Graduate Internship Report

Joseph A. Gregori High School

Kyle Beeman

Fall 2017

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Quality Criteria One:

CURRICULUM & INSTRUCTION

The agriculture program at Joseph A. Gregori High School services 510 unduplicated students. We pride ourselves on providing a rigorous and relevant curriculum that prepares our student for future careers in the agricultural industry. There are 15 different courses available to our students ranging from the sciences, floral, mechanics, landscape design and veterinary areas. All Modesto City Schools (MCS) agriculture courses are aligned with the Common Core State Standards as well the Career Technical Education Standards. We have designed two specific pathways to ensure our students are well prepared for the next level, whether it is in the workforce or higher education. The classes offered are: Integrated Agricultural Science 1-2 (meets MCS graduation requirement for Earth Science and is a UC "G" Elective), Integrated Agricultural Science 3-4 (meets MCS graduation requirement for Biology and is a UC "D" Lab science), Agriculture Mechanics 1-2, 3-4, 5-6 (Meets MCS graduation requirement for Practical Art, Structural Ag Welding (meets MCS graduation requirement for Practical Art), Small Engines 1-2, 3-4 (Meets MCS graduation requirement for Practical Art), History and Art of Floral Design (meets MCS graduation requirement for Visual and Performing Art and is also considered a UC "F" requirement), Floral Design II (meets MCS graduation requirement for Visual Performing Art), Integrated Agriculture Biology (meets the UC "D" Lab science requirement), Agriculture Business Computers (meets computer literacy requirement), Veterinary Science (meets the UC "G" elective requirement), Landscape design and Maintenance (Meets the Practical Arts requirement).

The pathways we have designed are in the areas of Veterinary Sciences and Agriculture Mechanics. The Veterinary Sciences pathway consists of Integrated Ag Science 1-2, 3-4, Integrated Agriculture Biology, Animal Science and with the Veterinary Science course serving as the capstone course. The Agriculture Mechanics Pathway starts with Ag Mechanics 1-2, 3-4, 5-6, or Small Engines, culminating in Structural Ag Welding.

Embedded into the instructional courses are the supervised agriculture experience (SAE) project as well as FFA involvement requirement. Classroom instruction is 70% of every student's grade,

while the FFA component counts for 20% and the SOEP component counts for 10%. This is demonstrated by students maintaining a working record book and participating in five FFA activities per semester. This requirement is clearly communicated to students and parents on the agriculture department's syllabi as well as online and posted in each agricultural classroom. In addition students are exposed to the numerous career opportunities available through a careers unit in each course as well as a planned career day.

Quality Criteria Two:

LEADERSHIP & CITIZENSHIP DEVELOPMENT

Joseph A. Gregori FFA chapter was chartered in 2010 with the opening of the High School. Our charter number, is CA0545. Every student enrolled in an agricultural course at Joseph A. Gregori High School is automatically considered an FFA member. Students learn very early in their first class that FFA plays an integral role in agriculture education. To reinforce that philosophy, students are encouraged to participate in the numerous activities that our chapter offers. Some examples of student leadership opportunities are, but not limited to: Opening Closing Ceremonies contest, Best Informed Greenhand, Job Interview, Extemporaneous Speaking, Prepared Public Speaking, Creed, Career Development Events, Eighth Grade Outreach and Project Competition.

Students understand that while participation in FFA activities is encouraged, there is a minimum number of activities that each member has to achieve as a portion of their grade. The minimum number of FFA activities that a member should participate in is five per semester. These are called “FFA Activity Points”. This participation counts for 20% of their semester grade. Some common activities that students participate in in addition to the ones mentioned above are, FFA meetings, fundraisers and serving on committees. These points are transferrable between agriculture courses should a student have multiple Ag classes.

To assist students in determining what activities to choose, we supply them with a calendar of events for the year and access to our chapter Program of Activities.

Quality Criteria Three:

PRACTICAL APPLICATION OF AGRICULTURAL SKILLS

The “learn by doing” philosophy is alive and well at Joseph A. Gregori High School. We are fortunate to have facilities that enable our students to not only learn various, relevant skills, they are also able to employ them. We have five different agriculture classrooms, including Two science classrooms, two shop classrooms and one floral room, a walk in floral cooler, a balloon room, and 16 raised garden beds. There is also a district farm being constructed directly behind our agriculture department for students to house their animal projects. We also have the opportunity for our students to participate during school hours through the internship with multiple businesses through out the community, including Flory’s Industries, United Sign and Beeler industries.

Every student is expected to utilize their classroom knowledge and apply it towards a supervised agricultural experience (SAE). The SAE is counted as 10% of their semester grade. All first year students either already have a project in place, have one planned or have a mock project that they log in their record books. Their plan is logged on the student data sheet.

Every agriculture teacher has a project supervision period, as well as a 215 day contract to supervise students’ SAEs. Every visit is scheduled and documented. We are currently moving our records to the Agriculture Experience Tracker system (AET), where we will begin documenting project visits for this year.

At Gregori, we have three agriculture vehicles that we utilize for project visits, contests and leadership events. The first is a 2010 Ford F250, and we have two 2016 Ford cargo vans one seven seater and one ten seater. These vehicles are maintained by the district and all have towing capacity for our two trailers. In the event that we are needing to transport additional students, the district will arrange for a rental vehicle. In some cases a personal vehicle may be required, but the mileage is recorded and compensated for in our travel expenses.

Quality Criteria Four:

QUALIFIED & PROFESSIONAL PERSONNEL

The four agriculture instructors at Gregori High School are “highly qualified teachers”. Each holding an Agriculture Specialist credential as well as a signal subject in Agriculture. Credential copies are not kept on file in the agriculture department office, they can be found on the California State Teacher website.

Each instructor attends professional development events at the local, sectional, regional and state level. All department members attended the Fall Regional Meeting and Road Show, which was in Cosumnes River College, and the spring meeting, which was in San Luis Obispo. There are numerous section events that the department attends such as: Spouse’s Night, the spring and Fall Section planning meetings and the section sponsored Counselor’s night. Each of us also attends the Summer CATA conference in San Luis Obispo in June. At the local level our Department head, Mark Nower is on the site leadership team and each of us are actively involved in the Small Learning Communities (SLCs) that our campus is built around.

The Agriculture department holds meetings every Thursday morning at 7:20am to review the activities of the week. At this time, the door is closed to any student disruption. Brittany Nelms, one of our agriculture teahcers keeps minutes from each meeting and they are stored on our shared drive so we can refer back to them if necessary.

The procedure for traveling to any professional development event, or school approved activity is to fill out a travel request at least two weeks before the date of travel. The form requires the hotel information, mileage, registration costs and number of meals one is to consume. Once the trip is concluded the hotel receipt is turned in and the district will cut a check for any expenses incurred.

Quality Criteria Five:

FACILITIES, EQUIPMENT & MATERIALS

We are very fortunate in our department to have some amazing facilities available to our students. Joseph A. Gregori High School was opened in 2010, so essentially all of our equipment and facilities are up to date and very functional.

There are many projects being constructed at once so in order to create more useable workspace some fabrication occurs outside the roll up door in the agriculture compound. Portable welders make this process very simple. To further ease the growing pains we have electrical outlets suspended from the ceiling throughout the shop as well as air hoses. There is ample storage for the shop as there is a side storeroom and C-train storage containers. The raised garden beds were planned and constructed two years ago by Gregori FFA students. The horticulture class mapped out the location and design, while the shop kids constructed the beds. Students paid close attention to the spacing of the beds to allow for handicap accessibility. Together they installed and filled the beds with materials donated by the City of Modesto. We rotate through winter summer and Spring vegetables. An animal facility is currently being constructed directly behind our agriculture department on the school campus for the agriculture departments to use. The barn is roughly 200ftX80ft, 16,000sqft. We have purchased pens that we will install once the barn in complete. This area will be available to students to house their SAEs as well as for the Veterinary students to obtain more hands on experience with large animals. Current students with projects do have a facility available to them on Tully Road Ag Facility; however, the new location would be much more convenient for Gregori students.

Each agriculture teacher has their own classroom, which includes a Surface Pro computer and media cart (projector, doc cam). Every site in Modesto City Schools has recently updated their buildings to have Wi Fi capabilities as well. The district offers each employee an email account in Office 365 to stay connected. In addition, the agriculture department has multiple storage rooms and an office. All of these facilities and supplies are well maintained by each agriculture instructor as evidenced by our chart of responsibilities. If it becomes necessary to fix or replace an item, there are “repair and replace” funds available for that purpose on each site.

Quality Criteria Six:

COMMUNITY, BUSINESS AND INDUSTRY INVOLVEMENT

The Agriculture Advisory Committee oversees all of the agriculture departments in Modesto City Schools. There are currently seven high schools with agriculture programs and in order to prevent industry leaders from attending multiple meetings that address the same issues we have consolidated into one large committee. Since Modesto is located in such a diverse agricultural area, our advisory members reflect a wide range of experiences and expertise. Their input is valuable when assessing the needs of the community as we work to train and certify our students.

The committee meets twice a year, once in the fall and once in the spring. The meeting sites rotate from site to site so that committee members are able to see what each department has to offer. We will be holding our spring meeting at the new farm facility so the members can give their input and see the progress we have made.

The committee has been instrumental in selecting appropriate curriculum and text books to make our content relevant. Many members have served as guest speakers or been participants in our Agriculture Career Day as well.

Our current Agriculture Advisory Committee Chair is Kim Hernandez of Haley Farms

Quality Criteria Seven:

CAREER GUIDANCE

Students in our program are counseled in each course regarding their future course selections, career and educational goals and progress toward graduation. We have four high school counselors on our campus, one college counselor and one work experience coordinator to the meet the needs of our 2,300 students. We foster a close working relationship with our counselors to ensure that they are up to date with the latest developments in the agriculture department and the industry. To show our appreciation we host a Counselor's night every fall with Modesto Junior College.

We regularly draft letters of recommendation letters for students to aid them in their academic and career endeavors. Teachers encourage students to select the next agriculture course in their selected pathway. We also recommend courses to satisfy their graduation requirement and college entrance requirements if that is their academic goal.

In the fall agriculture teachers meet with each of their students to aid in the completion of the Student Data Form. We also give presentations to each of our classes during balloting time to highlight the different agriculture courses available to them. In addition we host multiple guest speakers to showcase the multiple career opportunities.

Joseph A. Gregori High School does have an articulation agreement in place with Modesto Junior College for many of courses, including Veterinary Science course.

Quality Criteria Eight:

PROGRAM PROMOTION

Joseph A. Gregori High School takes a very active role in recruiting future FFA members. There are seven high schools in Modesto and each has its own, unique FFA program. Gregori is known for its Agriculture Science pathway, a horticulture pathway and an Ag mechanics pathway so we do retain some students from the middle schools in our district. They must fill out an application in the spring for a inter district transfer. In order for them to stay, they cannot have any failing grades and conduct themselves appropriately. However, the majority of our students come from the Sylvan School District and a Salida School District, as they do not have high schools.

One of the FFA activities students are able to participate in is eighth grade recruitment to put on a presentation for the science classes at three middle schools. This event is planned days before the eighth graders ballot for their high school classes. While there our FFA members expose the eighth graders to the various courses we offer, SAE opportunities and the FFA Organization. This activity is solely conducted by the high school students. Advisors are there for supervision purposes only, this serves as a tremendous leadership opportunity. Every year the science teachers complement our students on their speaking abilities and professionalism. This is an activity we are extremely proud of. While there students also distribute flyers and brochures that the Ag teachers and students have created so that their parents may see what we have to offer.

In addition, the advisors and officer team participate in Back to School Night every spring. This event is designed to let parents and incoming freshmen talk to the teachers and students about possible course choices. The agriculture department commandeers four tables where we have brochures, flyers, sample projects, textbooks, plants, welding samples, flowers, and animals available for parents and students to see. The agriculture instructors make themselves available to answer questions and provide support to any student or parent with questions or concerns.

One question that comes up often is in regards to the financial obligation of SAE projects. We are very fortunate that local agriculture lenders, such as F&M Bank work with our students to offer zero percent loans for SAE projects. We have taken advantage of this opportunity for years

and have a great working relationship. Also, students have the ability to apply for SAE scholarships through the Regional website.

Quality Criteria Nine:

PROGRAM ACCOUNTABILITY & PLANNING

Joseph A. Gregori High School has an updated Comprehensive Program Plan on file in the agriculture office as well as on file with our regional supervisor. Each year the program plan is updated to reflect the most up to date information available. These updates are sent to Jill Sperling by November 15th every year. As a department, we utilize our Thursday meeting time in the fall to go over our five-year acquisition plan, chart of responsibilities, Program of Activities, Advisory committee Roster and minutes. In addition the roster, Agriculture Incentive Grant expenditure report and roster of students are all sent to the regional supervisor by October 15th.

Equally as important is to keep track of the progress of our graduating seniors. This is an essential step in ensuring our validity as agriculture industry supporters. To better serve the needs of our students and the industry we gather information on our graduating seniors. The questions on our survey have to do with their career/school status, was their experience in agriculture education helpful, and any suggestions for future improvement. This information is updated annually in the Graduate Follow Up section of the FFA roster.

We find it very important to analyze the data the FFA Roster data provides. Our retention rate for our three and four year students helps us to better arrange the sequence of courses and options available.

Quality Criteria Ten:

STUDENT-TEACHER RATIO

The ratio of students to teachers in Modesto City Schools is capped at 40. Unfortunately all of our courses at the beginning of every school year are extremely large. Some of our courses for a short time will excide this district cap in which case we have to sign a classroom size waiver or turn those students away. Neither of us want to deny students the opportunities that agriculture education has to offer, however when considering possible discipline situations we generally stick to the district cap of 40. Naturally this number fluctuates throughout the year as students transfer in or out. Joseph A. Gregori High School has a limited number of courses that count for the Visual and Performing Art and Practical Art credits, so we do tend to have high numbers of new agriculture students each year. We do operate with these large numbers, knowing that this isn't a situation that our district or site leadership will rectify.

Quality Criteria Eleven:

FULL YEAR EMPLOYMENT

Every teacher employed in the Agriculture Department at Joseph A. Gregori High School is considered a full time instructor. Each agriculture teacher has a project supervision period. In addition, agriculture teachers in Modesto City Schools are granted 215-day contracts as opposed to the traditional 185-day contract offered to certificated employees. These extra days cover our SAE supervision over the summer. All four of us also receive an FFA stipend which is roughly 1800.00/year.

Criteria One: Curriculum and Instruction

Criteria 1 A: Curriculum

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Advanced Animal Science S1 Advanced Animal Science S2

COURSE NUMBER: AGR00301 AGR00302

RECOMMENDED GRADE LEVEL: 11, 12

DURATION: Year

CREDIT: 5 Units/Semester

MEETS GRADUATION REQUIREMENTS: Practical Arts, CTE

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4021

MEETS UC ENTRANCE REQUIREMENTS:

MEETS CSU ENTRANCE REQUIREMENTS: No

CREDENTIAL REQUIREMENTS: Single Subject: Agriculture

REPLACES:

Course Description:

Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with plants and/or animal science. This course will emphasize animal science.

Recommended Prerequisites: None

Date Aligned with State Standards: May 17, 2016

Board Approved: August 15, 2016

REVIEW CYCLE: 2015-2016 through 2019-2020
REQUIRED TEXTBOOK (Title, publisher, year): Modern Livestock and Poultry Production, Gillespie, Delmar Cengage, 2010 or Latest Edition, including eBook

INSTRUCTIONAL MATERIALS

Basic Text(s):

Modern Livestock and Poultry Production, Gillespie, Delmar, 2010 or Latest Edition, Instructor's Manual (download only) Online, 013159477X, 978-0131594777, Online Instructor Manual – PC Zip, available for download

eBook: Modern Livestock & Poultry Production, Cengage
E-Book ISBN-10: 1-133-48167-1, ISBN-13: 978-1-133-48167-6

Supplementary Text(s):

K12eBook on Web (ISBN-10: 1435486277/13: 9781435486270

Instructor's Manual (ISBN-10: 1428318097/13: 9781428318090)

Class Master (ISBN-10: 1428318100/13: 9781428318106)

Classroom Interactivity CD-ROM (ISBN-10: 1428318119/13: 9781428318113)

Student – K12eBook on Web (ISBN-10: 1435486277/13: 9781435486270)

Student – Class Master (ISBN-10: 1428318100/13: 9781428318106)

Livestock Feeds and Feeding, 6th or latest edition, Pearson All Together

FFA Handbook, Future Farmers of America, FFA Foundation

FFA Official Manual, Future Farmers of America, FFA Foundation

The Farm Management Guide, Doane Western, Inc.

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units		Approximate Length of Instruction for Each Unit (Weeks)
1.	Livestock Facilities, Equipment and Tools	2
2.	Nutrition	6
3.	Maintenance of Organ Systems	2
4.	Livestock Breeding	5
5.	Health Problems	4
6.	Livestock Pests and Control	3
7.	Basic Care Principles	2
8.	Basic Concepts Leading to Sale	2
9.	Pasture/Rangeland Management	2
10.	Waste Management	1
11.	Market Class	4
12.	Careers	2
13.	FFA	1
	Total Number of Weeks	36

1.0 GOAL:

Students will become familiar with the correct and safe use of livestock facilities, restraint equipment, and the tools necessary for animal housing and care.

1.1 Name and demonstrate the use of tools commonly used to restrain farm animals.

1.2 Discuss the purpose of proper handling and restraint as it relates to the safety of both the handler and livestock.

Anchor Standards: 1.0, 4.1, 4.3, 4.5
Career Readiness: 1, 4, 5
CTE Ag and Natural Resource: D1.1, D2.2

2.0 GOAL:

Students will develop an advanced understanding of the principles involved in animal nutrition and feeds.

2.1 Identify three common roughages and four common concentrates available locally and discuss which feeds have the highest content (percentage) of nitrogen, energy, protein, calcium, and phosphorus.

2.2 Identify the major feed additives on the market, explain how each additive affects production, and review governmental regulations pertaining to the use of each.

2.3 Explain how hormones are used as growth regulators and list the animals on which those hormones are used.

2.4 Develop a low-cost (specifying actual cost) feed ration for one species of livestock for maintenance, growth, and lactation, using concentrates and roughages available locally.

2.5 List vitamins and amino acids not synthesized by livestock species and identify feeds high in these specific nutrients.

2.6 Describe the symptoms of five common nutritional diseases caused by vitamin or mineral deficiencies or toxicity and explain the treatment and prevention of these diseases.

2.7 Explain the importance of a consistent feeding regime and list possible metabolic disease problems that might occur because of sudden changes in the ration.

2.8 Define creep feeding and explain its value in an animal feeding regime.

2.9 Given specific data, calculate the rate of gain and cost of feed per pound of gain per day for three livestock species.

2.10 Feed and maintain an animal through a full production cycle.

Anchor Standards: 1.0, 4.1, 4.2, 4.7, 5.1
Career Readiness: 1, 4, 5
CTE Ag and Natural Resource: D2.4, D7.4

3.0 GOAL:

Students will learn the structure, function, and maintenance of the major organ system of an animal (e.g. respiratory, excretory, endocrine, and digestive), their interrelationships, and their role in maintaining homeostasis.

3.1 Demonstrate an understanding of the structure and function of the digestive system by tracing the pathways of food through the four types of livestock digestive systems, with emphasis on the function of organs in the digestive process.

3.2 Briefly explain the process of respiration, using a diagram of the lungs.

3.3 Describe the function of the endocrine system, the location of the glands and list the hormones that affect growth and reproduction.

Anchor Standards: 1.0, 5.0, 10.0, 11.0
Career Readiness: 1, 2.5, 4.5, 4.6
CTE Ag and Natural Resource: D2.0, D2.4, D3.1

4.0 GOAL:

Students will understand the principles of livestock breeding and Mendelian genetics, and the importance of heritability in a breeding program.

4.1 Briefly define the chromosome theory of inheritance.

4.2 Draw and describe the difference between oogenesis and spermatogenesis.

4.3 Review (from the basic core) and define the terms phenotype, genotype, gene, locus, allele, homozygous, variation, and mutation.

4.4 Diagram the phenotypic and geneotypic results of a cross, using traits common to modern livestock, which exhibit classic dominant and recessive characteristic.

4.5 Diagram a dihybrid cross (e.g. using two heterozygous gene pairs) and determine the genotypes of the offspring.

4.6 Cite an advantage and a disadvantage of each of the following breeding systems and describe a situation in which each could be used: inbreeding, close breeding, outcrossing, and crossbreeding.

4.7 Define hybrid, using the cross between a horse and a donkey as an example,

and explain the genetic effects that make the offspring sterile.

4.8 Describe the genetic factors that influence the sex of an offspring.

4.9 Define prepotency as it relates to genetics and name a famous sire that possessed this characteristic.

4.10 Define heritability and explain why selection is important in the livestock industry.

4.11 Describe a surgical and a nonsurgical method of embryo transfer and explain the impact that embryo transfer has made on the animal genetics.

4.12 List important factors to consider in a bull fertility test.

4.13 Explain the process of artificial insemination and its impact on the gene pool in modern livestock.

4.14 List three methods used to detect estrus in livestock, explain the importance of detection in breeding program, and describe the equipment used to detect estrus.

4.15 List the three stages of parturition, explain when each stage begins and ends, describe the proper fetus presentation, and list possible problems that might occur during delivery.

4.16 Verbally outline the development of a prenatal farm animal from fertilization to birth, using slides.

4.17 Compare and contrast the estrous cycles of the mare, cow, sow, ewe, and doe rabbit and include seasons of the year in which they cycle.

4.18 List the gestation periods of the mare, cow, sow, ewe, and doe rabbit.

4.19 Define the term freemartin and identify the problems that can occur with freemartins in bovine breeding programs (genetic level).

4.20 Describe the proper environment for the female during gestation, parturition, and lactation.

4.21 Describe the proper maintenance and care of male breeding stock.

4.22 Identify the recommended breeding age for the bull, stallion, buck, boar, and ram and the potential amount of service (years) for breeding males of each species.

4.23 Develop a feeding regime for dam through gestation, parturition, lactation.

4.24 Perform the appropriate husbandry practices when handling newborn animals.

4.25 Visually identify crossbreeds of commercial livestock and explain the advantages of the cross.

Anchor Standards: 1.0, 4.0, 10.0
Career Readiness: 1.0, 2.5, 4.4, 5.1, 11.0, 12.0
CTE Ag and Natural Resource: D2.5, D4.6, D5.1, D5.2

5.0 GOAL:

Students will develop an in-depth understanding of the specific health problems of cattle, sheep, swine, horses, poultry, and rabbits, and the identification, treatment, and prevention of these problems.

5.1 Describe the differences between vaccines, anti-serum, and bacterins, and explain how each is used to fight disease.

5.2 Identify five categories of pathogens and list the major classes of each.

5.3 List the current major infectious diseases for at least four species of livestock in California and describe the symptoms, treatment, prevention, and economic significance of each.

5.4 Identify four noninfectious causes of disease and the methods of prevention for each.

5.5 Take the normal body temperature of four types of livestock species, compare the readings with the normal temperatures of each species, and discuss factors that may increase or decrease an animal's body temperature.

5.6 Demonstrate the proper methods of subcutaneous and intramuscular injections of livestock.

5.7 Calculate the correct dosage of medication from the instructions on the medicine label for various weights.

Anchor Standards: 1.0, 2.0, 10.0
Career Readiness: 1.0, 4.0, 5.0, 10.0
CTE Ag and Natural Resource: D1.0, 2.6, 3.4, 6.68.3, 10.1

6.0 GOAL:

Students will learn the major internal and external livestock pests, their life cycles, and their control.

6.1 Draw the life cycle of an internal parasite that's specific for each of the following: horse, swine, cattle, sheep, poultry, and rabbits. Show the point in the life cycle where each internal parasite can best be controlled.

6.2 Draw the life cycle of at least three common external parasites, including the possible hosts and methods to control each parasite.

6.3 Develop a one-year worming and vaccination schedule for a student-owned animal.

6.4 Explain the value of pasture rotation in parasite control.

6.5 Describe production problems associated with the housefly, blowfly, botfly, and horsefly and explain two methods in which these can be controlled.

6.6 Define drenching and demonstrate drenching methods on three livestock species.

Anchor Standards: 1.0, 3.0, 5.0
Career Readiness: 2.5
CTE Ag and Natural Resource: 10.7

7.0 GOAL:

Students will demonstrate an understanding of basic principles of care raising, breeding, selection, and selling of large animals.

7.1 Demonstrate proper feeding, handling, and management practices for each species studied.

7.2 Demonstrate proper grooming and showing techniques for at least two large animal species of commercial importance in California.

7.3 Identify animal behavioral patterns that will make animals easier and safer to handle.

7.4 List and discuss the different markets available for sale of livestock.

Anchor Standards: 2.0, 5.0
Career Readiness: 2.1, 2.5
CTE Ag and Natural Resource: D9.1, 9.2, 9.12

8.0 GOAL:

Students will understand the basic concepts in the care, raising, breeding, selection, and selling of small animals.

8.1 Identify six species of small animals that are of importance to agriculture and list common breeds within each species.

8.2 Understand the relationship of small animals to agriculture and its related industries.

8.3 Describe and participate in the marketing of small animals in two occupational areas (e.g., sale of replacement stock and sale of meat animals) and list the advantages and disadvantages of each of the occupational areas.

Anchor Standards: 5.0, 10.0
Career Readiness: 1.0
CTE Ag and Natural Resource: D2.5, 5.4

9.0 GOAL:

Students will understand the importance of correct pasture and rangeland management practices for animal health, erosion control, pasture production, and maintenance of the balance of living things within the ecosystem.

9.1 Define the terms common to rangeland management.

9.2 List three ways in which overgrazing or poor rangeland management can negatively affect the environment.

9.3 Calculate, from information provided, the carrying capacity of an acreage of rangeland for species of livestock.

9.4 Identify and describe the variety of rangelands found in California.

9.5 Collect and label three suitable legumes and discuss factors to consider in their selection for rangeland forage.

9.6 Collect, label, and press ten common range plans.

9.7 Collect and identify ten weeds and brush common to California rangelands and discuss control methods for each.

9.8 Identify five plants poisonous to livestock and identify the California area in which they may be found.

Anchor Standards: 5.0, 11.0
Career Readiness: 5.2, 5.4
CTE Ag and Natural Resource: D6.5, 11.1

10.0 GOAL:

Students will gain basic knowledge of animal waste management and the importance of disposing of waste inexpensively with the least impact on the environment.

10.1 Identify the three main types of agricultural wastes.

10.2 Describe two ways to recycle manure so it can be used by livestock.

Anchor Standards: 1.0, 2.0, 10.0
Career Readiness: 1.0, 4.6, 5.1
CTE Ag and Natural Resource: D2.5, 3.1, 4.1, 4.7

11.0 GOAL:

Students will analyze and describe a class of four market animals within each major specie.

11.1 Identify 6 desirable traits of a market animal within each species (beef, sheep, and swine) and list the characteristics necessary for the animal to possess these traits.

11.2 Analyze and describe a class of four market animals within each specie.

Anchor Standards: 1.0, 5.0, 10.0
Career Readiness: 1.0, 11.0
CTE Ag and Natural Resource: D1.0, 10.1, 10.4

12.0 Career Pathways

Students will identify major agricultural careers, within the animal industry.

A. Facilities, equipment and tools
B. Nutrition
C. Animal Husbandry
D. Animal Health
E. Pest Management
F. Pasture and Rangeland Management
G. Evaluation and Animal Selection

12.1 Develop a personal occupational plan that outlines career goals and an action plan to achieve those goals.

Anchor Standards: 1.0, 5.0
Career Readiness: 1.0, 5.0, 11.0
CTE Ag and Natural Resource: D8.3, 5.4, 5.5

13.0 Students will appreciate the importance of the Future Farmers of America (FFA), Parliamentary Procedure.

13.1 Demonstrate the proper use of parliamentary procedure to improve meetings, using motions, and proper conducting of business.

13.2 Students will gain an understanding of supervised agricultural experience (SAE), and farm record keeping through hands-on project involvement. Students will:

A. Describe the benefits of an SAE and how to develop long-range planning.
B. List reasons for good record keeping using the California Farm Account book.
C. Demonstrate understanding of various types of records including budgets, journals, income summaries and financial statements.

13.3 Students will appreciate the importance of the Future Farmers of America (FFA), Parliamentary Procedure.

A. List reasons for good record keeping using the California Farm Account Book.

B. Demonstrate understanding of various types of records including budgets, journals, income summaries and financial statements.

Anchor Standards: 1.0, 4.0, 10.0
Career Readiness: 2.2, 5.1, 11.0
CTE Ag and Natural Resource: D4.4, 3.2, 3.3

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Modern Livestock & Poultry Production, 8E or latest edition

AUTHOR(S): James R. Gillespie

PUBLISHER: Delmar Cengage Learning

COPYRIGHT DATE: 2010

ISBN #: 1-4283-1808-3/9

PRICE: $98.95

DEPARTMENT: Agriculture

CLASS: Advanced Animal Science, Agricultural Marketing and Animal Industries ROP, Animal Science 3, 4

GENERAL DESCRIPTION:
Text paints a vivid picture of the animal agriculture industry and provides the information necessary to pursue a career in the field

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: Advisory Committee

Selection Committee:
Mark Nower, Mike Brecht, Kyle Beeman Richard Wolfe

Mike Henderson, Director
Alternative and Vocational Education

Thor Harrison, Director
Educational Services

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Advanced Floriculture ROP S1 Advanced Floriculture ROP S2

COURSE NUMBER: ROP60001 ROP60002

RECOMMENDED GRADE LEVEL: 10-12

ABILITY LEVEL: Unsectioned

DURATION: 2-6 Semesters

CREDIT: 5 per semester/Maximum 30 credits (May be repeated for additional credit with attention given to more advanced techniques in floral design

GRADING FORMAT: Standard

MEETS GRADUATION REQUIREMENTS: Practical Arts/Visual and Performing Arts, CTE

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4052

MEETS UC AND CSU ENTRANCE REQUIREMENTS: No

CREDENTIAL REQUIREMENTS: Agriculture: Career Tech Ed; Ag & Natural Resources

REPLACES:

Course Description:

The advanced floral design class is designed to give the student advanced design techniques including wedding, sympathy, and high-style floral design. This includes everlasting flowers, oriental style of design, contemporary design and techniques, and harvest and distribution. This class also goes into greater detail of operating a retail flower shop and covers careers and continuing education.

Recommended Prerequisites: History and Art of Floral Design

Date Matched Against State Framework, Model Curriculum Standards, and State Curriculum Guides: September 24, 2013

Board Approved: December 7, 2015

REVIEW CYCLE: 2015-16 through 2019-20
REQUIRED TEXTBOOK (Title, publisher, year): Floriculture: Designing & Merchandising, Delmar Publishers, 1994 or latest edition, The Art of Floral Design, Delmar Publishers, Inc., 2000 or latest edition

INSTRUCTIONAL MATERIALS

REQUIRED TEXT(S):

Floriculture: Designing & Merchandising, Delmar Publishers, 1994 or latest edition

The Art of Floral Design, Delmar Publishers, Inc., 2000 or latest edition

SUPPLEMENTARY TEXT(S):

Flowers for a Beautiful Wedding, Gail Brown Brumley, 1990
Arranging Cut Flowers, Ortho Books, 1985
Family Circle Weekend Crafts, Newfield Publications
Western Garden Book, Sunset, 1997
Designers' Workbook Series, The John Henry Co., 1994
Flowers, Flowers, Rizzoli International Publications, Inc., 1996
A Centennial History of the American Florist, 1997
Retail flower Shop Operation, Redbook, 1991
Selling and Designing Wedding Flowers, Redbook, 1991
The Profit Minded Florist, Source Publications, 1987
The Retail florist Business, The Interstate Printers and Publishers, 1977
Start Your Own Florist Shop & Other Floral Business Entrepreneur, Media, Inc., 2006

Publications:

Florists' Review, Monthly
Flowers & Telefloral, Monthly
Floral & Nature Crafts, Better Homes and Gardens, Monthly
Green Profit, Bi-monthly

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units		*Approximate Length of Instruction for Each Unit (in Weeks)
1.	Introduction to Everlasting Flowers	2*
2.	Oriental Style of Design	5*
3.	Contemporary Design Styles & Techniques	5*
4.	Wedding Flowers	5*
5.	Sympathy Flowers	5*
6.	Harvest & Distribution	2
7.	The Retail Flower Shop	8*
8.	Careers and Continuing Education	2
	Total Number of Weeks	36

*Reinforced throughout year

Instructional Content Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:			**Hours** CL=Classroom CC=Comm. Class	
1. Introduction to Everlasting Flowers. 1. Types of permanent flowers and foliage. 2. Dried plant material 3. Designing with everlastings	***Goal: The students will demonstrate knowledge and understanding of Everlasting Flowers.*** A. Describe various preserving techniques and to be able to dry flowers and leaves successfully for use in floral design. B. Demonstrate proficiency in designing with artificial and dried materials. C. Described the advantages of everlastings over fresh designs.	**Anchor/ CR** 1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11 CR1, CR2, CR4, CR10	**CTE ANR** F11.1 F11.2 F11.3 F11.4	**CL** 10	**CC** 15
2. Introduction to Oriental Style of Design 1. Chinese influence 2. Japanese influence	***Goal: The students will demonstrate knowledge and understanding of the difference in styles of Oriental Design.*** A. Identify the characteristics of Chinese and Japanese styles of arrangement and distinguish between the two. B. Describe the various Japanese styles of design. C. Explain the benefits of exploring oriental design styles and techniques. D. Identify and gather appropriate supplies to make arrangements in several different Japanese styles.	2, 3, 4, 5, 7, 11, CR1, CR2, CR3	**ANR** F11.2 F11.4	10	15
3. Introduction to Contemporary Design Styles and Techniques 1. Classic design styles 2. Naturalistic design styles 3. Linear design styles 4. Modernistic design styles 5. Advanced design techniques	***Goal: The students will demonstrate knowledge and understanding of the different styles of contemporary design styles and techniques.*** A. Specify what constitutes a contemporary floral design. B. Demonstrate proficiency in advanced arrangement techniques. C. Define, sketch, or construct the various contemporary, advanced, classic, naturalistic, linear, and modernistic design styles discussed.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 CR1, CR2, CR4, CR10	**ANR** F11.1 F11.2 F11.4	10	15

Legend
A = Anchor
CR = Career Ready
ANR = Ag & Natural Resources Standard
BF = Business & Finance Standard
FID = Fashion & Interior Design Standard
MSS = Marketing, Sales & Service Standard

Instructional Content Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:			**Hours** CL=Classroom CC=Comm. Class	
4. Introduction to Wedding Flowers Floral romance 1. Promotion and advertising by retail florist 2. Wedding consultation 3. Styles of bouquets 4. Servicing the wedding.	***Goal: The students will demonstrate knowledge and understanding of Wedding Flowers.*** A. Describe the importance of promotion and advertising to attract prospective brides-to-be. B. Specify the importance of the wedding consultation appointment and the necessity for a floral consultant to be knowledgeable about wedding flowers and professional in helping a bride-to-be select appropriate flowers for her wedding. C. Describe how to conduct a bridal consultation and explain the various floral pieces that are listed on a wedding order form. D. Describe the most popular bouquet styles. E. Describe general approaches to planning and presenting flowers for the ceremony and reception decorations. F. List the fundamental design techniques that are important in creating wedding flowers. G. Construct a simple colonial bouquet and a simple cascade bouquet using foam bouquet holders. H. Construct a cake top in a cake-top holder. I. Describe the importance of servicing weddings that require professional attention at the ceremony and the reception.	**Anchor/ CR** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 CR1, CR2, CR4, CR10	**CTE ANR** F11.1 F11.2 F11.3 F11.4	**CL** 40	**CC** 75
5. Introduction to Sympathy Flowers 1. Importance of sympathy flowers 2. Trends and regional differences 3. Selling sympathy flowers 4. Overview of sympathy flower designs 5. Maintaining ideal working relations with funeral directors 6. Servicing the funeral	***Goal: The students will demonstrate knowledge and understanding of sympathy flowers.*** A. Identify various sympathy floral designs, tributes, and funeral-related terminology. B. Describe the significant construction techniques in creating sympathy designs. C. List ways a professional retail flower shop can develop a positive working relationship with funeral directors. D. Identify concerns that limit the growth of the sympathy flower business. E. Characterize how to conduct a consultation with a family ordering flowers for their deceased loved one. F. Construct a variety of floral designs including a tied flat spray, a pedestal arrangement, an easel spray and a simple casket spray.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 CR1, CR2, CR4, CR10	**ANR** F11.1 F11.2 F11.3 F11.4	40	75

Instructional Content Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:			**Hours** CL=Classroom CC=Comm. Class	
6. Introduction to Harvest and Distribution 1. The world flower market 2. Harvest 3. Packing 4. Shipping 5. Distribution 6. Marketing flowers	***Goal: The students will demonstrate knowledge and understanding of Harvest and Distribution.*** A. Describe the world flower market and the position the United States maintains in this market. B. Discuss the important processes of harvesting, grading, bunching, and conditioning flowers to ensure optimum quality and longevity for the final consumer. C. Explain the various methods of packing and shipping flowers. D. Outline the tradition distribution channel for flowers and describe changes that are taking place in the movement of product from growers to final consumers. E. Summarize the floral industry's advertising and promotion programs.	**Anchor/ CR** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 CR1, CR2, CR4, CR5, CR8, CR9, CR10, CR11, CR12	**CTE ANR** F11.1 F11.2 F11.3 F11.4 A7.6 **MSS** A6.1 A6.4 A7.1 A4.11	**CL** 6	**CC** 9
7. Introduction of the Retail Flower Shop 1. Types of flower shops 2. Location 3. Production presentation and shop layout 4. Employees and responsibilities 5. Marketing 6. Salesmanship and customer relations 7. Wire service 8. Buying and pricing 9. Designing 10. Delivery	***Goal: The students will demonstrate knowledge and understanding of the retail flower shop.*** A. Identify the primary functions of a retail flower shop. B. Differentiate the major classifications of retail flower operations. C. Explain the characteristics of store location options. D. Characterize the principle responsibilities of employees. E. Summarize the key management responsibilities required for a successful and profitable flower shop. F. Describe product presentation and the importance of window and store display. G. Identify the primary goals of display. H. Describe the sequence of taking information for a telephone order.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 CR1 CR2	**ANR** F11.1 F11.2 F11.3 F11.4 **BF** A9.2 A9.3 A9.4 A9.5 **MSS** A6.4 A7.4 A7.7 A7.9 A7.10 **FID** A10.2 A10.3 A10.4 A2.3	10	15

Instructional Content Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:			**Hours** CL=Classroom CC=Comm. Class	
8. Introduction to Careers and Continuing Education 1. Career opportunities for qualified professional floral designers 2. Other career opportunities in the floral industry 3. Continuing Education	***Goal: The students will demonstrate knowledge and understanding of careers and continuing education.*** A. Describe various employment opportunities in a retail flower shop. B. Outline the skills and experience required to work in specialized areas of floral design. C. Identify other career opportunities within the wholesale and production areas of the floral industry. D. Describe the importance of continuing education in floral design. E. Identify numerous career options within the floral industry. F. Describe and distinguish between the different trade organizations and the opportunities each provides. G. List some of the many trade publications, design workshops, and educational programs available to increase the knowledge and skills of a floral designer.	**Anchor** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 A 3.1, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9 **CR** CR1 CR2 CR3 CR4 CR5 CR6 CR7 CR8 CR9 CR10 CR11 CR12	**CTE** **ANR** **F11.4** **FID** C4.1 C4.2 C4.3 C4.4	**CL** 6	**CC** 9
9. Communication, Leadership and Opportunities for Occupational Growth 1. Develop leadership skills 2. Develop communication skills 3. Develop interpersonal and intrapersonal skills 4. Develop interview skills 5. Demonstrate a positive self- image 6. Create a career seeking portfolio	***Goal: Student will, through the National FFA Organization, learn leadership skills in interviewing, portfolio development, work and professional attire. They will develop growth in interpersonal and intrapersonal skills working with others and alone. The students will learn the ability to solve problems and think critically on group and individual projects and assignments.***	1, 2, 4, 9, 10, 11, 9.0 CR1, CR2, CR2, CR7, CR8, CR9, CR10, CR12	**FID** A2.1 A2.2		

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Agricultural Diesel EngTechnology 1 Agricultural Diesel EngTechnology 2

COURSE NUMBER: ROP02411 ROP02412

RECOMMENDED GRADE LEVEL: 11, 12

ABILITY LEVEL:

DURATION: 1 Year

CREDIT: 10 Units

GRADING FORMAT: Standard 0-4 Grd. Pts.

MEETS GRADUATION REQUIREMENTS: Practical Arts, CTE

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4035

MEETS UC AND CSU ENTRANCE REQUIREMENTS: No

CREDENTIAL REQUIREMENTS:

REPLACES:

Course Description:
Diesel Equipment Technology is designed to train students for employment opportunities available within the agricultural/industrial industry. This course emphasizes skills necessary in the field of diesel equipment mechanics where students will learn major overhaul and tune-up diesel engines. The course will also focus on skills in power machinery and small engine repair and maintenance with strong emphasis upon safety, tool and equipment usage and preventative maintenance procedures. The development of leadership and employability skills is emphasized throughout the course. This advanced course follows the Model Curriculum Standards and Frameworks for Agriculture Specialization in the Agricultural Mechanics Advanced Core Cluster.

Recommended Prerequisites: Ag Mechanics or Small Engines, or permission of instructor

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Date Matched Against State Framework, Model Curriculum Standards and State Curriculum Guides: September 25, 2013

Board Approved: July 25, 2016

REVIEW CYCLE: 2015-16 through 2019-20
REQUIRED TEXTBOOK (Title, publisher, year): Diesel Technology, Goodheart-Willcox, Norman, 2016, or Latest Edition; Diesel Technology eBook, Goodheart-Willcox, Norman, 2016 or Latest Edition; Diesel Technology Fundamentals Service Repair Manual, Goodheart-Willcox, Norman, 2007 or Latest Edition; An Introduction to Compact and Automotive Diesels, Delmar Cengage Learning, 1997 or Latest Edition

INSTRUCTIONAL MATERIALS

REQUIRED TEXT(S):

Diesel Technology Fundamentals Service Repair, Goodheart-Willcox, Norman, 2016, or Latest Edition

Diesel Technology Fundamentals Service Repair eBook, Goodheart-Willcox, Norman, 2016, or Latest Edition

Diesel Technology Fundamentals Service Repair Manual, Goodheart-Willcox, Norman/Corinchock, 2007, or Latest Edition

An Introduction to Compact & Automotive Diesels, Edward J. Ralbovsky, Delmar Cengage Learning, 1997, or Latest Edition

SUPPLEMENTARY TEXT(S):

SUMMARY OF MAJOR UNITS OF INSTRUCTION
Approximate Length of Instruction for Each Unit

	(Hours Year 1)
Classroom Orientation	1
Career Development	5
FFA/SAE	5
Equipment Mechanics	95
Diesel Engines	100
Equipment Operation	100
Safety and First Aid	20
Employability Skills	20
Leadership	14

Instructional Content: Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:	**Hours** CL=Classroom L=Lab			
1. Classroom Orientation. 1. Class Procedures 2. Attendance 3. Grading 4. Paperwork 5. Career Development 6. Opportunities in Ag Business Mgt. 7. Occupational Goal setting 8. Work Values 9. Self-Assessment	***Goal: The student will understand the general principles expected in the classroom*** A. Demonstrate proper classroom behavior B. Understand attendance, grading and flow of paperwork. C. Understand components of the agriculture industry D. Recognize agriculture as a business. E. Define & demonstrate Careers/Job Market/Employability. F. Participate in leadership/management. G. Understand the need for leadership & management in the field. H. Participate in self-assessment to increase knowledge and improve work habits.	**CTE**	**Anchor CR** Anchor 1,2,3,5,9, and 11 CR 1,2,3,5,7, 8,12	**CL** 5	**L**
2. Safety. 1. General shop safety. 2..Accident Prevention 3. Potential Hazard identification. 4. Handling emergencies 5. Power machinery 6. Servicing Equipment 7. Laws pertaining to Ag Machinery 6. OSHA rules & regulations. 7. Waste & material disposal. 8. Roll over Protection 9. Stability and center of gravity 10. Emergency start procedures	***Goal: Student will understand the health hazards, safety practices, & environmental hazards related to their work in the shop***. A. Comply with shop safety. B. Wear eye protection. C. Describe proper clothing & grooming. D. Use hand & power tools safely. E. Understand the relationship safety factors, seat belts, roll guard in cabs. F. Follow emergency fire & disaster procedures. G. Comply with OSHA rules & regulations. H. Handle & dispose of materials safely. I. Understand stability and center of gravity j. Demonstrate emergency start procedures	B1.1 B1.2 B1.3	Anchor 1,2,5,6,7,8 ,10,11 CR 1,2,5,6,7,8 ,10,11,12	3	2
3. FFA 1. Organization opportunities. 2. Teams and competitions. 3. Meetings. 4. Participation. 5. Record books 6. Communication skills 7. Critical thinking/problem solving.	***Goal: The student will understand and participate in FFA activities.*** A. Understand the components of FFA B. Participate in team and individual competitions. C. Attend regular meetings D. Complete record books as necessary E. Exhibit good communication skills F. Demonstrate critical thinking and Problem solving		Anchor 7,8 CR 1,2,8,9	2	3

Instructional Content: Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:	**Hours** CL=Classroom CC=Comm. Class			
4. Supervised Ag Experience (SAE) 1. Acceptable projects 2. Record Books 3. Monthly Updates	***Goal: The student will participate in SAE activities*** A. Participate in projects B. Input timely and accurate information into record books. C. Provide monthly updates on activities and status of projects	**CTE** 4.1 4.2 4.4 4.5	**Anchor/ CR** **Anchor 2,3,5,7,8 ,9,10** **CR 1,2,8,9**	**CL** 8	**L** 2
5. Communication Skills. 1. Applying written communication skills in agricultural industry, including appointments, cost estimates, work orders, and using service manuals.	***Goal: The student will be able to apply verbal communication skills in the agricultural industry.*** A. Schedule appointments. B. Prepare cost estimates. C. Prepare work orders. D. Prepare & close repair orders. E. Use service manuals & other information retrieval systems for diagnostic procedures. F. Understand the need for maintenance & document maintenance procedures. G. Understand fault diagnosis & the steps that lead to fault diagnosis, & inspect & analyze the cause of component failure. H. Understand the business practices of a shop, & generate & maintain service records in a manner consistent with current legal & industry requirements.		Anchor 2,3,4,5, 6,7,8,9, 10,11 CR1,2,4 ,5,7,8,9, 10,12	5	2
6. Equipment Mechanics 1. Shop Procedures *2.* Tool identification *3.* Proper use of tools *4.* Basic mechanics hand tools *5.* Micrometers, dial indicators, bore gauges Telescoping gauges and calipers	***Goal: The student will understand basic procedures and tools.*** A. Demonstrate shop procedures B. Identify tools C. Demonstrate proper use of tools D. Use basic mechanics hands tools E. Use of micrometers, dial indicators, F. Bore and telescoping gauges, and calipers	B9.3 B9.4 B9.5 B11.1 B11.2 B11.3 B11.4 B11.5 B11.6	Anchor 1,2,6,7, 10,11 CR 1,2,4,7	8	8

Instructional Content: Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:	**Hours** CL=Classroom CC=Comm. Class			
7. Forklifts, hoists jacks and jack stands 1. Tank steam cleans parts tanks, Cold tank cleaning, glass bead Machines, and sand blasting 2. Pullers, hydraulic presses and arbor presses 3. Valve grinders, boring machines, and lathes 4. Air impact tools 5. Drilling threading, and removal of broken 6. Bolts and threaded inserts 7. Grinders and metal cutting equipment	***Goal: The student will understand the use of forklifts, hoists jacks and jack stands*** A. Demonstrate cleaning of steam and cold Tanks using various methods B. Demonstrate use of pullers, hydraulics and arbor presses C. Demonstrate use of valve grinders, Boring machines and lathes D. Demonstrate use of air impact tools E. Demonstrate use of drilling threading and removal of broken bolts and threaded inserts F. Demonstrate use of grinders and metal cutting equipment	**CTE** B11.1 B11.2 B11.3 B11.4 B11.5 B5.1 B5.2 B5.3 B5.4 B5.5	**Anchor CR** Anchor 1,2,6,7,9, 10,11 CR 1,4,7,9, 10	**CL** 10	**L** 5
8. Welding Equipment 1. Sharpening and Fitting tools 2. Fasteners 3. Identification 4. Copper Tubing's 5. Brass Fittings 6. Hoses and fittings 7. Hydraulic fittings and lines	***Goal: The student will understand basic welding tools and equipment*** A. Understand the use of sharpening and fitting tools *B.* Understand fasteners *C.* Demonstrate tool identification *D.* Understand copper tubings and their use *E.* Understand brass fittings and their use *F.* Identify hoses and fittings *G.* Understand hydraulic fittings and lines	B5.1 B5.2 B5.3 B5.4 B5.5 B8.1 B8.2 B8.3 B8.4 B9.1 B9.2 B9.3 B9.4 B9.5 B9.6 B9.7 B11.4	Anchor 1,2,6,7,9 10,11 CR 1,2,4,5,7, 9,10	10	5
9. Diesel Engines 1. History and general information of diesel engine development and field applications 2. Comparison of diesel and gas engines 3. Two and four stroke cycle engine design and operation principles. 4. Model, serial and general identification system 5. Order parts 6. Basic engine cylinder block assembly design, components parts disassembly, inspection and reassembly 7. Cylinder blocks 8. Crankshaft and main bearings 9. Flywheel, ring gear, clutch pilot bearing, flywheel housing and gear train cover 10. Vibration damper 11. Pistons and connection rods 12. Timing gear train and camshaft	***Goal: The student will understand Diesel Engines*** *A.* Understand general information and history diesel engine development and field applications *B.* Understand the comparisons of a diesel and gas engines *C.* Understand two and four stroke cycle engines *D.* Demonstrate how to identify the model, Serial and identification system *E.* Demonstrate ordering parts *F.* Understand basic engine cylinder block assembly design, components parts, G. Demonstrate disassembly, inspection and reassembly of a basic engine cylinder block H. Understand crankshaft and main bearings	B10.1 B10.2 B10.3 B10.4 B10.5 B10.6 B11.1 B11.2 B11.3 B11.4 B11.5 B11.6	Anchor, 1,2,5,7,9, 10,11 CR 1,2,4,5,7,8 ,9,10,11,1 2	4	5

13. Cylinder head and valves 14. Lubrication systems, purpose, circulation, and distribution system 15. Engine oil 16. Oil filters and strainers; purpose and application 17. Oil cooler requirements 18. Lubricating oil pump 19. Oil leakage test purpose and procedures 20. Oil pressure and heat safety control devices	I. Understand flywheel, ring gear, clutch pilot bearing, flywheel housing and gear train cover. J. Understand Vibration damper K. Understand pistons and connection rods L. Understanding timing gear train and camshaft M. Understand Cylinder heads and valves N. Understand lubricating systems O. Understand and demonstrate the use of engine oil, filters, and strainers P. Understand requirements for oil cooler Q. Understand lubricating oil pump R. Demonstrate purpose and procedures for oil leakage test S. Understand how to read oil pressure and heat safety control devices				
10. Cooling System *1.* Cooling system coolant circulation and component assemblies *2.* Thermostatically controlled hydraulically driven fan, design operation and serving principles	***Goal: The student will understand cooling systems*** A. Understand Cooling system coolant Circulation and component assembles B. Understand Thermostatically controlled Hydraulically driven fan, design operation and serving principles	**CTE** B11.2 B11.3	**Anchor/ CR** Anchor 1,2, 10,11,12 CR 1,2,4,5	3	10
11. Air Intake Systems 1. Naturally aspirated engines 2. Turbocharger engines 3. Air cleaners	***Goal: The student will understand Air Intake Systems*** A. Understand naturally aspirated and turbocharger engines B. Understand air cleaners.	B11.2 B11.3	Anchor 1,2, 10,11,12 CR 1,2,4,5	3	5
12. Fuel Injection Systems *1.* Fuel system fundamental assemblies and their basic operation principles *2.* Fuel oil recommendations *3.* Transfer pumps *4.* Field installation and service	***Goal: The student will understand Fuel Injection Systems*** A. Demonstrate fuel system fundamentals and basic operating principles B. Describe fuel oil recommendations C. Understand transfer pumps D. Demonstrate installation and service in a field setting***.***	**CTE** B11.2 B11.3	**Anchor/ CR** Anchor 1,2, 10,11,12 CR 1,2,4,5	**CL** 5	**L** 4
13. Ending Balancers 1. Balancing requirements *2.* Balancer purpose, theory and Operating principles *3.* Balancer timing and servicing procedures	***Goal: The student will understand Balancers*** *A.* Demonstrate the purpose, theory and operating principles of a balancer *B.* Demonstrate time and services procedures	B11.2 B11.3	Anchor 1,2, 10,11,12 CR 1,2,4,5	3	10

Instructional Content: Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:			**Hours** CL=Classroom CC=Comm. Class	
14. Tractors 1. Introduction 2. Daily maintenance and service 3. Starting and stopping procedures 4. Driving and backing 5. Speed Control 6. Ground and Engine	***Goal: The student will understand tractors*** A. Develop a maintenance and service schedule for farm tractors. B. Demonstrate proper procedures for driving a tractor and controlling speed	B1.1 B1.2 B1.3 B11.1 B11.2 B11.3 B11.4 B11.5 B11.6	Anchor 1,2,4,5,6, 8, 9,10,11 CR 1,2,4,5,6, 7, 9,10,12	5	5
15. Tracklayers 1. Introduction 2. Daily maintenance and service 3. Starting and stopping procedures 4. Driving and backing 5. Speed control 6. Ground Engine 7. Hitching 8. 3 point hitches 9. Category selection and engagement safety 10. PTO connection and engagement and safety 11. Auxiliary hydraulic connections	***Goal: The student will understand tracklayers***. A. Develop a maintenance and service schedule B. Demonstrate proper procedures driving, backing up and controlling speed C. Demonstrate hitching process and procedures D. Demonstrate safety E. Demonstrate connections	B1.1 B1.2 B1.3 B11.1 B11.2 B11.3 B11.4 B11.5 B11.6	Anchor 1,2,4,5,6, 8, 9,10,11 CR 1,2,4,5,6, 7, 9,10,12	2	3
16. Loaders 1. Introduction *2.* Daily maintenance and service *3.* Safety and stability *4.* Operating and handling *5.* Forklifts *6.* Safety and loading handling *7.* Speed control and efficiency	***Goal: The student will understand Loaders*** A. Develop a maintenance and service schedule B. Demonstrate proper procedures driving, backing up and controlling speed C. Describe forklifts and their purpose D. Describe procedures for safe loading	B1.1 B1.2 B1.3 B11.1 B11.2 B11.3 B11.4 B11.5 B11.6	Anchor 1,2,4,5,6, 8, 9,10,11 CR 1,2,4,5,6, 7, 9,10,12	5	5

Instructional Content: Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:	**Hours** CL=Classroom CC=Comm. Class			
17. Trucks 1. Starting and stopping 2. Driving and backing 3. Speed control hitching 4. Daily maintenance and service. 5. Safety and First Aid	***Goal: The student will understand trucks.*** A. Demonstrate safe driving procedures F. Demonstrate maintenance and service procedures G. Demonstrate safety and first aid	**CTE** B1.1 B1.2 B1.3 B11.1 B11.2 B11.3 B11.4 B11.5 B11.6	**Anchor/ CR** Anchor 1,2,4,5,6, 8, 9,10,11 CR 1,2,4,5,6, 7, 9,10,12	**CL** 3	**L** 3
18. Employability Skills 1. Career Paths 2. Employment opportunities 3. Educational Certifications Requirements 4. Sources of Job Info 5. Communication Skills 6. Employment Literacy 7. Application 8. Resume 9. Cover Letter 10. Interviews 11. Grooming and Dress 12. Follow-up Letter 13. Job Retention Skills 14. Team Work – Cooperation 15. Ethics and Professionalism 16. Work Habits and Ethics 17. Leadership	***Goal: The student will understand Employability Skills*** A. Discuss career paths B. Explore employment opportunities. C. Complete Educational Certificate requirements D. Research varied sources of job info E. Exhibit good communication skills F. Demonstrate proper completion of an application H. Complete a resume, cover letter and follow-up letter H. Participate in mock interviews I. Demonstrate proper grooming and dress J. Discuss skills for retaining a job K. Participate as a team member L. Demonstrate proper ethics and responsibilities M. Demonstrate good work habits and leadership	B12.7	Anchor 1,2,3,4,5, 6,7,8,9,1 0, 11 CR 1,2,3,4,5, 6 7,8,9,10, 11,12	2	3

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Diesel Technology, eBook

AUTHOR(S): Andrew Norman

PUBLISHER: Goodheart-Willcox

COPYRIGHT DATE: 2016

ISBN #: 9781619607224/6 yr. Classroom Subscription

PRICE: $93.58

DEPARTMENT: Agriculture/ROP

CLASS: Agricultural Diesel Engine Technology 1-2 ROP

GENERAL DESCRIPTION:
Diesel Technology covers the design, construction, operation, diagnosis, service, and repair of both mobile and stationary diesel engines. The 2016 edition of this comprehensive text has been updated throughout, and includes new information on engine control systems, fuel injection systems, and exhaust after-treatment systems. Content relates to on- and off-road vehicles, as well as marine, agricultural, and industrial applications. This text is a valuable resource for anyone involved in the service and repair of diesel engines, as well as those preparing for ASE Medium/ Heavy Truck Test T2 – Diesel Engines, Test T6 – Electrical/Electronic Systems, and Test T8 – Preventive Maintenance Inspection (PMI).

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY:

Selection Committee:
Mike Brecht, Kyle Beeman, Rich Wolfe

Jeff Albritton, Senior Director
Alternative and Vocational Education

Thor Harrison
Senior Director, Educational Services

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Agricul Marketing and Anml Indst ROP

COURSE NUMBER: AGR00501 (S1) AGR00502 (S2)

RECOMMENDED GRADE LEVEL: 11-12

DURATION: 4 semesters or 2 Summers and 2 Semesters

CREDIT: Variable; Up to 10 each summer or semester for a maximum of 40 units

MEETS GRADUATION REQUIREMENTS: Practical Arts, CTE

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4042

MEETS UC ENTRANCE REQUIREMENTS: No

MEETS CSU ENTRANCE REQUIREMENTS: No

CREDENTIAL REQUIREMENTS: Single Subject: Agriculture, Designated Subjects: Agriculture

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Course Description:

This course is designed to train students for entry-level jobs in agricultural marketing and animal industries. There is a large demand for persons trained in the marketing and care of large and small animals. Students will have classroom theory and hands-on experience with animals.

Recommended Prerequisites: None

Date Matched Against State Framework, Model Curriculum Standards, and State Curriculum Guides: May 17, 2016

Board Approved: August 15, 2016

REVIEW CYCLE: 2015-16 through 2019-20
REQUIRED TEXTBOOK (Title, publisher, year): Modern Livestock & Poultry Production, including eBook, Gillespie/Flanders, 2016 or Latest Edition, Delmar Cengage Learning

INSTRUCTIONAL MATERIALS

Basic Text(s):

Modern Livestock & Poultry Production, Latest Edition, Gillespie, James R., Thomson/Delmar Learning

Modern Livestock & Poultry Production eBook, Gillespie/Flanders, 2016 or Latest Edition, Delmar Cengage Learning

Supplementary Text(s):

Agribusiness Management and Entrepreneurship, Delmar, Latest Ed.

FFA Handbook, Future Farmers of America, FFA Foundation

Agribusiness, an Entrepreneurial Approach, Latest Edition, Delmar Publishers

Livestock Feeds and Feeding, 6th or Latest Edition, Pearson

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units		Approximate Length of Instruction for Each Unit (Weeks)	(Hours)
A.	Workplace Skills	2.5	30
B.	Career Information	2.5	30
C.	Technology	2.5	30
D.	Ethics	2.5	30
E.	Basic Animal Science	2.5*	30*
F.	Anatomy	2.5	30
G.	Disease & Parasite Control	2.5*	30*
H.	Animal Attitude & Behaviors	2.5*	30*
I.	Animal Handling & Restraints	2.5*	30*
J.	Animal Reproduction	5.0	60
K.	Medical Terminology & Abbreviations	5.0	60
L.	Veterinary Hospital Duties	3.0*	45*
M.	Sterilization & Infection Procedures	3.0*	45*
N.	Domestic, Wild & Exotic Animal Management	3.0	45
O.	Maintaining Healthy Animals	3.0*	45*
P.	Emergency Procedures	3.0*	45*
Q.	Kennel Management	3.0*	45*
R.	Career Development & Resume	3.0	45
S.	FFA/SAE	3.0	15
	Total	508*	720*

*Plus community classroom hours not to exceed a total of 720

EXPECTATIONS FOR STUDENT LEARNING

1.0 GOAL:

A. The student will understand the basic requirements of the program, classroom policies, procedures and expectations.

1.1 Programs available
1.2 Develop leadership abilities in educational, vocational, civic, recreational, and social activities through involvement in student organizations such as the Future Farmers of America
1.3 Community classroom/CVE
1.4 Eligibility for enrollment
1.5 Attendance
1.6 Acceptable behavior
1.7 Course requirements
1.8 Safety rules
1.9 Attitude/work ethic

B. The student will demonstrate the following attitudes, behaviors, and personal characteristics valued by employers. The student will complete individual SOE projects in addition to assigned class curriculum.

1.10 Responsibility
1.11 Dependability
1.12 Promptness
1.13 Willingness to learn new skills
1.14 Attentiveness during instruction
1.15 Getting along with others
1.16 Honesty and integrity
1.17 Pride in work
1.18 Flexibility
1.19 Not being defensive when corrected
1.20 Not being defensive when corrected
1.21 Working up to capacity
1.22 Being pleasant and cheerful
1.23 Showing strong motivation to succeed
1.24 Good personal appearance
1.25 Organized
1.26 Constructively assisting others
1.27 Work evaluation

C. The student will understand principles of interpersonal skills, including groups dynamics, conflict resolution, and negotiation. (SCANS)

1.28 Discuss and demonstrate strategies for mutual respect, and for conflict resolution and explain their importance.
1.29 Understand the laws that apply to sexual harassment in the workplace, and identify tactics for handling harassment situations.
1.30 Demonstrate cooperative working relationships and proper etiquette across gender and cultural groups.

D. The student will understand the importance of good academic skills, critical thinking and problem solving skills.

1.31 Use mathematical and algebra concepts, binary numbers and additional higher-level math concepts as applicable.
1.32 Use general and physical science concepts and biology, physics and chemistry concepts as applicable.
1.33 Demonstrate skills in reading, technical reading, writing and give directions.
1.34 Exhibit critical and creative thinking skills and local reasoning skills, and employ these skills for problem solving.
1.35 Present a positive image through verbal and nonverbal communication, and understand the power of body language in communication.

E. The student will understand occupational safety issues, including avoidance of physical hazards.

Anchor Standards: 7.0, 8.3, 8.4, 9.0
Career Readiness: 2.1, 2.2, 5.1, 6.2, 6.5
CTE: Agriculture and Natural Resources, A1.0

2.0 GOAL: The student will understand career paths and strategies for obtaining employment.

2.1 Explore career opportunities and projected trends, investigate required education, training and experience, and develop an individual educational plan and portfolio.
2.2 Examine aptitudes related to career options; relate personal characteristics and interests to educational and occupational opportunities.

Anchor Standards: 3.0, 5.0, 9.0
Career Readiness: 3.0, 5.0, 7.0, 9.0
CTE: Agriculture and Natural Resources, A3.2, A6.3

3.0 GOAL: The student will understand and adapt to changing technology.

3.1 Identify and explain how people, information, tools, machines, energy, capital, physical space, and time influence the selection and use of agriculture sales, marketing and animal industry technologies.
3.2 Demonstrate the ability to use personal computers for loading and retrieving data, information gathering, measurements, and writing about and explaining agriculture sales, marketing and animal industries.

Anchor Standards: 3.0, 5.0
Career Readiness: 5.0, 1.0
CTE: Agriculture and Natural Resources – 3.1

4.0 GOAL: The student will understand the importance of ethics in the industry.

4.1 Discuss social and ethical responsibilities attached to access to information.

4.2 Understand that copyright violations are theft.
4.3 Demonstrate ethical choices in workplace situations.
4.4 Distinguish between First Amendment freedoms and access to information.

Anchor Standards: 8
Career Readiness: 8.1, 8.4, 10.1
CTE: Agriculture and Natural Resources – 1.0

5.0 GOAL: The student will be able to recognize and classify, according to scientific terminology, domestic animals.

5.1 Beef
5.2 Sheep
5.3 Swine
5.4 Dogs
5.5 Cats
5.6 Horses

Anchor Standards: 1.0, 1.2
Career Readiness: 1
CTE: Agriculture and Natural Resources – 5.1, 5.2

6.0 GOAL: The student will understand and illustrate systems that relate to specific animals.

6.1 Skeletal
6.2 Digestive
6.3 Circulatory
6.4 Nervous
6.5 Muscular
6.6 Respiratory

Anchor Standards: 5.7
Career Readiness: 4, 9, 2, 7
CTE: Agriculture and Natural Resources – D3.0, D3.1

7.0 GOAL: The student will examine and evaluate disease and parasite prevention and control.

A. Internal parasites

7.1 Strongyles
7.2 Ascarids
7.3 Roundworms

B. External parasites

7.4 Lice
7.5 Mites
7.6 Ticks

7.7 Flies

Anchor Standards: 5,7
Career Readiness: 5, 11
CTE: Agriculture and Natural Resources – D6.0

8.0 GOAL: The student will recognize and evaluate signs of illness in animals.

8.1 Normal animal behavior/abnormal behavior
8.2 Vital signs
8.3 Intake of feed
8.4 Outward signs of illness

Anchor Standards: 5, 6, 11
Career Readiness: 2, 5
CTE: Agriculture and Natural Resources – D6.0, D6.4, D9.1, C9.0

9.0 GOAL: The student will understand restraining techniques.

9.1 Dogs
9.2 Cats
9.3 Small animals
9.4 Farm animals

Anchor Standards: 5, 6, 11
Career Readiness: 1, 5
CTE: Agriculture and Natural Resources – D10.0, D10.1, D11.0, D11.1

10.0 GOAL: The student will investigate the reproductive tract of the male and female. Identify and categorize the associated organs and derive conclusions as to their related functions, and identify and assimilate the functions of selected hormones.

10.1 Vagina
10.2 Vulva
10.3 Ovaries
10.4 Oviduct
10.5 Cervix
10.6 Bladder
10.7 Uterine horns
10.8 Epidymis
10.9 Cowper's gland
10.10 Prostrate
10.11 Scrotum
10.12 Penis
10.13 Testicles
10.14 Vas deferens
10.15 Seminal vesicles
10.16 Urethra
10.17 Estrogen
10.18 Progesterone

10.19 Testosterone

Anchor Standards: 1, 5, 8
Career Readiness: 1, 4, 12
CTE: Agriculture and Natural Resources – D4.0, D4.1, D4.5

11.0 GOAL: The student will understand and apply the various medical terminology abbreviations used in the field of veterinary medicine.

11.1	SID	11.10	ID	11.19	CBC
11.2	BID	11.11	IP	11.20	CRT
11.3	TID	11.12	Tx	11.21	TPR
11.4	QID	11.13	Dx	11.22	HBC
11.5	IV	11.14	Rx	11.23	OVH/OHE
11.6	IM	11.15	Sx	11.24	ECG (EKG)
11.7	IC	11.16	NPO	11.25	Cc
11.8	SQ	11.17	Per os	11.26	MI
11.9	SQ	11.18	Ad lib	11.27	Mg

Anchor Standards: 1, 4, 10
Career Readiness: 1, 11
CTE: Agriculture and Natural Resources – D6.0, D6.3, D10.2

12.0 GOAL: The student will practice assisting the veterinarian in office procedures.

12.1 Correctly demonstrate the procedures involved in bathing and dipping an animal for external parasites.
12.2 Properly administer medicine.
12.3 Be able to detect vital signs on animals.
12.4 Assist with radiology procedures (student must be 18 years of age).

Anchor Standards: A1, A3, A7, A8
Career Readiness: 2, 3, 7
CTE: Agriculture and Natural Resources, D9.0, D9.3, D9.4

13.0 GOAL: The student will perform appropriate sterilization and disinfection procedures to prevent the spread of disease.

13.1 Understand the difference between infectious versus noninfectious diseases.
13.2 Identify and understand pathogens.
13.3 Interpret the effects of protozoas on animals.

Anchor Standards: A1, A2, A8
Career Readiness: 1, 2, 5, 10
CTE: Agriculture and Natural Resources, D6.4, D6.5, D6.6, D6.7

14.0 GOAL: The student will examine domestic, wild and exotic animal management and behavior.

A. Appraise and predict animal behaviors based on the following:
   14.1 Maintenance behaviors
   14.2 Social behaviors
   14.3 Learned behaviors

B. Evaluate normal versus abnormal behavior based on the following factors:
   14.4 Attitude and behavior
   14.5 Posture and movement
   14.6 Animal's voice
   14.7 Appetite

Anchor Standards: A1, A5, A10
Career Readiness: 1, 2, 5, 9, 11
CTE: Agriculture and Natural Resources – D11.0, D11.1, D11.2, D12.3

15.0 GOAL: The student will understand and utilize various management techniques to maintain healthy animals.

15.1 Vaccination and disease prevention
15.2 Nutritional knowledge
15.3 Sterilization of animals
15.4 Dehorning, castrating and docking
15.5 Medications
15.6 Preventative measures

Anchor Standards: A1, 2, 5, 11
Career Readiness: 1, 2, 5, 9, 11
CTE: Agriculture and Natural Resources – D9.0, D9.3, D10.2

16.0 GOAL: The student will identify laboratory skills used in the veterinary hospital.

16.1 Fecal
16.2 Blood
16.3 Urine

Anchor Standards: A1, A10
Career Readiness: 1, 4, 11
CTE: Agriculture and Natural Resources – C9.5, D6.3

17.0 GOAL: The student will practice emergency procedures utilized in the veterinary hospital.

17.1 Equipment
17.2 Shock
17.3 Trauma

Anchor Standards: A1, A10
Career Readiness: 1, 11
CTE: Agriculture and Natural Resources – D9.0, D9.1

18.0 GOAL: The student will demonstrate skills needed for working in a kennel.

18.1 Demonstrate skills in sanitizing individual kennels used for boarders.
18.2 Evaluate individual kennel charts based on patient care.
18.3 Analyze kennel and boarder chart to determine necessary patient care.
18.4 Develop a feeding and cleaning schedule based on individual patient needs.
18.5 Understand medical abbreviations listed on kennel and boarder charts.

Anchor Standards: A1, A10
Career Readiness: 1, 11
CTE: Agriculture and Natural Resources – D9.0, D9.1

19.0 GOAL: The student will evaluate portfolio and prepare for finding a job.

19.1 Create a resume with current skills and achievements.
19.2 Include recommendation letters from training site(s).
19.3 Identify and demonstrate effective interviewing techniques.
19.4 Demonstrate knowledge and skills for career retention through positive workplace attributes, college courses, and lifelong learning.

Anchor Standards: A2, 3, 10
Career Readiness: 1, 3, 7
CTE: Agriculture and Natural Resources – 3.1, 3.5, 3.6, 3.7, 3.9

20.0 GOAL: Students will develop the knowledge and skills of the National FFA Organization and develop Leadership. The students will also gain practical experience through a Supervised Agricultural Experience project.

20.1 List, explain, or recite the following items needed to be an FFA member.

A. History of the FFA
B. Aims and Purpose
C. Creed
D. Dress
E. Motto
F. Code of Ethics
G. Colors
H. Greenhand Degree
I. Emblem
J. Kinds of Membership

20.2 Demonstrate the proper use of parliamentary procedure to improve meetings, using motions, and proper conducting of business.
20.3 Students will gain an understanding of supervised agricultural experience (SAE), and farm record keeping through hands-on project involvement. Students will:

A. Describe the benefits of an SAE and how to develop long-range planning.
B. List reasons for good record keeping using the California Farm Account

Book.

C. Demonstrate understanding of various types of records including budgets, journals, income summaries and financial statements.

Anchor Standards: A2, 7, 9
Career Readiness: 2, 7, 8
CTE: Ag and Natural Resource – 9.1, 9.9, 913

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Modern Livestock & Poultry Production, eBook

AUTHOR(S): James R. Gillespie/Frank Flanders

PUBLISHER: Delmar Cengage Learning

COPYRIGHT DATE: 2016

ISBN #: 9781435486270

PRICE: $65.49

DEPARTMENT: Agriculture

CLASS: Agricultural Marketing and Animal Industries ROP, Animal Science 3, 4, Advanced Animal Science, Animal Science ROP, Individual Studies for Agriculture

GENERAL DESCRIPTION:
Text paints a vivid picture of the animal agriculture industry and provides the information necessary to pursue a career in the field.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: Advisory Committee

Selection Committee:
Mark Nower, Mike Brecht, Kyle Beeman, Gary Gerhardt, Richard Wolfe

Jeff Albritton, Senior Director
Alternative and Vocational Education

Thor Harrison, Senior Director
Educational Services, 7-12

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Livestock Feeds and Feeding, 6th Edition

AUTHOR(S): Kellems & Church

PUBLISHER: Pearson

COPYRIGHT DATE: 2010

ISBN #: 0-13-159475-3

PRICE: $144.80

DEPARTMENT: Agriculture

CLASS: Advanced Animal Science, Agricultural Marketing and Animal Industries ROP, Animal Science 3, 4

GENERAL DESCRIPTION:
Text paints a vivid picture of the animal agriculture industry and provides the information necessary to pursue a career in the feeds and feeding area of livestock production.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: Advisory Committee

Selection Committee:
Mark Nower, Mike Brecht, Kyle Beeman, Richard Wolfe

Mike Henderson, Director
Alternative and Vocational Education

Thor Harrison
Director, Educational Services

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Agricultural Mechanics 1 Agricultural Mechanics 2

COURSE NUMBER: AGR00101 AGR00102

RECOMMENDED GRADE LEVEL: 9, 10

DURATION: 2 Semesters

CREDIT: 10

MEETS GRADUATION REQUIREMENTS: Practical Arts

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4030

MEETS UC ENTRANCE REQUIREMENTS: No

MEETS CSU ENTRANCE REQUIREMENTS: Yes

CREDENTIAL REQUIREMENTS: Single Subject: Agriculture

REPLACES:

Course Description:

Students will use a classroom and laboratory-type situation to cover the principles, and applications of topics. Work habits and attitudes will be stressed with emphasis on careers in agriculture. Areas of instruction will include: safety, tools, measurement, drawing, woods, welding, concrete, metalwork/sheet metal, electricity, rope, and plumbing.

Recommended Prerequisites: None

Date Aligned with State Standards: February, 2007

Board Approved: February 6, 2012

REVIEW CYCLE: 2011-12 through 2015-16
REQUIRED TEXTBOOK (Title, publisher, year): Agricultural Mechanics: Fundamentals & Applications, Latest Edition, Herren, Thomson/Delmar Publishers; Lab Manual to Accompany Agricultural Mechanics Fundamentals & Applications, Herren, Thomson/Delmar Learning, Latest Edition; Basic Blueprint Reading and Sketching, Olivo, Thomson/Delmar Learning, Latest Edition; Small Gas Engines, Roth, Goodheart/Willcox, Latest Edition; Small Gas Engines Workbook, Roth, Goodheart/Willcox, Latest Edition; Practical Problems in Mathematics for Carpenters, Huth/Huth, Thomson/Delmar Learning, Latest Edition; Mathematical Applications in Agriculture, Mitchell, Thomson/Delmar Learning, Latest Edition

INSTRUCTIONAL MATERIALS

Basic Text(s):

Agricultural Mechanics: Fundamentals & Applications, Latest Edition; Herren; Thomson/Delmar Publishers

Supplementary Text(s):

Lab Manual to Accompany Agricultural Mechanics Fundamentals & Applications, Herren, Thomson/Delmar Learning, Latest Edition

Practical Problems in Mathematics for Carpenters, Huth/Huth, Thomson/ Delmar Learning, Latest Edition

Mathematical Applications in Agriculture, Mitchell, Thomson/Delmar Learning, Latest Edition

Basic Blueprint Reading and Sketching, Latest Edition; Olivo, Thomson/ Delmar Learning

Small Gas Engines, Roth, Goodheart/Willcox, Latest Edition

Small Gas Engines Workbook, Roth, Goodheart/Willcox, Latest Edition

THE MODERN ILLUSTRATED HAND AND POWER TOOL MANUAL; or Latest Edition
Vocational Education Productions

BASIC TECHNICAL DRAWING; Spencer and Dygdon; Glencoe

WELDING: Principles and Applications; Jeffus; Delmar, Latest Edition
Student Guide and Lab Manual
Complete Welding Video Package

SMALL GAS ENGINES; Gray and Barrow; Prentice Hall, or Latest Edition

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units		Approximate Length of Instruction for Each Unit (Weeks)
A.	Tools	2
B.	Safety	2
C.	Measurement	2
D.	Tool Fitting	1
E.	Oxy-Acetylene Welding	4
F.	Arc Welding	4
G.	Metalwork and Sheet Metal	3
H.	Woodworking/SAE	5
I.	Drawing	2
J.	Concrete	2
K.	Electricity	3
L.	Ropework	1
M.	Plumbing	1
N.	FFA and Leadership	1
O.	Agriculture Careers	1
	Total Weeks	36

AGRICULTURAL MECHANICS 1-2

1.0 GOAL:

Students will understand the importance of proper cleaning and storage of shop tools, the reporting of hazardous situations, and safe practices to be employed with all tools and machines. Upon completion of this unit, students will be able to:

1.1 Store tools, equipment, and materials properly.

1.2 Clean the shop properly as directed by the instructor.

1.3 Recognize and report hazardous situations to the appropriate persons.

1.4 Use a fire extinguisher properly.

1.5 Practice all shop and equipment safety regulations.

1.6 Develop a proper attitude toward work and avoid unsafe practices.

2.0 GOAL:

Students will understand the importance of correct and safe use of shop tools and be able to identify shop tools. Upon completion of this unit, students will be able to:

2.1 Identify all the tools used in the Ag Mechanics California Curriculum Guidelines unit on basic hand and power tools.

2.2 Justify in an oral or written statement (record to be kept on file in agriculture department office) the selection of tools to be used in the agricultural mechanics program.

2.3 Demonstrate the proper and safe use of the tools to be used in the agricultural mechanics program.

3.0 GOAL:

Students will be able to understand and demonstrate proper procedures for tool fitting and sharpening. Upon completion of this unit, students will be able to:

3.1 Replace handles correctly on hand tools such as hammers, shovels, and axes.

3.2 Sharpen selected cutting tools correctly, including chisels, screwdrivers, twist drills, blades, hoes, axes, knives, scissors, and shears.

3.3 Be able to construct and repair a cutting tool such as a cold chisel and demonstrate proper hardening and tempering techniques.

4.0 GOAL:

Students will understand and be able to read and use a ruler or tape to calculate problems involving length, area, volume, and weight. Students will know the

difference between the U. S. Customary and the metric measurement systems. Upon completion of this unit, the students will be able to:

4.1 Measure objects correctly with a ruler, tape, or framing square.

4.2 Measure objects correctly using calipers and micrometers.

4.3 Calculate and solve basic measurement problems, including calculation of board feet, cubic measurements, and standard liquid measurements.

4.4 Differentiate between U. S. Customary and metric measurement units (in linear, area, and volumetric measurements).

4.5 Calculate and solve basic measurement problems, including weight.

4.6 Use various methods to determine the mass and volume of regularly and irregularly shaped objects.

5.0 GOAL:

Students will master the basic skills necessary to design, draw, calculate the cost of, and construct a project by interpreting the working drawing correctly. Upon completion of this unit, the students will be able to:

5.1 Identify the types of lines used in a drawing or layout.

5.2 Identify the three types of drawings (orthographic, isometric, and oblique).

5.3 Use an architect's scale.

5.4 Construct three-view (orthographic) drawings.

5.5 Interpret a working drawing.

5.6 Sketch an object using paper and pencil.

5.7 Plan and layout a construction project.

5.8 Calculate construction costs for a given task.

5.9 Assemble and finish a project.

6.0 GOAL:

Students will understand the fundamentals of woodworking and demonstrate applied skills through project construction. Upon completion of this unit, the students will be able to:

6.1 Select kinds, grades, and quantity of lumber for a given task.

6.2 Identify and demonstrate the uses of ten different woodworking hand tools.

6.3 Measure and mark wood for cutting and drilling.

6.4 Cut and assemble wood parts.

6.5 Know the basic joints used in woodworking and demonstrate the application.

6.6 Operate power tools correctly and safely, replacing blades and making adjustments as necessary.

7.0 GOAL:

Students will understand and demonstrate skills involved in the oxy-acetylene welding process and roles heat and pressure play in the process, and will be able to operate and use the oxy-acetylene welder safely. Upon completion of this unit, students will be able to:

7.1 Pass a safety test on oxy-acetylene welding.

7.2 Identify the basic components of the oxy-acetylene welding apparatus.

7.3 Set up, use, shut off, and store an oxy-acetylene welder properly.

7.4 Run a bead with the oxy-acetylene equipment with and without a filler rod.

7.5 Use the oxy-acetylene equipment to do four basic welds other than a bead.

7.6 Select welding rods and fluxes appropriate for the job.

7.7 Make a straight cut, using the cutting head.

7.8 Clean the orifices in welding and cutting heads using the approved technique.

7.9 Construct a simple project requiring cutting and welding.

7.10 Change lenses on cutting goggles.

8.0 GOAL:

Students will understand and demonstrate competencies in the arc welding process and be able to operate an arc welder safely. Upon completion of this unit, students will be able to:

8.1 Pass a safety test and demonstrate proper use of arc welding equipment.

8.2 Strike and maintain an arc correctly.

8.3 Be familiar with the American Welding Society (AWS) classification system for electrodes.

8.4 Select various sizes and types of electrodes and correctly adjust the current setting for each application.

8.5 Identify four basic welding joints and demonstrate the application of each in the flat position, using AC and DC equipment.

8.6 Control distortion in arc welding.

8.7 Test welds for quality and strength.

8.8 Construct a project requiring at least three different welds.

8.9 Identify career opportunities in the welding industry.

8.10 Change lens and head gear on a helmet.

9.0 GOAL:

Students will familiarize themselves with the uses of concrete and masonry and the materials used in making concrete, and will be able to identify and use the tools related to the task. Upon completion of this unit, students will be able to:

9.1 List the ingredients and characteristics of concrete.

9.2 Calculate the amounts and costs of materials required for a particular application.

9.3 Build proper forms.

9.4 Mix, pour, reinforce, finish, and cure concrete.

9.5 Demonstrate the use of the basic tools needed to pour a concrete slab.

9.6 Describe and use basic masonry techniques and tools.

10.0 GOAL:

Students will demonstrate skills in the metalworking processes and properly identify types of materials and tools used for cold metalworking. Upon completion of this unit, students will be able to:

10.1 Identify samples of cast iron, mild steel, and aluminum.

10.2 Identify ten common metalworking tools by name and use.

10.3 Lay out a drawing on metal.

10.4 Make square and circular bends in metal using an anvil or vise.

10.5 Determine tap drill sizes.

10.6 Use files and saw blades correctly.

10.7 Forge a chisel.

10.8 Cut threads with tap and dies.

11.0 GOAL:

Students will develop and demonstrate a basic understanding of electricity, its theory, and its practical application. Upon completion of this unit, the students will be able to:

11.1 Use approved safety measures in electrical wiring.

11.2 Select correct fuse sizes for a given circuit.

11.3 Select wire sizes for a given circuit.

11.4 Define ampere, watt, volt, and ohm.

11.5 Repair an electrical cord.

11.6 Exhibit safe habits when working around electricity.

11.7 Understand the difference between electrical flow of 240 volts and 120 volts in wiring.

11.8 Complete wiring of light and convenience circuits.

11.9 "Trouble shoot" electrical circuits in a safe manner.

12.0 GOAL:

Students will develop and demonstrate the ability to select, use, and care for rope. Upon completion of this unit, the students will be able to:

12.1 List five common uses of rope.

12.2 Identify samples of natural and synthetic fiber ropes.

12.3 List the factors to consider when selecting rope.

12.4 Describe three important practices in rope care.

12.5 Construct crown, eye, short, and slide-loop splices (or make a rope halter, using the splices).

12.6 Tie three types of common hitches.

12.7 Tie three types of common knots.

13.0 GOAL:

Students will develop the knowledge and skills necessary to accomplish basic plumbing jobs. Upon completion of this unit, the students will be able to:

13.1 Properly identify common plumbing tools and materials.

13.2 Exhibit safe handling and working practices when using plumbing tools.

13.3 Understand the purposes for the various plumbing fittings and materials.

13.4 Perform an installation, including cutting pipe to length and installing fittings, using a combination of materials including steel, plastic and copper.

14.0 GOAL:

Students will develop the knowledge and skills of the National FFA Organization and develop leadership. The students will also gain practical experience through a Supervised Agricultural Experience project.

14.1 List, explain, or recite the following items needed to be an FFA member.

A. History of the FFA
B. Aims and Purpose
C. Creed
D. Dress
E. Motto
F. Code of Ethics
G. Colors
H. Greenhand Degree
I. Emblem
J. Kinds of Membership

14.2 Demonstrate the proper use of parliamentary procedure to improve meetings, using motions, and proper conducting of business.

14.3 Students will gain an understanding of supervised agricultural experience (SAE), and farm record keeping through hands-on project involvement. Students will.

A. Describe the benefits of an SAE and how to develop long-range planning.
B. List reasons for good record keeping using the California Farm Account Book.
C. Demonstrate understanding of various types of records including budgets, journals, income summaries and financial statements.

15.0 GOAL: Career Opportunities – Describe and give examples of entry, technical, and professional careers in the industry.

15.1 Complete a self-assessment related to Agricultural work values and interests.

15.2 Develop a personal occupational plan that outlines career goals and an action plan to achieve those goals.

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Agricultural Mechanics, Fundamentals & Applications, 5th Edition

AUTHOR(S): Ray V. Herren

PUBLISHER: Delmar, Thomson Learning

COPYRIGHT DATE: 2006

ISBN #: 1-4018-5956-9

PRICE: $120.00

DEPARTMENT: Agriculture

CLASS: Agricultural Mechanics 1-2, Agricultural Mechanics 3-4

GENERAL DESCRIPTION:
Agricultural Mechanics Fundamentals & Applications continues to be the most widely used textbook for high school Agricultural Mechanics programs nationwide because of its student friendly layout and its comprehensive coverage. Topics covered range from welding to tool identification, from diesel engine maintenance to masonry. The units are presented in a logical, easy to follow format allowing students to comprehend concepts and apply them in hands on applications.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: Advisory Committee

Selection Committee:
Roger Dickson, Mark Nower, Natalie Sweeney, Mike Brecht, Gary Gerhardt, Scott Layne

Rodney L. Owen, Director
School-to-Career Education

Lynn Lysko, Director
Curriculum & Staff Development, 7-12

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Lab Manual to Accompany Agricultural Mechanics - Fundamentals & Applications – 5th Edition

AUTHOR(S): Ray V. Herren, Jenna Caputo

PUBLISHER: Delmar, Thomson Learning

COPYRIGHT DATE: 2006

ISBN #: 1-4018-5958-5

PRICE: $47.95

DEPARTMENT: Agriculture

CLASS: Agricultural Mechanics 1-2, Agricultural Mechanics 3-4

GENERAL DESCRIPTION:
The Lab Manual provides guides for completing activities that expand on the material covered in the textbook.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: Advisory Committee

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Rodney L. Owen, Director
School-to-Career Education

V. Lynn Lysko
Director, Curriculum & Staff Development, 7-12

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Mathematical Applications in Agriculture

AUTHOR(S): Nina H. Mitchell

PUBLISHER: Thomson, Delmar Learning

COPYRIGHT DATE: 2004

ISBN #: 1-4018-3549-X

PRICE: $53.95

DEPARTMENT: Agriculture

CLASS: Agriculture Mechanics 1-2, Agriculture Mechanics 3-4

GENERAL DESCRIPTION:
This book teaches the many mathematical applications used in crop production, livestock production and financial management in the agriculture business, skills which are essential for success as an agriculture professional. By giving readers a solid foundation in arithmetic, applied geometry and algebra as they relate to agriculture, the material presented will help develop their ability to think through the many mathematical challenges they will face. Case studies, sample problems, charts, and graphs fully illustrate the important concepts presented.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

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Rodney L. Owen, Director
School-to-Career Education

V. Lynn Lysko
Director, Curriculum & Staff Development, 7-12

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Practical Problems in Mathematics for Carpenters

AUTHOR(S): Harry Huth, Mark Huth

PUBLISHER: Thomson, Delmar Learning

COPYRIGHT DATE: 2006

ISBN #: 1-4018-7215-8

PRICE: $38.95

DEPARTMENT: Agriculture

CLASS: Agriculture Mechanics 1-2, Agricultural Mechanics 3-4

GENERAL DESCRIPTION:
This widely used text/workbook teaches the practical mathematics essential to the building construction and carpentry trades. The book features short units that begin with a brief explanation of an important math principle followed by straightforward explanations and examples that are worked out in detail so readers can see first-hand how to perform the functions involved. Basic mathematical problems relevant to the construction trade are accompanied by clear-cut illustrations and together give readers the opportunity to apply and practice math principles common to carpentry.

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Rodney L. Owen, Director
School-to-Career Education

V. Lynn Lysko
Director, Curriculum & Staff Development, 7-12

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Workbook Small Gas Engines

AUTHOR(S): Alfred C. Roth

PUBLISHER: The Goodheart-Willcox Company, Inc.

COPYRIGHT DATE: 2003

ISBN #: 1-59070-184-4

PRICE: $12.75

DEPARTMENT: Agriculture

CLASS: Agricultural Mechanics 1-2, Agricultural Mechanics 3-4

GENERAL DESCRIPTION:
Small Gas Engines provides practical information about the construction and operation of one, two, and three-cylinder, two and four-cycle gasoline engines. Detailed information about specific applications, maintenance, lubrication, trouble-shooting, service, rebuilding, and repair is presented. The text is written in clear, nontechnical language. This edition is up-to-date with the latest advances in small gas engine technology.

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Director, Curriculum & Staff Development, 7-12

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Small Gas Engines

AUTHOR(S): Alfred C. Roth

PUBLISHER: The Goodheart-Willcox Company, Inc.

COPYRIGHT DATE: 2004

ISBN #: 1-59070-183-6

PRICE: $42.75

DEPARTMENT: Agriculture

CLASS: Agricultural Mechanics 1-2, Agricultural Mechanics 3-4

GENERAL DESCRIPTION:
Small Gas Engines provides practical information about the construction and operation of one, two, and three-cylinder, two and four-cycle gasoline engines. Detailed information about specific applications, maintenance, lubrication, trouble-shooting, service, rebuilding, and repair is presented. The text is written in clear, nontechnical language. This edition is up-to-date with the latest advances in small gas engine technology.

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V. Lynn Lysko
Director, Curriculum & Staff Development, 7-12

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Basic Blueprint – Reading and Sketching 8th Edition

AUTHOR(S): Thomas P. Olivo, Dr. C. Thomas Olivo

PUBLISHER: Thomson, Delmar Learning

COPYRIGHT DATE: 2005

ISBN #: 1-4018-4878-8

PRICE: $86.95

DEPARTMENT: Agriculture

CLASS: Agricultural Mechanics 1-2, Agricultural Mechanics 3-4, Structural Ag Welding (ROP)

GENERAL DESCRIPTION:
Updated to the latest ANSI, ISO, AWS, and ASME standards, this 50th Anniversary Edition helps individuals develop skills in reading and interpreting industrial drawings and in preparing simple technical sketches. It is written to be a consumable, interactive text/workbook that provides basic principles, concepts, ANSI and SI Metric drafting symbols and standards, terminology, manufacturing process notes, and other related technical information contained on a mechanical or CAD drawing. Each unit features a basic principle and at least one blueprint and assignment that encourages users to practice newly learned skills.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: Advisory Committee

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MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Agricultural Mechanics 3 Agricultural Mechanics 4

COURSE NUMBER: AGR00901 AGR00902

RECOMMENDED GRADE LEVEL: 10, 11

DURATION: 1 Year

CREDIT: 5 per semester

MEETS GRADUATION REQUIREMENTS: Practical Arts

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4030

MEETS UC ENTRANCE REQUIREMENTS: No

MEETS CSU ENTRANCE REQUIREMENTS: Yes

CREDENTIAL REQUIREMENTS:

REPLACES:

Course Description:

Students will use a classroom and laboratory-type situation to cover the principles, care of, and maintenance of small gas and diesel engines. Work habits and attitudes will be stressed with emphasis on careers in agriculture. Areas of instruction will include: use of equipment manuals, equipment maintenance, and types of engines, oxy-acetylene welding, arc welding, measurement, drawing, safety, and project construction.

Recommended Prerequisites: Agricultural Mechanics 1-2

Date Aligned with State Standards: February, 2007

Board Approved: February 6, 2012

REVIEW CYCLE: 2011-12 through 2015-16
REQUIRED TEXTBOOK (Title, publisher, year): Agricultural Mechanics: Fundamentals & Applications, Herren, Thomson/Delmar Publishers, Latest Edition; Lab Manual to Accompany Agricultural Mechanics Fundamentals & Applications, Herren, Thomson/Delmar Learning, Latest Edition; Basic Blueprint Reading and Sketching, Olivo, Thomson/Delmar Learning, Latest Edition; Small Gas Engines, Roth, Goodheart/Willcox, Latest Edition; Small Gas Engines Workbook, Roth, Goodheart/Willcox, Latest Edition; Mathematical Applications in Agriculture, Mitchell, Thomson/Delmar Learning, Latest Edition; Practical Problems in Mathematics for Carpenters, Huth/Huth, Thomson/Delmar Learning, Latest Edition

INSTRUCTIONAL MATERIALS

Basic Text(s):

Agricultural Mechanics: Fundamentals & Applications, Herren; Thomson/ Delmar Publishers, Latest Edition

Supplementary Text(s):

Lab Manual to Accompany Agricultural Mechanics Fundamentals & Applications, Herren, Thomson/Delmar Learning, Latest Edition
Basic Blueprint Reading and Sketching, Olivo, Thomson/Delmar Learning, Latest Edition
Small Gas Engines, Roth, Goodheart/Willcox, Latest Edition
Small Gas Engines Workbook, Roth, Goodheart/Willcox, Latest Edition
Mathematical Applications in Agriculture, Mitchell, Thomson/Delmar Learning, Latest Edition
Practical Problems in Mathematics for Carpenters, Hugh/Huth, Thomson/ Delmar Learning, Latest Edition

SMALL GAS ENGINES, 3rd or Latest Edition Gray & Barrow, Prentice Hall
SERVICE AND REPAIR INSTRUCTIONS, Briggs and Stratton, or Latest Edition

MECHANICS HANDBOOK; Tecumseh Products Company, or Latest Edition

MASTER PARTS AND SERVICE MANUAL; Tecumseh Products Company, Latest Edition

AGRICULTURAL MECHANICS: Fundamentals & Applications, 3rd or Latest Edition, Cooper, Delmar

THE MODERN ILLUSTRATED HAND AND POWER TOOL MANUAL: Vocational Education Productions, or Latest Edition

WELDING: Principles and Applications, Jeffus, Delmar, or Latest Edition
Student Guide and Lab Manual
Complete Welding Video Package

BLUEPRINT READING FOR WELDERS; Delmar

BASIC TECHNICAL DRAWING; Spencer and Dygdon; Glencoe

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units		Approximate Length of Instruction for Each Unit (Weeks)
A.	SAFETY	2
B.	USE OF MANUALS	1
C.	TYPES OF SYSTEMS	2
D.	CARBURETION	2
E.	IGNITION	2
F.	OVERHAUL AND REPAIR	4
G.	OXY-ACETYLENE WELDING	4
H.	ARC WELDING	5
I.	MEASUREMENT	1
J.	DRAWING	1
K.	PROJECT CONSTRUCTION/SAE	10
L.	FFA and Leadership	1
M.	Agriculture Careers	1
	Total Weeks	36

1.0 GOAL:

Students will understand the importance of proper cleaning and storage of shop tools, the reporting of hazardous situations, and safe practices to be employed with all tools and machines. Upon completion of this unit, students will be able to:

1.1 Store tools, equipment, and materials properly.
1.2 Clean the shop properly as directed by the instructor.
1.3 Recognize and report hazardous situations.
1.4 Use a fire extinguisher properly.
1.5 Practice all shop and equipment safety regulations.
1.6 Develop a proper attitude toward work and avoid unsafe practices.

2.0 GOAL:

Students will understand the importance of an operator's manual for a given piece of equipment and be able to use it for ordering or maintenance. Upon completion of this unit, the students will be able to:

2.1 Identify the equipment to be serviced or repaired and locate the proper service or operator's manual.
2.2 Use the table of contents and determine the main sections and their page numbers.
2.3 Use the proper manual, determine the location of various parts or systems and locate adjustment points for adjusting the equipment.
2.4 Identify the proper names of these parts and systems.
2.5 Order repair or replacement parts by proper name.
2.6 Determine when service is due.

3.0 GOAL:

Students will develop and demonstrate a basic understanding of the types and systems of small gas engines. Upon completion of this unit students will be able to:

3.1 Distinguish among the different types and systems of small gas engines.
3.2 Be able to identify the major parts of an engine.
3.3 Understand the basic terminology used in the study of engines.
3.4 Identify the operating principles of two and four-stroke engines.
3.5 Understand how an engine works.

4.0 GOAL:

Students will develop their ability to recognize the different types of carburetor systems on small engines and be able to maintain them. Upon completion of this unit students will be able to:

4.1 Be familiar with the terminology used in describing carburetion systems.
4.2 List the purpose of each component of a fuel system.
4.3 Identify parts of the carburetor.
4.4 Identify three (3) types of fuel filters.

4.5 Identify three (3) types of air cleaners.
4.6 Explain the theory of carburetion.

5.0 GOAL:

Students will develop their ability to recognize the different types of ignition systems, their component parts, and how to maintain and make adjustments on them. Upon completion of this unit the students will:

5.1 Identify the components of an ignition system.
5.2 Be able to identify the different types of ignition systems.
5.3 Explain the theory of an ignition system.
5.4 Test a spark plug.
5.5 Check the gap on a spark plug.
5.6 Test, repair, and/or replace components of the ignition system.
5.7 Make correct adjustments on the ignition systems.

6.0 GOAL: OVERHAUL AND REPAIR

The student will be able to identify small engines (i.e., manufacturer, size), their parts and components. They will be able to disassemble and reassemble engines, checking tolerances and wear within the engine parts. They will be able to repair, adjust or replace parts and recognize if an engine is worn to the extent that repair is not economical. Upon completion of this unit the student will be able to:

6.1 Locate the proper manuals and specifications for specific small gas engines.
6.2 Read and interpret sketches and diagrams.
6.3 Select the proper hand tools.
6.4 Dissemble a small gas engine.
6.5 Reassemble an engine.
6.6 Be able to read and make measurements with micrometers and calipers.
6.7 Make the necessary repairs, adjustments, etc., to have an engine run.
6.8 Be able to use bearing and guide replacement tool kit to refurbish small engine blocks.

7.0 GOAL: OXY-ACETYLENE WELDING

Students will understand and demonstrate skills involved in the oxy-acetylene welding process and roles heat and pressure play in the process, and will be able to operate and use the oxy-acetylene welder safely. Upon completion of this unit the students will be able to:

7.1 Pass a safety test on oxy-acetylene welding.
7.2 Identify the basic components of the oxy-acetylene welding apparatus.
7.3 Set up, use, shut off, and store an oxy-acetylene welder properly.
7.4 Use the oxy-acetylene equipment to braze mild steel.
7.5 Run a bead with the oxy-acetylene equipment with and without filler rod.
7.6 Use the oxy-acetylene to do four basic welds other than a bead.
7.7 Select welding rods and fluxes appropriate for the job.
7.8 Make a straight cut, using the cutting head.
7.9 Make a bevel cut, using the cutting head.

7.10 Pierce a hole in steel plate.
7.11 Clean the orifices in welding and cutting heads, using the approved technique.
7.12 Construct a simple project requiring cutting and welding.
7.13 Cut a sheet metal (14 gauge or thinner) with the cutting head.
7.14 Change lenses on cutting goggles.
7.15 Observe phase change of metals when they are subjected to heat.
7.16 Describe how materials behave under applied stress.

8.0 GOAL: ARC WELDING

Students will understand and demonstrate competencies in the arc welding process and be able to operate an arc welder safely. Upon completion of this unit students will be able to:

8.1 Pass a safety test and demonstrate proper use of arc welding equipment.
8.2 Strike and maintain an arc correctly.
8.3 Be familiar with the American Welding Society (AWS) classification system for electrodes.
8.4 Select various sizes and types of electrodes and correctly adjust the current setting for each application.
8.5 Identify four basic welding joints and demonstrate the application of each in the flat position, using AC and DC equipment.
8.6 Control distortion in arc welding.
8.7 Test welds for quality and strength.
8.8 Construct a project requiring at least three different welds.
8.9 Identify career opportunities in the welding industry.
8.10 Change lens and head gear on a helmet.
8.11 Use a MIG welder to do four basic welding joints.

9.0 GOAL: MEASUREMENT

Students will understand and be able to read and use a ruler or tape to calculate problems involving length, area, volume, and weight. Students will know the difference between the U. S. Customary and the metric measurement systems. Upon completion of this unit the students will be able to:

9.1 Measure objects correctly with a ruler, tape, or framing square.
9.2 Measure objects correctly using calipers and micrometers.
9.3 Calculate and solve basic measurement problems, including calculation of board feet, cubic measurements, and standard liquid measurements.
9.4 Differentiate between U. S. Customary and metric units (in linear, area, and volumetric measurements).
9.5 Calculate and solve basic measurement problems, including weight.
9.6 Use various methods to determine the mass and volume of regularly and irregularly shaped objects.

10.0 GOAL: DRAWING

Students will master the basic skills necessary to design, draw, calculate the cost of, and construct a project by interpreting the working drawing correctly. Upon completion of this unit the students will be able to:

10.1 Identify the different types of lines used in a drawing or layout.
10.2 Identify the three types of drawings (orthographic, isometric, and oblique).
10.3 Use an architect's scale.
10.4 Construct three-view (orthographic) drawings.
10.5 Interpret a working drawing.
10.6 Sketch and object, using paper and pencil.
10.7 Plan and layout a construction project.
10.8 Calculate construction costs for a given task.
10.9 Assemble and finish a project.

11.0 GOAL: EQUIPMENT MAINTENANCE

Students will develop and demonstrate a basic understanding of adjusting, servicing, maintaining, and operating agricultural equipment. Upon completion of this unit, the students will be able to:

11.1 Demonstrate safe operational procedures for three pieces of agricultural equipment.
11.2 Be able to change oil; change filters for oil, air and fuel; and maintain battery water levels.
11.3 Use safe work habits while servicing, maintaining, and adjusting agricultural equipment.
11.4 Identify the hazards of working with agricultural chemicals.
11.5 Determine what safety standards to follow when using equipment for spreading or spraying hazardous agricultural chemicals.
11.6 Prepare a piece of equipment for storage.
11.7 Recognize the personal and financial dangers related to the safe use, replacement, and repair of components using hydraulic applications.

12.0 GOAL: PROJECT CONSTRUCTION

Students will develop, plan, and build project(s) of their choice, using acquired skills. Upon completion of this unit the students will be able to:

12.1 Develop a bill of materials.
12.2 Develop working drawings and sketches.
12.3 Perform necessary measuring, cutting, welding, etc., to construct project(s).

13.0 GOAL:

Students will develop the knowledge and skills of the National FFA Organization and develop leadership. The students will also gain practical experience through a Supervised Agricultural Experience project.

13.1 List, explain, or recite the following items needed to be an FFA member.

A. History of the FFA
B. Aims and Purpose
C. Creed
D. Dress

E. Motto
F. Code of Ethics
G. Colors
H. Greenhand Degree
I. Emblem
J. Kinds of Membership

13.2 Demonstrate the proper use of parliamentary procedure to improve meetings, using motions, and proper conducting of business.

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A. Describe the benefits of an SAE and how to develop long-range planning.
B. List reasons for good record keeping using the California Farm Account Book.
C. Demonstrate understanding of various types of records including budgets, journals, income summaries and financial statements.

14.0 GOAL:

Career Opportunities – Describe and give examples of entry, technical, and professional careers in the industry.

14.1 Complete a self-assessment related to Agricultural work values and interests.

14.2 Develop a personal occupational plan that outlines career goals and an action plan to achieve those goals.

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Agricultural Mechanics – Fundamentals & Applications - 5th Edition

AUTHOR(S): Ray V. Herren

PUBLISHER: Delmar, Thomson Learning

COPYRIGHT DATE: 2006

ISBN #: 1-4018-5956-9

PRICE: $120.00

DEPARTMENT: Agriculture

CLASS: Agricultural Mechanics 1-2, Agricultural Mechanics 3-4

GENERAL DESCRIPTION:
Agricultural Mechanics Fundamentals & Applications continues to be the most widely used textbook for high school Agricultural Mechanics programs nationwide because of its student friendly layout and its comprehensive coverage. Topics covered range from welding to tool identification, from diesel engine maintenance to masonry. The units are presented in a logical, easy to follow format allowing students to comprehend concepts and apply them in hands on applications.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: Advisory Committee

Selection Committee:
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Rodney L. Owen, Director
School-to-Career Education

V. Lynn Lysko
Director, Curriculum & Staff Development, 7-12

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Lab Manual to Accompany Agricultural Mechanics - Fundamentals and Applications – 5th Edition

AUTHOR(S): Ray V. Herren, Jenna Caputo

PUBLISHER: Delmar, Thomson Learning

COPYRIGHT DATE: 2006

ISBN #: 1-4018-5958-5

PRICE: $47.95

DEPARTMENT: Agriculture

CLASS: Agricultural Mechanics 1-2, Agricultural Mechanics 3-4

GENERAL DESCRIPTION:
The Lab Manual provides guides for completing activities that expand on the material covered in the textbook.

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V. Lynn Lysko
Director, Curriculum & Staff Development, 7-12

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Mathematical Applications in Agriculture

AUTHOR(S): Nina H. Mitchell

PUBLISHER: Thomson, Delmar Learning

COPYRIGHT DATE: 2004

ISBN #: 1-4018-3549-X

PRICE: $53.95

DEPARTMENT: Agriculture

CLASS: Agricultural Mechanics 1-2, Agricultural Mechanics 3-4

GENERAL DESCRIPTION:
This book teaches the many mathematical applications used in crop production, livestock production and financial management in the agriculture business, skills which are essential for success as an agriculture professional. By giving readers a solid foundation in arithmetic, applied geometry and algebra as they relate to agriculture, the material presented will help develop their ability to think through the many mathematical challenges they will face. Case studies, sample problems, charts, and graphs fully illustrate the important concepts presented.

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MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Practical Problems in Mathematics For Carpenters

AUTHOR(S): Harry Huth, Mark Huth

PUBLISHER: Thomson, Delmar Learning

COPYRIGHT DATE: 2006

ISBN #: 1-4018-7215-8

PRICE: $38.95

DEPARTMENT: Agriculture

CLASS: Agricultural Mechanics 1-2, Agricultural Mechanics 3-4

GENERAL DESCRIPTION:
This widely used text/workbook teaches the practical mathematics essential to the building construction and carpentry trades. The book features short units that begin with a brief explanation of an important math principle followed by straightforward explanations and examples that are worked out in detail so readers can see first-hand how to perform the functions involved. Basic mathematical problems relevant to the construction trade are accompanied by clear-cut illustrations and together give readers the opportunity to apply and practice math principles common to carpentry.

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V. Lynn Lysko
Director, Curriculum & Staff Development, 7-12

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Workbook Small Gas Engines

AUTHOR(S): Alfred C. Roth

PUBLISHER: The Goodheart-Willcox Company, Inc.

COPYRIGHT DATE: 2003

ISBN #: 1-59070-184-4

PRICE: $12.75

DEPARTMENT: Agriculture

CLASS: Agricultural Mechanics 1-2, Agricultural Mechanics 3-4

GENERAL DESCRIPTION:
Small Gas Engines provides practical information about the construction and operation of one, two, and three-cylinder, two and four-cycle gasoline engines. Detailed information about specific applications, maintenance, lubrication, troubleshooting, service, rebuilding, and repair is presented. The text is written in clear, nontechnical language. This edition is up-to-date with the latest advances in small gas engine technology.

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MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Small Gas Engines

AUTHOR(S): Alfred C. Roth

PUBLISHER: The Goodheart-Willcox Company, Inc.

COPYRIGHT DATE: 2004

ISBN #: 1-59070-183-6

PRICE: $42.75

DEPARTMENT: Agriculture

CLASS: Agricultural Mechanics 1-2, Agricultural Mechanics 3-4

GENERAL DESCRIPTION:
Small Gas Engines provides practical information about the construction and operation of one, two, and three-cylinder, two and four-cycle gasoline engines. Detailed information about specific applications, maintenance, lubrication, troubleshooting, service, rebuilding, and repair is presented. The text is written in clear, nontechnical language. This edition is up-to-date with the latest advances in small gas engine technology.

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Curriculum Area Chairperson

V. Lynn Lysko
Director, Curriculum & Staff Development, 7-12

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Basic Blueprint – Reading and Sketching 8th Edition

AUTHOR(S): Thomas P. Olivo, Dr. C. Thomas Olivo

PUBLISHER: Thomson, Delmar Learning

COPYRIGHT DATE: 2005

ISBN #: 1-4018-4878-8

PRICE: $86.95

DEPARTMENT: Agriculture

CLASS: Agricultural Mechanics 1-2, Agricultural Mechanics 3-4, Structural Ag Welding (ROP)

GENERAL DESCRIPTION:
Updated to the latest ANSI, ISO, AWS, and ASME standards, this 50th Anniversary Edition helps individuals develop skills in reading and interpreting industrial drawings and in preparing simple technical sketches. It is written to be a consumable, interactive text/workbook that provides basic principles, concepts, ANSI and SI Metric drafting symbols and standards, terminology, manufacturing process notes, and other related technical information contained on a mechanical or CAD drawing. Each unit features a basic principle and at least one blueprint and assignment that encourages users to practice newly learned skills.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: Advisory Committee

Selection Committee:
Roger Dickson, Mark Nower, Natalie Sweeney, Mike Brecht, Gary Gerhardt, Scott Layne

Rodney L. Owen, Director
School-to-Career Education

V. Lynn Lysko
Director, Curriculum & Staff Development, 7-12

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Agricultural Mechanics 5 Agricultural Mechanics 6

COURSE NUMBER: AGR01001 AGR01002

RECOMMENDED GRADE LEVEL: 11, 12

DURATION: 1 Year

CREDIT: 5 per semester

MEETS GRADUATION REQUIREMENTS: Practical Arts

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4030

MEETS UC ENTRANCE REQUIREMENTS: No

MEETS CSU ENTRANCE REQUIREMENTS: Yes

CREDENTIAL REQUIREMENTS:

REPLACES:

Course Description:

Students will use a classroom and laboratory-type situation to cover the principles of surveying, power hydraulics, equipment maintenance, oxy-acetylene welding, arc welding, MIG and TIG welding. Project construction will emphasize project drawing, measurement, and cost analysis. Work habits and attitudes will be stressed with emphasis on careers in agriculture.

Recommended Prerequisites: Agricultural Mechanics 3-4

Date Aligned with State Standards: February, 2007

Board Approved: February 6, 2012

REVIEW CYCLE: 2011-12 through 2015-16
REQUIRED TEXTBOOK (Title, publisher, year): WELDING: Principles and Applications, Jeffus, Delmar, Latest Edition

INSTRUCTIONAL MATERIALS

Basic Text(s):

WELDING: Principles and Applications, Jeffus, Delmar, Latest Edition

Supplementary Text(s):

WELDING: Principles and Applications Student Study Guide and Lab Manual, Delmar, Complete Welding Video Package, Latest Edition

BLUEPRINT READING FOR WELDERS, Delmar, Latest Edition

SURVEYING WITH CONSTRUCTION APPLICATIONS, Kavanaugh, Prentice Hall, Latest Edition

INDUSTRIAL FLUID POWER, Womack Educational Publications, Latest Edition

VICKERS PRACTICAL HYDRAULICS, Sperry Rand, Latest Edition

BASIC TECHNICAL DRAWING, Spencer and Dygdon, Glencoe, Latest Edition

AGRICULTURAL MECHANICS: Fundamentals and Applications, 3rd or Latest Edition, Cooper, Delmar

THE MODERN ILLUSTRATED HAND AND POWER TOOL MANUAL, Latest Edition
Vocational Education Productions

SMALL GAS ENGINES, Gray and Barrow, Prentice Hall

STARRETT HANDBOOK OF TOOLS, L. S. Starrett Company

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units		Approximate Length of Instruction for Each Unit (Weeks)
A.	SAFETY	2
B.	SURVEYING	6
C.	WORK	2
D.	POWER	2
E.	HYDRAULICS	2
F.	EQUIPMENT MAINTENANCE	2
G.	WELDING: OXY-ACETYLENE	4
	ARC	4
H.	MEASUREMENT	1
I.	DRAWING	1
J.	PROJECT CONSTRUCTION/SAE	1
K.	FFA and Leadership/SAE	1
L.	Agriculture Careers	1
	Total Weeks	36

AGRICULTURAL MECHANICS 5-6

1.0 GOAL:

Students will understand the importance of proper cleaning and storage of shop tools, the reporting of hazardous situations, and safe practices to be employed with all tools and machines. Upon completion of this unit, students will be able to:

1.1 Store tools, equipment, and materials properly.
1.2 Clean the shop properly as directed by the instructor.
1.3 Recognize and report hazardous situations.
1.4 Use a fire extinguisher properly.
1.5 Practice all shop and equipment safety regulations.
1.6 Develop a proper attitude toward work and avoid unsafe practices.

2.0 GOAL:

Students will develop and demonstrate a basic understanding of surveying as it is used in agricultural applications. Upon completion of this, students will be able to:

2.1 List the uses of surveying.
2.2 Perform land measurements, including pacing and taping of linear distance.
2.3 Set up and level an instrument and read a rod, ruler, or tape.
2.4 Determine the difference in elevation between two or more points.
2.5 Be able to demonstrate proper use of a hand level or clinometer.
2.6 Set up and keep a field notebook.
2.7 Understand subdivision of land.
2.8 Understand the process of land leveling and cutting and filling.

3.0 GOAL:

Students will understand the difference between a quantity of work and the rate at which it is done. Upon completion of this unit, the students will be able to:

3.1 Define energy, force, pressure, friction, work, and power.
3.2 Demonstrate knowledge of energy, force, pressure, work, and power, using applications of levers, gears, pulleys, and shafts.
3.3 Describe the concept of efficiency of energy conversion and give examples of energy loss.
3.4 Develop an awareness of the importance of safety in relation to the application of energy, force, pressure, friction, work, and power.

4.0 GOAL:

Students will explain and demonstrate principles related to the transmission of power. Upon completion of this unit, the student will be able to:

4.1 Define linear motion and rotational motion.
4.2 Explain the relationship of friction to the transmission of power.
4.3 Demonstrate knowledge of the transmission of power, using chains, belts, gears, and shafts.

4.4 Develop an awareness of the importance of safety in the transmission of power.

5.0 GOAL:

The goal of this unit is to develop the students understanding of hydraulic theory and fundamentals. Upon completion of this unit the student will be able to:

5.1 Describe the function of different hydraulic parts.
5.2 Identify the different types and uses of hydraulic pumps.
5.3 Test, diagnose and repair a hydraulic system.
5.4 Assemble a simple hydraulic system.

6.0 GOAL:

Students will develop and demonstrate a basic understanding of adjusting, servicing, maintaining, and operating agricultural equipment. Upon completion of this unit, students will be able to:

6.1 Demonstrate safe operational procedures for three pieces of agricultural equipment.
6.2 Change oil, filters for oil, air and fuel; and maintain battery water levels.
6.3 Use safe work habits while servicing, maintaining, and adjusting agricultural equipment.
6.4 Identify the hazards of working with agricultural chemicals.
6.5 Determine what safety standards to follow when using equipment for spreading or spraying hazardous agricultural chemicals.
6.6 Prepare a piece of equipment for storage.
6.7 Recognize the personal and financial dangers related to the safe use, replacement, and repair of components used in hydraulic applications.

7.0 GOAL:

Students will understand and demonstrate skills involved in the oxy-acetylene welding process and roles heat and pressure play in the process, and will be able to operate and use the oxy-acetylene welder safely. Upon completion of this unit, the students will be able to:

7.1 Pass a safety test on oxy-acetylene welding.
7.2 Identify the basic components of the oxy-acetylene welding apparatus.
7.3 Set up, use, shut off, and store an oxy-acetylene welder properly.
7.4 Use the oxy-acetylene equipment to braze mild steel.
7.5 Run a bead with the oxy-acetylene equipment with and without filler rod.
7.6 Use the oxy-acetylene to do four basic welds other than a bead.
7.7 Select welding rods and fluxes appropriate for the job.
7.8 Make a straight cut, using the cutting head.
7.9 Clean the orifices in welding and cutting heads using the approved technique.
7.10 Construct a simple project requiring cutting and welding.
7.11 Change lenses on cutting goggles.

8.0 GOAL:

Students will understand and demonstrate competencies in the arc welding process and be able to operate an arc welder safely. Upon completion of this unit, students will be able to:

8.1 Pass a safety test and demonstrate proper use of arc welding equipment.
8.2 Strike and maintain an arc correctly.
8.3 Be familiar with the American Welding Society (AWS) classification system for electrodes.
8.4 Select various sizes and types of electrodes and correctly adjust the current setting for each application.
8.5 Identify four basic welding joints and demonstrate the application of each in the flat position, using AC and DC equipment.
8.6 Control distortion in arc welding.
8.7 Test welds for quality and strength.
8.8 Construct a project requiring at least three different welds.
8.9 Identify career opportunities in the welding industry.
8.10 Change lens and head gear on a helmet.
8.11 Use a MIG welder to do four basic welding joints.
8.12 Use a MIG welder to weld square tubing and pipe together.
8.13 Use a stick welder to do four basic out of position welds.
8.14 Use a TIG welder to weld stainless steel and to do two basic joints.
8.15 Use a TIG welder to weld aluminum and to do two basic joints.

9.0 GOAL:

Students will understand and be able to read and use a ruler or tape to calculate problems involving length, area, volume, and weight. Students will know the difference between U. S. Customary and the metric measurement systems. Upon completion of this unit, students will be able to:

9.1 Measure objects correctly with a ruler, tape, or framing square.
9.2 Measure objects correctly using calipers and micrometers.
9.3 Calculate and solve basic measurement problems, including calculation of board feet, cubic measurements, and standard liquid measurements.
9.4 Differentiate between U. S. Customary and metric measurement units (in linear, area, and volumetric measurements).
9.5 Calculate and solve basic measurement problems, including weight.
9.6 Use various methods to determine the mass and volume of regularly and irregularly shaped objects.

10.0 GOAL:

Students will master the basic skills necessary to design, draw, calculate the cost of, and construct a project by interpreting the working drawing correctly. Upon completion of this unit, students will be able to:

10.1 Identify the different types of lines used in a drawing or layout.
10.2 Identify the three types of drawings (orthographic, isometric, and oblique).
10.3 Use an architect's scale.
10.4 Construct three-view (orthographic) drawings.
10.5 Interpret a working drawing.
10.6 Sketch and object, using paper and pencil.

10.7 Plan and layout a construction project.
10.8 Calculate construction costs for a given task.
10.9 Assemble and finish a project.

11.0 GOAL:

Students will develop, plan, and build a project(s) of their choice, using acquired skills. Upon completion of this unit, students will be able to:

11.1 Develop a bill of materials.
11.2 Develop working drawings and sketches.
11.3 Perform necessary measuring, cutting, welding, etc. to construct the project.

12.0 GOAL:

Students will develop the knowledge and skills of the National FFA Organization and develop leadership. The students will also gain practical experience through a Supervised Agricultural Experience project.

12.1 List, explain, or recite the following items needed to be an FFA member.

A. History of the FFA
B. Aims and Purpose
C. Creed
D. Dress
E. Motto
F. Code of Ethics
G. Colors
H. Greenhand Degree
I. Emblem
J. Kinds of Membership

12.2 Demonstrate the proper use of parliamentary procedure to improve meetings, using motions, and proper conducting of business.
12.3 Students will gain an understanding of supervised agricultural experience (SAE), and farm record keeping through hands-on project involvement. Students will:

A. Describe the benefits of an SAE and how to develop long-range planning.
B. List reasons for good record keeping using the California Farm Account Book.
C. Demonstrate understanding of various types of records including budgets, journals, income summaries and financial statements.

13.0 GOAL:

Career Opportunities – Describe and give examples of entry, technical, and professional careers in the industry.

13.1 Complete a self-assessment related to Agricultural work values and interests.
13.2 Develop a personal occupational plan that outlines career goals and an action plan to achieve those goals.

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Agricultural Mechanics 7 Agricultural Mechanics 8

COURSE NUMBER: AGR01011 AGR01012

RECOMMENDED GRADE LEVEL: 11, 12

DURATION: 1 Year

CREDIT: 5 per semester

MEETS GRADUATION REQUIREMENTS: Practical Arts

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4030

MEETS UC AND CSU ENTRANCE REQUIREMENTS: No

CREDENTIAL REQUIREMENTS: See last page

REPLACES:

Course Description:

Students will use a laboratory-type situation to cover the principles, and applications of MIG, TIG, and oxy-acetylene welding of large equipment. Strong emphasis is put on the instruction and participation of project design, project construction, and cost of materials. Participation in FFA will reinforce skill development in the students.

Recommended Prerequisites: Agricultural Mechanics 1-2, 3-4, and 5-6

Date Aligned with State Standards: February, 2007

Board Approved: February 6, 2012

REVIEW CYCLE: 2011-12 through 2015-16
REQUIRED TEXTBOOK (Title, publisher, year): WELDING: Principles and Applications, Jeffus, Delmar Publishers, Latest Edition; Practical Problems in Mathematics for Welders, Schell/Matlock, Delmar Publishers, Latest Edition; Metal Fabrication, Technology for Agriculture, Jeffus, Thomson/Delmar Learning, Latest Edition; Basic Blueprint – Reading and Sketching, Olivo, Thomson/Delmar Learning, Latest Edition

INSTRUCTIONAL MATERIALS

Basic Text(s):

WELDING: Principles and Applications, Jeffus, Delmar Publishers, Latest Edition
Practical Problems in Mathematics for Welders, Schell/Matlock, Delmar Publishers, Latest Edition
Metal Fabrication, Technology for Agriculture, Jeffus, Thomson/Delmar Learning, Latest Edition
Basic Blueprint – Reading and Sketching, Olivo, Thomson/Delmar Learning, Latest Edition

Supplementary Text(s):

WELDING: Principles and Applications, Jeffus, Delmar
Student Guide and Lab Manual, latest edition
Complete Welding Video Package

BLUEPRINT READING FOR WELDERS: Delmar
Text and Workbook

BASIC TECHNICAL DRAWING: Spencer & Dygdon; Glencoe

FFA Official Manual, Future Farmers of America, FFA Foundation

FFA Handbook, Future Farmers of America, FFA Foundation

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units		Approximate Length of Instruction for Each Unit (Weeks)
A.	Shop Orientation and Safety	2
B.	Supervised Agricultural Experience	6
C.	Analytical and Construction Skills	10
D.	Shop/Trade Math	*
E.	Planning/Design for Welding, Structures, Fences	4
F.	Welding: Arc/Oxy-acetylene	4
G.	MIG Welding Process	4
H.	TIG Welding Process	4
I.	FFA and Leadership	1
J.	Agriculture Careers	1
	Total Weeks	36

AGRICULTURAL MECHANICS 7-8

1.0 GOAL:

Students will understand the importance of safe practices to be employed with all tools and machines. Upon completion of this unit, students will be able to:

1.1 Store tools, equipment, and materials properly.

1.2 Describe the importance and clean the shop properly as directed by the instructor.

1.3 Recognize and report hazardous situations to the appropriate persons.

1.4 Identify the major classifications of fires and describe how to extinguish each.

1.5 Practice all shop and equipment safety regulations.

1.6 Develop a proper attitude toward work and avoid unsafe practices.

2.0 GOAL:

Students will understand the important factors of the Supervised Occupational Experience Programs (SAEP) in the total program of vocational agriculture.

2.1 Define SAEP.

2.2 Describe the relationship between SAEP and the total program of Vocational Agriculture.

2.3 Identify and list the benefits of SAEP.

2.4 Describe the types of SAEP.

2.5 Identify and discuss the purpose and characteristics of an SAEP plan.

2.6 Describe how a person can get started in a SAEP.

2.7 Develop a long-range SAEP plan.

2.8 Record all transactions and activities pertinent to the student's SAEP and FFA activities in the California Vocational Agriculture record Book.

3.0 GOAL:

Students will demonstrate the proper work order of construction in the production of an assignment.

3.1 Develop a logical, sequential, step-by-step plan for completion, from inception through evaluation of finished product.

3.2 Sketch an example, establish a design, develop construction detail, estimate cost, modify any step based upon implications of preceding step, select materials, determine hand tools, power tools, and machines needed, estimate time for construction.

3.3 Lay out patterns, lay out jigs, determine sequence of processes, schedule cutting, identify milling needs, identify laminating procedures and jointery, perform major assembly as per procedures, complete sanding preparation, detail assembly procedures and adjustments at each major step, and apply appropriate finished.

3.4 Evaluate the finished product.

4.0 GOAL:

Students will understand and be able to read and use a ruler or tape to calculate problems involving length, area, volume, and weight. Students will know the difference between the U. S. Customary and the metric measurement systems. Upon completion of this unit, the students will be able to:

4.1 Measure objects correctly with a ruler, tape, or framing square.

4.2 Calculate and solve basic measurement problems, including calculation of board feet, cubic measurements, and standard liquid measurements.

4.3 Differentiate between U. S. Customary and metric measurement units (in linear, area, and volumetric measurements).

4.4 Calculate and solve basic measurement problems, including weight.

4.5 Use various methods to determine the mass and volume of regularly and irregularly shaped objects.

5.0 GOAL:

Students will master the basic skills necessary to design, draw, calculate the cost of, and construct a project by interpreting the working drawing correctly. Upon completion of this unit, the students will be able to:

5.1 Identify the types of lines used in a drawing or layout.

5.2 Determine lengths to scale.

5.3 Develop a working drawing for a project to scale.

6.0 GOAL:

Students will understand and demonstrate skills involved in the arc or oxy-acetylene welding process.

6.1 Pass a safety test on arc and oxy-acetylene welding.

6.2 Successfully complete the following types of welds: Butt, V or Fillet, Lap, and Corner.

6.3 Identify kinds of metals.

6.4 Select the make, type, and size of electrodes.

6.5 Select and use welding table, metal vise, ground clamp, electrode holder, face shield, welding gloves, chipping hammer, wire brush.

6.6 Connect welder to electric source.

6.7 Strike and hold an arc.

6.8 Lay a bead, chip and remove a slag, and clean metals to be welded.

6.9 Control expansion and contraction while welding various kinds of metals.

6.10 Successfully complete welds in the following positions: Flat, horizontal, vertical, overhead.

6.11 Identify the parts of an oxy-acetylene unit and indicate their use.

6.12 Properly set up, light, and adjust an oxy-acetylene flame.

6.13 Cut mild steel with an oxy-acetylene cutting torch.

6.14 Select the oxygen, acetylene, oxygen regulator, acetylene regulator, hoses and connections, welding blowpipe, goggles, flint lighter, welding filler rods, wrenches, flux and cutting blowtorch, and welding table.

6.15 Set, test, and shut down welding equipment.

6.16 Make a joint without using a filler rod.

6.17 Perform cutting, fusion welding, brazing, hard surfacing, and silver soldering on a project.

7.0 GOAL:

Students will understand and demonstrate competencies in the MIG welding process.

7.1 Explain the uses of gas fluxes.

7.2 Explain the MIG power supply.

7.3 Use ferrous and non-ferrous wire electrodes with the proper inert gas.

7.4 Use proper manipulation and welding techniques.

8.0 GOAL:

The student will understand the process of TIG welding.

8.1 Explain the uses of the tungsten electrode for stainless steel and aluminum.

8.2 Use proper gas flux for specific applications.

8.3 Explain the power supply for TIG welding.

8.4 Use proper manipulation and welding techniques.

9.0 GOAL:

Students will develop a knowledge of job search techniques and resources, develop interview techniques, develop a tentative occupational goal, appreciate the fundamental points of keeping a job.

9.1 Prepare a list of contacts and list important factors to consider when selecting people or agencies to use as resources to locate jobs.

9.2 Locate, read, and understand "Help Wanted" ads and posted job vacancies.

9.3 Compare relative merits of using private and public employment agencies.

9.4 Describe the important components of a resume.

9.5 Describe the value of the "cold walk-in" procedure as an effective method of job seeking.

9.6 Complete sample job applications.

9.7 Describe various methods of interviewing job candidates and list some of the frequently used questions.

9.8 Discuss the interview standards in regards to grooming, behavior and clothing.

9.9 Develop an appreciation for other factors involved in job candidate assessment including: first impressions, listening and communicating skills, enthusiasm, identification of potential employee contributions.

9.10 Discuss the concept of professional ethics.

9.11 Identify criteria for self-assessment of one's performance on the job, and list reasons why workers are fired from their jobs.

9.12 Describe economic and technological trends which may affect the work environment.

9.13 Develop a plan of action for accomplishing an occupational objective. The occupational goal, the program of study (post-secondary education if necessary) and S.O.E.P. for time in high school should all be included. The plan should be maintained in departmental files.

10.0 GOAL:

Students will develop the knowledge and skills of the National FFA Organization and develop leadership. The students will also gain practical experience through a Supervised Agricultural Experience project.

10.1 List, explain, or recite the following items needed to be an FFA member.

A. History of the FFA
B. Aims and Purpose
C. Creed
D. Dress
E. Motto
F. Code of Ethics
G. Colors
H. Greenhand Degree/Chapter Farmer Degree
I. Emblem
J. Kinds of Membership

10.2 Demonstrate the proper use of parliamentary procedure to improve meetings, using motions, and proper conducting of business.

10.3 Students will gain an understanding of supervised agricultural experience (SAE), and farm record keeping through hands-on project involvement. Students will:

A. Describe the benefits of an SAE and how to develop long-range planning.
B. List reasons for good record keeping using the California Farm Account Book.
C. Demonstrate understanding of various types of records including budgets, journals, income summaries and financial statements.

11.0 GOAL:

Career Opportunities – Describe and give examples of entry, technical, and professional careers in the industry.

11.1 Complete a self-assessment related to Agricultural work values and interests.

11.2 Develop a personal occupational plan that outlines career goals and an action plan to achieve those goals.

From: Gallagher, Jeanette
Sent: Monday, September 28, 2009 8:45 AM
To: Moore, Julie
Subject: FW: Ag Mech 7-8 course outline.rtf
Please note the appropriate credentials listed below.

Also, please note, I know often the courses that put "Ag" in front of the title means you want it to be an Ag teacher. What Teresa is saying below is it wouldn't be the best choice, but we could allow an Ag teacher to do the course as a "District Call" if they had a strong welding background.

Jeanette Gallagher
Human Resources Analyst
gallagher.j@monet.k12.ca.us
(209) 576-4387

From: Ussery, Teresa [mailto:TUssery@stancoe.org]
Sent: Monday, September 28, 2009 8:41 AM
To: Gallagher, Jeanette
Subject: RE: Ag Mech 7-8 course outline.rtf

A Single Subject in Industrial Technology Education, a Designated Subjects Career Technical Education in Building Trades and Construction (or the old Voc Ed in Welding). You could put an Ag Science teacher in as a district call- I would think you would want to make sure the teacher to has a strong welding background.

Teresa

MODESTO CITY SCHOOLS
COURSE OUTLINE

COURSE TITLE: Agricultural Small Engine Repair 1 Agricultural Small Engine Repair 2

COURSE NUMBER: AGR14201 AGR14202

RECOMMENDED GRADE LEVEL: 9-12

ABILITY LEVEL: Unsectioned

DURATION: 2 Semesters

CREDIT: 5-10 Units/Semester

GRADING FORMAT: Standard 0-4 Grade Points

MEETS GRADUATION REQUIREMENTS IN: Practical Arts

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4030

MEETS UC AND CSU ENTRANCE REQUIREMENTS: No

CREDENTIAL REQUIREMENTS: Single Subject in: Ag, Industrial Ed & Technology, Ag Mechanics, Engine Performance & Technology or Small Engine Service & Repair

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Course Description: This course is designed to educate students about the fast growing industry of small engines and compact power equipment. There is a large demand for small engine technicians in the areas of lawn, garden, farm and construction equipment. This course places emphasis on overhaul, repair, adjustment, and troubleshooting of lawnmowers, chainsaws, and other agricultural compact power equipment.

Recommended Prerequisites: None

Credential Requirements:

Date Matched Against State Framework:
Model Curriculum Standards, and State
Curriculum Guides: October 15, 2005

Board Approved: February 6, 2012

REVIEW CYCLE: 2011-12 through 2015-16
REQUIRED TEXTBOOK: Small Gas Engines, Alfred C. Roth, Goodheart-Wilcox, 2004

INSTRUCTIONAL MATERIALS

Basic Text(s):

Small Gas Engines Alfred C. Roth, Goodheart-Wilcox, 2004, or Latest Edition (ISBN 1-59070-183-6)
Workbook (ISBN 1-59070-184-4),
Instructor's Manual (ISBN 1-59070-185-2),
Video Set (ISBN M-S200) Full Set, Volume Discount

Supplementary Text(s):

Vanguard V-Twin Overhead Valve (OHV) Engines - 272144, Briggs and Stratton, Latest edition

Service Tools Catalog – MS-8746, Briggs and Stratton, Latest edition

Repair Manual for Intek V-twin overhead valve (OHV) engines 273521, Briggs and Stratton, Latest edition

Twin Cylinder (opposed twin) L-head (side valve) built after 1981 271172, Briggs and Stratton, Latest edition

Single Cylinder L-head (side valve) engines built after 1981 270962, Briggs and Stratton, Latest edition

Single Cylinder Overhead Valve (OHV) Engines built after 1981, 272147, Briggs and Stratton, Latest edition

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units	Approximate length of instruction for each unit (Weeks)
A. Career Opportunities/FFA Leadership/Gender Equity/SAE	1
B. Safety and Shop Practices	2
C. Theory	2.5
D. Tools	3
E. Two and Four Stroke Engines	2
F. Basic Systems	1
G. Ignition Systems	1.5
H. Fuel Systems	1.5
I. Components	2
J. Valves	1.5
K. Cylinders	1
L. Pistons	1
M. Rod and Crankshaft	1
N. Bearings and Seals	1
O. Lubrication	1
P. Electrical Systems	1.5
Q. Project Disassembly	3.5
R. Project Assembly	5
S. Frame	.5
T. Service	1
U. Consumer/Shop Practices	1
V. Computer Applications	.5
Total Number of Weeks	36 Weeks

EXPECTATIONS FOR STUDENT LEARNING

1.0 GOAL: The student will be able to demonstrate competency in lifelong career planning skills, develop leadership abilities, and develop an awareness of programs offered in higher education without regard to race, sex, national origin, or handicap as they relate to agricultural compact power equipment.

1.1 Develop leadership abilities in educational, vocational, civic, recreational, and social activities through involvement in student organizations such as the Future Farmers of America. (6.12.1)

1.2 Identify personal traits (strengths, values and weaknesses). (6.12)

1.3 Listen to guest speaker on trade and technical education after high school. (6.12)

1.4 Identify at least three possible career choices in the small engine repair field. (6.13)

1.5 Demonstrate that opportunities in the small engine repair field are available without regard to race, sex, national origin, or handicap. (6.7)

1.6 Demonstrate an understanding of the role of a small engine mechanic in the agriculture industry. (6.7)

1.7 Students will explore and develop an SAEP.

2.0 GOAL: Demonstrate attitudes, behaviors, and personal characteristics valued by employers.

2.1 The student will demonstrate the following: (6.7)

A. Responsibility
B. Dependability
C. Promptness
D. Willingness to learn new skills
E. Attentiveness during instruction
F. Getting along with others
G. Respect for others
H. Honesty and integrity
I Pride in work
J. Flexibility
K. Not being defensive when corrected
L. Working up to capacity
M. Being pleasant and cheerful
N. Showing strong motivation to succeed
0. Good personal appearance
P. Organized
Q. Constructively assisting others
R. Work evaluation

3.0 GOAL: The student will understand correct safety practices, and tool use, consistent with industry requirements.

3.1 Satisfactorily complete the district's safety program. (6.8)

3.2 Pass shop safety tests and demonstrate shop safety. (6.8.1)

3.3 Obtain parental acknowledgement of safety requirements and conduct expectations. (6.8)

3.4 Demonstrate the safe use of all power equipment. (6.8.1)

3.5 Follow cleanup and storage procedures. (6.8.1)

3.6 Identify tools and their safe uses on a tool test. (6.8.1)

4.0 GOAL: The student will understand physical science concepts related to small engine design and operation including energy forms, static inertia, dynamic inertia, force, torque, horsepower, power vacuum, and atmosphere pressure.

4.1 Explain theory of inertia. (6.6)

4.2 Identify types of engines by their design. (6.6.1)

4.3 Compute displacement. (6.14.1)

4.4 Explain energy forms. (6.6.1)

4.5 Define and calculate force, torque, power, and horsepower. (6.6.1)

4.6 Explain ratios. (6.14)

4.7 Explain atmosphere pressure as it relates to engine operation. (6.6)

4.8 Define vacuum. (6.6)

5.0 GOAL: The student will understand two cycle and four cycle engine operating principles.

5.1 Explain the four stroke cycle. (6.6)

5.2 Explain the two stroke cycle. (6.6)

5.3 Demonstrate the four stroke cycle on a shop engine and describe the sequence of combustion. (6.6.1)

5.4 Name the parts and explain the function on a four cycle engine. (6.6.1)

5.5 Name the parts and explain the function on a two cycle engine. (6.6.1)

6.0 GOAL: The student will understand the principles of the fuel, electrical and ignition system.

6.1 Explain the principles of the fuel system. (6.6)

6.2 Explain the principles of the ignition and electrical system. (6.6)

6.3 Identify part of a simple fuel system and explain their function. (6.6.1)

6.4 Identify the parts of a simple point ignition system and explain their function. (6.6.1)

7.0 GOAL: The student will understand the physical science of electricity, principles of magneto ignition, principles of battery ignition, and principles of spark plugs in a manner consistent with industry standards.

7.1 Explain the theory of basic magneto system. (6.6)

7.2 Overhaul a magneto system and perform a tune-up. (6.6.1)

7.3 Demonstrate a knowledge of how the capacitive discharge system works. (6.6)

7.4 Explain and perform an ignition system repair on a small engine ignition system. (6.6.1)

7.5 Clean and gap a spark plug. (6.6.1)

7.6 Identify the components of a battery ignition system and explain the function of each part. (6.6)

8.0 GOAL: The student will understand carburetion systems, fuel types, fuel mixtures, fuel pumps and filters, physical science of fuel systems, diaphragms and float-type carburetion theory, troubleshooting and repair, air cleaner, servicing, and governor repair and adjustments consistent with related industry standards.

8.1 Identify the parts of a typical fuel system. (6.6)

8.2 Identify different types of fuels used – unleaded, leaded, fuel mix. (6.6.1)

8.3 Explain the carburetor theory and circuits. (6.6)

8.4 Overhaul a basic carburetor and name the parts. (6.6.1)

8.5 Explain fuel pump operation and overhaul a fuel pump. (6.6.1)

8.6 Explain the venturi principle and how it is used in carburetion. (6.6.1)

8.7 Service a diaphragm type of carburetor and make all adjustments. (6.6.1)

8.8 Service fuel and air filters. (6.6.1)

8.9 Identify types of air filter systems. (6.6.1)

8.10 Identify different types of governor systems and explain their operation. (6.6.1)

8.11 Adjust mixture (air-fuel). (6.6.1)

9.0 GOAL: The student will understand the components of an engine.

9.1 Identify different types of engines according to design. (6.6.1)

9.2 Identify component parts of an engine. (6.6.1)

9.3 Explain and describe the two and four stroke sequence of combustion. (6.6)

10.0 GOAL: The student will disassemble a project engine with regard to procedure, records and organization consistent with industry skill level requirements.

10.1 Identify the correct manual and procedures for disassembling the project engine. (6.5.2)

10.2 Demonstrate proper organization of disassembled parts in regard to placement and order of assembly. (6.5.2)

10.3 Fill out an engine specification sheet showing measurements of critical components. (6.11.1)

10.4 Identify OEM part specifications in proper service manuals for project engine. (6.6.1)

10.5 Demonstrate how to identify worn or damaged parts using the manual and specification sheet. (6.11)

11.0 GOAL: The student will understand cylinder reconditioning process and techniques.

11.1 Use a micrometer to measure a cylinder. (6.14.1)

11.2 Hone a cylinder. (6.6.1)

11.3 Identify a cylinder in need of repair. (6.6.1)

11.4 Look up specifications to be used in cylinder reconditioning. (6.6.1)

12.0 GOAL: The student will understand piston and piston ring construction, design, operation, troubleshooting, repair, and replacement with industry standards.

12.1 Remove and replace pistons and rings and measure ring end gap. (6.6.1)

12.2 Measure piston with a micrometer. (6.14.1)

12.3 Identify piston ring by name and function. (6.6.1)

12.4 Identify piston pin types and keeper. (6.6.1)

12.5 Remove and replace a piston pin. (6.6.1)

12.6 Identify piston damage and determine if replacement is necessary. (6.6.1)

12.7 Look up specifications to be used in piston and ring service. (6.5.2)

13.0 GOAL: The student will understand connecting rod and crankshaft construction, design, inspection repair, and replacement consistent with industry standards.

13.1 Service lower end of engine (bearings and crank). (6.6.1)

13.2 Perform engine measurements on crankshaft and connecting rods. (6.14.1)

13.3 Identify types of connecting rods. (6.6.1)

13.4 Identify assembly marks on rod caps. (6.6.1)

13.5 Explain how crankshaft operates and what its function is. (6.6)

13.6 Look up specifications to be used in piston and ring service. (6.5.1)

14.0 GOAL: The student will understand bearing and seal removal, inspection, measurement, installation, consistent with industry skill level requirements.

14.1 Identify types of engine bearings. (6.6.1)

14.2 Measure and inspect bearings. (6.14.1)

14.3 Install and torque bearing caps. (6.6.1)

14.4 Inspect seals. (6.6.1)

14.5 Replace seals. (6.6.1)

14.6 Identify types of bearings. (6.6.1)

15.0 GOAL: The student will understand friction, viscosity, lubrication types and specifications, and two cycle and four cycle lubrications systems in a manner consistent with industry standards.

15.1 Explain friction, viscosity, and oil classification. (6.5, 6.6)

15.2 Identify three types of lubrication systems. (6.5, 6.6)

15.3 Explain how the two cycle oil system works. (6.6)

16.0 GOAL: The student will understand components and operation of L-Head and Over Head valve train design.

16.1 Explain the function of a valve train and their components. (6.6.1)

16.2. Explain the operating sequence and valve timing. (6.6.1)

16.3 Identify the different type of valve configurations. (6.6)

16.4 Troubleshoot the valve train. (6.6)

17.0 GOAL: The student will demonstrate an understanding of engine diagnosis, tune-up, carburetion repair, ignition repair, major engine repair.

17.1 Look up specifications in book. (6.5.2, 6.6.1, 6.14.1)

17.2 Disassemble engine according to specifications. (6.6.1)

17.3 Refurbish valves. (6.6.1)

17.4 Replace rings. (6.6.1)

17.5 Measure parts with micrometer. (6.14.1)

17.6 Reassemble engine, torquing all necessary parts. (6.6.1)

17.7 Replace all necessary gaskets and seals. (6.6.1)

17.8 Rebuild ignition system. (6.6.1)

17.9 Service and rebuild a carburetor. (6.6.1)

17.10 Troubleshoot an engine in the areas of carburetor ignition, starting, and compression. (6.6.1)

17.11 Perform a complete tune-up. (6.6.1)

17.12 Make all necessary adjustments to the engine to make it run correctly. (6.6)

18.0 GOAL: The student will understand basic walk-behind frame repair and maintenance and blade service.

18.1 Perform frame maintenance. (6.5.1)

18.2 Service belts and chains. (6.5.1)

18.3 Service blades. (6.5.1)

19.0 GOAL: The student will demonstrate entry-level skills in oil changing, lube servicing, filter service, blade and hub servicing, and chain servicing.

19.1 Change oil on a motor. (6.5.1)

19.2 Service filters. (6.5.1)

19.3 Sharpen a blade. (6.5.1)

19.4 Change a blade. (6.5.1)

19.5 Grease zerk fittings on a motor and frame. (6.5.1)

20.0 GOAL: The student will understand detail information required on engine disassembly.

20.1 Demonstrate how to develop an engine specification sheet. (6.5.2, 6.11)

21.0 GOAL: The student will assemble a project engine with regard to procedure, records and organization consistent with industry skill level requirements.

21.1 Identify the correct manual and procedures for assembling the project engine. (6.5.2)

21.2 Demonstrate proper organization of assembling parts in regard to placement and order of assembly. (6.5.2)

21.3 Identify parts, tools, patterns and torque specifications in proper service manuals for project engine. (6.6.1)

22.0 GOAL: The student will understand computer usage in the field.

22.1 Demonstrate computer applications in industry as they pertain to parts, tools, service, and inventory. (6.11)

23.0 GOAL: The student will complete individual SOE projects in addition to assigned class curriculum.

23.1 Satisfactorily complete the individual SOE projects. (6.13.1)

23.2 Complete a record book for SOE project. (6.11, 6.13.2)

24.0 GOAL: The student will identify and select the proper tool for a specific application. The student will correctly use tools and equipment to perform a job to manufacturer's specification.

24.1 Identify hand and power tools by their proper names and explain their proper use. (6.6.1)

24.2 Properly use service manuals/parts books to look up parts and specifications. (6.5.2)

Equipment Needed:

Air tools
Basic mechanics hand tools – Society of Automotive Engineers (SAE) and metric
Battery charger
Bearing press
Bench Vises
Bearing puller set
Body tools – assorted
Boring machine
Bushing drivers
Camcorder
Carburetor synchronizers
Compression tester
Computer with printer
Cylinder bore gauge
Double flaring set
Drill press
Electronic test equipment
Expendable supplies
Student tool sets
Glass bead machine
Grinders – hand
Hard seat grinder
Hydraulic Jack
Jack stands
Lathe/Mill combo
Lubrication equipment
Micrometers – in/out/telescope
Oil drain equipment
Overhead projector
Paint spray gun
Parts washer
Pedestal grinder
Project engines Compressed Air
Regulator
Ring compressor
Seat cutter
Soldering gun
Solvent tank
Spark plug cleaner
Specialty tools
Steam cleaner
Tap and die sets – SAE and metric
Test engines
Torque wrenches
Tubing cutter
Vacuum gauge
Vacuum pressure tester
Valve knurler
Valve grinder
Valve seat grinder
Valve spring
Compressor
VCR and monitor
Class set Fluke Volt-ohm meters
Work tables

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Small Gas Engines

AUTHOR(S): Alfred C. Roth

PUBLISHER: Goodheart-Wilcox

COPYRIGHT DATE: 2004

ISBN #: 1-59070-183-6

PRICE: $37.98

DEPARTMENT: Agriculture

CLASS: Agricultural Small Engine Repair 1-2, 3-4

GENERAL DESCRIPTION:
Text provides clear, hands-on directions when working with small gas engines.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY:

Selection Committee:
Richard Wolfe, Roger Dickson, and approved by District Agriculture Advisory Committee

Rodney L. Owen, Director
School-to-Career Education

V. Lynn Lysko
Director, Curriculum & Staff Development, 7-12

MODESTO CITY SCHOOLS
COURSE OUTLINE

COURSE TITLE: Agricultural Small Engine Repair 3 Agricultural Small Engine Repair 4

COURSE NUMBER: AGR14301 AGR14302

RECOMMENDED GRADE LEVEL: 10-12

ABILITY LEVEL: Unsectioned

DURATION: 2 Semesters

CREDIT: 5-10 Units/Semester

GRADING FORMAT: Standard 0-4 Grade Points

MEETS GRADUATION REQUIREMENTS IN: Practical Arts

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4030

MEETS UNIVERSITY OF CALIFORNIA ENTRANCE REQUIREMENTS: No

MEETS CALIFORNIA STATE UNIVERSITY ENTRANCE REQUIREMENTS: No

CREDENTIAL REQUIREMENTS: Single Subject in: Ag, Industrial Ed & Technology, Ag Mechanics, Engine Performance & Technology or Small Engine Service & Repair

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Course Description:

This course is designed to enhance the students former knowledge about the fast growing industry of small engines and compact power equipment. This course places emphasis on advanced techniques of overhauling, repairing, adjusting, and troubleshooting of two and four-stroke agricultural compact power equipment.

Recommended Prerequisites: Agricultural Small Engine Repair 1-2

Date Matched Against State Framework Model Curriculum Standards, and State Curriculum Guides: October 15, 2005

Board Approved: February 6, 2012

REVIEW CYCLE: 2011-12 through 2015-16
REQUIRED TEXTBOOK: Small Gas Engines, Alfred C. Roth, Goodheart-Wilcox, 2004, Latest Edition

INSTRUCTIONAL MATERIALS

Basic Text(s):

Small Gas Engines, Alfred C. Roth, Goodheart-Wilcox, 2004, or Latest Edition (ISBN 1-59070-183-6),
Workbook (ISBN 1-59070-184-4),
Instructor's Manual (ISBN 1-59070-185-2),
Video Set (ISBN M-S200) Full Set, Volume Discount

Supplementary Text(s):

Vanguard V-Twin Overhead Valve (OHV) Engines - 272144, Briggs and Stratton, or Latest Edition

Service Tools Catalog – MS-8746, Briggs and Stratton, or Latest Edition

Repair Manual for Intek V-twin overhead valve (OHV) engines 273521, Briggs and Stratton, or Latest Edition

Twin Cylinder (opposed twin) L-head (side valve) built after 1981 271172, Briggs and Stratton, or Latest Edition

Single Cylinder L-head (side valve) engines built after 1981 270962, Briggs and Stratton, or Latest Edition

Single Cylinder Overhead Valve (OHV) Engines built after 1981, 272147, Briggs and Stratton, or Latest Edition

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units	Approximate length of instruction for each unit (Weeks)
A. Career Opportunities/FFA Leadership/Gender Equity	1
B. Safety and Shop Practices	2
C. Tools	2
D. Two and Four Stroke Engine and Performance	2
E. Basic Charging Systems	2
F. Ignition Systems	1.5
G. Fuel & Systems	1.5
H. Manufacturers of Small Engines	2
I. Valves and Valve Train Performance	2.5
J. Cylinders	1
K. Pistons	1
L. Rod and Crankshaft	1
M. Bearings and Seals	1
N. Accessory Electrical Systems	2.5
O. Project Disassembly	1
P. Project Assembly	2
Q. Lawn Mower Tractor (LMT) Frame	2
R. Two Stroke and 4 Stroke Service	1
S. Consumer/Shop Practices	1
T. Computer Applications	1
U. Individual Projects	5
Total Number of Weeks	36 Weeks

EXPECTATIONS FOR STUDENT LEARNING

1.0 GOAL: The student will be able to demonstrate competency in lifelong career planning skills, develop leadership abilities, and develop an awareness of programs offered in higher education without regard to race, sex, national origin, or handicap as they relate to agricultural compact power equipment.

1.1 Students will recognize traits of effective leaders and businessmen in the industry, by visiting small engine repair facilities and complete a report about choosing a career within the field of agricultural engines. (6.12)

1.2 Develop leadership abilities in educational, vocational, civic, recreational, and social activities through involvement in student organizations such as the Future Farmers of America. (6.12.1)

1.3 Identify personal traits (strengths, values and weaknesses). (6.12)

1.4 Listen to guest speaker on trade and technical education after high school. (6.12)

1.5 Identify at least three possible career choices in the small engine repair field. (6.13)

1.6 Demonstrate that opportunities in the small engine repair field are available without regard to race, sex, national origin, or handicap. (6.7)

1.7 Demonstrate an understanding of the role of a small engine mechanic in the agriculture industry. (6.7)

1.8 Develop a resume and complete a job application. (6.12)

1.9 Correctly fill out and use repair order forms. (6.11.1)

2.0 GOAL: Demonstrate attitudes, behaviors, and personal characteristics valued by employers.

2.1 The student will demonstrate the following: (6.7)

A. Responsibility
B. Dependability
C. Promptness
D. Willingness to learn new skills
E. Attentiveness during instruction
F. Getting along with others
G. Respect for others
H. Honesty and integrity
I. Pride in work

2.1 Continued:

J. Flexibility
K. Not being defensive when corrected
L. Working up to capacity
M. Being pleasant and cheerful
N. Showing strong motivation to succeed
0. Good personal appearance
P. Organized
Q. Constructively assisting others
R. Work evaluation

3.0 GOAL: The student will understand correct safety practices, and tool use, consistent with industry requirements.

3.1 Satisfactorily complete the district's safety program. (6.8)

3.2 Pass shop safety tests and demonstrate shop safety. (6.8.1)

3.3 Obtain parental acknowledgement of safety requirements and conduct expectations. (6.8)

3.4 Demonstrate the safe use of all power equipment. (6.8.1)

3.5 Follow-up cleanup and storage procedures. (6.8.1)

3.6 Identify tools and their uses on a tool test. (6.8.1)

4.0 GOAL: The student will understand physical science concepts related to small engine design and performance including energy forms, efficiency, static inertia, dynamic inertia, force, torque, horsepower, in both two and four stroke engines.

4.1 Explain theory of inertia. (6.6)

4.2 Explain how component weight and design affects engine efficiency. (6.6.1)

4.3 Compute displacement. (6.14.1)

4.4 Define and calculate force, torque, power, and horsepower. (6.6.1)

4.5 Explain and calculate ratios. (6.14)

4.6 Explain how turbos and blowers work and are used in the small engine industry. (6.6.1)

4.7 Explain atmosphere pressure as it relates to engine operation. (6.6)

5.0 GOAL: The student will understand two cycle and four cycle engine operating principles.

5.1 Explain the four stroke cycle. (6.6)

5.2 Explain the two stroke cycle. (6.6)

5.3 Describe the sequence of combustion in a two and four stroke engine. (6.6.1)

5.4 Name the parts and explain the function on a four cycle engine. (6.6.1)

5.5 Name the parts and explain the function on a two cycle engine. (6.6.1)

6.0 GOAL: The student will understand the principles of the fuel, electrical charging and ignition system.

6.1 Explain the principles of the fuel system. (6.6)

6.2 Explain the principles of electrical flow. (6.6)

6.3 Explain the principles of the ignition and electrical system. (6.6)

6.4 Identify the different types of charging systems and their output. (6.6.1)

6.5 Demonstrate how to troubleshoot a charging system using a volt meter, DC shunt. (6.9)

6.6 Demonstrate how to test DC amperage output of an alternator or stator. (6.9)

6.7 Explain a function of a diode, voltage regulator and other charging components. (6.6.1)

6.8 Identify the parts of a simple point ignition system and explain their function. (6.6.1)

7.0 GOAL: The student will understand the physical science of electricity, principles of magneto ignition, principles of battery ignition, and principles of spark plugs in a manner consistent with industry standards.

7.1 Explain the theory of basic magneto system. (6.6)

7.2 Overhaul a magneto system and perform a tune-up. (6.6.1)

7.3 Demonstrate a knowledge of how the capacitive discharge system works. (6.6)

7.4 Explain and perform an ignition system repair on a small engine ignition system. (6.6.1)

7.5 Clean and gap a spark plus. (6.6.1)

7.6 Identify the components of a basic electronic ignition system and explain the function of each part. (6.6)

8.0 GOAL: The student will understand carburetion systems, fuel types, fuel mixtures, fuel pumps, filters, carburetion theory, troubleshooting and repair, air cleaner, servicing, and governor repair and adjustments consistent with related industry standards.

8.1 Identify the parts of a typical fuel system. (6.6)

8.2 Identify different types of fuels used – unleaded, leaded, fuel mix. (6.6.1)

8.3 Explain the function and principles of octane and additives in fuel. (6.6)

8.4 Explain the carburetor theory and circuits. (6.6)

8.5 Overhaul a performance carburetor and name the parts. (6.6.1)

8.6 Explain fuel pump operation and overhaul a fuel pump and accelerator pump. (6.6.1)

8.7 Explain the venture principle and how it is used in carburetion. (6.6.1)

8.8 Explain the differences in throttle controlling devices inside the carburetor including slide, plate and cylinder type of controls. (6.6.1)

8.9 Service fuel and air filters. (6.6.1)

8.10 Adjust mixture (air-fuel). (6.6.1)

9.0 GOAL: The student will properly identify different models, types, designs, components and manufacturers of small engines.

9.1 Identify different types of engines according to design, make and model. (6.6.1)

9.2 Identify the different types of components from different manufacturers. (6.6.1)

9.3 Troubleshoot problems within several different makes, model and type of engines. (6.6)

10.0 GOAL: The student will troubleshoot, repair, and replace valves, seats, valve guides, and springs consistent with industry skill level requirements.

10.1 Service upper end and valve train and measure stem clearance. (6.6.1)

10.2 Demonstrate removal and installation of a valve. (6.6.1)

10.3 Inspect and clean a valve. (6.6.1)

10.4 Explain valve failures and their causes. (6.6.1)

10.5 Grind a valve and seat. (6.6.1)

10.6 Identify the parts of a valve. (6.6.1)

10.7 Lapp a valve. (6.6.1)

10.8 Adjust valve clearance. (6.6.1)

10.9 Demonstrate a multi-angle valve cut and explain the effects on air flow. (6.6.1)

11.0 GOAL: The student will understand cylinder reconditioning process and techniques.

11.1 Use a micrometer to measure a cylinder. (6.14.1)

11.2 Hone a cylinder. (6.6.1)

11.3 Identify a cylinder in need of repair. (6.6.1)

11.4 Look up specifications to be used in cylinder reconditioning. (6.6.1)

12.0 GOAL: The student will understand piston and piston ring construction, design, operation, troubleshooting, repair, and replacement with industry standards.

12.1 Remove and replace pistons and rings and measure ring end gap. (6.6.1)

12.2 Measure piston with a micrometer. (6.14.1)

12.3 Identify piston ring by name and function. (6.6.1)

12.4 Identify piston pin types and keeper. (6.6.1)

12.5 Remove and replace a piston pin. (6.6.1)

12.6 Identify piston damage and determine if replacement is necessary. (6.6.1)

12.7 Look up specifications to be used in piston and ring service. (6.5.2)

12.8 Explain different shapes of pistons and their uses. (6.6.1)

12.9 Explain how piston weight and design affects efficiency, combustion and performance. (6.6.1)

13.0 GOAL: The student will understand connecting rod and crankshaft construction, design, inspection repair, and replacement consistent with industry standards.

13.1 Service lower end of engine (bearings and crank). (6.6.1)

13.2 Perform engine measurements on crankshaft and connecting rods. (6.14.1)

13.3 Identify types of connecting rods. (6.6.1)

13.4 Identify assembly marks on rod caps. (6.6.1)

13.5 Explain how crankshaft operates and what its function is. (6.6)

13.6 Look up specifications to be used in piston and ring service. (6.5.1)

14.0 GOAL: The student will understand bearing and seal removal, inspection, measurement, installation, consistent with industry skill level requirements.

14.1 Identify types of engine bearings. (6.6.1)

14.2 Measure and inspect bearings. (6.14.1)

14.3 Install and torque bearing caps. (6.6.1)

14.4 Inspect seals. (6.6.1)

14.5 Replace seals. (6.6.1)

14.6 Identify types of bearings. (6.6.1)

15.0 GOAL: The student will understand friction, viscosity, lubrication types and specifications, and two cycle and four cycle lubrications systems in a manner consistent with industry standards.

15.1 Explain friction, viscosity, and oil classification. (6.5, 6.6)

15.2 Identify the different types of lubrication systems. (6.5, 6.6)

15.3 Explain how the two cycle oil system works. (6.6)

15.4 Explain different additives and their functions in oil. (6.6)

16.0 GOAL: The student will understand electrical system, and mechanical starter systems.

16.1 Use a volt-ohm meter. (6.9.2)

16.4 Check a battery for charge. (6.9)

16.6 Service electrical starter systems. (6.9)

16.7 Troubleshoot the electrical and starting system. (6.9)

17.0 GOAL: The student will demonstrate an understanding of engine diagnosis, tune-up, carburetion repair, ignition repair, major engine repair, and drive system repair.

17.1 Look up specifications in book. (6.5.2, 6.6.1, 6.14.1)

17.2 Disassemble engine according to specifications. (6.6.1)

17.3 Refurbish valves. (6.6.1)

17.4 Replace rings. (6.6.1)

17.5 Measure parts with micrometer. (6.14.1)

17.6 Reassemble engine, torquing all necessary parts. (6.6.1)

17.7 Replace all necessary gaskets and seals. (6.6.1)

17.8 Rebuild ignition system. (6.6.1)

17.9 Service and rebuild a carburetor. (6.6.1)

17.10 Troubleshoot an engine in the areas of carburetor ignition, starting, and compression. (6.6.1)

17.11 Perform a complete tune-up. (6.6.1)

17.12 Make all necessary adjustments to the engine to make it run correctly. (6.6)

18.0 GOAL: The student will understand Lawn Mower Tractor (LMT) frame repair, maintenance and blade service.

18.1 Perform frame maintenance. (6.5.1)

18.2 Service belts and chains. (6.5.1)

18.3 Service blades. (6.5.1)

19.0 GOAL: The student will disassemble a project engine with regard to procedure, records and organization consistent with industry skill level requirements.

19.1 Identify the correct manual and procedures for disassembling the project engine. (6.5.2)

19.2 Demonstrate proper organization of disassembled parts in regard to placement and order of assembly. (6.5.2)

19.3 Fill out an engine specification sheet showing measurements of critical components. (6.11.1)

19.4 Identify OEM part specifications in proper service manuals for project engine. (6.6.1)

19.5 Demonstrate how to identify worn or damaged parts using the manual and specification sheet. (6.11)

20.0 GOAL: The student will understand detail information required on records and work orders.

20.1 Demonstrate how to develop a service schedule and keep a maintenance record. (6.5.2, 6.11)

20.2 Demonstrate how to fill out a work order. (6.11)

20.3 Demonstrate how to develop an engine specification sheet. (6.5.2, 6.11)

21.0 GOAL: The student will understand computer usage in the field.

21.1 Demonstrate computer applications in industry as they pertain to parts, service, and inventory. (6.11)

22.0 GOAL: The student will complete individual SOE projects in addition to assigned class curriculum.

22.1 Satisfactorily complete pre-approved individual projects. (6.13.1)

22.2 Complete a record book for SOE project. (6.11, 6.13.2)

23.0 GOAL: The student will identify and select the proper tool for a specific application. The student will correctly use tools and equipment to perform a job to manufacturer's specification.

23.1 Identify hand and power tools by their proper names and explain their proper use. (6.6.1)

23.2 Properly use service manuals/parts books to look up parts and specifications. (6.5.2)

24.0 GOAL: The student will assemble a project engine with regard to procedure, records and organization consistent with industry skill level requirements.

24.1 Identify the correct manual and procedures for assembling the project engine. (6.5.2)

24.2 Demonstrate proper organization of assembling parts in regard to placement and order of assembly. (6.5.2)

24.3 Identify parts, tools, patterns and torque specifications in proper service manuals for project engine. (6.6.1)

25.0 GOAL: The student will assemble, disassemble, and troubleshoot an individual project engine with regard to procedure, records and organization consistent with industry skill level requirements.

25.1 Identify the correct manual and procedures for assembling the project engine. (6.5.2)

25.2 Demonstrate proper organization of disassembled parts in regard to placement and order of assembly. (6.5.2)

25.3 Demonstrate proper organization of assembling parts in regard to placement and order of assembly. (6.5.2)

25.4 Identify parts, tools, patterns and torque specifications in proper service manuals for project engine. (6.6.1)

25.5 Properly use service manuals/parts books to look up parts and specifications. (6.5.2)

25.6 Fill out an engine specification sheet showing measurements of critical components. (6.11.1)

Equipment Needed:

Air tools
Basic mechanics hand tools--Society of Automotive Engineers (SAE) and metric
Battery charger
Bearing press
Bench Vises
Bearing puller set
Body tools--assorted
Boring machine
Bushing drivers
Camcorder
Carburetor synchronizers
Compression tester
Computer with printer
Cylinder bore gauge
Double flaring set
Drill press
Electronic test equipment
Expendable supplies
Student tool sets
Glass bead machine
Grinders--hand
Hard seat grinder
Hydraulic Jack
Jack stands
Lathe / Mill combo
Lubrication equipment
Micrometers--in/out/telescope
Oil drain equipment
Overhead projector
Paint spray gun
Parts washer
Pedestal grinder
Project engines
Compressed Air Regulator
Ring compressor
Seat cutter
Soldering gun
Solvent tank
Spark plug cleaner
Specialty tools
Steam cleaner
Tap and die sets--SAE and metric
Test engines
Torque wrenches
Tubing cutter
Vacuum gauge
Vacuum pressure tester
Valve knurler
Valve grinder

Valve seat grinder
Valve spring compressor
VCR and monitor
Class set Fluke Volt-ohm meters
Work tables

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Small Gas Engines

AUTHOR(S): Alfred C. Roth

PUBLISHER: Goodheart-Wilcox

COPYRIGHT DATE: 2004

ISBN #: 1-59070-183-6

PRICE: $37.98

DEPARTMENT: Agriculture

CLASS: Agricultural Small Engine Repair 1-2, 3-4

GENERAL DESCRIPTION:
Text provides clear, hands-on directions when working with small gas engines.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY:

Selection Committee:
Richard Wolfe, Roger Dickson, and approved by District Agriculture Advisory Committee

Rodney L. Owen, Director
School-to-Career Education

V. Lynn Lysko
Director, Curriculum & Staff Development, 7-12

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Agriculture 1 ROP S1 Agriculture 1 ROP S2

COURSE NUMBER: ROP01611 ROP01612

RECOMMENDED GRADE LEVEL: 11, 12

DURATION: 4 semesters or 2 summers and 2 semesters

CREDIT: Variable; up to 15 each summer, 10 per semester for a maximum of 40

MEETS GRADUATION REQUIREMENTS: Practical Arts, CTE

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4070

MEETS UC AND CSU ENTRANCE REQUIREMENTS: No

CREDENTIAL REQUIREMENTS: Single Subject Agriculture

REPLACES:

Course Description:

This competency-based course prepares students for employment in areas of modern agriculture with emphasis in the area of commercial livestock agriculture. Integrated throughout the course are career preparation standards which include basic academic skills, communication, interpersonal skills, problem-solving, workplace safety, technology, and employment literacy.

Recommended Prerequisites: None

Date Aligned with State Standards: September, 2013

Board Approved: June 16, 2014

REVIEW CYCLE: 2011-12 through 2015-16
REQUIRED TEXTBOOK (Title, publisher, year): AgriScience Explorations, Morgan, Lee, Wilson, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition, AgriScience Explorations, Activity Manual, Mika, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition

INSTRUCTIONAL MATERIALS

Basic Text(s):

AgriScience Explorations, Morgan, Lee, Wilson, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition

AgriScience Explorations, Activity Manual, Mika, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition

Supplementary Text(s):

AgriScience Explorations, Activity Manual Instructor's Guide

Agriscience Explorations, Teacher's Manual

Exam*View*® Test Bank CD-ROM for Comprehensive Titles

Visual Aids on PowerPoint® CD-ROM

SUMMARY OF MAJOR UNITS OF INSTRUCTION
Approximate Length of Instruction for Each Unit

		(Hours)
A.	Orientation	2
B.	Career Development	3
C.	Employability	5
D.	Agriculture Leadership Development	25
E.	Health and Safety	5
F.	Livestock Selection and Management	55
G.	Business Skills Development	25
H.	Beef and Swine Industry	20
I.	Livestock Physiology and Nutrition	25
J.	Agriculture Math Problem Solving	15
K.	Agriculture in California, the U. S. and the World	10
L.	Agriculture Leadership Development	20
M.	Merchandising/Marketing Livestock	
N.	Advanced Livestock Selection	
O.	Livestock Health Management and Sanitation Practices	
P.	Reproduction & Genetics in Agriculture	
Q.	Commercial Horse Management and Dairy Production	
R.	Basic Agriculture Business Law	
S.	Supervised Occupational Experience	55
T.	Commercial Plant Science	10
U.	Current Events in Agriculture	5
V.	Agriculture Math	
VI.	Community Classroom Training	330
	Total	720

Orientation – Students will understand attendance, grading and discipline policies.

1.1 Explain the function of OSHA in the workplace.
1.2 Describe accident prevention techniques and provide methods to prevent accidents in the workplace.
1.3 Explain and implement procedures to be followed in the event of an emergency or accident in the workplace or classroom.
1.4 Students will identify instances of sexual harassment and provide appropriate solutions to deal with workplace issues.
1.5 Students will identify, describe, and demonstrate positive work ethics.

Anchor Standards: 6.2, 6.4, 6.5, 6.6 Career Readiness: 6

2.0 **Career Opportunities** – Describe and give examples of entry, technical, and professional careers in the industry.

2.1 Complete a self-assessment related to work values and interests.
2.2 Develop a personal occupational plan that outlines career goals and an action plan to achieve those goals.

Anchor Standards: 3.1, 3.4, 3.9 Career Readiness: 3

3.0 **Employability** – Students will participate in an interview that includes presentation of the employability portfolio.

3.1 *Students will create and develop a*
- Resume
- Cover Letter
- Job Application Form
- Letter of Recommendation
- Work Sample

3.2 Students will participate in an interview that includes presentation of the employability portfolio.

Anchor Standards: 11.5 Career Readiness: 1, 2, 5, 7, 8, 9, 12

4.0 **Agriculture Leadership Development** – Students understand effective leadership styles, key concepts of group dynamics, team and individual decision-making and conflict resolution.

4.1 Know and engage in SAE (supervised agricultural experience).
4.2 Parliamentary law and its importance to agriculture.
4.3 Types of Supervised Occupational Experience Programs.
4.4 Record-Keeping and management of projects.
4.5 Agriculture presentation/public speaking.
4.6 Opportunities available through the FFA.
4.7 Students understand health and safety practices, policies, procedures, and regulations, including equipment and hazardous materials handling.

Anchor Standards: 2.2, 2.3, 2.5, 3.1, 3.9, 5.1, 5.3, 5.4, 6.3, 6.4, 6.5, 6.6, 9.1, 9.2, 9.3, 9.4, 9.5, 9.7, 9.8, 9.9, 9.10, 9.11, 10.7, 11.3 Career Readiness: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11

5.0 **Health and Safety** – Students understand health and safety practices, policies, procedures, and regulations, including equipment and hazardous materials handling.

5.1 Explain policies and procedures for safety in the agriculture field.
5.2 Use tools and machines safely.

Anchor Standards: 5.2, 6.2, 6.3, 6.4, 6.6 Career Readiness: 1, 2, 5, 7

6.0 **Livestock Selection and Management** – Students understand the necessary elements for proper animal housing and handling equipment, space and location requirements, selection of habitat and housing, sane and humane use of restraint equipment and animal husbandry tools.

6.1 Identify major livestock breeds.
6.2 Evaluate major classes of livestock.
6.3 Terms, definitions, and life-cycles of the major classes of livestock.
6.4 Explain economic/social significance of livestock classes.
6.5 Describe management techniques used on various livestock.
6.6 Identify parts and functions of livestock.
6.7 Identify economic importance of livestock.
6.8 Identify different breeds of livestock, and their importance, and their use in agriculture.
6.9 Identify external anatomy.
6.10 Understand principles of animal behavior.
6.11 Understand the factors involved in and develop an ability for evaluating livestock.
6.12 Demonstrate basic skills necessary in livestock management.

Anchor Standards: 1, 5.1, 5.4, 7.1, 7.6, 10.1, 10.4, 10.6 Career Readiness: 1, 2, 5 CTE Pathway Agriculture and Natural Resources: Agriscience Pathway © 6.1; Animal Science Pathway (D) 1.1, 1.2, 1.3, 1.4, 3.2-5.2, 6.1, 6.2, 9.1, 10.1, 10.2, 11.1, 11.2, 12.1-12.6

7.0 **Business Skills Development** – Responsibility & Flexibility – qualities and behaviors that constitute a positive and professional work demeanor; accountability, adaptation to various roles and responsibilities, individual actions affect a community, time management, continually refine, perfect and apply high-quality craftsmanship to a product or presentation.

7.1 Project types and opportunities.
7.2 Merchandising/marketing process.
7.3 Financing procedures.
7.4 Budgeting and enterprise.

7.5 Product selection.
7.6 Contracts – loans, facility, insurance, feeding.
7.7 Cooperatives – insurance, feed, hay.
7.8 Management practices – housing/equipment, feeding and health care.
7.9 Project accounting procedures.
7.10 Exhibit preparation/showmanship practices.
7.11 Exhibit/live product evaluation.
7.12 Processing evaluation.
7.13 Overall evaluation.

Anchor Standards: 3.2, 3.3, 4.5, 4.7, 5.1-5.4, 7.1, 7.2, 7.6, 10.1, 10.2, 10.4-10.8 Career Readiness: 1, 4, 5, 6, 9, 11

8.0 **Beef and Swine Industry** – Students understand large animal production.

8.1 Overall industry terminology.
8.2 Conformation points.
8.3 Breeds/selection.
8.4 Basic health.
8.5 Marketing.

Anchor Standards: 1.0, 10.1, 11.1 Career Readiness: 1, 5 CTE Pathway Agriculture and Natural Resources: Animal Science (D) 5.1, 5.2, 6.1-6.4, 8.4, 10.2, 12.2-12.6

9.0 **Livestock Physiology and Nutrition** – Students understand key principles of animal nutrition and will understand animal physiology.

9.1 Describe major systems and functions of organs in each system.
9.2 Describe the management practices that are likely to improve the functioning of the various systems.
9.3 Explain the principles for providing proper balanced rations for a variety of production stages in ruminants and monogastrics.
9.4 Explain the digestive processes of the ruminant and monogastric digestive systems.
9.5 Describe how animal nutrition is affected by the digestive, endocrine, and circulatory systems.

Anchor Standards: 1.0, 10.1 Career Readiness: 1, 5 CTE Pathway Agriculture and Natural Resources: Animal Science (D) 2.2, 2.4, 3.1-3.3, 7.1, 10.2, 11.2

10.0 **Agriculture Math Problem Solving** – Students will learn Probability & Statistics and organizing data distributions.

10.1 Various mathematical applications integrated in the curriculum including accounting basics, statistics and data sets, judging argument validity, etc.

Anchor Standards: 1, 5.1-5.4
Career Readiness: 1, 5
CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 1.4, 1.6, 4.1, 4.2

11.0 **Agriculture in California, the U. S. and the World** – Students know how to use contemporary and emerging technological resources in diverse and changing personal, community and workplace environments.

11.1 Global perspectives of agriculture.
11.2 Internal agriculture trade.
11.3 Current events in U. S. agriculture.

Anchor Standards: 1, 8.2, 10.1, 10.2, 10.8
Career Readiness: 1, 12
CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 2.1-2.4, 9.1-9.7, Agriscience Pathway (C) 1.1-1.4, 1.6, 1.7

12.0 **Agriculture Leadership Development** – Students understand effective leadership styles, key concepts of group dynamics, team and individual decision-making and conflict resolution.

12.1 Supervised Experience Project Evaluation – Bishop Future Farmers.
12.2 FFA Leadership program/Officer training.
12.3 Junior Livestock meetings.
12.4 NJLS Meetings.
12.5 Stanislaus Cattleman's Association participation.
12.6 Farm Bureau.
12.7 CPPA Shows and meetings.

Anchor Standards: 9.1, 9.2, 9.7, 9.9, 9.12, 9.15
Career Readiness: 1, 2, 7
CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 6.1-6.3

13.0 **Merchandising/Marketing Livestock** – Students understand how animal products and by-products are processed and marketed.

13.1 Describe animal harvest, carcass inspection and grading, meat processing safety regulations and practices, removal and disposal of non-edible by-products.
13.2 Explain relative importance of major meat classifications.
13.3 Describe how meat based products and meals are made.
13.4 Describe how meat products are marketed and the value of animal by-products to non-agricultural industries.

Anchor Standards: 8.1, 10.2, 10.4
Career Readiness: 1, 2
CTE Pathway Agriculture and Natural Resources: Animal Science Pathway (D) 12.1-12.3, 12.5, 12.6

14.0 **Advanced Livestock Production** – Students understand the necessary elements for proper animal housing and handling equipment – space and location requirements, selection of habitat and housing, sane and humane use of restraint equipment and animal husbandry tools.

14.1 Identify major livestock breeds.
14.2 Evaluate major classes of livestock.
14.3 Terms, definitions, and life-cycles of the major classes of livestock.
14.4 Explain economic/social significance of livestock classes.
14.5 Describe management techniques used on various livestock.
14.6 Identify parts and functions of livestock.
14.7 Identify economic importance of livestock.
14.8 Identify different breeds of livestock, and their importance, and their use in agriculture.
14.9 Identify external anatomy.
14.10 Understand principles of animal behavior.
14.11 Understand the factors involved in and develop an ability for evaluating livestock.
14.12 Demonstrate advanced skills necessary in livestock management.

Anchor Standards: 1, 7.1, 9.5, 10.1, 10.4
Career Readiness: 1, 6
CTE Pathway Agriculture and Natural Resources: Agriscience Pathway (C) 6.1, Animal Science Pathway (D) 1.1-1.4, 3.2, 4.1, 4.2, 5.1, 5.2, 6.1, 6.2, 9.1, 10.1, 10.2, 11.1, 11.2, 12.1-12.6

15.0 **Livestock Health Management and Sanitation Practices** – Students understand the causes and effects of diseases and illnesses in animals.

15.1 Describe signs of normal health in contrast to illness and diseases.
15.2 Explain importance of animal behavior in diagnosing animal sickness and disease.
15.3 Describe common pathogens, vectors, and hosts that cause disease in animals.
15.4 Explain prevention, control, and treatment practices for pests and parasites.
15.5 Describe how diseases are passed among animal species and from animals to humans and how that relationship affects health and food safety.

Anchor Standards: 1, 10.1, 10.3
Career Readiness: 1, 2, 5
CTE Pathway Agriculture and Natural Resources: Animal Science Pathway (D) 6.1-6.7

16.0 **Reproduction and Genetics in Agriculture** – Students understand animal reproduction including reproductive organ function. Students understand animal inheritance and selection principles including the structure and role of DNA.

16.1 Explain animal conception, gestation process and fetal development.
16.2 Describe the parturition process including problems and solutions.
16.3 Describe the role of artificial insemination and embryo transfer in animal agriculture.
16.4 Explain animal production breeding systems and reasons for use.

16.5 Evaluate a group of animals for desired qualities and discern among them for breeding selection.
16.6 Demonstrate how to use animal performance data in the selection and management of production animals.
16.7 Research and discuss current technology used to measure desirable traits.
16.8 Demonstrate how to predict phenotypic and genotypic results of a dominant/recessive gene pair.
16.9 Explain role of mutations and hybrids in animal genetics.

Anchor Standards: 1, 4.1, 4.3, 4.5, 10.1 Career Readiness: 1, 5 CTE Pathway Agriculture and Natural Resources: Animal Science Pathway (D) 4.1-4.5, 5.1-5.5

17.0 **Commercial Horse Management and Dairy Production** – Students understand large animal production and be able to do a Demonstration and Application.

17.1 Demonstrate an understanding of selection of livestock.
17.2 Demonstrate sound methods for raising young livestock to a productive age.
17.3 Know channels in which livestock and livestock products are marketed.
17.4 Know structure and limitations of livestock industries.
17.5 Apply knowledge and experience to ag farm practices including caring for horses and dairy cows.

Anchor Standards: 1, 4.5, 10.1, 10.4 Career Readiness: 1, 5 CTE Pathway Agriculture and Natural Resources: Animal Science Pathway (D) 1.1, 1.2, 3.2, 5.1, 5.2, 6.7, 9.2, 10.2, 12.4, 12.5

18.0 **Basic Agriculture Business Law** – Students understand animal welfare concerns and management practices that support animal

18.1 Understand federal and state animal welfare laws and regulations such as those for abandoned and neglected animals, animal fighting, euthanasia, medical research, etc.
18.2 Understand regulations for humane transport and harvest such as those delineated in the USDA Food Safety and Inspection Service (USDA/FSIS) and the Humane Methods of Slaughter Act.

Anchor Standards: 1, 8.7, 10.1 Career Readiness: 1, 12 CTE Pathway Agriculture and Natural Resources: Animal Science Pathway (d) 9.3, 9.4

19.0 **Supervised Occupational Experience** – Demonstration and Application.

19.1 Demonstrate knowledge and experience through work tailored to interests/career emphasis.

Anchor Standards: 3.3, 3.4, 11.4 Career Readiness: 1

20.0 **Commercial Plant Science** – Students understand common rangeland management practices and their impact on a balanced ecosystem.

20.1 **Plant Classification**
- 20.1.1 Taxonomy and Classification
- 20.1.2 Plant Identification

20.2 **Plant Physiology and Growth**
- 20.2.1 Anatomy
- 20.2.2 Functions
- 20.2.3 Factors affecting growth
- 20.2.4 Physiological Processes

20.3 **Plant Reproduction**
- 20.3.1 Asexual versus Sexual Reproduction
- 20.3.2 Propagation

20.4 **Plant Pathology**
- 20.4.1 Entomology
- 20.4.2 Weed Identification
- 20.4.3 Integrated Pest Management
- 20.4.4 Plant Diseases

20.5 **Soil Properties**
- 20.5.1 Soil Texture, Structure, and Types
- 20.5.2 Soil and Water Management
- 20.5.3 Biology
- 20.5.4 Soil Origins
- 20.5.5 Irrigation and Drainage

Anchor Standards: 1, 10.1
Career Readiness: 1
CTE Pathway Agriculture and Natural Resources: Plant and Soil Science Pathway (G) 1.1-1.4, 3.1-3.4, 4.1, 4.2, 5.1-5.5, 6.1, 6.4, 7.1, 7.3, 8.1

21.0 **Current Events in Agriculture** – Understand public concerns for animal welfare in the context of housing, behavior, nutrition, transportation, disposal, harvest.

21.1 Discuss current events in agriculture researched using publications, newspapers, and the Internet.

Anchor Standards: 4.5, 4.7, 7.8, 10.2, 10.4
Career Readiness: 1, 12
CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 6.3, Agriscience Pathway (C) 2.5

22.0 **Agriculture Math** – Probability and Statistics. Organizing data distributions.

22.1 Various mathematical applications integrated in the curriculum including accounting basics, statistics and data sets, judging argument validity, etc.

Anchor Standards: 7.6
Career Readiness: 1
CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 1.4, 1.6, 4.1, 4.2

23.0 **Community Classroom Training** – Various based on site placement.

23.1 Perform specific skills and tasks relevant to the individual site placement.

Anchor Standards: 5.4, 11.1
Career Readiness: 1
CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 8.1-8.3

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: AgriScience Explorations, Revised Third Edition & Activity Manual

AUTHOR(S): Morgan, Lee, Wilson

PUBLISHER: Pearson

COPYRIGHT DATE: 2009

ISBN #: 978-0-13-362637-7 0-13-362637-7 013362644X

PRICE: $68.97/$20.97

DEPARTMENT: Agriculture/ROP

CLASS: Agriculture 1 ROP, Agriculture 2 ROP, Agriculture 3 ROP, Agriculture 4 ROP, Agriculture 5 ROP

GENERAL DESCRIPTION:
This newly revised edition provides students with a comprehensive introduction to the Agriculture industry. Updated photos and easy to understand text introduces students to a variety of interesting AgriScience concepts and skills including Agri-Science careers, the relationship between Agriculture and Science, how AgriScience is applied in the real world, and the meaning of being a professional in the AgriScience industry.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: Agriculture Advisory Committee

Selection Committee:
Mark Nower, Roger Dickson

Curriculum Area Chairperson

Scott Kuykendall
Director, 7-12, CTE/ROP

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Agriculture 2 ROP S1 Agriculture 2 S2

COURSE NUMBER: ROP01621 ROP01622

RECOMMENDED GRADE LEVEL: 11, 12

DURATION: 4 semesters or 2 summers and 2 semesters

CREDIT: Variable; up to 15 each summer, 10 per semester for a maximum of 40

MEETS GRADUATION REQUIREMENTS: Practical Arts, CTE

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4043

MEETS UC AND CSU ENTRANCE REQUIREMENTS: No

CREDENTIAL REQUIREMENTS: Single Subject Agriculture

REPLACES:

Course Description:

This competency-based course prepares students for employment in areas of modern agriculture with emphasis in the area of commercial livestock agriculture. Integrated throughout the course are career preparation standards which include basic academic skills, communication, interpersonal skills, problem-solving, workplace safety, technology, and employment literacy.

Recommended Prerequisites: None

Date Matched Against State Framework, Model Curriculum Standards, and State Curriculum Guides: September, 2013

Board Approved: June 16, 2014

REVIEW CYCLE: 2011-12 through 2015-16
REQUIRED TEXTBOOK (Title, publisher, year): AgriScience Explorations, Morgan, Lee, Wilson, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition, AgriScience Explorations, Activity Manual, Mika, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition

INSTRUCTIONAL MATERIALS

Basic Text(s):

AgriScience Explorations, Morgan, Lee, Wilson, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition

AgriScience Explorations, Activity Manual, Mika, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition

Supplementary Text(s):

AgriScience Explorations, Activity Manual Instructor's Guide

Agriscience Explorations, Teacher's Manual

Exam*View*® Test Bank CD-ROM for Comprehensive Titles

Visual Aids on PowerPoint® CD-ROM

SUMMARY OF MAJOR UNITS OF INSTRUCTION
Approximate Length of Instruction for Each Unit

		(Hours)
A.	Orientation	2
B.	Career Development	2
C.	Employability	1
D.	Agriculture Leadership Development	25
E.	Health and Safety	5
F.	Livestock Selection and Management	
G.	Business Skills Development	15
H.	Beef and Swine Industry	
I.	Livestock Physiology and Nutrition	
J.	Agriculture Math Problem Solving	
K.	Agriculture in California, the U. S. and the World	
L.	Agriculture Leadership Development	30
M.	Merchandising/Marketing Livestock	15
N.	Advanced Livestock Selection	20
O.	Livestock Health Management and Sanitation Practices	20
P.	Reproduction & Genetics in Agriculture	20
Q.	Commercial Horse Management and Dairy Production	15
R.	Basic Agriculture Business Law	10
S.	Supervised Occupational Experience	75
T.	Commercial Plant Science	10
U.	Current Events in Agriculture	5
V.	Agriculture Math	10
VI.	Community Classroom Training	330
	Total	720

Orientation – Students will understand attendance, grading and discipline policies.

1.1 Explain the function of OSHA in the workplace.
1.2 Describe accident prevention techniques and provide methods to prevent accidents in the workplace.
1.3 Explain and implement procedures to be followed in the event of an emergency or accident in the workplace or classroom.
1.4 Students will identify instances of sexual harassment and provide appropriate solutions to deal with workplace issues.
1.5 Students will identify, describe, and demonstrate positive work ethics.

Anchor Standards: 6.2, 6.4, 6.5, 6.6 Career Readiness: 6

2.0 **Career Opportunities** – Describe and give examples of entry, technical, and professional careers in the industry.

2.1 Complete a self-assessment related to work values and interests.
2.2 Develop a personal occupational plan that outlines career goals and an action plan to achieve those goals.

Anchor Standards: 3.1, 3.4, 3.9 Career Readiness: 3

3.0 **Employability** – Students will participate in an interview that includes presentation of the employability portfolio.

3.1 *Students will create and develop a*
- Resume
- Cover Letter
- Job Application Form
- Letter of Recommendation
- Work Sample

3.2 Students will participate in an interview that includes presentation of the employability portfolio.

Anchor Standards: 1.5 Career Readiness: 1, 2, 5, 7, 8, 9, 12

4.0 **Agriculture Leadership Development** – Students understand effective leadership styles, key concepts of group dynamics, team and individual decision-making and conflict resolution.

4.1 Know and engage in SAE (supervised agricultural experience).
4.2 Parliamentary law and its importance to agriculture.
4.3 Types of Supervised Occupational Experience Programs.
4.4 Record-Keeping and management of projects.
4.5 Agriculture presentation/public speaking.
4.6 Opportunities available through the FFA.
4.7 Students understand health and safety practices, policies, procedures, and regulations, including equipment and hazardous materials handling.

Anchor Standards: 2.2, 2.3, 2.5, 3.1, 3.9, 5.1, 5.3, 5.4, 6.3, 6.4, 6.5, 6.6, 9.1, 9.2, 9.3, 9.4, 9.5, 9.7, 9.8, 9.9, 9.10, 9.11, 10.7, 11.3 Career Readiness: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11

5.0 **Health and Safety** – Students understand health and safety practices, policies, procedures, and regulations, including equipment and hazardous materials handling.

5.1 Explain policies and procedures for safety in the agriculture field.
5.2 Use tools and machines safely.

Anchor Standards: 5.2, 6.2, 6.3, 6.4, 6.6 Career Readiness: 1, 2, 5, 7

6.0 **Livestock Selection and Management** – Students understand the necessary elements for proper animal housing and handling equipment, space and location requirements, selection of habitat and housing, sane and humane use of restraint equipment and animal husbandry tools.

6.1 Identify major livestock breeds.
6.2 Evaluate major classes of livestock.
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6.9 Identify external anatomy.
6.10 Understand principles of animal behavior.
6.11 Understand the factors involved in and develop an ability for evaluating livestock.
6.12 Demonstrate basic skills necessary in livestock management.

Anchor Standards: 1, 5.1, 5.4, 7.1, 7.6, 10.1, 10.4, 10.6 Career Readiness: 1, 2, 5 CTE Pathway Agriculture and Natural Resources: Agriscience Pathway © 6.1; Animal Science Pathway (D) 1.1, 1.2, 1.3, 1.4, 3.2-5.2, 6.1, 6.2, 9.1, 10.1, 10.2, 11.1, 11.2, 12.1-12.6

7.0 **Business Skills Development** – Responsibility & Flexibility – qualities and behaviors that constitute a positive and professional work demeanor; accountability, adaptation to various roles and responsibilities, individual actions affect a community, time management, continually refine, perfect and apply high-quality craftsmanship to a product or presentation.

7.1 Project types and opportunities.
7.2 Merchandising/marketing process.
7.3 Financing procedures.
7.4 Budgeting and enterprise.

7.5 Product selection.
7.6 Contracts – loans, facility, insurance, feeding.
7.7 Cooperatives – insurance, feed, hay.
7.8 Management practices – housing/equipment, feeding and health care.
7.9 Project accounting procedures.
7.10 Exhibit preparation/showmanship practices
7.11 Exhibit/live product evaluation.
7.12 Processing evaluation.
7.13 Overall evaluation.

Anchor Standards: 3.2, 3.3, 4.5, 4.7, 5.1-5.4, 7.1, 7.2, 7.6, 10.1, 10.2, 10.4-10.8 Career Readiness: 1, 4, 5, 6, 9, 11

8.0 **Beef and Swine Industry** – Students understand large animal production.

8.1 Overall industry terminology.
8.2 Conformation points.
8.3 Breeds/selection.
8.4 Basic health.
8.5 Marketing.

Anchor Standards: 1.0, 10.1, 11.1 Career Readiness: 1, 5 CTE Pathway Agriculture and Natural Resources: Animal Science (D) 5.1, 5.2, 6.1-6.4, 8.4, 10.2, 12.2-12.6

9.0 **Livestock Physiology and Nutrition** – Students understand key principles of animal nutrition and will understand animal physiology.

9.1 Describe major systems and functions of organs in each system.
9.2 Describe the management practices that are likely to improve the functioning of the various systems.
9.3 Explain the principles for providing proper balanced rations for a variety of production stages in ruminants and monogastrics.
9.4 Explain the digestive processes of the ruminant and monogastric digestive systems.
9.5 Describe how animal nutrition is affected by the digestive, endocrine, and circulatory systems.

Anchor Standards: 1.0, 10.1 Career Readiness: 1, 5 CTE Pathway Agriculture and Natural Resources: Animal Science (D) 2.2, 2.4, 3.1-3.3, 7.1, 10.2, 11.2

10.0 **Agriculture Math Problem Solving** – Students will learn Probability & Statistics and organizing data distributions.

10.1 Various mathematical applications integrated in the curriculum including accounting basics, statistics and data sets, judgment argument validity, etc.

Anchor Standards: 1, 5.1-5.4
Career Readiness: 1, 5
CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 1.4, 1.6, 4.1, 4.2

11.0 **Agriculture in California, the U. S. and the World** – Students know how to use contemporary and emerging technological resources in diverse and changing personal, community and workplace environments.

11.1 Global perspectives of agriculture.
11.2 Internal agriculture trade.
11.3 Current events in U. S. agriculture.

Anchor Standards: 1, 8.2, 10.1, 10.2, 10.8
Career Readiness: 1, 12
CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 2.1-2.4, 9.1-9.7, Agriscience Pathway (C) 1.1-1.4, 1.6, 1.7

12.0 **Agriculture Leadership Development** – Students understand effective leadership styles, key concepts of group dynamics, team and individual decision-making and conflict resolution.

12.1 Supervised Experience Project Evaluation – Bishop Future Farmers.
12.2 FFA Leadership program/Officer training.
12.3 Junior Livestock meetings.
12.4 NJLS Meetings.
12.5 Stanislaus Cattleman's Association participation.
12.6 Farm Bureau.
12.7 CPPA Shows and meetings.

Anchor Standards: 9.1, 9.2, 9.7, 9.9, 9.12, 9.15
Career Readiness: 1, 2, 7
CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 6.1-6.3

13.0 **Merchandising/Marketing Livestock** – Students understand how animal products and by-products are processed and marketed.

13.1 Describe animal harvest, carcass inspection and grading, meat processing safety regulations and practices, removal and disposal of non-edible by-products.
13.2 Explain relative importance of major meat classifications.
13.3 Describe how meat based products and meals are made.
13.4 Describe how meat products are marketed and the value of animal by-products to non-agricultural industries.

Anchor Standards: 8.1, 10.2, 10.4
Career Readiness: 1, 2
CTE Pathway Agriculture and Natural Resources: Animal Science Pathway (D) 12.1-12.3, 12.5, 12.6

14.0 **Advanced Livestock Production** – Students understand the necessary elements for proper animal housing and handling equipment – space and location requirements, selection of habitat and housing, sane and humane use of restraint equipment and animal husbandry tools.

14.1 Identify major livestock breeds.
14.2 Evaluate major classes of livestock.
14.3 Terms, definitions, and life-cycles of the major classes of livestock.
14.4 Explain economic/social significance of livestock classes.
14.5 Describe management techniques used on various livestock.
14.6 Identify parts and functions of livestock.
14.7 Identify economic importance of livestock.
14.8 Identify different breeds of livestock, and their importance, and their use in agriculture.
14.9 Identify external anatomy.
14.10 Understand principles of animal behavior.
14.11 Understand the factors involved in and develop an ability for evaluating livestock.
14.12 Demonstrate advanced skills necessary in livestock management.

Anchor Standards: 1, 7.1, 9.5, 10.1, 10.4
Career Readiness: 1, 6
CTE Pathway Agriculture and Natural Resources: Agriscience Pathway (C) 6.1, Animal Science Pathway (D) 1.1-1.4, 3.2, 4.1, 4.2, 5.1, 5.2, 6.1, 6.2, 9.1, 10.1, 10.2, 11.1, 11.2, 12.1-12.6

15.0 **Livestock Health Management and Sanitation Practices** – Students understand the causes and effects of diseases and illnesses in animals.

15.1 Describe signs of normal health in contrast to illness and diseases.
15.2 Explain importance of animal behavior in diagnosing animal sickness and disease.
15.3 Describe common pathogens, vectors, and hosts that cause disease in animals.
15.4 Explain prevention, control, and treatment practices for pests and parasites.
15.5 Describe how diseases are passed among animal species and from animals to humans and how that relationship affects health and food safety.

Anchor Standards: 1, 10.1, 10.3
Career Readiness: 1, 2, 5
CTE Pathway Agriculture and Natural Resources: Animal Science Pathway (D) 6.1-6.7

16.0 **Reproduction and Genetics in Agriculture** – Students understand animal reproduction including reproductive organ function. Students understand animal inheritance and selection principles including the structure and role of DNA.

16.1 Explain animal conception, gestation process and fetal development.
16.2 Describe the parturition process including problems and solutions.
16.3 Describe the role of artificial insemination and embryo transfer in animal agriculture.
16.4 Explain animal production breeding systems and reasons for use.

16.5 Evaluate a group of animals for desired qualities and discern among them for breeding selection.
16.6 Demonstrate how to use animal performance data in the selection and management of production animals.
16.7 Research and discuss current technology used to measure desirable traits.
16.8 Demonstrate how to predict phenotypic and genotypic results of a dominant/recessive gene pair.
16.9 Explain role of mutations and hybrids in animal genetics.

Anchor Standards: 1, 4.1, 4.3, 4.5, 10.1 Career Readiness: 1, 5 CTE Pathway Agriculture and Natural Resources: Animal Science Pathway (D) 4.1-4.5, 5.1-5.5

17.0 **Commercial Horse Management and Dairy Production** – Students understand large animal production and be able to do a Demonstration and Application.

17.1 Demonstrate an understanding of selection of livestock.
17.2 Demonstrate sound methods for raising young livestock to a productive age.
17.3 Know channels in which livestock and livestock products are marketed.
17.4 Know structure and limitations of livestock industries.
17.5 Apply knowledge and experience to ag farm practices including caring for horses and dairy cows.

Anchor Standards: 1, 4.5, 10.1, 10.4 Career Readiness: 1, 5 CTE Pathway Agriculture and Natural Resources: Animal Science Pathway (D) 1.1, 1.2, 3.2, 5.1, 5.2, 6.7, 9.2, 10.2, 12.4, 12.5

18.0 **Basic Agriculture Business Law** – Students understand animal welfare concerns and management practices that support animal

18.1 Understand federal and state animal welfare laws and regulations such as those for abandoned and neglected animals, animal fighting, euthanasia, medical research, etc.
18.2 Understand regulations for humane transport and harvest such as those delineated in the USDA Food Safety and Inspection Service (USDA/FSIS) and the Humane Methods of Slaughter Act.

Anchor Standards: 1, 8.7, 10.1 Career Readiness: 1, 12 CTE Pathway Agriculture and Natural Resources: Animal Science Pathway (D) 9.3, 9.4

19.0 **Supervised Occupational Experience** – Demonstration and Application.

19.1 Demonstrate knowledge and experience through work tailored to interests/career emphasis.

Anchor Standards: 3.3, 3.4, 11.4 Career Readiness: 1

20.0 **Commercial Plant Science** – Students understand common rangeland management practices and their impact on a balanced ecosystem.

20.1 **Plant Classification**
- 20.1.1 Taxonomy and Classification
- 20.1.2 Plant Identification

20.2 **Plant Physiology and Growth**
- 20.2.1 Anatomy
- 20.2.2 Functions
- 20.2.3 Factors affecting growth
- 20.2.4 Physiological Processes

20.3 **Plant Reproduction**
- 20.3.1 Asexual versus Sexual Reproduction
- 20.3.2 Propagation

20.4 **Plant Pathology**
- 20.4.1 Entomology
- 20.4.2 Weed Identification
- 20.4.3 Integrated Pest Management
- 20.4.4 Plant Diseases

20.5 **Soil Properties**
- 20.5.1 Soil Texture, Structure, and Types
- 20.5.2 Soil and Water Management
- 20.5.3 Biology
- 20.5.4 Soil Origins
- 20.5.5 Irrigation and Drainage

Anchor Standards: 1, 10.1
Career Readiness: 1
CTE Pathway Agriculture and Natural Resources: Plant and Soil Science Pathway (G) 1.1-1.4, 3.1-3.4, 4.1, 4.2, 5.1-5.5, 6.1, 6.4, 7.1, 7.3, 8.1

21.0 **Current Events in Agriculture** – Understand public concerns for animal welfare in the context of housing, behavior, nutrition, transportation, disposal, harvest.

21.1 Discuss current events in agriculture researched using publications, newspapers, and the Internet.

Anchor Standards: 4.5, 4.7, 7.8, 10.2, 10.4
Career Readiness: 1, 12
CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 6.3, Agriscience Pathway (C) 2.5

22.0 **Agriculture Math** – Probability and Statistics. Organizing data distributions.

22.1 Various mathematical applications integrated in the curriculum including accounting basics, statistics and data sets, judging argument validity, etc.

Anchor Standards: 7.6
Career Readiness: 1
CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 1.4, 1.6, 4.1, 4.2

23.0 **Community Classroom Training** – Various based on site placement.

23.1 Perform specific skills and tasks relevant to the individual site placement.

Anchor Standards: 5.4, 11.1
Career Readiness: 1
CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 8.1-8.3

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: AgriScience Explorations, Revised Third Edition & Activity Manual

AUTHOR(S): Morgan, Lee, Wilson

PUBLISHER: Pearson

COPYRIGHT DATE: 2009

ISBN #: 978-0-13-362637-7 0-13-362637-7 013362644X

PRICE: $68.97/$20.97

DEPARTMENT: Agriculture/ROP

CLASS: Agriculture 1 (ROP), Agriculture 2 (ROP), Agriculture 3 (ROP), Agriculture 4 (ROP), Agriculture 5 (ROP)

GENERAL DESCRIPTION:
This newly revised edition provides students with a comprehensive introduction to the Agriculture industry. Updated photos and easy to understand text introduces students to a variety of interesting AgriScience concepts and skills including Agri-Science careers, the relationship between Agriculture and Science, how AgriScience is applied in the real world, and the meaning of being a professional in the AgriScience industry.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: Agriculture Advisory Committee

Selection Committee:
Mark Nower, Roger Dickson

Curriculum Area Chairperson

Scott Kuykendall
Director, 7-12, CTE/ROP

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Agriculture 3 ROP S1 Agriculture 3 ROP S2

COURSE NUMBER: ROP01631 ROP01632

RECOMMENDED GRADE LEVEL: 11, 12

DURATION: 4 semesters or 2 summers and 2 semesters

CREDIT: Variable; up to 15 per summer, 10 per semester for a maximum of 40

MEETS GRADUATION REQUIREMENTS: Practical Arts, CTE

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4042

MEETS UC AND CSU ENTRANCE REQUIREMENTS: No

CREDENTIAL REQUIREMENTS: Single Subject Agriculture

REPLACES:

Course Description:

AGRICULTURE 3 is designed to introduce students to agricultural occupations and careers and provide hands-on training in various entry-level positions in the area(s) of agriculture business and communications, agriculture mechanics, animal science, plant science, horticulture, and floriculture.

Course instruction – This course is designed to allow students the opportunity to gain knowledge and skills in their perspective area of interest in the agriculture industry. The course emphasizes the necessary knowledge and skills to provide the student with a foundation leading to understanding agriculture career trends and options, employment regulations, job safety, communication, leadership, college/university and career technical education opportunities, critical thinking, business management, economic principles, sales and marketing, and record keeping. Students will connect and apply this foundation towards their specific agricultural industry area of interest through job specific training at an industry related community classroom or cooperative community classroom. This methodology will include individualized training plans which outline specific training targeted to match occupational competencies required for the job.

Key instructional methods include direct supervision via lectures and PowerPoint presentation, discussion, cooperative learning, project-based learning, career development portfolio, and job specific training at an industry related community classroom or cooperative community classroom site. Leadership skills are developed through FFA. Frequent opportunities are also given to develop and apply rational and creative thinking processes of observing, comparing, organizing, relating, inferring, applying and communicating. There is an emphasis on developing values, aspirations, and attitudes that promote the students understanding personal involvement with the scientific explorations and discoveries of the future. These hands-on science experiences are designed to enhance the student's understanding of Agriculture, the environment, and society.

Recommended Prerequisites: None

Date Matched Against State Framework Model Curriculum Standards, and State Curriculum Guides: September, 2013

Board Approved: June 16, 2014

REVIEW CYCLE: 2011-12 through 2015-16

REQUIRED TEXTBOOK (Title, publisher, year): AgriScience Explorations, Morgan, Lee, Wilson, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition, AgriScience Explorations, Activity Manual, Mika, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition

INSTRUCTIONAL MATERIALS

This includes, but is not limited to, computer resources, textbooks, video/audiovisual, websites, trade publications, laboratory materials, and specialized equipment.

Basic Text(s):

AgriScience Explorations, Morgan, Lee, Wilson, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition

AgriScience Explorations, Activity Manual, Mika, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition

Supplementary Text(s):

WELDING: Principles and Applications; Jeffus; Delmar

Agriscience Explorations, Teacher's Manual

Agriscience Explorations, Activity Manual Instructor's Guide

Exam*View*® Test Bank CD-ROM for Comprehensive Titles

Visual Aids on PowerPoint® CD-ROM

SUMMARY OF MAJOR UNITS OF INSTRUCTION

		Approximate Length (Hours)
A.	Orientation	4
B.	Safety and Work Ethics	10
C.	Career Options Exploration	4
D.	Employability	15
E.	Communication	6
F.	Leadership	11
G.	Agriculture Research Project	10
H.	Scholarships/Higher Education	5
I.	Agribusiness Management	20
J.	Personal Financial Management	4
K.	Government Agencies	4
L.	Industry Explorations	15
M.	Community Classroom Training	252
	Total	360

1.0 Goal: Orientation

Students will become aware of correct procedures related to the ROP program and occupations and the importance to the individual and society.

1.1 Complete and explain the purpose of the following ROP paperwork.
   a. Socrates Enrollment
   b. Registration Permit
   c. Community Classroom Permit/Training Plan
   d. Community Classroom Rules
   e. Work Permit
   f. Joint Venture Training Agreement

1.2 Demonstrate a clear understanding of attendance, grading, and timecard policies.

1.3 Demonstrate a clear understanding of ROP placement and site allocation procedures.

1.4 Create a resume, cover letter, and reference using a word processing program and present documents to site supervisor.

Anchor Standards: 3.9, 4.6, 11.1, 11.5 Career Readiness: 1

2.0 Goal: Safety and Work Ethics

The student has demonstrated safe work habits and attitudes.

2.1 Explain the purpose and functions of OSHA in the workplace.

2.2 Identify and explain the labor laws that govern teens in the workplace.

2.3 Identify and explain the labor laws that govern adults in the workplace.

2.4 Describe accident prevention techniques and provide methods to prevent accidents in the workplace.

2.5 Explain and implement procedures to be followed in the event of an emergency or accident in the workplace or classroom.

2.6 List factors that contribute to farm accidents.

2.7 Describe management's responsibility related to farm safety.

2.8 Identify sources of safety information.

2.9 Describe variations and parameters pertaining to particular job sites.

2.10 Identify instances of sexual harassment and provide appropriate solutions to deal with such workplace issues.

2.11 Identify, describe, and demonstrate positive work ethics in the workplace.

Anchor Standards: 6.2-6.7 Career Readiness: 1, 6

3.0 Goal: Career Options Exploration

Demonstrated awareness of career opportunities in careers related to the industry.

3.1 Explore, research, and describe the levels of career opportunities available to individuals in the agriculture industry.

3.2 Identify and describe a career interest in an agriculture or agriculture-related occupation.

3.3 Analyze the skills, abilities, and education required to gain entry into the student's occupational choice.
3.4 Develop a plan of action, Career Plan, for accomplishing an occupational objective.
3.5 Explore and research current trends and careers in agriculture using the Eureka Career Information System.
3.6 Identify twelve potential agriculture or agriculture-related careers.
3.7 Identify four potential local labor market area agriculture or agriculture-related careers.
3.8 Describe economic and technological trends which may affect the work environment.
3.9 Identify ways in which employees may have to adapt to changing work environments.
3.10 Explain the importance of work to the individual and society.

Anchor Standards: 3.1-3.8, 4.2, 4.7, 7.3, 7.4 Career Readiness: 1, 2

4.0 Goal: Employability

Developed employment literacy to include job readiness skills and technical reading and writing applications demonstrated by completion of an Employability Portfolio.

4.1 Complete an employability portfolio containing the following:
- a. Table of Contents
- b. Resume
- c. Cover Letter
- d. Master Application Form
- e. Letter of Recommendation
- f. Employability Skills Evaluation
- g. Work Sample and caption

4.2 Portfolio Presentation/Interviewing Skills
4.3 Participate in an interview situation that includes the presentation of the Employability Portfolio.

Anchor Standards: 11.5 Career Readiness: 1, 2, 5, 7, 8, 9, 12

5.0 Goal: Communication

Exhibited leadership skills related to teamwork, communications, human relations, and community responsibility.

5.1 Demonstrate the ability to lead a discussion group.
5.2 Identify and demonstrate communication skills using telephones, letters, memos, and through verbal conversations.
5.3 Identify and demonstrate the necessary skills to effectively and efficiently work as part of a member on a committee.
5.4 Describe the importance of being a good listener.
5.5 Identify standards for interview preparation in regards to grooming, behavior, and clothing requirements.
5.6 Identify other factors influencing job applicant assessment such as first

impressions and eye contact.

5.7 Develop a list of frequently asked interview questions.
5.8 Discuss the various methods used in interviewing job candidates.
5.9 Write two follow-up letters to a job interview.
5.10 List and describe the importance of public speaking skills.
5.11 Demonstrate public speaking abilities by selecting, researching, developing, and delivering a seven minute sales presentation on an agriculture product.

Anchor Standards: 2.1, 2.2, 2.3, 2.5 Career Readiness: 1, 2

6.0 Goal: Leadership

Develop Personal Growth and Development through a Student Organization (FFA)

6.1 Review and practice FFA policies from handbook.
6.2 List and describe FFA awards available to members.
6.3 Identify FFA contests in which vocational-agriculture students may participate.
6.4 List the requirements for earning the Chapter FFA Degree, State FFA Degree, and American FFA Degree.
6.5 Complete the FFA student data sheet.
6.6 List five characteristics of a critical thinker.
6.7 List criteria used to identify when a problem exists.
6.8 Identify the nature and specifics of a particular problem.
6.9 Define and describe the scientific method of problem solving.
6.10 Identify the information needed to solve the problem.
6.11 Identify how to locate specific information related to the problem.
6.12 List possible solutions to a problem.
6.13 Evaluate the consequences of alternative solutions.
6.14 Determine the best solution among the alternatives.
6.15 Define discussion, disagreement, argument, inference, counterexample, and propaganda.

Anchor Standards: 5.1-5.4, 9.1, 9.9-9.13 Career Readiness: 1

7.0 Goal: Agriculture Research Project

The student will complete an Agriculture Research Project

7.1 The student will complete a research project related to the marketing industry that includes the following:
- written report
- presentation visuals
- oral report

Anchor Standards: 2.5, 4.3, 9.7 Career Readiness: 1, 2, 5

8.0 Goal: Scholarships/Higher Education

Student will look at Scholarships/Higher Education

8.1 Identify college/university application deadline dates.
8.2 Identify the components of the college/university application process.
8.3 Students will identify possible scholarships and grants at a college or university for which they apply.
8.4 Identify entrance requirements for California Community College, California State University, and the University of California system.
8.5 Research and identify financial aid resources, deadlines, and application processes.
8.6 Identify different trade institutions, application requirements, and cost of tuition.

Anchor Standards: 3.3, 3.4 Career Readiness: 1, 2, 5

9.0 Goal: Agribusiness Management

Student will discuss different types Agribusiness Management Systems

9.1 Describe the four types of business structures found in agriculture: 1. Single Proprietorships; 2. Partnerships; 3. Cooperatives; 4. Corporations.
9.2 Discuss similarities and differences among the four types of business structures listed above.
9.3 Describe the basic economic factors that affect farm and agribusiness management decisions.
9.4 Describe how supply and demand affect prices.
9.5 List factors that shift the supply and demand curves.
9.6 Distinguish among supplementary, complementary, competitive, and independent enterprises.
9.7 List the advantages and disadvantages of diversification and specialization.
9.8 Explain the importance of agribusiness and its impact on the gross national product and the total economy.
9.9 Use economic decision-making tools to increase the profitability of an agricultural enterprise.
9.10 Describe the concept of diminishing returns.
9.11 Distinguish between fixed and variable costs.
9.12 Calculate the estimated fixed cost and variable costs for an agricultural commodity.
9.13 Distinguish between marginal cost and marginal revenue.
9.14 Explain what is meant by the term, “free enterprises system.”
9.15 Describe key factors involved in marketing.
9.16 Describe types of markets.
9.17 Describe the importance of grades and standards.
9.18 Distinguish between hedging and speculation.
9.19 Describe the purpose and function of local markets.
9.20 Define the terms, “developing,” and “developed country,” and explain how the level of development affects agriculture and agricultural trade.
9.21 Define the purpose of developing a marketing plan.
9.22 Identify the various kinds of marketing plans.
9.23 Identify the process of developing a marketing plan.
9.24 Explain the three essential elements of a marketing program.
9.25 Develop a marketing plan for a commodity.

9.26 Identify sales careers in agriculture.
9.27 Discuss major advantages and disadvantages of a sales career.
9.28 List the skills and abilities needed to have a successful sales career in agriculture.
9.29 List the four groups of customers who are targeted in agriculture.
9.30 Describe the basic function of the sales process in agriculture.
9.31 Describe the steps most people go through when making a purchase.
9.32 Discuss what motivates people to buy.
9.33 Select appropriate questions and methods to identify customer needs and wants.
9.34 Identify and explain the five stages in making a sale.
9.35 Describe the kinds of information that a sales person needs to have available about a product or service when making a sale.
9.36 Discuss the three main sales approaches:
- Greeting
- Merchandise
- Service

9.37 Demonstrate three ways of opening a sales presentation.
9.38 Give a sales presentation using an agricultural product or service.
9.39 Demonstrate effective handling of customer objections in a role playing situation.
9.40 Demonstrate effective closing techniques in a sales presentation.
9.41 Describe and demonstrate the professional sales process in agribusiness.
9.42 Demonstrate the ability to build customer confidence in yourself and your product.
9.43 Demonstrate knowledge of advertising and promotion in agricultural sales in an assignment.

Anchor Standards: 1, 10.1, 10.4
Career Readiness: 1
CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 1.1-1.6, 2.1-2.6, 7.1, 7.2, 7.4, 8.1-8.3, 9.7

10.0 Goal: Personal Financial Management

The student will recognize different methods of Personal Financial Management

10.1 Explain the main reasons for keeping records.
10.2 Identify and demonstrate the guidelines for completing a record book.

Anchor Standards: 10.7
Career Readiness: 1
CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 4.1, 4.2, 4.4

11.0 Goal: Government Agencies

Students will explore the different types of governmental agencies in the Stanislaus County area.

11.1 Identify and describe the primary agencies involved in agriculture and the services they provide.

11.2 List the major objectives of the U. S. Department of Agriculture.
11.3 Describe the services provided by the Cooperative Extension Service.
11.4 The students will learn and keep records in the California computerized record book.

Anchor Standards: 7.8, 8.2, 10.2, 10.7 Career Readiness: 1 CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 6.1-6.3

12.0 Goal: Industry Explorations

Students will explore the different types of agricultural industries in the Stanislaus County area.

12.1 Attend a field trip to research various sectors within the agriculture industry which could include one or more of the following industry areas:
- Dairy Science
- Water Science
- Environmental Science
- Livestock Management
- Agribusiness
- Welding and Fabrication
- Landscape Management

12.2 Complete a reflection paper to summarize knowledge learned at the field trip exploration.

Anchor Standards: 1, 10.1, 10.4 Career Readiness: 1 CTE Pathway Agriculture and Natural Resources: All pathway standards are integrated within the industry exploration and field study.

13.0 Community Classroom

The student will receive Community Classroom Training

13.1 Perform specific skills and tasks relevant to the individual site placement.

Anchor Standards: 1 Career Readiness: 5.4, 11.1 CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 8.1-8.3

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: AgriScience Explorations, Revised Third Edition & Activity Manual

AUTHOR(S): Morgan, Lee, Wilson

PUBLISHER: Pearson

COPYRIGHT DATE: 2009

ISBN #: 978-0-13-362637-7 0-13-362637-7 013362644X

PRICE: $68.97/$20.97

DEPARTMENT: Agriculture/ROP

CLASS: Agriculture 1 (ROP), Agriculture 2 (ROP), Agriculture 3 (ROP), Agriculture 4 (ROP), Agriculture 5 (ROP)

GENERAL DESCRIPTION:
This newly revised edition provides students with a comprehensive introduction to the Agriculture industry. Updated photos and easy to understand text introduces students to a variety of interesting AgriScience concepts and skills including Agri-Science careers, the relationship between Agriculture and Science, how AgriScience is applied in the real world, and the meaning of being a professional in the AgriScience industry.

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APPROVED BY: Agriculture Advisory Committee

Selection Committee:
Mark Nower, Roger Dickson

Curriculum Area Chairperson

Scott Kuykendall
Director, 7-12, CTE/ROP

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Agriculture 4 ROP S1 Agriculture 4 ROP S2

COURSE NUMBER: ROP01641 ROP01642

RECOMMENDED GRADE LEVEL: 11, 12

DURATION: 4 semesters or 2 summers and 2 semesters

CREDIT: Variable; up to 15 per summer, 10 per semester for a maximum of 40

MEETS GRADUATION REQUIREMENTS: Practical Arts, CTE

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4043

MEETS UC AND CSU ENTRANCE REQUIREMENTS: No

CREDENTIAL REQUIREMENTS:

REPLACES:

Course Description:

AGRICULTURE 4 is designed to introduce students to agricultural occupations and careers and provide hands-on training in various entry-level positions in the area(s) of agriculture business and communications, agriculture mechanics, animal science, plant science, horticulture, and floriculture.

Course instruction – This course is designed to allow students the opportunity to gain knowledge and skills in their perspective area of interest in the agriculture industry. The course emphasizes the necessary knowledge and skills to provide the student with a foundation leading to understanding agriculture career trends and options, employment regulations, job safety, communication, leadership, college/university and career technical education opportunities, critical thinking, business management, economic principles, sales and marketing, and record keeping. Students will connect and apply this foundation towards their specific agricultural industry area of interest through job specific training at an industry related community classroom or cooperative community classroom. This methodology will include individualized training plans which outline specific training targeted to match occupational competencies required for the job.

Key instructional methods include direct supervision via lectures and PowerPoint presentation, discussion, cooperative learning, project-based learning, career development portfolio, and job specific training at an industry related community classroom or cooperative community classroom site. Leadership skills are developed through FFA. Frequent opportunities are also given to develop and apply rational and creative thinking processes of observing, comparing, organizing, relating, inferring, applying and communicating. There is an emphasis on developing values, aspirations, and attitudes that promote the student's understanding personal involvement with the scientific explorations and discoveries of the future. These hands-on science experiences are designed to enhance the student's understanding of Agriculture, the environment, and society.

Recommended Prerequisites: None

Date Matched Against State Framework Model Curriculum Standards, and State Curriculum Guides: September, 2013

Board Approved: June 16, 2014

REVIEW CYCLE: 2011-12 through 2015-16

REQUIRED TEXTBOOK (Title, publisher, year): AgriScience Explorations, Morgan, Lee, Wilson, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition, AgriScience Explorations, Activity Manual, Mika, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition

INSTRUCTIONAL MATERIALS

This includes, but is not limited to, computer resources, textbooks, video/audiovisual, websites, trade publications, laboratory materials, and specialized equipment.

Basic Text(s):

AgriScience Explorations, Morgan, Lee, Wilson, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition

AgriScience Explorations, Activity Manual, Mika, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition

Supplementary Text(s):

WELDING: Principles and Applications; Jeffus; Delmar

AgriScience Explorations, Teacher's Manual

AgriScience Explorations, Activity Manual Instructor's Guide

Exam*View*® Test Bank CD-ROM for Comprehensive Titles

Visual Aids on PowerPoint® CD-ROM

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Instruction for Each Unit		Approximate Length (Hours)
A.	Orientation	4
B.	Safety and Work Ethics	5
C.	Career Options Exploration	4
D.	Employability	10
E.	Communication	6
F.	Leadership	11
G.	Agriculture Research Project	10
H.	Scholarships/Higher Education	5
I.	Agribusiness Management	25
J.	Personal Financial Management	4
K.	Government Agencies	9
L.	Industry Explorations	15
M.	Community Classroom Training	252
	Total	360

1.0 Goal: Orientation

Students will become aware of correct procedures related to the ROP program and occupations and the importance to the individual and society.

1.1 Complete and explain the purpose of the following ROP paperwork.
   a. Socrates Enrollment
   b. Registration Permit
   c. Community Classroom Permit/Training Plan
   d. Community Classroom Rules
   e. Work Permit
   f. Joint Venture Training Agreement

1.2 Demonstrate a clear understanding of attendance, grading, and timecard policies.

1.3 Demonstrate a clear understanding of ROP placement and site allocation procedures.

1.4 Create a resume, cover letter, and reference using a word processing program and present documents to site supervisor.

Anchor Standards: 3.9, 4.6, 11.1, 11.5 Career Readiness: 1

2.0 Goal: Safety and Work Ethics

The student has demonstrated safe work habits and attitudes.

2.1 Explain the purpose and functions of OSHA in the workplace.

2.2 Identify and explain the labor laws that govern teens in the workplace.

2.3 Identify and explain the labor laws that govern adults in the workplace.

2.4 Describe accident prevention techniques and provide methods to prevent accidents in the workplace.

2.5 Explain and implement procedures to be followed in the event of an emergency or accident in the workplace or classroom.

2.6 List factors that contribute to farm accidents.

2.7 Describe management's responsibility related to farm safety.

2.8 Identify sources of safety information.

2.9 Describe variations and parameters pertaining to particular job sites.

2.10 Identify instances of sexual harassment and provide appropriate solutions to deal with such workplace issues.

2.11 Identify, describe, and demonstrate positive work ethics in the workplace.

Anchor Standards: 6.2-6.7 Career Readiness: 1, 6

3.0 Goal: Career Options Exploration

Demonstrated awareness of career opportunities in careers related to the industry.

3.1 Explore, research, and describe the levels of career opportunities available to individuals in the agriculture industry.

3.2 Identify and describe a career interest in an agriculture or agriculture-related occupation.

3.3 Analyze the skills, abilities, and education required to gain entry into the student's occupational choice.
3.4 Develop a plan of action, Career Plan, for accomplishing an occupational objective.
3.5 Explore and research current trends and careers in agriculture using the Eureka Career Information System.
3.6 Identify twelve potential agriculture or agriculture-related careers.
3.7 Identify four potential local labor market area agriculture or agriculture-related careers.
3.8 Describe economic and technological trends which may affect the work environment.
3.9 Identify ways in which employees may have to adapt to changing work environments.
3.10 Explain the importance of work to the individual and society.

Anchor Standards: 3.1-3.8, 4.2, 4.7, 7.3, 7.4 Career Readiness: 1, 2

4.0 Goal: Employability

Developed employment literacy to include job readiness skills and technical reading and writing applications demonstrated by completion of an Employability Portfolio.

4.1 Complete an employability portfolio containing the following:
- a. Table of Contents
- b. Resume
- c. Cover Letter
- d. Master Application Form
- e. Letter of Recommendation
- f. Employability Skills Evaluation
- g. Work Sample and caption

4.2 Portfolio Presentation/Interviewing Skills
4.3 Participate in an interview situation that includes the presentation of the Employability Portfolio.

Anchor Standards: 11.5 Career Readiness: 1, 2, 5, 7, 8, 9, 12

5.0 Goal: Communication

Exhibited leadership skills related to teamwork, communications, human relations, and community responsibility.

5.1 Demonstrate the ability to lead a discussion group.
5.2 Identify and demonstrate communication skills using telephones, letters, memos, and through verbal conversations.
5.3 Identify and demonstrate the necessary skills to effectively and efficiently work as part of a member on a committee.
5.4 Describe the importance of being a good listener.
5.5 Identify standards for interview preparation in regards to grooming, behavior, and clothing requirements.
5.6 Identify other factors influencing job applicant assessment such as first

impressions and eye contact.

5.7 Develop a list of frequently asked interview questions.
5.8 Discuss the various methods used in interviewing job candidates.
5.9 Write two follow-up letters to a job interview.
5.10 List and describe the importance of public speaking skills.
5.11 Demonstrate public speaking abilities by selecting, researching, developing, and delivering a seven minute sales presentation on an agriculture product.

Anchor Standards: 2.1, 2.2, 2.3, 2.5 Career Readiness: 1, 2

6.0 Goal: Leadership

Develop Personal Growth and Development through a Student Organization (FFA)

6.1 Review and practice FFA policies from handbook.
6.2 List and describe FFA awards available to members.
6.3 Identify FFA contests in which vocational-agriculture students may participate.
6.4 List the requirements for earning the Chapter FFA Degree, State FFA Degree, and American FFA Degree.
6.5 Complete the FFA student data sheet.
6.6 List five characteristics of a critical thinker.
6.7 List criteria used to identify when a problem exists.
6.8 Identify the nature and specifics of a particular problem.
6.9 Define and describe the scientific method of problem solving.
6.10 Identify the information needed to solve the problem.
6.11 Identify how to locate specific information related to the problem.
6.12 List possible solutions to a problem.
6.13 Evaluate the consequences of alternative solutions.
6.14 Determine the best solution among the alternatives.
6.15 Define discussion, disagreement, argument, inference, counterexample, and propaganda.

Anchor Standards: 5.1-5.4, 9.1, 9.9-9.13 Career Readiness: 1

7.0 Goal: Agriculture Research Project

The Student will complete an Agriculture Research Project

7.1 The student will complete a research project related to the marketing industry that includes the following:
- written report
- presentation visuals
- oral report

Anchor Standards: 2.5, 4.3, 9.7 Career Readiness: 1, 2, 5

8.0 Goal: Scholarships/Higher Education

Student will look at Scholarships/Higher Education

8.1 Identify college/university application deadline dates.
8.2 Identify the components of the college/university application process.
8.3 Students will identify possible scholarships and grants at a college or university for which they apply.
8.4 Identify entrance requirements for California Community College, California State University, and the University of California system.
8.5 Research and identify financial aid resources, deadlines, and application processes.
8.6 Identify different trade institutions, application requirements, and cost of tuition.

Anchor Standards: 3.3, 3.4 Career Readiness: 1, 2, 5

9.0 Goal: Agribusiness Management

Student will discuss different types Agribusiness Management Systems

9.1 Describe the four types of business structures found in agriculture: 1. Single Proprietorships; 2. Partnerships; 3. Cooperatives; 4. Corporations
9.2 Discuss similarities and differences among the four types of business structures listed above.
9.3 Describe the basic economic factors that affect farm and agribusiness management decisions.
9.4 Describe how supply and demand affect prices.
9.5 List factors that shift the supply and demand curves.
9.6 Distinguish among supplementary, complementary, competitive, and independent enterprises.
9.7 List the advantages and disadvantages of diversification and specialization.
9.8 Explain the importance of agribusiness and its impact on the gross national product and the total economy.
9.9 Use economic decision-making tools to increase the profitability of an agricultural enterprise.
9.10 Describe the concept of diminishing returns.
9.11 Distinguish between fixed and variable costs.
9.12 Calculate the estimated fixed cost and variable costs for an agricultural commodity.
9.13 Distinguish between marginal cost and marginal revenue.
9.14 Explain what is meant by the term, “free enterprise system.”
9.15 Describe key factors involved in marketing.
9.16 Describe types of markets.
9.17 Describe the importance of grades and standards.
9.18 Distinguish between hedging and speculation.
9.19 Describe the purpose and function of local markets.
9.20 Define the terms, “developing,” and “developed country” and explain how the level of development affects agriculture and agricultural trade.
9.21 Define the purpose of developing a marketing plan.
9.22 Identify the various kinds of marketing plans.
9.23 Identify the process of developing a marketing plan.
9.24 Explain the three essential elements of a marketing program.
9.25 Develop a marketing plan for a commodity.

9.26 Identify sales careers in agriculture.
9.27 Discuss major advantages and disadvantages of a sales career.
9.28 List the skills and abilities needed to have a successful sales career in agriculture.
9.29 List the four groups of customers who are targeted in agriculture.
9.30 Describe the basic function of the sales process in agriculture.
9.31 Describe the steps most people go through when making a purchase.
9.32 Discuss what motivates people to buy.
9.33 Select appropriate questions and methods to identify customer needs and wants.
9.34 Identify and explain the five stages in making a sale.
9.35 Describe the kinds of information that a sales person needs to have available about a product or service when making a sale.
9.36 Discuss the three main sales approaches:
- Greeting
- Merchandise
- Service

9.37 Demonstrate three ways of opening a sales presentation.
9.38 Give a sales presentation using an agricultural product or service.
9.39 Demonstrate effective handling of customer objections in a role playing situation.
9.40 Demonstrate effective closing techniques in a sales presentation.
9.41 Describe and demonstrate the professional sales process in agribusiness.
9.42 Demonstrate the ability to build customer confidence in yourself and your product.
9.43 Demonstrate knowledge of advertising and promotion in agricultural sales in an assignment.

Anchor Standards: 1, 10.1, 10.4
Career Readiness: 1
CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 1.1-1.6, 2.1-2.6, 7.1, 7.2, 7.4, 8.1-8.3, 9.7

10.0 Goal: Personal Financial Management

The student will recognize different methods of Personal Financial Management

10.1 Explain the main reasons for keeping records.
10.2 Identify and demonstrate the guidelines for completing a record book.

Anchor Standards: 10.7
Career Readiness: 1
CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 4.1, 4.2, 4.4

11.0 Goal: Government Agencies

Students will explore the different types of governmental agencies in the Stanislaus County area.

11.1 Identify and describe the primary agencies involved in agriculture and the services they provide.

11.2 List the major objectives of the U. S. Department of Agriculture.
11.3 Describe the services provided by the Cooperative Extension Service.
11.4 The students will learn and keep records in the California computerized record book.

Anchor Standards: 7.8, 8.2, 10.2, 10.7 Career Readiness: 1 CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 6.1-6.3

12.0 Goal: Industry Explorations

Students will explore the different types of agricultural industries in the Stanislaus County area.

12.1 Attend a field trip to research various sectors within the agriculture industry which could include one or more of the following industry areas:

- Dairy Science
- Water Science
- Environmental Science
- Livestock Management
- Agribusiness
- Welding and Fabrication
- Landscape Management

12.2 Complete a reflection paper to summarize knowledge learned at the field trip exploration.

Anchor Standards: 1, 10.1, 10.4 Career Readiness: 1 CTE Pathway Agriculture and Natural Resources: All pathway standards are integrated within the industry exploration and field study.

13.0 Community Classroom

The student will receive Community Classroom Training.

13.1 Perform specific skills and tasks relevant to the individual site placement.

Anchor Standards: 1 Career Readiness: 5.4, 11.1 CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A) 8.1-8.3

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: AgriScience Explorations, Revised 3rd ed. & Activity Manual

AUTHOR(S): Morgan, Lee, Wilson

PUBLISHER: Pearson

COPYRIGHT DATE: 2009

ISBN #: 978-0-13-362637-7, 0-13-362637-7, 013362644X

PRICE: $68.97/$20.97

DEPARTMENT: Agriculture/ROP

CLASS: Agriculture 1 (ROP), Agriculture 2 (ROP), Agriculture 3 (ROP), Agriculture 5 (ROP)

GENERAL DESCRIPTION:
This newly revised edition provides students with a comprehensive introduction to the Agriculture industry. Updated photos and easy to understand text introduces students to a variety of interesting AgriScience concepts and skills including AgriScience careers, the relationship between Agriculture and Science, how AgriScience is applied in the real world, and the meaning of being a professional in the AgriScience industry.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY:

Selection Committee:
Mark Nower, Roger Dickson

Curriculum Area Chairperson

Scott Kuykendall
Director, 7-12, CTE/ROP

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Agriculture 5 ROP S1 Agriculture 5 ROP S2

COURSE NUMBER: ROP01651 ROP01652

RECOMMENDED GRADE LEVEL: 11, 12

DURATION: Two Years

CREDIT: 10 per year

MEETS GRADUATION REQUIREMENTS: Practical Arts, CTE

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4043

MEETS UC AND CSU ENTRANCE REQUIREMENTS: No

CREDENTIAL REQUIREMENTS:

REPLACES:

Course Description:

AGRICULTURE 5 is designed to introduce students to careers in production agriculture. Students will receive hands on training in various entry-level positions available in their community. Students will be provided the opportunity to explore various career opportunities in agriculture labor.

Course instruction – This course is designed to introduce students to skills pertaining to jobs in production agriculture. The course instruction and experiences will give students the opportunity to receive instruction and hands-on experience to obtain the skills required to apply for and retain a job in production agriculture in their community. Leadership skills are developed through FFA (Future Farmers of America).

Prerequisites: None

Date Matched Against State Framework Model Curriculum Standards, and State Curriculum Guides: September, 2013

Board Approved: June 16, 2014

REVIEW CYCLE: 2011-12 through 2015-16
REQUIRED TEXTBOOK (Title, publisher, year): AgriScience Explorations, Morgan, Lee, Wilson, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition, AgriScience Explorations, Activity Manual, Mika, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition

INSTRUCTIONAL MATERIALS

This includes, but is not limited to, computer resources, textbooks, video/audiovisual, websites, trade publications, laboratory materials, and specialized equipment.

Basic Text(s):

AgriScience Explorations, Morgan, Lee, Wilson, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition

AgriScience Explorations, Activity Manual, Mika, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition

Supplementary Text(s):

AgriScience Explorations, Activity Manual Instructor's Guide

AgriScience Explorations, Teacher's Manual

Exam*View*® Test Bank CD-ROM for Comprehensive Titles

Visual Aids on PowerPoint® CD-ROM

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Instruction for Each Unit		Approximate Length (Hours)
A.	Orientation	10
B.	Career Development	5
C.	Employability	15
D.	Business/Professional Development	10
E.	Leadership	8
F.	Agricultural Research Project	5
G.	Introduction to Agricultural Skills	5
H.	School Farm, Agriculture Shop and General Safety	15
I.	Welding/Cutting	10
J.	Farm Tractor and Implement Operation	15
K.	Basic Introduction to Livestock	10
L.	Plant Science	20
M.	Agricultural Construction	17
N.	Farm Equipment and Tool Identification and Operation	10
O.	Community Classroom Training	565
	Total	720

Goal 1 Orientation

Exhibited leadership skills related to teamwork, communications, human relations, and community responsibility.

1.0 Complete and explain the purpose of the following ROP paperwork
   a. Socrates Enrollment
   b. Registration Permit
1.2 Demonstrate a clear understanding of attendance, grading, and timecard policies.
1.3 OSHA: explain the purpose and function of OSHA in the workplace.
1.4 Labor Laws for Teens: identify and explain the labor laws that govern teens in the workplace.
1.5 Accident Prevention: emphasize the safety of specific lab sites, the school farm and the agriculture shop.
1.6 Identify instances of sexual harassment and provide appropriate solutions to deal with such workplace issues.
1.7 Identify, describe, and demonstrate positive work ethics in the workplace.

Anchor Standards: 3.9, 4.6, 6.2-6.7, 11.1, 11.5 Career Readiness: 1, 6

Goal 2 Career Development

Set short and long term occupational goals in a chosen career field.

2.0 Explore and describe the levels of career opportunities available to individuals in the Agriculture Mechanics and Production Farming industry.
2.1 Complete a self-assessment using the ROP Employability Skills Evaluation form and the ROP "Who Am I" booklet.
2.2 Develop a personal occupational plan that outlines specific career goals, and an action plan to achieve these outcomes.

Anchor Standards: 3.1-3.8, 4.2, 4.7, 7.3, 7.4 Career Readiness: 1, 2

Goal 3 Employability

Demonstrated work values consistent with employment success within the industry.

3.1 Create an employability portfolio.
   - Complete an employability portfolio containing the following:
   - Table of Contents
   - Resume
   - Cover Letter
   - Master Application Form
   - Letter of Recommendation
   - Employability Skills Evaluation
   - Work Sample and caption
3.2 Participate in an interview situation that includes the presentation of the Employability Portfolio.

Anchor Standards: 1.5 Career Readiness: 1, 2, 5, 7, 8, 9, 12

Goal 4 Business/Professional Development

Deliver effective communication, and demonstrate the ability to communicate effectively with co-workers, supervisors, teachers, customers, and classmates.

4.1 Human Relations: demonstrate effective human relation skills while working with others.
4.2 Writing Sample: create a writing sample that demonstrates effective writing and communication skills used in the workplace.
4.3 Present Agriculture Research project to an audience determined by ROP instructor.

Anchor Standards: 2.3-2.5, 4.5, 9.3, 9.6, 9.12 Career Readiness: 1, 5

Goal 5 Leadership

Develop leadership skills through the FFA and community service.

5.1 Develop and execute a community service project that will be of benefit to a specific group, institution, or cause within the community.
5.2 Execute a community service project that will meet the 40 hours of community service requirement for graduation.
5.3 Participated in a job interview.
5.4 Actively participate in the applicable course student organization such as FFA.

Anchor Standards: 2.3, 2.5, 5.2, 7.2, 9.9 Career Readiness: 1, 7, 8

Goal 6 Agricultural Research Project

Complete a written project and present the topic in class.

6.1 Complete a research project related to an agriculture occupation that includes the following:
- Written Report
- Presentation Visuals
- Oral Report or lead a group discussion for 20 min. as required by National FFA Record Book

Anchor Standards: 3.3, 3.4, 3.8 Career Readiness: 1, 2, 9, 11 CTE Pathway Agriculture and Natural Resources: Agriscience Pathway (C) 13.1, 13.2

Goal 7 Introduction to Agricultural Skills

Set short and long term occupational skills

7.1 List goals of class and the requirements to obtain them.
7.2 List the expected requirements to complete this course.
7.3 Explain the grading policy of this course.

Anchor Standards: 3.3 Career Readiness: 1

Goal 8 School Farm, Agriculture Shop and General Safety

The student will have demonstrated safety procedures in the agriculture shop and school farm.

8.1 Explain the rules and regulations in relation to safety expectations in order to work at the school farm and in the school agriculture shop.
8.2 Explain the proper and safe attire for working at the school farm and in the school agriculture shop.
8.3 List the procedures for reporting an accident at the school farm and at the school agriculture shop.
8.4 Explain how to safely operate both hand and power tools at the school farm and the school agriculture shop.
8.5 List the proper way of handling pesticides safely including use of the correct clothing or personal protective equipment.
8.6 Explain how to inspect equipment before operation to identify any safety concerns.
8.7 Describe the basics of operating the equipment at the school farm.
8.8 Demonstrate safe practices when working with and around livestock.
8.9 Demonstrate the proper techniques for handling all species of livestock at the school farm.

Anchor Standards: 6.3-6.6 Career Readiness: 1 CTE Pathway Agriculture and Natural Resources: Agricultural Mechanics Pathway (B) 1.1-1.3, 9.2, 11.2, 6.1, Animal Science Pathway (D) 1.1, 1.4

Goal 9 Welding/Cutting

The student will have developed basic skills in Oxy-Fuel and Arc Welding.

9.1 Demonstrate proper techniques for the welding and cutting process for Oxy-Fuel welding.
9.2 Demonstrate proper techniques for the welding and cutting process for Arc welding.

Anchor Standards: 1.0, 10.1 Career Readiness: 1 CTE Pathway Agriculture and Natural Resources: Agricultural Mechanics (B) 7.1-7.4, 8.1-8.4

Goal 10 Farm Tractor and Implement Operation

The student will demonstrate the proper use of equipment

10.1 Demonstrate the safe and proper use of the following equipment:

- Gas and/or Diesel Tractors
- Disc
- Plows
- Cultivators
- Listers
- Scrapers
- Sprayers

Anchor Standards: 1.0, 4.7, 6.4, 10.1 Career Readiness: 1 CTE Pathway Agriculture and Natural Resources: Agricultural Mechanics (B) 11.1-11.3

Goal 11 Basic Introduction to Livestock

The student will have demonstrated livestock feeding and healthcare practices.

11.1 Recognize and list breeds of the species of livestock at the school farm.
11.2 Identify types of feed stuffs and its proper use as livestock feed.
11.3 Identify common illnesses in livestock and list types of treatment.
11.4 Perform treatments for livestock including shots, drenching, and first aid.

Anchor Standards: 1.0, 10.1 Career Readiness: 1 CTE Pathway Agriculture and Natural Resources: Animal Science (D) 2.2, 2.11, 6.1-6.3, 10.1, 11.1, 11.2, 15.1

Goal 12 Plant Science

The student will have demonstrated basic knowledge in plant science application.

12.1 List basic plant systems.
12.2 List basic nutrient requirements of plants.
12.3 Explain types of irrigation used in agriculture.
12.4 Describe which type of irrigation practice should be used in relation to a selected crop and soil type.
12.5 Describe a fertilizer in reference to its type and how it would be used in agriculture production.
12.6 List various types of pesticides.
12.7 List what specific pesticides are used to control.
12.8 Describe or demonstrate the proper use of pesticides.
12.9 Explain various forms of plant propagation.
12.10 Demonstrate proper technique for transplanting plants.
12.11 Produce a functional vegetable garden using the steps below:

- Plan
- Prepare
- Plant
- Maintain

Anchor Standards: 1.0, 10.1 Career Readiness: 1 CTE Pathway Agriculture and Natural Resources: Ornamental Horticulture (F) 1.1-3, 2.1, 2.3, 3.1, 3.2, 5.1, 5.2, 5.4, 6.1-6.4, 9.3, 9.4

Goal 13 Agricultural Construction

The student will have demonstrated skill in completing farm construction projects.

13.1 Demonstrate the proper way to repair, maintain, or construct fences using the following materials:
- Wood
- Woven
- Barb Wire
- Pipe and Cable
- Electric Materials
- Gates

13.2 Demonstrate or explain how to construct livestock pens.

13.3 Explain, using the steps below, how to complete a concrete project:
- Composition
- Forming
- Finishing
- Repairing
- Job Requirements

13.4 Demonstrate safety applications with an electrical project.

13.5 List parts identification with an electrical project.

13.6 Demonstrate basic electrical wiring skills.

13.7 Generate a bill of materials and costs for a project.

Anchor Standards: 1.0, 10.1, 10.8 Career Readiness: 1 CTE Pathway Agriculture and Natural Resources: Agricultural Mechanics (B) 2.4, 3.1-3.6, 4.4, 6.1-6.3, 9.7, 12.5, 12.6

Goal 14 Farm Equipment and Tool Identification and Operation

The student will demonstrate the proper use of farm equipment and tools.

14.1 Demonstrate the safe and proper use of the following equipment:
- Gas and/or Diesel Tractors
- Disc
- Plows
- Cultivators

Anchor Standards: 1.0, 10.1, 10.8 Career Readiness: 1 CTE Pathway Agriculture and Natural Resources: Agricultural Mechanics (B) 10.1, 10.2, 11.2, 11.3

Goal 15 Community Classroom

The student will receive Community Classroom Training

15.1 Perform specific skills and tasks relevant to the individual site placement.

Anchor Standards: 5.3 Career Readiness: 1

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: AgriScience Explorations, Revised 3rd ed. & Activity Manual

AUTHOR(S): Morgan, Lee, Wilson

PUBLISHER: Pearson

COPYRIGHT DATE: 2009

ISBN #: 978-0-13-362637-7, 0-13-362637-7, 013362644X

PRICE: $68.97/$20.97

DEPARTMENT: Agriculture/ROP

CLASS: Agriculture 1 (ROP), Agriculture 2 (ROP), Agriculture 3 (ROP), Agriculture 5 (ROP)

GENERAL DESCRIPTION:
This newly revised edition provides students with a comprehensive introduction to the Agriculture industry. Updated photos and easy to understand text introduces students to a variety of interesting AgriScience concepts and skills including AgriScience careers, the relationship between Agriculture and Science, how AgriScience is applied in the real world, and the meaning of being a professional in the AgriScience industry.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY:

Selection Committee:
Mark Nower, Roger Dickson

Curriculum Area Chairperson

Scott Kuykendall
Director, 7-12, CTE/ROP

Date Board Approved: _____

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Agriculture Computer Literacy 1 Agriculture Computer Literacy 2

COURSE NUMBER: AGR01101 AGR01102

RECOMMENDED GRADE LEVEL: 9-12

ABILITY LEVEL: Unsectioned

DURATION: One Year

CREDIT: 5 per Semester

MEETS GRADUATION REQUIREMENTS: Computer Literacy

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4098

MEETS UC AND CSU ENTRANCE REQUIREMENTS: No

CREDENTIAL REQUIREMENTS:

REPLACES:

Course Description:
The course in Agriculture Computer Literacy is designed to expose students to the selection, use, and practical applications of computers in the diverse fields of Agriculture. The student will be able to apply computer technology in typical agriculture business management decision-making situations; to develop familiarity with the role of information in making sound business decisions and integration of labor, supplies, and machinery in the agriculture business management process; and to develop an understanding of the importance of income tax planning and calculations in the agri-business profit and loss column; also the use of computer application software tools for word processing, data base, spread sheet, presentation software and internet access will be used.

Recommended Prerequisites: None

Date Matched Against State Framework, Model Curriculum Standards, and State Curriculum Guides: February, 2007

Board Approved: January 17, 2012

REVIEW CYCLE: 2011-12 through 2015-16
REQUIRED TEXTBOOK: A Guide To Microsoft Office 2010, Jan Marrelli, 2011, EMC Publishing, LLC or Latest Edition

INSTRUCTIONAL MATERIALS

Basic Text:

A Guide To Microsoft Office 2010, Jan Marrelli, 2011, EMC Publishing, LLC
or Latest Edition

Supplementary Text(s):

Introduction to Agribusiness, Ricketts/Rawlins, Delmar Publishers, 2010
or Latest Edition

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units		Approximate Length of Instruction for Each Unit (Weeks)

Career planning, leadership skills, FFA, SOEP, and general employability skills are included in every Agriculture Computer Literacy course. The level of competency expected of each student is dependent upon the individual's ability level and prior coursework in Computer Education

A.	Introduction	1
B.	Word Processing	6
C.	FFA	3
D.	SOEP	3
E.	Spreadsheet	6
F.	Data Base	5
G.	Power Point	6
H.	Internet	5
I.	Careers	1
	Total Number of Weeks	36

AGRICULTURE COMPUTER LITERACY

1.0 GOAL: Students will understand and use the computer equipment properly.

- 1.1 Given a set of computer terms, the student will be able to define them.
- 1.2 Given pieces of computer equipment, the student will be able to demonstrate his/her ability to properly use each piece of equipment.
- 1.3 Given a description of equipment, the student will be able to describe the capabilities and limitations.

2.0 GOAL: Students will use word processing software to create text and understand the capabilities and limitations of word processors.

- 2.1 Given a document, the student will be able to enter the document onto a computer system and obtain a printout of the document.
- 2.2 Given a document that needs to be modified, with the modifications specified, the student will produce the document using a computer system.
- 2.3 Given a situation calling for the production of a text such as "Public Speaking, Extemporaneous Speaking" the student will create the text and print it without error.
- 2.4 Learn design procedures.

3.0 GOAL: Students will use spreadsheet software to understand the capabilities and limitations of spreadsheets.

- 3.1 Given a spreadsheet that has multiple entries, the student will be able to replicate the spreadsheet on the computer system.
- 3.2 Given a spreadsheet and stipulated modifications that are to be carried out on the sheet, the student will be able to complete the modification.
- 3.3 Given a situation calling for the utilization of a spreadsheet, the student will be able to create a spreadsheet to adequately solve the problem that needs to be addressed.
- 3.4 Given the California Recordbook, students shall be able to enter data and create a spreadsheet determining the student's net worth.

4.0 GOAL: Students will use database software to enter data, generate reports, and to understand the capabilities and limitations of the database.

- 4.1 Given a file, the student will be able to replicate the file on a computer system.
- 4.2 Given a file that needs to be modified with the modification stipulated, the student will be able to carry out the modification.
- 4.3 Given a situation calling for the creation of a file, the student will be able to identify the appropriate data elements and create the file needed to produce the required solution.

5.0 GOAL: Students will create multimedia and slide presentations using application software.

5.1 Given data and slide information, students will be able to replicate a slide presentation using application software. Project will include commercial demonstrations for agriculture businesses.

5.2 Students will be able to create an informative presentation from scratch pictures, clip art and sound files.

6.0 GOAL: Students will master problem solving via navigation of the Internet.

6.1 Students will demonstrate the ability to open and navigate a browser to access a designated web site.

6.2 Students will demonstrate the ability to follow links from web pages on a given topic.

6.3 Students will be able to store information obtained from a web site.

6.4 Students will be able to research a topic using three (3) sources.

6.5 Students will research FFA Careers and report on five (5) different areas.

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: A Guide To Microsoft Office 2010

AUTHOR(S): Jan Marrelli

PUBLISHER: EMC Publishing, LLC

COPYRIGHT DATE: 2011, or Latest Edition

ISBN #: _____

PRICE: _____

DEPARTMENT: Agriculture

CLASS: Agriculture Computer Literacy

GENERAL DESCRIPTION:

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ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: Agriculture Advisory Committee

Selection Committee:

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_____ _____

Curriculum Area Chairperson

Thor Harrison, Director
Director, Educational Services

MODESTO CITY SCHOOLS

COURSE TITLE: Agriscience
COURSE NUMBER:
RECOMMENDED GRADE LEVEL: 9
ABILITY LEVEL: Unsectioned
DURATION: 2 semesters
CREDIT: 10
MEETS GRADUATION REQUIREMENTS: Physical Science
REQUIRED FOR GRADUATION: Yes
SCHOOLS: Beyer, Downey, Davis, Enochs, Gregori, Johansen, Modesto
CBEDS CODE: 4072
MEETS UC ENTRANCE REQUIREMENTS: Yes – Lab Science: Chemistry
MEETS CSU ENTRANCE REQUIREMENTS: Yes
CREDENTIAL REQUIREMENTS: Single Subject: Agriculture
REPLACES: Integrated Ag Science 1-2

COURSE DESCRIPTION:

- This course explores the physical and chemical nature of soil as well as the relationships between soil, plants, animals and agricultural practices. Students will examine properties of soil and land and their connections to plant and animal production. Using knowledge of scientific protocols as well as course content, students will develop an Agriscience research program to be conducted throughout the first semester of the course. To complete that whole project each student will investigate and test an Agriscience research question by formulating a scientific question related to the course content, formulating a hypothesis based on related research, conducting an experiment to test the hypothesis, collecting quantitative data, and forming a conclusion based on analysis of the data. The result of this research program will be an in depth research and experimentation paper that is technically written, based on scientific protocol, and cited using APA formatting. Additionally, students will develop and present a capstone soil management plan for agricultural producers, using the content learned throughout the course. Throughout the course, students will be graded on participation in intra-curricular FFA activities as well as the development and maintenance of an ongoing Supervised Agricultural Experience (SAE) program.
- Agriculture Education is a comprehensive program and requires students to participate in a Supervised Agriculture Experience Project component as well as FFA leadership activities and events. These activities are a graded component of this course. A student cannot receive an A grade without participation in FFA and SAE.

Date Aligned with State Standards: January, 2015
Board Approved:
REVIEW CYCLE: 2011-2016

REQUIRED TEXTBOOK (Title, publisher, year):

Plant & Soil Science Fundamentals and Applications by Rick Parker, Delmar Cengage Learning
Author: Rick Parker, Ph.D.
Edition: current
Product Type: Bound Book
ISBN 13: 9781428334809
ISBN 10: 1428334807
Copyright: 2010
Price: $175.95
9781428334830 - Instructor's Manual
9781428334816 - Classmaster CD-ROM

Managing Our Natural Resources, 6th edition, Camp, Cengage Learning
Author: Camp and Camp.
Edition: current
Product Type: Bound Book
Copyright: 2015
Price: $232.95
ISBN-10: 1285835077 |
ISBN-13: 9781285835075

Supplemental Materials:

Environmental Science Fundamentals and Applications Delmar Cengage Learning
Chapters 1-3; 5 & 6

Environmental Science and Technology Second Edition Agriscience & Technology
Chapters 10, 13, 14 & 15

Environmental Science 10th Edition; G. Tyler Miller, Jr.
Chapters 9, 13 & 14

Environmental Science 7th Edition; Bernard J. Nebel & Richard T. Wright, Prentice Hall

The Science of Agriculture A Biological Approach 2nd Edition; Ray V. Herren; Delmar Thomson Learning

Agriscience Fundamentals and Applications 6th Edition; L. DeVere Burton, Cengage Learning

Environmental Science 1st Edition, 2013; Michael Heithaus; Karen Arms; Houghton, Mifflin, Harcourt

How to Write a Scientific Paper by Robert A. Day

National FFA Agriscience Fair Handbook https://www.ffa.org/documents/agsci_handbook.pdf

National FFA Research Report Template
https://www.ffa.org/programs/awards/agrisciencefair/Pages/default.aspx

Unit 1-Assignment 1:
http://www.todayshomeowner.com/diy-soil-texture-test-for-your-yard/

Unit 3- Assignment 2:
https://www.lcmm.org/education/resource/on-water-ecology/worksheet-water-quality-testing.pdf

Unit 4 Assignment 1
http://www.cfaitc.org/lessonplans/pdf/403.pdf
http://www.cfaitc.org/lessonplans/pdf/404.pdf

Unit 5 Assignment 1
http://www.sites.ext.vt.edu/newsletter-archive/livestock/aps-06_04/aps-313.html

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units	Approximate Length of Instruction for Each Unit (Weeks)
Unit 1: Agriscience Practices	4
Unit 2: The Nature of Soil	4
Unit 3: Water and Soil Management	5
Unit 4: Plants and Soil Management	4
Unit 5: Animals and Soil Management	4
Unit 6: Soil Sustainability	4
Unit 7: FFA & SAE	7
Unit 8: Capstone Project and Portfolio	4
Total Number of Weeks	36 weeks

Unit One: Agriscience Practices

Unit Description

This introductory unit will focus on proper methods of agriscience inquiry. Through a series of mini-lab experiences based on the course content, students will learn to ask questions and define problems, conduct research to form a hypothesis, determine the experimental design and conduct experimentation, analyze and interpret data, develop conclusions and then communicate their findings in lab reports. Not only will the students learn to utilize proper scientific method protocol through conducting these mini-labs, they will also learn what topics will be taught throughout the year in order to guide them in selecting the problem/question for their individual Agriscience Project. Through these mini-lab experiences and unit content, students will be provided with the skills and knowledge to successfully establish the idea they will pursue in their Agriscience Project. By the end of this unit, students will complete the Agriscience Project Research Proposal for their on-going science experiment that will be conducted throughout the first semester of the course.

Key Assignments

1. Soil Structure and Composition Mini-Lab - Calgon Testing

Students will learn that soil is composed of different size particles at varying percentages by conducting an experiment where students separate, examine and identify the major components of soil to better understand how these components give soil its unique physical characteristics. Students will learn to measure the percentage of sand, silt, and clay in a soil sample. Soil samples should be collected in the course of a walking field trip where students will take samples from varying locations on the walk. Students will mix one cup of soil sample with laundry detergent powder in a mason jar in order to dissolve the soil aggregates and keep the individual particles separated. Once the soil sample mixture sits for three days, students will measure and determine the percentage of each particle within their specific soil sample. Students will write a lab report to summarize what occurred throughout the experiment, their data, and analysis/conclusion.

2. Water and Soil Management Mini-Lab - Water Percolation

Students will learn how to design a scientific experiment through proper scientific method and how to develop a research proposal. Students will be put into groups to produce a mini-proposal which will include the specific water percolation problem/question they will research for this lab, three literary research references, a hypothesis and scientific procedure. Students will also learn how soil composition impacts the speed of water percolation or amount of water absorption by conducting the experiment they designed. Students will create a lab report that includes their data and analysis/conclusion. The lab not only develops

student's ability to write a proposal and a scientific experiment, but exposes them to the relationship between water and soil management.

3. Plant and Soil Management Mini-Lab - Nutrient Uptake
Students will learn that plants utilize nutrients in soil to grow and develop. Each student will bring in a soil sample from their yard to utilize in this lab. They will divide the sample into two pots, one that will be a control sample and the other will be amended with animal manure compost. They will test the nutrients of these two pots of soil with a standard soil testing kit in order to record the levels of Nitrogen, Phosphorus, and Potassium in their control and amended samples. A bean seed will be planted in each pot of soil to germinate and grow over the course of a two week period. Throughout the two weeks, students will be recording quantitative data on seed germination, plant growth, and soil nutrients. After analyzing their data, students will determine how much of each nutrient was utilized by the bean plant. A lab report will be written to summarize what occurred throughout the experiment, their data, and analysis/conclusion.

4. Animal and Soil Management Mini-Lab - Animal Manure Amendment
To build on to the learning of nutrient uptake in the previous lab, students will extend their data analysis to make conclusions on why the bean plant in the amended soil sample had more optimal growth over the past two weeks than the bean plant in the controlled soil sample. This extended analysis of their data will allow the students to learn that animal waste can be composted and used as a soil amendment to increase soil nutrients for optimal plant growth. A lab report will be written to summarize what occurred throughout the experiment, their data, and analysis/conclusion.

5. Technology Mini-Lab - Soil Moisture Testing
Building on the learning of soil composition in the Calgon lab, in this mini-lab, students will learn that the moisture levels in soil vary depending on the soil composition through the use of soil moisture sensing equipment. Students will learn how to operate a soil moisture sensor by testing the moisture levels in various soils. Students will return to the locations where soil samples were collected for the Calgon testing lab in order to test the moisture levels of those specific soils. They will use their data from the Calgon testing lab alongside the data from the soil moisture tests to determine how the composition of the soil impacts the soil moisture levels. A lab report will be written to summarize what occurred throughout the experiment, their data, and analysis/conclusion.

6. Agriscience Research Project Proposal
The key assignment for this introductory unit will be writing a research proposal for the student's planned Agriscience Project. To guide the students in deciding their agriscience research questions/problem, the mini lab experiences completed in this unit should be utilized. The written proposal will include their chosen problem/question that they will be researching and investigating, five pieces of literary references, and the steps to complete for their research project. This assignment marks the first in a series of assignments that will be necessary for students to complete in order to successfully complete their agriscience research project.

Anchor Standards: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11,
Career Readiness: 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12
CTE Pathway Standards: C1.0, C1.2, C1.4, C1.5, C3.1, C3.2, C3.5, C13.1, C13.2
NGSS: HS-ETS1-1, HS-ETS1-2, HS-ETS1-3

Unit Two: The Nature of Soil

Unit Description

Students will use the methods of scientific inquiry, developed in the previous unit, to investigate the composition of the physical world, and discover how matter and energy change forms through biogeochemical cycles. Students will understand where soil originates by investigating the role of the rock cycle in soil formation. Students will learn how the electron configurations of different elements, present in the parent material, give them unique physical and chemical properties, and will further investigate how these properties impact soil characteristics. Students will identify how the climate, weather, and environment impact the soil properties, and will examine the role erosion plays in soil science. Students will collect soil samples from a variety of sources, and will use industry methods to determine the chemical composition of the soil and how this composition affects its physical and chemical characteristics. Students will connect to prior knowledge of life science by looking at how biotic factors impact soil type, composition and texture through investigation and experimentation. Students will use the results of their soil testing and the locations from which they took their samples to create a soil map of their local area. Students will compare their map to existing soil maps and analyses, and analyze the similarities and differences with the previous research.

Key Assignments

1. Sedimentary Rock Lab

In this activity students will model how sedimentary rock is formed by simulating weathering and erosion. Because sedimentary rock is the parent material for major components of many high quality soils, students will investigate the physical and chemical processes which create sedimentary rock. In this lab, students will use brown sugar to simulate the effect of water on soluble rock, show how water can dissolve various minerals, show how freezing water can crack porous rock, show the effects of water's impact by pouring water on sand, and use a hairdryer and sand to simulate wind erosion on copper sulfate crystals. Students will turn in a lab report that details the results of the lab and that identifies which processes are examples of physical change (water expanding in cracks to break rocks, sand particles wearing away rock, etc.), and which processes are examples of chemical change (slightly acidic water dissolving limestone, oxidation of minerals to create metal oxides, etc.).

(http://www.rsc.org/education/teachers/resources/jesei/weather/home.htm)

2. Collect and Test Soil Samples: Physical Properties (figure out what elements might be in them based on chemical properties)

In this lab, students will learn how to test the physical characteristics of soil, so that they can learn how these characteristics affect a soil's capabilities in later units. They will be able to assess and amend a soil to achieve a specific agricultural application. Students will collect soil samples from a variety of locations around their community. After receiving instruction in lab safety protocols, students will choose appropriate lab testing and safety equipment, and will carry out a battery of industry standard tests to determine what physical characteristics the soil samples possess. After receiving instruction in what physical properties of matter are measured in soil testing, students will use the ribbon test, and also look at physical factors such as soil texture, composition, and particle size. Students will examine the soil for presence of living organisms, such as nematodes. Based on these properties, students will hypothesize what chemical elements are present in the soil. Students will research what chemicals are prominent in the soil in their test areas, and check their hypotheses against this research. Students will turn in an annotated bibliography detailing the major findings of their research. Students will give a presentation on their annotated bibliography, and give details on where their soil came from, the lab tests they performed, the results of the tests, their data analysis, and how that analysis compared to their research.

3. Background Scholarly Research and Forming a Hypothesis

As they begin work on their semester-long research project, students use skills in research and forming hypotheses developed in the previous units to develop a hypothesis for their agriscience research project. Students will use credible sources to conduct background research on the agricultural issue they are investigating by reading and deconstructing scholarly journal articles to identify the key components of their agriscience research project. They will use this research to generate a testable hypothesis related to the scientific problem they have identified. The hypothesis developed by the student will be constructed with the independent and dependent variables in mind, and ultimately reviewed by the instructor.

4. Test Soil Samples: Chemical Properties

In this lab, students will learn how to test the chemical characteristics of soil, so that as they learn how these characteristics affect a soil's capabilities in later units, they will be able to assess and amend soil to achieve a specific agricultural application. Students will test the soil samples that they collected for the previous lab to determine the chemical properties of the samples. After receiving instruction in lab safety protocols, students will choose appropriate lab testing and safety equipment. After learning what chemical characteristics of soil are commonly tested, what reactions occur in the testing process, and how these tests are performed, students will carry out a battery of industry standard tests to determine chemical characteristics, such as pH, nitrogen levels, potassium levels, phosphorous levels and presence of micronutrients. Students will use their chemical tests to compare what chemical elements they found in the soil with what they hypothesized based on physical characteristics, and what they found in their research. Students will turn in a lab report which details where their soil came from, the lab tests they performed, the results of their tests, and the analysis of their results as compared to their findings in the previous assignment.

5. Experimental Design and Conducting Experimentation

Students continue work on their semester-long agriscience project by constructing an experimental design to test the hypothesis they developed in earlier in this unit. A written experimental design should be constructed consistent with scientific protocols using the systematic approach outlined in the previous units. Students will have their experimental designs reviewed by professional contacts (industry experts, agricultural instructors, local growers/producers, researchers or university representatives). After validating the design using the peer review process, students will move to the experimentation phase of their research. Experimental designs should include replicates, control groups, and determine the variables to be controlled and how. Additionally, a determination should be made as to the type of data that will be collected and in what ways, with the emphasis placed on quantitative data or quantifying data that is qualitative in nature. Students will use their experimental design to test their hypothesis. Raw data should be recorded using a field book or electronic device.

6. Creating Soil Maps

Students will take the soil analysis results from the previous assignments to construct a soil map of their local area. Based on the physical properties, such as soil texture, composition and particle size, the chemical properties, such as pH, nitrogen levels, micronutrient levels, etc., and the specific location from which the soils came, students will categorize the soil samples and the class will construct a comprehensive soil map of the local area. Students will then compare their map to existing soil maps, and analyze the similarities and differences with the previous USDA-NRCS maps.

7. Soil Management Project

The soil management project, which students begin in unit 2, will be ongoing throughout the length of the course. The teacher will procure samples of soil from a variety of local farms and these samples will be kept as individual soil plots, or can be kept in plastic containers. Students will perform a variety of tests on these soil samples throughout the course in order to determine the characteristics that the individual samples possess, to analyze how these characteristics impact agricultural outcomes, and how amendments can be made to the soil samples in order to achieve a desired outcome. In this unit students will use the skills they learned in the previous labs to test and record the physical and chemical characteristics of the soil, and identify organisms living in the soil. Students will keep ongoing records of the data they collect during each of the units learning labs. This data will include information about the physical and chemical characteristics of their soil sample, results from testing pH, moisture, nutrient levels, water holding capacity, ability to grow target crops, and other factors in subsequent units.

Anchor Standards: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
Career Readiness: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
CTE Pathway Standards: C10.1, C10.2, C10.3, C10.4, E3.1, E3.2, E3.3, F5.3
NGSS: HS-PS1-1, HS-PS1-3, HS-PS1-8, HS-ESS2-5, HS-ESS2-7, HS-ESS2-2

Unit Three: Water and Soil Management

Unit Description

Using knowledge accessed from previous units on the physical and chemical properties of soil, students will analyze how the water cycle impacts soil based on its soil type (sand, silt, clay) soil location (geographic and topographic), vegetative state and natural slope of land. In order to understand how water becomes available for plant growth, students will explain the movement of water through soil with respect to how intermolecular forces impact percolation, capillary action, pore size, cohesion and adhesion. Furthermore, students will address how the concentration of organic matter in soil impacts the movement of water. Students will explain the impact that soil has on the quality of their water and will use water analysis tests to determine the safe and appropriate levels for potable water. Students will also be able to provide solutions to possible contaminations and/or toxic levels of residues/nutrients in the water samples. Students will determine how different irrigation, tillage and planting practices will impact the soil and surrounding area by testing water quality, pH and checking for possible contaminants due to leaching. Students will determine proper and efficient irrigation practices based on the chemistry behind the soil and the way water moves through the soil particles. Students will use GPS to enable students to more accurately analyze watersheds in their area and rationalize how the drought can impact both water quality and quantity as well as soil composition.

Key Assignments

1. Soil Erosion and Runoff Lab

Using soil plots from the previous labs, students will analyze how soils with vegetation (including organic matter) have a greater water holding capacity and less runoff than soils without vegetation by collecting runoff water from each plot and testing not only the amount of water collected from each plot, but also the percent of solids collected from runoff from each of those plots. Students will complete their lab write up to emphasize their understanding of these key concepts. Students' lab reports should include qualitative and quantitative observations of the composition of runoff from the soil plots. They should analyze this data to draw conclusions about the water holding capacity of the soils and should discuss the intermolecular interactions which allow soil to hold water at the molecular level. This assignment prepares them for decisions that will be made in their capstone project of creating a soil management plan.

2. Water Quality Testing

Students will begin by examining properties of subatomic particles and will create models to illustrate bonding of hydrogen and oxygen, accounting for the polarity of the water molecule. The focus of this unit will continue to develop an understanding of how hydrogen bonds give water a number of properties that allow it to percolate through soil, adhere to pollutants and transpire through plants.

https://www.lcmm.org/education/resource/on-water-ecology/worksheet-water-quality-testing.pdf

Above is the link to the lab where students will test water samples from various sources

throughout their community to determine the quality of the water. They will test and record data on pH, phosphates, nitrates, dissolved oxygen, and turbidity. Students will then analyze this data to draw conclusions on what can be done to improve the quality of the water. Students should also indicate what steps can be made in agriculture to protect water quality and ensure a safe water source for the community. Students will make a presentation to the class that summarizes their lab procedure, results, and conclusions. To extend learning, the group that has the most thorough presentation can present their findings to the School Board, local Farm Bureau, or any other local organization.

3. Analyzing data, interpreting data and forming conclusions.
Students will determine the best methods for organizing the data from their semester-long Agriscience Project by creating data tables. The skills in analyzing and interpreting data used during Key Assignments One and Two in this unit will be applied to the final agriscience research project. Students will make similar determinations on their Agriscience research. Students will use mathematical principles to synthesize their data, calculating a mean. Furthermore, a statistical analysis of the data will help the student determine if the results are due to chance or the independent variable that was tested. Students will choose the best way to present their data using graphs they believe will most effectively demonstrate their findings, and will further summarize what each graph shows. Finally, students will interpret the data and formulate conclusions based on the results. In the written conclusion, students will use their data to either accept or reject the original hypothesis. Conclusions should be directly supported by the data and by previous research. Students will also identify the limitations of their research, improvements that could be made to the experimental design, as well as future studies that may be conducted that relate the study at hand.

4. Tillage Practices and the Impact they have on Runoff, Erosion and Soil Chemistry
Students will explore how chemical bonding, chemical reactions and chemical equilibrium are demonstrated through the relationship between tilled soil and water runoff. Students build upon their knowledge of atomic structure to explore the various forms of chemical bonding that takes place between atoms of different elements as well as the role of valence electrons. To deepen understanding of chemical interactions, students will investigate both the physical and chemical changes that take place during tillage.

Students will utilize locally sourced soil samples at both pre-tillage and post-tillage intervals to compare the effects of tillage on the physical and chemical nature of soil. Ideally, multiple tillage types will be examined including conventional tillage, deep ripping tillage and conservation tillage. Soil pH, effective cation exchange capacity, soil organic carbon, and soil nutrient levels will be measured in addition to an analysis of the physical structure of the soil. Examination of the physical structure can allow students to predict potential erosion and runoff issues.

Students will then develop suggestions for best tilling practices by using GPS and topographic maps to determine the natural slope of a given plot of land. They will be asked to design the most efficient “tillage” for this plot to conserve water, prevent soil erosion and cause the least disturbance to soil and water bonding. Students must explain in a written report, including a

detailed diagram, why they selected the design they did and how it will be the most beneficial for the environment using conservation techniques for the soil and water as learned in this unit. They will also explain why the alternative designs would be poor choices.

5. Ground Water Contamination and Aquifer Lab

Students will demonstrate how aquifers filter different contaminants by constructing a model of an aquifer and testing how groundwater contamination occurs by using common agricultural contaminants. They will analyze two different types of aquifers and determine which type they would want to place a well into and why. Students will explain how the size of the pores affects the intermolecular interactions between contaminated water and the rock, and how this in turn impacts how well an aquifer can filter out contaminants.
Students will examine how the pH of different solutions is directly affected by soil type and aquifer porosity. Students will model this by capturing water that comes through their aquifer model. Students will then determine the concentration of this type of solution through a standardized titration experiment.

Once they have used their models as a means of understanding how easily groundwater can be contaminated, they will complete their conclusion and create a multimedia production in the form of a TED talk or Infomercial that educates their community on what agriculturists do and can do to improve water quality in their local area. They will present their productions to a panel of judges and the winners will have their video/multimedia presentation broadcast school-wide.

6. Irrigation Practices in Agriculture

Students will understand how evaporation (due to temperature) and soil type plays a huge role in the irrigation methods and practices employed in the agriculture industry. Students will be given 3 different soil types. Students will divide these 3 soil types into 9 different samples; 3 of each in a different setting, but they will receive the same amount of water to simulate "irrigation". Students will hypothesize what they think will happen based on soil type and temperature with regard to moisture retention and how this will impact decisions in irrigation selection. In the control group the 3 soil samples will be placed outside. In test group #1, 3 samples will be placed under a heat lamp to simulate an environment with a hotter ambient temperature. In test group #2, 3 samples will be placed in a location cooler than your outside temperature. In all 3 of the test locations students will water all of the samples with equal amounts of water. The following day students will test the moisture content of all soil samples using a Kelway Soil Acidity and Moisture Meter to determine the effects that temperature and soil type had on moisture retention. Using this data, students will then complete the lab write up and finish a conclusion by summing up how this lab impacts irrigation practices.

7. Semester One Capstone Project

Students will submit their agriscience research in a written paper, and it will include the following components: problem/purpose, background research, hypothesis, methodology, results/data, and discussion/ conclusion. The paper will be written using skills associated with technical and scientific writing, for example, refraining from the use of personal pronouns or keeping discussion limited to what the research and data suggest rather than personal opinion and bias. APA format will be utilized to reference and cite sources. The project and its findings will be shared with the class in an oral presentation.

Anchor Standards: 1, 2, 4, 5, 6, 7, 9, 10, 11
Career Readiness: 1, 2, 4, 5, 8, 9, 10, 11, 12
CTE Pathway Standards: E6.1, E6.4, F2.4, F5.1, F5.2, F5.3, F5.4, F5.5, G6.4, G8.2, G8.3, G8.4, G8.5
NGSS: HS-PS1-1, HS-PS1-3, HS-PS1-2, HS-PS1-4, HS-PS1-6, HS-PS1-7, HS-ESSS3-3

Unit Four: Plants and Soil Management

Unit Description

Building on knowledge acquired from the previous units on the physical and chemical properties of water and soil, students will begin to determine the effects of plant, soil and water interactions with respect to maintaining or restoring environmental health and structure. Students will model how nutrients cycle through the environment, analyze how pH affects nutrient availability by changing chemical equilibrium, determine water holding capacity with respect to water availability for plant growth, and identify possible nutrient deficiencies based on plant observations. Students will apply this learning to developing knowledge of soil nutrients and their role in the environment by testing and analyzing soil samples for optimal soil structure, nutrient value and availability and determining possible soil amendments and practices to improve soil quality.

Key Assignments

1. Plant Requirements from Soil Lab

Students will demonstrate their knowledge of plant growth requirements by creating a controlled experiment to compare the difference between natural and synthetic fertilizers on plant growth. Students will make qualitative and quantitative observations of plant growth and analyze their data in order to draw conclusions regarding the availability of nutrients and the practical application for crop growers. Fertilizers are identified with particular isotopes and as part of the assignment, students will describe nuclear processes and radiation, describing their methods of use in determining fertilizer application in commercial agriculture. Students will then create a written recommendation to a local crop producer regarding which type of fertilizer to use for their farm in order to achieve production goals, highlighting chemistry concepts as a fundamental part of the assignment.
Optional extension: Students can analyze the amounts of fertilizers needed in order to reach the desired amount necessary for plant growth and determine whether the addition of fertilizers is cost effective.

2. Soil Management Project

Students will analyze their data collected from unit 2 and determine which crops can be grown based on the current physical and chemical properties of the soil. Students will make recommendations for soil amendments which would increase the nutrient availability of the soil in order to grow a desired crop. Students should consider how pH, and chemical

equilibrium will impact the availability of nutrients in the soil in their recommendations. Students will then plant a crop from a given list of cover crops (clover, grasses and legumes) in their soil test plot, allow it to grow and then retest the soil to see if there is a difference in the nutrient concentrations. Students will incorporate their knowledge of biogeochemical cycles into their lab report and will provide an explanation of how nutrients are being transferred from the soil to the plants. The research and experimentation conducted in this project will be added to their Soil Management Capstone Project.

3. Plant and Soil Interactions
Students will compare their nutrient values from the previous project with other groups during a classroom discussion. Students will analyze the data and develop explanations for why there is a difference in the amount of nutrients the plants extracted from the soil. Students will then revisit the Soil Erosion and Runoff Lab from Unit 3 and measure the amount of runoff and soil erosion that occurs on each of the cover crops and compare the data to the data collected from Unit 3. Students will communicate their results in a lab write up.

Anchor Standards: 2, 4, 5, 7, 9, 10, 11
Career Readiness: 1, 2, 4, 5, 9, 10, 11, 12
CTE Pathway Standards: G10.1, G11.1, G6.1, G6.2, G6.3, G6.4 G3.4
NGSS: HS-PS1-1, HS-PS1-3, HS-PS1-2, HS-PS1-4, HS-PS1-6, HS-PS1-7, HS-ESS3-3, HS-PS1-5

Unit Five: Animals and Soil Management

Unit Description
Using knowledge from previous units about soil nutrient content, students will identify the key macro-minerals and micro-minerals necessary for normal livestock growth and reproduction. The students will correlate the minerals present in soil with the nutrient content of typical livestock concentrate and roughage feeds. Using local resources, the students will identify mineral deficiencies or toxicities in the soil and relate the deficiencies or toxicities to livestock health. Students will identify crop and range management practices to improve the nutrient content of soil, and will explain what reactions take place at the molecular level to improve nutrient content. Students will identify various methods of using animal waste and the environmental impacts including the use of animal waste as soil amendments and fertilizers. Students will relate the units of concentration used in agriculture practice to units used in chemistry labs, as they identify problems and contaminants associated with livestock waste disposal and related health and safety regulations.

Key Assignments

1. Nutrient Deficiencies in Livestock
Students will examine the correlation between soil and plant nutrient levels with health problems in livestock. Using their knowledge of solutions and concentration, students will identify soil nutrient deficiencies in a geographic area. They will relate the nutrient deficiencies with livestock diseases. For example, if an area has a deficiency in selenium,

students will identify problems such as white muscle disease in calves and lambs. Working in groups, the students will analyze a case study on selenium deficiencies in cattle and offer a solution and/or design a system to prevent or correct a mineral deficiency in livestock caused by a soil deficiency. Their analysis will be presented in a written report. An optional extension to this assignment could include testing other nutrient deficiencies, such as copper toxicity, and reporting these findings in a group oral presentation using the case study as an example.

2. Livestock and Water Quality

Students will examine the nutrients present in animal waste and identify possible environmental contaminates in the waste. To examine the effects of water runoff from livestock facilities, students will design a controlled experiment to test water samples from soils exposed to livestock for nitrates, phosphate, heavy metals, pH, dissolved oxygen and other factors. Students will utilize their previously collected soil samples or soil plot and design a model to simulate water run-off from a livestock production facility. Alternately, students will test water runoff samples from existing livestock facilities. At the conclusion of the experiment, students will provide a written recommendation to a county land use commission with a protocol for the optimal use of the animal effluent.

3. Livestock Waste Management

Students will examine the challenges involved with livestock waste management. The problems may include ammonia emissions, phosphorus runoff, nitrate leaching and heavy metal runoff. The instructor will provide a problem and scenario that relates to livestock waste management from an agricultural operation. Students will research the problem and design a system or solution. For example, if a school builds a school farm and raises 10 head of cattle in confinement, how will the waste be handled? The students will consider factors such as environmental concerns, health and safety regulations, amount of waste produced, reactivity of the waste products, uses for the waste, possible cost and labor requirements.

4. Soil Management Project

The soil management project, which students begin in unit 2, will be ongoing throughout the length of the course. In this unit, students will identify the nutrient deficiencies or toxicities present in the soil samples that might influence livestock production. Students will develop a written proposal for the tested soil, including soil amendments, fertilizers and application of animal waste or changes in livestock management practices to address these deficiencies or toxicities. As part of the recommendation process, students will examine the use of animal waste as a method of enhancing soil quality, using background knowledge of nuclear processes to describe variability in nutrient availability in uptake. For any toxicities present, students will examine the chemical profiles of the elements and recommend strategies for resolving agricultural issues for those elements. Students will use these soil management profiles as a component of their final course project as well as use them for subsequent units.

Anchor Standards: 3, 4, 5, 6, 7, 9, 10, 11
Career Readiness: 1, 2, 4, 5, 8, 9, 10, 11, 12
CTE Pathway Standards: D7.1, D7.2, D7.4, D8.1, D8.2, D8.3, D10.1, D2.1, D2.2
NGSS: HS-PS1-3, HS-PS1-4, HS-PS1-6, HS-ESS3-3, HS-PS1-2

Unit Six: Soil Sustainability

Unit Description

Based on the accumulation of knowledge, examples and research conclusions from throughout the year, students will develop an understanding of sustainable agriculture by employing a Sustainability evaluation tool, "The 3-Pillars of Sustainability, economic, environmental and social impacts" of agriculture. Students will critically evaluate and justify perspectives and determine benefits/concerns based on research and credible information. Students will investigate and evaluate the sustainability of agricultural practices. Students will design and conduct a phytoremediation lab to analyze the efficacy of salt tolerant accumulators to remove saline from the soil. Students will formulate potential solutions using the three pillars of sustainability to soil and land management problems based on agricultural scenarios and debate agricultural issues.

Key Assignments

1. Phytoremediation Lab

Students will learn the about the remediative effects of plants in the uptake of soil contaminants, in this example, reducing soil salinity. Students will research saltwater intrusion causes and implications, research phytoremediation, develop a hypothesis, design an experimental procedure, identify safety procedures specific to this experiment, collect and analyze data, and formulate conclusions. Through these steps, students will determine which types of plants are best in phytoremediation of saline ("halophytic" or salt loving plants) and the maximum amount of saline which can be removed from the soil in this way.
Possible extension: Compare efficacy of procedure with different soil types
Students will complete a formal lab write-up.

2. Tillage Protocols: Impact on Soil Structure and Soil Sustainability Lab

The purpose of this lab is to determine the effects of tillage practices on soil sustainability and plant growth. Using a prepared mini-plot with all three tillage examples (conventional, no-till, and low till) soil structure, students will measure and compare soil fertility, water holding capacity, and percolation. Students will analyze and graph their data, explain the implications of the each of these tillage systems with respect to soil and water sustainability and extrapolate those results to the effect of tillage practices effect on plant health. Students will create a poster to illustrate the benefits and drawbacks of each tillage system with respect to Soil-Plants-Water.

3. Land Use Planning Model

Student groups will make soil/land management decisions based on specific agriculture and land use restrictions on pieces of land such as large urban gardens, range management, forest management, and farmlands. Students will use their knowledge of physical and chemical properties of soil in regards to plants, animals and water to highlight the importance of sustainable agriculture. Getting a land use plan approved and in place with multiple interest groups is complicated and relies on the checks and balances to determine the success of the project. Each student in the group needs to take on a specific role in order to determine their

Land Use Plan (such as conservationist, developer, owner, law enforcement, Department of Public Works, Anthropologist, City Planner, etc.). Groups will then prepare a presentation to present their plan. This presentation could be presented to the class and instructor or even community/local industry members.

Anchor Standards: 1, 2, 3, 4, 5, 9, 10, 11
Career Readiness: 1, 2, 4, 5, 8, 9, 10, 11, 12
CTE Pathway Standards: G9.3, C3.5, C3.2, C2.1, C2.2, C2.3, C2.4, E3.4, E3.5, G9.1, G9.2
NGSS: HS-LS2-4, HS-LS1-6, HS-LS1-6, HS-LS4-6, HS-LS2-7, HS-LS2-2, HS-ETS1-2, HS-ETS1-1, HS-ETS1-4, HS-LS1-3

Unit 7: FFA and SAE

Students will appreciate the importance of the Future Farmers of America (FFA), Parliamentary Procedure.

List, explain or recite the following items needed to be an FFA member.

A. History of the FFA
B. Creed
C. Motto
D. Colors
E. Emblem
F. Kinds of Membership
G. Aims and Purpose
H. Dress
I. Code of Ethics
J. Greenhand Degree
k. California Recordbook

Demonstrate the proper use of parliamentary procedure to improve meetings, using motions, and proper conducting of business.

Students will gain an understanding of supervised agricultural experience (SAE), and farm record keeping through hands-on project involvement. Students will:

A. Describe the benefits of an SAE and how to develop long-range planning.
B. List reasons for good record keeping suing the California Farm Account Book.
C. Demonstrate understanding of various types of records including budgets, journals, income summaries and financial statements.

Anchor Standards: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
Career Readiness: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
CTE Pathway Standards: A2.1, A2.2, A2.3, A2.6, A7.1, A7.4, A1.6, A5.4, A5.5, A5.6, D9.3, D12.7
NGSS:

Unit 8: Capstone Project and Portfolio

4. Agriculture Issue Debate and Policy Proposal

Students will begin by conducting secondary research using industry journals into the global use of methyl bromide as a chemical soil sterilant. Students will examine the pros and cons of the use of methyl bromide in terms of manipulations to the chemical profile of soil, microbiology, effects on groundwater, runoff challenges and effects on agricultural productivity. Research should highlight chemical reactions as the primary point of focus. Students will then be assigned a perspective related to the methyl bromide investigation (runoff or microbiology, for example) to represent in the debate, using their list of chemistry- and agriculturally-focused pros and cons to inform their contributions. Students will end the debate with a comprehensive analysis of the issue of methyl bromide use in agriculture from multiple angles in order to develop a model policy for their county regarding the possible use of methyl bromide in agricultural applications.

5. Soil Management Project

The soil management project, which students began in unit 2, has continued throughout the length of the course. At the end of Unit 6, students will incorporate knowledge gained from all previous labs, and the conclusions drawn from the Phytoremediation and Tillage Protocols: Impact on Soil Structure and Soil Sustainability Labs to test, analyze, treat and/or modify soil structure and fertility for specific usage/in order to achieve desired outcomes. This work will be used as evidence in the Soil Management Capstone Project and will also aid in drawing the final conclusions of the year-long research and experimentation.

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Soil Science & Management, 6th Edition

AUTHOR(S): Edward Plaster

PUBLISHER: Delmar Publishers

COPYRIGHT DATE: 2016

ISBN #: 9780840024329

PRICE:

DEPARTMENT: Agriculture

CLASS: Agriscience

GENERAL DESCRIPTION:

This sixth edition of *Soil Science and Management* continues the primary objectives of earlier editions, with the following four main purposes:

1. to acquaint the reader with the soil and water resources of the United States to enable a full appreciation of the importance of these resources;
2. to present soil science theory tied to the practice of those who use soil, mainly for growing plants;
3. to stress the sustainable management of soil and water resources by devoting detail to such subjects as soil and water conservation, conservation tillage, nutrient management, Best Management Practices, and sustainable agriculture; and
4. to relate soils to natural ecosystems.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY:

Selection Committee: MCS Agriculture Education Advisory Committee
Mike Brecht, Mark Nower, Gary Gerhardt, Nancy Miguel

Curriculum Area Chairperson, Jeff Albrittion
Director ROP

Senior Director, Educational Services
Mike Coates

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Managing Our Natural Resources 6th Edition

AUTHOR(S): Camp & Camp

PUBLISHER: Holt-Rinehart-Winston

COPYRIGHT DATE: 2016

ISBN #: 9781285835075

PRICE:

DEPARTMENT: Agriculture

CLASS: Agricsience

GENERAL DESCRIPTION:

Managing Our Natural Resources is designed for high school and postsecondary students enrolled in an agriculture program with a natural resources, conservation, forestry management, environmental science, or wildlife management course.

It is the purpose of this book to present a balanced viewpoint of the place of humans in the world as long-term residents. We discuss soil formation, erosion, reclamation, and conservation; water use and improvement; and air quality. We examine endangered species of wildlife; hunting game animals; fishing; and safety in boating, hiking, and other forms of outdoor recreation. We study conservation farming; land-use planning; construction practices that minimize the impact of exploitation on the environment; energy resources use, abuse, conservation, and alternatives; mineral use and recycling; and career opportunities in each of those diverse fields.

For this sixth edition, we worked to present the most current and relevant events, statistics, and topics. Our intention is that readers become informed of the natural resource management issues of today.

Managing natural resources itself is a very broad topic, and a book that attempts to deal with it cannot go into great depth in any of the areas considered. Therefore, this book should be used as a survey of many broad areas rather than as a definitive treatment of any one area of study.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: Advisory Committee

Selection Committee: Mark Nower, Mike Brecht, Bill Morris, Nusery Owner, Ag Advisory Committee

Jeff Albrittion, Director School to Career

Mike Coates: Senior Director, Educational Services

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Agriscience Systems Management

COURSE NUMBER: AGR00711 (S1) AGR00712 (S2)

RECOMMENDED GRADE LEVEL: 9-12

DURATION: 2 semesters

CREDIT: 10 (5 per semester)

MEETS GRADUATION REQUIREMENTS: Elective, CTE

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4072

MEETS UC AND CSU ENTRANCE REQUIREMENTS: Yes, "d" elective

CREDENTIAL REQUIREMENTS:

Course Description: This integrated class combines an interdisciplinary approach to laboratory science and research with agricultural management principles. Using skills and principles learned in the course, students design systems and experiments to solve agricultural management issues currently facing the industry. Additionally, students will connect the products created in this class with industry activities to link real world encounters and implement skills demanded by both colleges and careers. The course culminates with an agriscience experimental research project in which students design and conduct an experiment to solve a relevant issue. Final projects will be eligible for Career Development Event competition at FFA events. Throughout the course, students will be graded on participation in intracurricular FFA activities as well as the development and maintenance of an ongoing Supervised Agricultural Experience (SAE) program.

Recommended Prerequisites: Successful completion of Agriculture and Soil Chemistry & Sustainable Agriculture – A Biological Approach to Industry Practices

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Date Matched Against State Framework, Model Curriculum Standards, and State Curriculum Guides: January, 2015

Board Approved: November 9, 2015

REVIEW CYCLE: 2015-16 through 2019-20
REQUIRED TEXTBOOK (Title, publisher, year): ***Agriscience Fundamentals and Applications***, 6th or current edition, including Lab Manuals, Cengage Learning, 2015; ***Energy and Agriculture: Science, Environment, and Solutions***, 1st or latest edition, Stephen D. Butz, Cengage Learning, 2015; ***Introduction to Biotechnology: An Agricultural Revolution***, 2nd or latest edition, including Instructor Guide and Lab Manuals, Ray V. Herren, Cengage, 2013

Board approval of this course outline and texts does not constitute funding approval for purchase of instructional materials. Instructor will have to secure funding prior to purchase.

INSTRUCTIONAL MATERIALS

REQUIRED TEXT(S):

Agriscience Fundamentals and Applications, 6th or latest edition, including lab manual, Burton, Cengage Learning, 2015

Energy and Agriculture: Science, Environment, and Solutions, 1st or latest edition, Stephen D. Butz, Cengage Learning, 2015

Introduction to Biotechnology: An Agricultural Revolution, 2nd or latest edition, including instructor guide and lab manuals, Ray V. Herren, Cengage, 2013

SUPPLEMENTARY MATERIALS:

FDA HACCP http://www.fda.gov/Food/GuidanceRegulation/HACCP/ucm2006801.htm

National Center for Home Canning
http://nchfp.uga.edu/publications/publications_usda.html

A Food Labeling guide
http://www.fda.gov/downloads/Food/GuidanceRegulation/UCM265446

California Public Health Department-Procedure for Obtaining a Canning License

http://www.cdph.ca.gov/pubsforms/Guidelines/Documents/fdbCANgde06.pdf

Ball Canning http://www.freshpreserving.com/

Centers for Disease Control-Food Safety/Foodborne illness

http://www.cdc.gov/foodsafety/diseases/index.html

Food Allergens Guidance Documents & Regulatory

http://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/Allergens/default.htm

Veterinary Medicines for Livestock: www.gov.uk/managingi-livestock-veterinary-medicines

Modern Livestock and Poultry 8th Edition, Gillespie and Flanders

How to Write a Scientific Paper by Robert A. Day

Statistics for Veterinary and Animal Science by Aviva Petrie and Paul Watson

Environmental Protection Agency-Crop Production:
http://www.epa.gov/oecaagct/ag101/cropsoil.html#operations

National FFA Agriscience Fair Handbook
https://www.ffa.org/documents/agsci_handbook.pdf

National FFA Research Report Template
https://www.ffa.org/programs/awards/agrisciencefair/Pages/default.aspx

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units		Approximate Length of Instruction for Each Unit (Weeks)
1.	Research Methods in Agriscience	4
2.	Plant Systems	6
3.	Animal Systems	7
4.	Natural Resources	6
5.	Food Systems	6
6.	Agriscience Research Paper and Display	3
7.	FFA and SAE	3
	Total Number of Weeks	36 weeks

COURSE OUTLINE

Unit One: Research Methods in Agriscience

The final unit will culminate in an agriscience experimental research project. Students will identify a problem related to the aspects of agriculture explored in this course (plant science, animal science, natural resources, and food science). After completing studies in plant science, animal science, natural resources, and food science, students will develop an agriculture problem to be solved using the scientific method. Such examples of problems identified by the student may include the effects of estrus synchronization of ovulation, a comparison of the germination rates of GMO and conventional seeds, or an investigation of perceptions of community members towards alternative agriculture practices. The research problem should be current and relevant, and may be applicable on a local, regional, national, or global level. Students will utilize the empirical method to design an experiment that will test their own authentic hypothesis using the skills and processes learned throughout the course that include dissecting published research and studies, testing the hypothesis, collecting, synthesizing, analyzing and interpreting data, accepting or rejecting the hypothesis based upon the data, technical reading and writing, and scientific collaboration. In this first unit, students will practice research skills in agriscience that will give them the skills needed to successfully complete the unit labs and capstone project.

Assignment Summary
Background Scholarly Research: In this assignment, students begin the work of investigation into their project. Students will read and deconstruct scholarly journal articles to identify the key components of agriscience research. The manner in which this assignment is completed can be determined by the individual teacher. Examples of student outcomes of the journal assignment could be: graphic organizer, abstract, oral presentation, visual aids, etc. This assignment models the expected outcomes of all projects in the coming units.

Anchor Standards: 3, 4, 5, 7, 8, 9, 10, 11
Career Readiness: 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12
CTE Pathway Standards: C1.0, C1.2, C1.4, C1.5, C3.1, C3.2, C3.5, C13.1, C13.2
NGSS: HS-ETS1-1, HS-ETS1-2, HS-ETS1-3

Unit Two: Plant Systems

Students will examine the chemical and biological principles that govern plant science and crop production, using prior knowledge of plant pathology, taxonomy and biological principles to inform the unit's activities. Plant pests are present in all plant systems. Pest populations must be managed to prevent economic losses. Integrated pest management strategies are used to achieve desired results while using cost-effective and environmentally-friendly practices. Students will collect primary and secondary research regarding plant production models, chemical or biological control methods for pest management and agricultural yield expectations. Specifically in this unit, students will examine chemical irradiation methods, botanical extracts, microbial control, predator use, synthetic pesticides, etc. Through this unit, students will gather information regarding the risks and benefits of each method in regard to plant production, agricultural yields and environmental sustainability.

Assignment Summaries
1: GMO's/Organic vs. Conventional Farming Debate and TED talk
To further their understanding of accepted, conventional farming practices as well as alternative methods of production, students will distinguish between each practice, the characteristics of production that define each, and the concerns raised by society, then report their findings through visual media (TED). Genetic engineering is known as one of the great advancements of our times, but is also one of the most controversial. Often conventional farming methods and agriculture corporations are highly criticized for their creation of GMO (genetically modified organisms) products and use of chemicals. This assignment will help students understand the technologies and practices used in conventional and organic farming and be able to defend a practice or a product and support their position with scientific evidence. After instruction in conventional and organic farming, students will engage in secondary research to investigate differences between the two, the use of biotechnology and GMO's, by preparing and executing a yield differential lab that synthesizes their knowledge of biological and chemical principles. Specifically, students will calculate levels of chemical inputs and forecast environmental

impacts of anticipated chemical reactions between a GMO crop, a traditional crop and an organic crop. After the conclusion of that process, students will engage in primary research with a yield differential lab. The lab will ask students to prepare a soil sample that works for a locally-relevant crop and to plant and grow that crop in both GMO and organic forms, comparing yields at the conclusion of the lab.

Upon conclusion of their primary research, students will prepare a presentation that will highlight the results both of their secondary and primary research. The presentation should focus on the relationship between chemical uses and anticipated chemical reactions in various production scenarios and expected yields from the same scenarios, with students presenting recommendations to peers or industry guests. The desired goal is for students to inform their decision with a research validated analysis of the tradeoffs associated with each production method.

For activity enhancement: Students review biased documents/media (e.g. Food Inc.) to review and discuss their inaccuracies, contrasting the results of their lab with their media review. The conclusion of this assignment will ask students to present their comparative analysis to their peers and engage in a peer review process.

Additionally, students can research scientific journal articles, laws, regulations, case studies or other scientific evidence that supports or refutes claims, then produce and submit a 4-5 minute TED talk to be reviewed by their peers . Students will select the two TED talks produced by their classmates that they feel are the most fair, balanced, and scientifically based. They will discuss their selection in an individual class blog posting.

2. Categorizing Agriculture Pests

In this activity, students will categorize pests based on biological and physical characteristics. One of the key components of an IPM plan is being able to correctly identify a pest, which is then used to determine an appropriate control method. Students will collect a weed sample (e.g., from home, ag dept. school), and utilizing the UC IPM website, they will learn the difference between broadleaf, sedge, grass and aquatic weeds. They will then determine what type of weed their sample is and mount it. Examples of scientific sampling methods that may be used to collect weeds include; Random Sampling, Systematic Sampling or Stratified Sampling. Students will use taxonomic classification principles in order to label the identifying characteristics that distinguish it from other weed types. Being able to identify the type of weed will assist in determining what an appropriate control is and will be utilized to create their comprehensive crop production plan. Students will then conduct a laboratory experiment using a selected chemical or biological control and report their findings via a podcast, paper or blog post.

Students will continue their study of pests by examining vertebrate and invertebrate pests, pest damage (instructor will provide samples of common pest/damage for the region) and make predictions about which pest caused the damage. Students will be able to match crop damage to the pest that caused it using indicators like mouthparts, digging and pecking. Students will be able to identify pest using mouth parts, body segments, excrement, etc. Students will create a biological dichotomous key for the identification of vertebrate and invertebrate pests. Students will research and then create a handbook that assists in identifying nematode and plant disease damage. The dichotomous key will be added to the handbook. The knowledge gained in creating this handbook will be used as part of the IPM plan in the unit project.

3. Controlling Pests Through Integrated Pest Management

Students will demonstrate the integration of pest management techniques by designing and conducting an experiment where they compare the four methods of pest management (biological, cultural, mechanical/physical, and chemical) on a specific pest and crop, for example, snails in citrus trees or vegetables. After the conclusion of this experiment, students will construct an explanation on the effects of pest management techniques on biodiversity, ecosystem balance and agricultural productivity and include that information in their lab report. Suggested areas for experimentation might include chemical controls (soap and water), use of beneficial predators (avians or various invertebrates), cultural (tilling soil), and mechanical/cultural (physically removing the pest). One method must include a chemical control, with students describing the relationship between specific elements in the chemical control and the elements and reaction processes that facilitated the management of the pest.

Crop Production Plan

Based on prior knowledge and activities, students will create a comprehensive crop production calendar for a

specific crop (eg. row crops, trees, vines, greenhouses), organic or conventional farming methods and a specific location. The calendar will include various cultural practices, time frames on pest controls and monitoring, analysis of neighboring field plantings, fertilization, post harvest procedure, soil amendments, days to re-entry, and harvest and land preparation. In addition, students will include a solution for reducing the impacts of human activities on the environment and biodiversity through crop production practices. Students will utilize descriptions of the soil's chemical and physical profiles, chemical profiles for all soil amendments and genetic planning procedures for all plants used in the production scheme.

Related Research and Forming a Hypothesis
As they begin work on their year-long research project, students use skills in research and forming hypotheses developed in the plant systems unit to develop a hypothesis for their agriscience research project. Students will use credible sources to conduct background research on the agricultural issue they are investigating, and they will use this research to generate a testable hypothesis related to the scientific problem they have identified. The hypothesis developed by the student will be constructed with the independent and dependent variables in mind, and ultimately reviewed by the instructor.

Anchor Standards: 2, 3, 4, 5 6, 7, 8, 9, 10, 11
Career Readiness: 1, 2, 4, 5, 8, 9, 10, 11, 12
CTE Pathway Standards: G1.1, G1.2, G1.3, G1.4, G1.5, G1.6, G3.1, G3.2, G3.6, G4.1, G4.2, G4.3, G5.1, G5.2, G5.3, G5.4, G5.5, G9.1, G9.2, G9.3
NGSS: HS-LS1-7, HS-LS2-3, HS-LS2-4, HS-LS2-1, HS-LS2-7, HS-LS4-6, HS-ETS1-1, HS-ESS2-5, HS-ESS2-7

Unit Three: Animal Systems

Description of Topics
Each livestock species has a series of parasites or diseases that can be managed to help produce healthier livestock. This unit builds on the basic format for research methods developed through activities in Unit One and Unit Two to help students understand how animals are affected by parasites and other infectious diseases. Students will review basic livestock anatomy and physiology, livestock production systems, and the goals and objectives associated with the production of livestock as a food and fiber source.

In order to achieve production goals, the management of the livestock herd must include an understanding of how diseases and parasites can impact livestock production in terms of growth efficiency and outcome of an animal. Students will research the basic cycles of the parasites and their prevention and how they are treated. The students will conduct experiments with pathogens, disease and infections related to livestock herds and examine information about the mode of infection and chemistry of the illness as well as the immune response of the species to the parasite or illness. Furthermore, students will propose methods for breaking the cycle of parasite and disease resistance by utilizing alternative management options outside of the traditional pharmacological treatments as part of the Parasite and Disease Management Plan (unit culminating activity).

Assignment Summaries
1 - Facility Visits - In order to understand the interaction of parasite life cycles with livestock production, students will be taken to livestock production facilities to discover which type of facilities and feeding systems may have an impact on parasite infections. Additionally, students will collect fecal samples from the site to determine the presence of common pathogens and parasites in an upcoming lab. Interviews on site with producers and handlers will provide insight as to how housing and facilities will impact diseases and parasites, thereby dictating the management plans on their farms. Students will then develop a written or live recommendation to the producer regarding the management protocols and handling needs to mitigate the parasites or pathogens found a result of the experiments.

2 - Survey - To foster professional contacts, students will complete a formal research survey (possibly using a Google Form Survey) which will require students to contact a variety of local facilities, producers, and veterinarians. Students will begin by engaging in secondary research to investigate major livestock conditions, diseases and parasites, with focus on the inherent biological and chemical conditions that precede or enhance the condition. Students will then use this background knowledge to develop the questions in order to examine the

professional's role in diagnosing and resolving infections or conditions that may occur frequently in the local community. Students will synthesize and analyze their data to determine best practices gleaned from the survey responses. Students will select a research topic related to the results of their survey. Students will include the final results of this survey in their parasite management plan along with their research.

3 - Technical Reading and Research - Taking direction from the results of their survey, students will analyze journal research and published studies and merge their survey data to create an infographic to be included in their final parasite management plan. An example of a topic could include; the use of crossbreeding in livestock to help a livestock producer achieve greater natural resistance to some parasites, the natural selection and parasite resistance to medicines or specific veterinary applications of remedies.

4 - Lab Experiment 1 - Fecal Egg Counts-Practice
Providing practical, agriscience research skills, students will use the Modified McMaster's Fecal Egg Counting Protocol to perform a fecal egg count on livestock. In this pathogen experimentation the fecal egg counts will be compared to demonstrate how management affects internal parasite populations in livestock. Students will incorporate the scientific skills learned in the first unit in this laboratory experiment. A hypothesis will be constructed to predict the outcome of the research. A McMaster's fecal egg counting slide will allow students to quantify parasite infection through the egg counting and recording process. Students will produce a formal lab report and conclusion document which includes some suggested topics for further experimentation. These suggested topics will inform the selection of the Experimental Design Topic.

5 - Lab Experiment 2- Experimental Design
Using their experiences from the first experiment, students will design and conduct a related experiment in which they investigate a parasite topic of their choice related to the final capstone project.
Examples of variables that may be tested could include:

- livestock that have been dewormed versus those that haven't
- livestock that have been dry lotted after having been dewormed versus livestock that are returned immediately to graze on pasture.
- livestock that are crossbred with breeds known to exhibit parasite resistance.
- a comparison of the effectiveness of various anthelmintics (dewormers) available to producers or commonly used on local production facilities.

A statistical analysis may be conducted to help the student determine the likelihood that the results are due to the applied variable, rather than chance. Students will revisit the original hypothesis as they draw conclusions based upon the data. A discussion of limitations to the research and further studies will be included. A formal lab report will be written and will include all parts of this study, therefore reinforcing the empirical method of scientific research. Any citations and resources should be made using APA format.

6 - Final Product: Parasite/Disease Management Plan for Livestock
Components:
Using their research, surveys, and information from their visits and interviews, students will create a parasite management plan. The final product of this unit will be a written, research-based report which identifies a livestock species of interest and the disease or parasite that is affecting the livestock species of interest. After the best practices management plan is developed, students will present their portfolios to their peers and/or to local industry professionals at a formal symposium. All products should include qualitative and quantitative data recorded from the first five assignments of this unit.

Includes:

- Parasite/disease identified including biological/microbiological profile of the pest as well as a physiological analysis of the effect of the pest on the host.
- Vaccine/medication/anthelmintic- type and dosage to be administered, method of administration, withdrawal/recovery period, possible rotational schedule to prevent resistance. A chemical profile of the medication should also be included, with students specifically examining the presence of heavy metals, toxic elements and potential reactivity that require specific withdrawal periods when applied to food animals.

- Annual calendar or plan for vaccination and treatment of the animals in production.
- Facilities Design and Plan - livestock handling, pens/restraints, holding, equipment, pasture management/rotation. Specific considerations should be made for animal psychology, species-specific physiology and pest management through quality design.
- Human and Animal Safety considerations to be made. Specifically in relation to chemicals being used in the pest management protocol, which have hazardous reactions with humans and must be stored, managed and disposed of in particular manners?
- Labor requirements
- Alternative control methods that may be considered to help prevent or diminish the impact of the parasite/disease. Which holistic or homeopathic methods are effective in managing pests for alternative agricultural production models? What are the chemical profiles and potential reaction processes of alternative medicines that could be used to manage pests?
- Industry professional to mentor any part of the development of the management plan. For example, a veterinarian may be consulted on dosage and administration or a pharmaceutical representative may be asked to provide guidance on new medications. To develop a continued connection to agricultural careers, who locally could be potentially consulted in the implementation of this plan?
- Prevention plan to deter future infestations and disease or parasite resistance. What biological, physical and chemical elements can be put into a management protocol that would enhance prevention methods?

Experimental design and conducting experimentation

Students continue work on their year-long agriscience project by constructing an experimental design to test the hypothesis they developed in this unit. Students will draw on the experimental design and experimentation lessons learned during both fecal egg count laboratory activities. A written experimental design should be constructed consistent with scientific protocol using a systematic approach outlined in the previous units. Students will have their experimental designs reviewed by professional contacts (industry experts, agricultural instructors, local growers/producers, researchers or university representatives). After validating the design using the peer review process, students will move to the experimentation phase of their research. Experimental designs should include replicates, control groups, and determine the variables to be controlled and how. Additionally, a determination should be made as to the type of data that will be collected and in what ways, with the emphasis placed on quantitative data or quantifying data that is qualitative in nature. Students will use their experimental design to test their hypothesis. For example, a study could be conducted to determine if administering an injection of selenium is more effective than simply providing selenium salts in the diet in an effort to prevent selenium deficiency and white muscle disease in a sheep herd. Raw data should be recorded using a field book or electronic device.

Anchor Standards: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
Career Readiness: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
CTE Pathway Standards: D1.1, D1.2, D1.3, D1.4, D2.1, D2.2, D2.3, D2.4, D3.1, D3.2, D3.3, D4.1, D4.2, D4.3, D4.4, D4.5, D5.1, D5.2, D5.3, D5.4, D5.5, D6.1, D6.2, D6.3, D6.4, D6.5, D6.6, D6.7
GS*SS:* HS-LS1-7, HS-LS2-3, HS-LS2-4, HS-LS2-1, HS-LS2-7, HS-LS4-6, HSETS1-1, HS-ESS2-5, HS-ESS2-7, HS-LS3-2, HS-LS3-3, HS-LS3-1

Unit Four: Natural Resources

Natural resources can be defined as items found on earth that are of use to humans such as fuel, food, shelter, or a source of wealth. It is what humans do with these resources and the management practices that will determine if these will be available to future generations. In this unit, students will conduct primary research to draw conclusions regarding the impacts of plant and animal systems (units 2 and 3) on natural resources. Students will create model environmental impact reports that include secondary research backing, industry needs, primary research analysis and sustainability recommendations in watersheds located in agricultural regions. Students will identify local agriculture production areas and their relationships between land characteristics, water quality, and habitat growth and maintenance. Referencing local environments and agriculture practices, students will analyze possible sources of pollution and erosion and determine the impact of animal and plant systems, wildlife interactions, and beneficial and detrimental production practices. Students will use their knowledge to make recommendations on ecological friendly solutions on improving watersheds. Students evaluate the importance of

soil and water conservation, the effects of animals, erosion, pollution, and urban sprawl on watersheds, and human impact on the environment and natural resources.

Assignment Summaries

1 - Water Quality
In order to understand that natural resources like water are affected by the environment, students will locate and retrieve a sample of untreated water from local sources that have agricultural runoff, if none are nearby instructors may include local creeks, lakes, watersheds, or reservoirs, one from a source near an agriculture producing facility and one away from an agriculture producing facility. Using a standard water testing kit, the water samples will be analyzed for the various particulates and contaminants. They will record pH, lead, and nitrates, presence of pesticide residue, and coliform bacteria as well as sediment levels. They will use this information to determine which pollution factors are affecting local watersheds and their source, including an analysis of possible erosion sources, chemical contaminants and biological inputs (wildlife, livestock, etc.). Following their data collection and analysis, they will use problem solving skills to make recommendations for pollutant elimination, the reporting format will be determined by the instructor (example: oral presentation, visual aide, lab write up, etc.).

2 - Agriculture Practices, Natural Resource Conservation, and Case Studies
Now that students have an understanding of factors that affect water quality they will be exposed to agencies that regulate the use of these resources. Local directors of the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), the Resource Conservation District (RCD), or any other pertinent industry professionals will present students with information about practical applications of water conservation, limiting pollutants, and practices that reduce environmental impacts of agriculture practices. Local agriculture producers will also be invited to come and discuss their practices and how they are limiting their negative impacts on the natural resources available to them. Students will read and evaluate case studies of agriculture producing farms implementing sustainable practices. Case studies could include cover crops, owl boxes, crop rotation, and water runoff. The outcome of the visit(s) and case study will result in a reference included and cited in the future irrigation plan or environmental impact report that will be generated at the end of this unit. Both the irrigation plan and the environmental impact report should reference the data collected from assignment one.

3 - Water Flow, Irrigation Plan, and Efficiency Model
Using the information and data collected in assignments one and two, students will create a plan to analyze irrigation practices and efficiency in order to identify an appropriate irrigation system. Students will also gather knowledge of adhesion, cohesion and chemical bonding principles that govern water management through analysis of industry articles and scientific texts. Through the practice of building a water flow and efficiency model, students will identify innovative conservation approaches and irrigation methods such as scheduling irrigation rotations depending upon soil moisture, crop growing periods, availability of water, and methods of irrigation such as tape, drip, micro sprinklers, pressurized sprinklers, furrow, and flood. Sources of surface water and groundwater will be identified. Student irrigation plans will be based on a selected crop and data will be collected, analyzed, and interpreted, to form conclusions based on:

- acreage farmed
- types of crops
- methods of irrigation (to include a model demonstrating water flow and efficiency, see information below)
- sources of water
- acre feet of water for crops grown
- programs available for irrigation implementation funding or conservation
- cost effectiveness of farming versus selling water
- runoff and contamination
- environmental impact report culmination

Water flow and efficiency model:
Students will break into groups to demonstrate methods of irrigation. They are to create a “farm” of their choice (garden beds, farm plots, container created plots, etc.). Each group will be provided a set amount of water to

demonstrate their method of irrigation (each group should choose different methods such as furrow, drip, micro-sprinkler, etc.). They shall record the amount of water used, soil moisture, and runoff. At the conclusion of the lab, students will be able to justify best practices of irrigation for crops grown and the impact on environment and water resources. Students will utilize knowledge of capillary action in soil, plant physiology as well as chemical bonding in water to inform their laboratory experiment. Students will present their best practices in a format to be determined by the instructor (example: oral presentation, visual aide, lab write up, etc)

Analyzing data, interpreting data and forming conclusions.
Students will determine the best methods for organizing their data using tables. The skills in analyzing and interpreting data used during the water flow and efficiency model during the Natural Resource unit will be applied to the final agriscience research project. Specifically students were asked to determine the most efficient irrigation application method during the water flow and efficiency model. Students will make similar determinations on their Agriscience research. Students will use mathematical principles to synthesize their data, calculating a mean. Furthermore, a statistical analysis of the data will help the student determine if the results are due to chance or the independent variable that was tested. Students will choose the best way to present their data using graphs they believe will most effectively demonstrate their findings, and will further summarize what each graph shows. Finally, students will interpret the data and formulate conclusions based on the results. In the written conclusion, students will use their data to either accept or reject the original hypothesis. Conclusions should be directly supported by the data and supported by previous research. Students will also identify the limitations of their research, improvements that could be made to the experimental design, as well as future studies that may be conducted that relate the study at hand.

Anchor Standards: 1, 2, 4, 5, 6, 7, 9, 10, 11
Career Readiness: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
CTE Pathway Standards: E1.3, E1.4, E1.5, E2.1, E2.2, E2.3, E2.4, E2.5, E2.6, E5.1, E5.2, E5.3, E4.2, E4.3, E12.3
NGSS: HSLS2-4, HS-LS2-1, HS-LS2-7, HS-LS4-6, HS-ETS1-1, HS-ESS2-5, HS-ESS2-7, HS-PS1-4, HS-PS1-6

Unit Five: Food Systems

Description of Topics
The purpose of this unit is to use prior knowledge of chemical and biological principles and apply them to end-stage agricultural practices in food safety and food preservation. Utilizing research skills and technical plant, animal and pest knowledge from earlier units, students will create a consumer-focused and locally-relevant food product (examples: jerky, jam, pickles). They will utilize scientifically proven food safety and preservation methods and will create a comprehensive food safety plan including a food label following FDA guidelines for presentation to be judged by industry professionals. As part of the comprehensive food safety plan students will investigate the importance of implementing Hazardous Analysis Critical Control Point (HACCP) plans in the prevention of foodborne illness. HACCP plans will identify areas of potential contamination in the food chain for a specific products production from the raw commodities, preparation, and packaging through storage by the consumer.

Assignment Summaries
1 - Foodborne Disease and Its Role in Food Safety
To begin the convergence of scientific principles and food safety, students will research a specific foodborne illness, and their findings in this research will be linked to laboratory investigations where they will determine the types of disease causing agents they collected on food samples and from the food preparation areas and tools. They will use knowledge from prior units to identify the type of disease causing agent (fungal, bacterial, viral, parasitic, noninfectious), transmission, treatment, and prevention in addition to reviewing production practices responsible for a specific outbreak of that disease. In their review of the outbreak, they will propose recommendations for prevention of future outbreaks of that type. Students will create and present a PowerPoint including their research findings; upon the conclusion of the presentations students will submit their project to a shared document to be used as a class resource in developing a comprehensive food safety and marketing plan.

2 - Osmosis in Food Preparation
After learning appropriate food-handling protocols to reduce incidents of illness, students will engage in a series

of chemistry-based exercises to learn the methods for preserving consumer food products safely. In particular this activity promotes student understanding of how jamming, dehydrating, and drying with salt or sugar are effective forms of food preservation, as they remove the water and change the chemical composition of food and delay the growth of microorganisms from harmful bacteria rendering the food safe for consumption. Groups of students will read a technical document on food preservation methods (e.g. smoking, canning, jamming). Students will create a graphic organizer to compare methods. Students will then conduct an experiment where they dissolve the shell of an egg and place it in various solutions over the course of a week to determine how osmosis and concentrations of solutions impacts movement through the cell membrane. Students will then apply their understanding of osmosis from this lab to a given commodity, and will be able to create a written recommendation for appropriate food preservation methods based on HACCP protocol. They will later apply these findings to the creation of their safe food product at the end of the unit.

3 - Identifying Components to HACCP

Students will create a visual display that identifies the seven principles of a HACCP plan, which is a systematic approach to the identification, evaluation, and control of food safety hazards based on the following seven principles: Principle 1: Conduct a hazard analysis, Principle 2: Determine the critical control points (CCPs), Principle 3: Establish critical limits. Principle 4: Establish monitoring procedures, Principle 5: Establish corrective actions, Principle 6: Establish verification procedures, and Principle 7: Establish record-keeping and documentation procedures. Consequently each of these principles will be researched and applied through experimentation throughout the unit, to create a comprehensive food safety plan for the food product students design for their final unit project.

4 - Swabbing Hazards

After learning basic HAACP procedures, students will visit a commercial food production facility (school cafeteria, restaurant, processing site) and conduct a hazard analysis (as a basis for learning to investigate Principle 1 & 5 of a HACCP plan), swab samples of various surfaces (including but not limited to hands, door handles, tables, cutting surfaces, food preparation tools), and prepare and grow culture plates. After a period of growth, students will determine if potential disease-causing agents are present, and if so, identify the specific pathogen. Students will record their findings in a written report. As a result students will determine the critical control points for that location (Principle 2 of the HACCP plan) based on the data generated from the swabs. Students will apply this skill in the development of their product and food safety plan.

5- Chemical Properties in Preservation

Given the top 5 seasonally available commodities in a growing region, as well as common ingredients (granulated sugar, lemon, etc.) for preservation of those commodities, students will determine chemical properties of those commodities through their prior knowledge of pH, brix and water content. They will collect and record their data in a chart they design. Students will study the effects of pH on cut apple preservation (as a basis for learning to investigate Principle 3 & 4 of a HACCP plan). Each group will make a selection of a test solution based on scientific research. Students will gather data on bacterial colony counts that develop on swabs they take of samples from the cut apples. As a result groups will report to the class their findings and groups will evaluate the data. Groups will also brainstorm and determine other possible critical control limits for the sliced apple product. Students can employ several different possible methods of reporting their findings (examples of reports include: oral presentation, visual aide, lab write up, etc).

6 - Implementing Procedures and Practices

Students will begin by reviewing a locally obtained HACCP plan (as a basis for learning to investigate Principle 6 of a HACCP plan). From the plan students will annotate and 1) identify areas of critical control 2) identify scientific evidence used as expert advice to validate HACCP protocols 3) identify specific procedures and practices to implement protocol in the plant. Student findings will be recorded using a graphic organizer that will be included in their final food safety plan (examples include: Three Circle Venn Diagram, Comparison Chart, Cause and Effect, Factors in the Cause or Sorting Organizer). Upon gathering that information, students will conduct a primary research investigation to test the HAACP principles in a controlled environment using radiation and chemical methods. Though much of the scientific research they will have read shows that appropriate temperature and time kills microorganisms, there is also a significant body of evidence that dramatic pH alterations can inhibit microorganism growth. As such, students will conduct a second research protocol within

the HAACP protocol that contrasts the radiation and chemical methods of microorganism prevention in order to determine the relative efficacy of each method. Students will combine their graphic organizer with their research conclusion and present their findings in a lab report, which will also be added to their final food safety plan.

7 - Food Labeling
Students will wrap up their unit by developing an infographic that highlights food allergens and their role in food labeling. Students will research to prepare the infographic, which will include symptoms, major food allergens, treatment/when to seek treatment, the relationship of livestock antibiotic withdrawal periods and what must be included in origin labeling. An analysis of several different allergen-causing foods should occur, with investigations conducted regarding the elemental makeup of each food and the chemical reactions that cause the allergic reaction, specifically drawing a relationship between the interactions of the chemical world and the microbiology of the human body. The final infographic should showcase their findings using technical nomenclature, pictures, and supporting statistics.

8 - Food Safety Product and Plan
The final project for the unit will ask student to develop a physical food product such as a fruit jam, dried vegetable product, oil, herb or seasoning mix, citrus juice, etc. and create a comprehensive food safety plan for the product that includes the HAACP and labeling standards. Students will choose a commodity from their growing region and utilizing food safety principles preserve it following scientifically proven preservation methods. Students will also engage in industry-standard testing protocols to assess the chemical profile of the food product (pH level, potential toxicity, etc.) as well as engage in a multi-interval microorganism testing protocol. Students will follow FDA guidelines and use prior unit knowledge to develop an appropriate label for their food that follows legal standards as well as agricultural marketing practices. They will prepare a written and 3-5 minute visual presentation (students will choose the media) for a panel of industry professionals.

Anchor Standards: 1, 2, 4, 5, 6, 7, 8, 9, 10, 11
Career Readiness: 1, 2, 4, 5, 8, 9, 10, 11, 12
CTE Pathway Standards: G2.1, D6.7, C5.1, C5.2, C5.3, C5.4, C3.3, C3.4, C3.5, C3.1, C3.2. C1.7, C1.2, C1.3, C1.4
NGSS: HS-PS1-4, HS-PS1-6, HS-LS2-7, HS-LS1-4, HS-LS3-1, HS-LS3-2, HS-LS1-3, HS-LS2-1, HS-LS2-2, HS-LS1-3

Unit 6: Agriscience Research Paper and Display

Throughout all units, students will gather knowledge through laboratory exercises to further develop and enhance their Agriscience Research programs. At the conclusion of the course, students will submit their research in a written paper, and it will include the following components: problem/purpose, background research, hypothesis, methodology, results/data, and discussion/conclusion. The paper will be written using skills associated with technical and scientific writing, for example, refraining from the use of personal pronouns or keeping discussion limited to what the research and data suggest rather than personal opinion and bias. APA format will be utilized to reference and cite sources. Students will create a visual display board, using a digital format that mirrors the use of research posters in higher education, which will also include all of the components of the paper, but in a condensed form. The peer group that reviewed the original experimental design will review the final research paper. The project and its findings will be shared with the class in an oral presentation, with the research board on display to aid in communicating the results of the research.

Anchor Standards: 1, 2, 4, 5, 7, 9, 10, 11
Career Readiness: 1, 2, 4, 5, 9 10, 11, 12
CTE Pathway Standards: C5.1, C5.2, C5.3, C5.4, C3.3, C3.4, C3.5, C3.1, C3.2. C1.7, C1.2, E1.3, E1.4, E1.5, E2.1, E2.2, E2.3, E2.4, E2.5, E2.6
NGSS: HS-LS3-1, HS-LS3-2, HS-LS1-3, HS-LS2-1, HS-LS2-2, HS-LS1-3

Unit 7: FFA and SAE

Students will appreciate the importance of the Future Farmers of America (FFA), Parliamentary Procedure. List, explain or recite the following items needed to be an FFA member.

A. History of the FFA G. Aims and Purpose

B. Creed
C. Motto
D. Colors
E. Emblem
F. Kinds of Membership
H. Dress
I. Code of Ethics
J. Greenhand Degree
K. California Recordbook

Demonstrate the proper use of parliamentary procedure to improve meetings, using motions, and proper conducting of business.

Students will gain an understanding of supervised agricultural experience (SAE), and farm record keeping through hands-on project involvement. Students will:

A. Describe the benefits of an SAE and how to develop long-range planning.
B. List reasons for good record keeping suing the California Farm Account Book.
C. Demonstrate understanding of various types of records including budgets, journals, income summaries and financial statements.

Anchor Standards: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
Career Readiness: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
CTE Pathway Standards: A2.1, A2.2, A2.3, A2.6, A7.1, A7.4, A1.6, A5.4, A5.5, A5.6, D9.3, D12.7
NGSS:

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Agriscience, Fundamentals and Applications, 6th Edition

AUTHOR(S): L. DeVere Burton

PUBLISHER: Cengage Learning

COPYRIGHT DATE: 2015 or latest edition

ISBN #: 9781133686880, 1133686885 ebook: 9781305950092 – 1/1/17

PRICE: $ 185.95 $123.50/yr; $143.50/6 yrs
MindTap available 1/2017

DEPARTMENT: Agriculture

CLASS: Agriscience System Management

GENERAL DESCRIPTION:
Agriscience, Fundamentals and Applications is an introductory textbook in a series of modern secondary agricultural textbooks published by Cengage Learning. It addresses the most basic levels of agriscience using language and examples that are matched to the needs of beginning students in the natural science career pathway.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY:
Selection Committee:
Mark Nower, Natalie Stevano, Ag Advisory Committee

Jeff Albritton, Senior Director
Alternative and Vocational Education

Thor Harrison
Director, Educational Services, 7-12

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Energy and Agriculture, Science, Environment & Solutions

AUTHOR(S): Stephen Butz

PUBLISHER: Cengage Learning

COPYRIGHT DATE: 2015 or latest edition

ISBN #: 9781111541088 ebook: 9781305460690 Z 4/18/2014 NB

PRICE: $71.75 Bundle: $39.99 Net: $39.99

DEPARTMENT: Agriculture

CLASS: Agriscience System Management

GENERAL DESCRIPTION:
Energy and Agriculture is a science textbook designed to introduce students to the ways energy is generated and used today, and the role agriculture can play in helping to satisfy the world's energy demands.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY:
Selection Committee:
Mark Nower, Natalie Stevano, Ag Advisory Committee

Jeff Albritton, Senior Director
Alternative and Vocational Education

Thor Harrison
Director, Educational Services, 7-12

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Introduction to Biotechnology, An Agricultural Revolution

AUTHOR(S): Ray V. Herren

PUBLISHER: Delmar Cengage Learning

COPYRIGHT DATE: 2013 or latest edition

ISBN #: 9781435498372; (9781435498365-Instructor); 9781133606468 W 5/29/12 NB
*Bundle: $10.00 Net: $61.75; 1133130690 – Student Lab Manual

PRICE: $97.25

DEPARTMENT: Agriculture

CLASS: Agriscience System Management

GENERAL DESCRIPTION:
Introduction to Biotechnology: An Agricultural Revolution is intended as a text for use in high school agriscience courses. The aim is to provide students with a basic understanding of the concepts behind the biotechnology revolution in agriculture.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY:
Selection Committee:
Mark Nower, Natalie Stevano, Ag Advisory Committee

Jeff Albritton, Senior Director
Alternative and Vocational Education

Thor Harrison
Director, Educational Services, 7-12

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Animal Science 3 Animal Science 4

COURSE NUMBER: AGR01801 AGR01802

RECOMMENDED GRADE LEVEL: 11-12

ABILITY LEVEL: Unsectioned

DURATION: 2 Semesters

CREDIT: 5 per Semester

MEETS GRADUATION REQUIREMENTS: Practical Arts, CTE

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4022

MEETS UC AND CSU ENTRANCE REQUIREMENTS: Yes

CREDENTIAL REQUIREMENTS: Single Subject: Agriculture

REPLACES:

Course Description:

Animal Science 3, 4 will provide student with principles focusing on the areas of mammalian production, anatomy, physiology, reproduction, nutrition, respiration, and genetics. Hands-on scientific experiences are designed to enhance student's understanding of Agriculture, the environment, and society. This course is intended to successfully prepare those students who plan on majoring in Agricultural Sciences at a college or university.

Recommended Prerequisites:

Date Matched Against State Framework, Model Curriculum Standards, and State Curriculum Guides: May 17, 2016

Board Approved: August 15, 2016

REVIEW CYCLE: 2015-16 through 2019-20
REQUIRED TEXTBOOK (Title, publisher, year): Applied Animal Reproduction, Bearden and Fuquay, Prentice Hall, Latest Edition; Scientific Farm Animal Production, Taylor, Pearson, 2016 or Latest Edition, including eText; FFA California Record Book, Modern Livestock & Poultry Production, Thomson, Delmar Learning, Latest Edition, including eBook

INSTRUCTIONAL MATERIALS

REQUIRED TEXT:

Modern Livestock & Poultry Production, Gillespie, Thomson, Delmar Learning, Latest Edition

Modern Livestock & Poultry Production eBook, Gillespie/Flanders, Delmar Cengage, 2016 or Latest Edition

Applied Animal Reproduction, Bearden and Fuquay, Prentice Hall, Latest Edition. No eBook currently available

Scientific Farm Animal Production: An Introduction, Taylor, 2016 or Latest Edition, Pearson

Scientific Farm Animal Production: An Introduction eText, Taylor, 2016 or Latest Edition, Pearson

FFA California Record Book

SUPPLEMENTARY TEXT(S):

Livestock Feeds and Feeding, 6th or latest edition, Pearson

Feed and Feeding, Morrison, Morrison Publishing, Latest Edition

FFA Handbook, Future Farmers of America, FFA Foundation

FFA Official Manual, Future Farmers of America, FFA Foundation

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Unit		Approximate Length of Instruction for Each Unit (Weeks)
1.	Economic Impact	2
2.	Plants, Animals, and Their Management	3
3.	Animal Anatomy and Physiology	3
4.	Animal Breeding and Genetics	3
5.	Animal Phenotypic Selection and Evaluation	3
6.	Animal Health Care	3
7.	Animal Nutrition and Feeds	2
8.	Common Integument and Its Derivation	2
9.	The Nervous System	3
10.	Respiratory System and Respiration	3
11.	Animal Research Presentation	3
12.	Professional Opportunities in Animal Science	3
13.	Agricultural Inter-Personal & Leadership Development	3
	Total Number of Weeks	36

1.0 GOAL: Assemble and use laboratory apparatus, tools and materials in a skillful manner, giving attention to accident prevention and safety.

A. Using a microscope, student will identify animal cells by tissue type.
B. Study periodic table of elements.
C. Build a cell model, and examine and diagram cells.
D. Investigate osmosis and diffusion.

Anchor Standards: 1.0, 4.1, 4.3, 4.5
Career Readiness: 1.0, 4.0, 5.0
CTE Ag and Natural Resource: D1.1, 2.2

2.0 GOAL: Gather the qualitative and quantitative information needed for developing and testing inferences and hypotheses by making purposeful, objective observations of things and events. The student will:

A. Develop feed rations for swine, beef and dairy cattle.
B. List vitamins and amino acids not synthesized by livestock species and identify feeds high in these specific nutrients.
C. Define creep feeding and explain its value in an animal-feeding regime.
D. Given specific data, calculate the rate of gain and cost of feed per pound of gain per day for three livestock species.
E. Feed and maintain an animal through a full production cycle.

Anchor Standards: 1.0, 4.1, 4.2, 4.7, 5.1
Career Readiness: 1, 4, 5
CTE Ag and Natural Resource: D2.4, 7.4, 3.1

3.0 GOAL: Student will understand the make up of the body and its functions.

A. Recognize and be able to name the parts of the circulatory, digestive and reproductive systems.
B. Explain how hormones are used as growth regulators and list the animals on which those hormones are used.
C. Demonstrate an understanding of the structure and function of the digestive system by tracing the pathways of food through the four types of livestock digestive systems, with emphasis on the function or organs in the digestive process.
D. Briefly explain the process of respiration, using a diagram of the lungs.
E. Describe the function of the endocrine system, the location of the glands and list the hormones that affect growth and reproduction.

Anchor Standards: 1.0, 5.0, 10.0, 11.0
Career Readiness: 1.0, 2.5, 4.5, 4.6
CTE Ag and Natural Resource: D2.0, 2.4, 3.1

4.0 GOAL: Student will understand how to apply the knowledge of heredity and genetics to mammalian production.

A. Briefly define the chromosome theory of inheritance.
B. Draw and describe the difference between cogenesis and spermatogenesis.
C. Review (from the basic core) and define the terms phenotype, genotype, gene, locus, allele, homozygous, variation, and mutation.
D. Diagram the phenotypic and genotypic results of a cross, using traits common to modern livestock, which exhibit classic dominant and recessive characteristics.
E. Diagram a dihybrid cross (e.g. using two heterozygous gene pairs) and determine the genotypes of the offspring.
F. Cite an advantage and a disadvantage of each of the following breeding systems and describe a situation in which each could be used: inbreeding, close breeding, out-crossing, and crossbreeding.
G. Define hybrid, using the cross between a horse and a donkey as an example, and explain the genetic effects that make the offspring sterile.
H. Define potency as it relates to genetics and name a famous sire that possessed these characteristics.
I. Define heritability and explain why selection is important in the livestock industry.
J. Describe a surgical and a non-surgical method of embryo transfer and explain the impact that embryo transfer has made on the animal genetics.
K. List important factors to consider in a bull fertility test.
L. Explain the process of artificial insemination and its impact on the gene pool in modern livestock.
M. List three methods used to detect estrus in livestock, explain the importance of detection in breeding program, and describe the equipment used to detect estrus.
N. List the three stages of parturition, explain when each stage begins and ends.
O. Describe the proper fetus presentation, and list possible problems that might occur during delivery.
P. Verbally outline the development of a prenatal farm animal from fertilization to birth, using slides, or computer.
Q. Compare and contrast the estrous cycles of the mare, cow, sow, ewe, and doe rabbit and include seasons of the year in which they cycle.
R. List the gestation periods of the mare, cow, sow, ewe, and doe rabbit.
S. Define the term freemartin and identify the problems that can occur with freemartins in bovine breeding programs (genetic level).
T. Describe the proper environment for the female during gestation, parturition, and lactation.
U. Describe the proper maintenance and care of male breeding stock.
V. Identify the recommended breeding age for the bull, stallion, buck, boar, and ram and the potential amount of service (years) for breeding males of each species.
W. Develop a feeding regime for dam through gestation, parturition, lactation.
X. Perform the appropriate husbandry practices when handling newborn animals.
Y. Visually identify crossbreeds of commercial livestock and explain the advantages of the cross.

Anchor Standards: 1.0, 4.0, 10.0
Career Readiness: 1.0, 2.5, 11.0, 12.0, 5.1, 4.4
CTE Ag and Natural Resource: D2.5, 4.6, 5.1, 5.2, 10.1

5.0 GOAL: The student will understand evolution and natural selection and how it relates to production agriculture.

A. Be able to locate and select high-grade semen for the use of artificial insemination in swine and dairy cattle.
B. Identify six species of small animals that are of importance to agriculture and list common breeds with each species.

Anchor Standards: 1.0, 2.0, 10.0
Career Readiness: 1.0, 4.0, 5.0, 10.0
CTE Ag and Natural Resource: D1.0, 2.6, 3.4, 6.6, 8.3, 10.0

6.0 GOAL: Record observations accurately and organize data and ideas in ways that enhance their usefulness.

A. Students will regularly record data and experiences in the California Record Book.

Anchor Standards: 1.0, 3.0, 5
Career Readiness: 2.5, 3.4
CTE Ag and Natural Resource: 10.7

7.0 GOAL: Students will communicate with others (written and oral) in a manner that is consistent with the knowledge of scientific conventions, and facilitates the learning of the listeners or readers.

A. Develop listening, speaking, reading and writing skills.
B. Work on critical thinking and team building activities.

Anchor Standards: 2.0, 5.0
Career Readiness: 2.1, 2.5
CTE Ag and Natural Resource: D9.1, 9.2, 9.12

8.0 GOAL: Use the metric system effectively in measuring and quantifying substances.

A. Review metric system and practice using it for liquid and dry measurements.
B. Investigate professional opportunities for agriculture laboratory technicians.
C. Do class presentation showing metric system substitutions.

Anchor Standards: 5.0, 10.0
Career Readiness: 1.0
CTE Ag and Natural Resource: 2.5, 3.4

9.0 GOAL: Students will become familiar with the correct and safe use of livestock facilities, restraint equipment, and the tools necessary for animal housing and care.

A. Name and demonstrate the use of tools commonly used to restrain farm animals.
B. Discuss the purpose of proper handling and restraint as it relates to the safety

of both the handler and livestock.

Anchor Standards: 5.0, 11.0
Career Readiness: 5.2, 5.4
CTE Ag and Natural Resource: 6.5, 11.1

10.0 GOAL: Students will develop an advanced understanding of the principles involved in animal nutrition and feeds.

A. Identify three common roughages and four common concentrates available locally and discuss which feeds have the highest content (percentage) of nitrogen, energy, protein, calcium, and phosphorus.
B. Identify the major feed additives on the market, explain how each additive affects production, and review governmental regulations pertaining to the use of each.
C. Explain how hormones are used as growth regulators and list the animals on which those hormones are used.
D. Develop a lost-cost (specify actual cost) feed ration for one species of livestock for maintenance, growth and lactation, using concentrates and roughages available locally.
E. List vitamins and amino acids not synthesized by livestock species and identify feeds high in these specific nutrients.
F. Describe the symptoms of five common nutritional diseases caused by vitamin or mineral deficiencies or toxicity and explain the treatment and prevention of these diseases.
G. Explain the importance of a consistent feeding regime and list possible metabolic disease problems that might occur because of sudden changes in the ration.

Anchor Standards: 1.0, 2.0, 10.0
Career Readiness: 1.0, 4.6, 5.1
CTE Ag and Natural Resource: 2.5, 3.1, 4.1, 4.7

11.0 GOAL: Students will learn the structure, function, and maintenance of the major organ system of an animal (e.g., respiratory, excretory, endocrine, and digestive), their interrelationships, and their role in maintaining homeostasis.

A. Compare species for: pulse and breathing rates, metabolic rates, dilution and toxicity, chemical mechanisms, system responses and physiology.
B. Compare human norms with animals.
C. Evaluate different species for normal and abnormal protein values.

Anchor Standards: 1.0, 5.0, 10.0
Career Readiness: 1.0, 11.0
CTE Ag and Natural Resource: 1.0, 10.1, 10.4

12.0 GOAL: Students will understand the principles of livestock breeding and Mendelian genetics, and the importance of habitability in a breeding program.

A. Define gene regulation.

B. What is manipulation of DNA?
C. How do you determine genetic traits?

Anchor Standards: 1.0, 5.0
Career Readiness: 1.0, 5.0, 11.0
CTE Ag and Natural Resource: 8.3, 5.4, 5.5

13.0 GOAL: Students will develop an in-depth understanding of the specific health problems of cattle, sheep, swine, horses, poultry, and rabbits, and the identification, treatment, and prevention of these problems.

A. Describe the differences between vaccines, anti-serum, and bacterins, and explain how each is used to fight disease.
B. Identify five categories of pathogens and list the major classes of each.
C. List the current major infectious diseases for at least four species of livestock in California and describe the symptoms, treatment, prevention, and economic significance of each.
D. Identify four noninfectious causes of disease and the methods of prevention for each.
E. Take the normal body temperature of four types of livestock species, compare the readings with the normal temperatures of each species, and discuss factors that may increase or decrease an animal's body temperature.
F. Demonstrate the proper methods of subcutaneous and intramuscular injections of livestock.
G. Calculate the correct dosage of medication from the instructions on the medicine label for various weights.

Anchor Standards: 1.0, 4.0, 10.0
Career Readiness: 2.2, 5.1, 11.0
CTE Ag and Natural Resource: D4.4, 3.2, 3.3

14.0 GOAL: Students will learn the major internal and external livestock pests, their life cycles and their control.

A. Draw the life cycle of an internal parasite that is specific for each of the following: horse, swine, cattle, sheep, poultry and rabbits. Show the point in the life cycle where each internal parasite can best be controlled.
B. Draw the life cycle of at least three common external parasites, including the possible hosts and the methods to control each parasite.
C. Develop a one-year worming and vaccination schedule for a student-owned animal.
D. Explain the value of pasture rotation in parasite control.
E. Describe production problems associated with the housefly, blowfly, botfly, and horsefly, and explain two methods in which these can be controlled.
F. Define drenching and demonstrate drenching methods on three livestock species.

Anchor Standards: 1.0, 5.0
Career Readiness: 2.5, 5.2
CTE Ag and Natural Resource: D2.1, 2.2, 7.1, 7.2, 9.1

15.0 GOAL: Students will demonstrate an understanding of basic principles of care, raising, breeding, selection, and selling of large animals.

A. Demonstrate proper feeding, handling, and management for each species studied.
B. Demonstrate proper grooming and showing techniques for at least two large animal species of commercial importance in California.
C. Identify animal behavioral patterns that will make animals easier and safer to handle.
D. List and discuss the different markets available for sale of livestock.

Anchor Standards: 5.0, 8.0
Career Readiness: 5.2, 6.4, 7.1
CTE Ag and Natural Resource: D1.4, 6.1, 12.1

16.0 GOAL: Students will understand the basic concepts in the care, raising, breeding, selection, and selling of small animals.

A. Identify six species of small animals that are of importance to agriculture and list common breeds within each species.
B. Understand the relationship of small animals to agriculture and its related industries.
C. Describe and participate in the marketing of small animals in two occupational areas (e.g., sale of replacement stock and sale of meat animals) and list the advantages and disadvantages of each of the occupational areas.

Anchor Standards: 2.1, 5.0, 7.4
Career Readiness: 2.2, 7.6
CTE Ag and Natural Resource: D1.3, 11.1, 11.4

17.0 GOAL: Students will understand the importance of correct pasture and rangeland management practices for animal health, erosion control, pasture production, and maintenance of the balance of living things within the ecosystem.

A. Define the terms common to rangeland management.
B. List three ways in which overgrazing or poor rangeland management can negatively affect the environment.
C. Calculate, from information provided, the carrying capacity of an acreage of rangeland for species of livestock.
D. Identify and describe variety of rangelands found in California.
E. Collect and label three suitable legumes and discuss factors to consider in their selection for rangeland forage.
F. Collect, label and press ten common range plans.
G. Collect and identify ten weeds and brush common to California rangelands and discuss control methods for each.
H. Identify five plants poisonous to livestock and identify the California area in which they may be found.

Anchor Standards: 1.0, 2.0, 10.0
Career Readiness: 2.5, 5.1, 10.8
CTE Ag and Natural Resource: D7.0, 7.1, 7.3, 7.4

18.0 GOAL: Students will gain basic knowledge of animal waste management and the importance of disposing of waste inexpensively with the least impact on the environment.

A. Identify the three main types of agricultural wastes.
B. Describe two ways to recycle manure so it can be used by livestock.

Anchor Standards: 1.0, 5.0
Career Readiness: 5.1, 5.3
CTE Ag and Natural Resource: D8.1, 8.2

19.0 GOAL: Students will analyze and describe a class of four market animals within each major species.

A. Identify six desirable traits of a market animal within each species (beef, sheep and swine) and list the characteristics necessary for the animal to possess these traits.
B. Analyze and describe a class of four market animals within each species.

Anchor Standards: 5.0, 9.0
Career Readiness: 2.1
CTE Ag and Natural Resource: D10.0, 10.2

20.0 GOAL: Students will demonstrate an understanding of animal research and investigation, and data collection.

A. Student will present a completed Supervised Agricultural Experience Program and data collection.
B. Student will present evidence of investigation into professional opportunities in Animal Science.

Anchor Standards: 9.0
Career Readiness: 2.1, 9.9
CTE Ag and Natural Resource: D9.4

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Scientific Farm Animal Production

AUTHOR(S): Taylor & Field

PUBLISHER: Prentice Hall

COPYRIGHT DATE: Latest Edition

ISBN #: 0-13-048170-X

PRICE: $83.53

DEPARTMENT: Agriculture

CLASS: Animal Science 3-4

GENERAL DESCRIPTION:
This book gives an overview of the biological principles applicable to the Animal Sciences with chapters on reproduction, genetics, nutrition, lactation, consumer products, and other subjects.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: District Agriculture Advisory Committee

Selection Committee:
Mark Nower and Roger Dickson

Curriculum Area Chairperson

Linda Erickson, Director
Director, Curriculum & Staff Development, 7-12

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Applied Animal Reproduction

AUTHOR(S): Bearden & Fuquay

PUBLISHER: Prentice Hall

COPYRIGHT DATE: Latest Edition

ISBN #: 0-13-112831-0

PRICE: $78.15

DEPARTMENT: Agriculture

CLASS: Animal Science 3-4

GENERAL DESCRIPTION:
This text is intended to give the undergraduate student majoring in animal or dairy science a complete overview of the reproductive processes. It is assumed that these students have a limited background in physiology.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: District Agriculture Advisory Committee

Selection Committee:
Mark Nower and Roger Dickson

Curriculum Area Chairperson

Linda Erickson
Director, Curriculum & Staff Development, 7-12

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Modern Livestock & Poultry Production, 8E

AUTHOR(S): James R. Gillespie

PUBLISHER: Delmar Cengage Learning

COPYRIGHT DATE: 2010

ISBN #: 1-4283-1808-3/9

PRICE: $98.95

DEPARTMENT: Agriculture

CLASS: Agricultural Marketing and Animal Industries ROP, Animal Science 3, 4, Advanced Animal Science

GENERAL DESCRIPTION:
Text paints a vivid picture of the animal agriculture industry and provides the information necessary to pursue a career in the field.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: Advisory Committee

Selection Committee:
Mark Nower, Mike Brecht, Kyle Beeman, Richard Wolfe

Mike Henderson, Director
Alternative and Vocational Education

Thor Harrison
Director, Educational Services

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Scientific Farm Animal Production: An Introduction eText

AUTHOR(S): Taylor

PUBLISHER: Pearson

COPYRIGHT DATE: 2016

ISBN #: 9780133767254

PRICE: $68.99

DEPARTMENT: Agriculture

CLASS: Animal Science 3-4

GENERAL DESCRIPTION:
A comprehensive, best-selling, science-based approach to building livestock and poultry management systems for food, fiber, and recreation. With Scientific Farm Animal Production, students of animal agriculture get a comprehensive, science-based approach to building livestock and poultry management systems for food, fiber, and recreation. It effectively integrates the scientific disciplines that support livestock and poultry production with detailed information about the primary livestock species, appropriate management protocols, and the market forces that impact demand across the supply chain.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY:

Selection Committee:
Mark Nower, Mike Brecht, Kyle Beeman, Rich Wolfe

Jeff Albritton, Senior Director
Alternative and Vocational Education

Thor Harrison, Senior Director
Educational Services, 7-12

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: History and Art of Floral Design ROP

COURSE NUMBER: ROP75701 (S1) ROP75702 (S2)

RECOMMENDED GRADE LEVEL: 10-12

ABILITY LEVEL: Unsectioned

DURATION: 2 Semesters

CREDIT: 5 per Semester

GRADING FORMAT: Standard 0-4 Grd. Pts.

MEETS GRADUATION REQUIREMENTS: Practical Arts/Visual & Performing Arts, CTE

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4052

MEETS UC AND CSU ENTRANCE REQUIREMENTS: Yes, "f" requirement

CREDENTIAL REQUIREMENTS: Agriculture; Designated Subject: Agriculture & Natural Resources

REPLACES:

Course Description:
The *History and Art of Floral Design* provides an introduction to artistic and creative perception including aesthetic valuing through a series of projects in various media including tempera, pencil, flowers, tile, and a variety of papers. Students are also introduced to the elements and principles of visual art design such as line, shape/form, color, balance, and emphasis using a series of floral-based projects to explore the connections, relations, and application to visual arts design. Students will research and study floral trends to understand and develop an appreciation for floral design within historical and cultural, formal and casual, ceremonial and traditional, including an understanding that floral designs are affected by society, culture, history, politics, and economic influence. Various assignments based on abstract two and three dimensional designs, historical culture and theory, color theory, and analytical critiques of various floral art works using design vocabulary in conjunction with development of technical skills in floral art will serve as a foundation for more complex works such as multi-part floral designs and creative expression through wedding consultations.

Recommended Prerequisites:

Date Matched Against State Framework, Model Curriculum Standards and State Curriculum Guides: September 24, 2013

Board Approved: December 7, 2015

REVIEW CYCLE: 2015-16 through 2019-20
REQUIRED TEXTBOOK (Title, publisher, year): Floriculture Designing & Merchandising, Griner, Charles, Delmar Publishers, 2002, or latest edition
The Art of Floral Design, by Norah T. Hunter; Delmar Publisher, latest edition

INSTRUCTIONAL MATERIALS

REQUIRED TEXT(S):

Floriculture Designing & Merchandising, Griner, Charles, Delmar Publishers, 2002, or latest edition

The Art of Floral Design, by Norah T. Hunter; Delmar Publishers, latest edition

SUPPLEMENTARY TEXT(S):

Impressionist Flowers, Art of the Bouquet, Whelan, Richard, First Glance Books, Cobb, California, 1998, or most recent edition
A Bouquet from the MET, Metropolitan Museum of Art, Plumb, Barbara, Harry N. Abrams, Inc., 1998, or most recent edition
The Complete Guide to Flower Arranging, Packer, Jane, DK Publishing, Inc., 1998, or most recent edition
The Flower arranging Expert, Hessayon, Dr. D. G., Transworld Publishers, 1996, or most recent edition
Wheat Weaving and Straw Craft, Owens, Celli, Morgyn Geoffrey, Larks Books, 1997, or most recent edition
Visual and Performing Arts Framework, California Department of Education, 1995, or most recent edition
Art Talk, by Rosalind Ragans, Glencoe & McGraw-Hill Publisher, latest edition
Art Fundamentals, by Otto Ocvirk; McGraw Hill Publisher, latest edition
Discovering Art History, by Gerald F. Bromer; Davis Publisher, latest edition
Exploring Visual Design, the Elements & Principles; Davis Publisher, latest Edition
The Visual Experience, Delmar Publisher, latest edition
Essential Impressionist, Parragon Publisher, latest edition
The Natural Way to Draw, by Kimon Nicolaides, latest edition

AUDIO-VISUAL MATERIALS:

A-V Instructional Materials from the County A-V Department
A-V Instructional Materials from the School Library
A-V Instructional Materials from the City Library
A-V Instructional materials from Commercial Sources

Elements of Design from Crystal Productions

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units	Approximate Length of Instruction for Each Unit (Weeks)
1. General Expectations	6*
2. Specific Expectations	28
Floral Industry and Careers History and Art of Floral Design Cultural Dimensions Tools and Supplies Plants and Flowers Design Principles and elements Handling Techniques/Arrangements Nomenclature/Communication Skills Creative Expression through Floral Design Application of Visual Art Record Keeping Computer Usage Marketing	
3. Career Exploration	2*
Portfolio	
Total Number of Weeks	36

* Reinforced throughout year

Instructional Content Instruction will include:	**Student Outcomes** At the end of instruction, the Student will be able to:			**Hours** CL=Classroom CC=Comm. Class	
1. Safety 1. Discuss safety precautions and first aid procedures when coming in contact with hazardous sprays. 2. Demonstrate proper handling procedure of flowers containing thorns or needles. 4. Demonstrate proper usage of tools. 5. Demonstrate proper lifting procedures. 6. Demonstrate safety precautions and proper handling and usage of a helium tank.	***Goal: The student will understand safety procedures.*** A. Appropriate procedures for use of poisonous sprays. B. Demonstrate correct handling of flowers with thorns or needles. C. Proper usage of floral tools D. Proper lifting E. Proper usage of a helium tank	**Anchor/ CR** A11, A6 CR1 CR2 CR3 CR4 CR5 CR6 CR12	**CTE ANR** F11.1	**CL** 10	**CC**
2. History of Floral Design 1. Discuss the characteristics of European and Oriental styles. 2. Review examples of floral arrangements throughout time.	***Goal: The student will be able to identify floral contributions of ancient and modern civilizations.*** A. Flower art in ancient civilizations. B. European Periods C. Oriental Influence D. American Styles	A2, A3, A4, A5, A7, A11 CR1 CR2 CR3	**ANR** F11.2 F11.4	10	
3. Design, Harmony, and Unity	***Goal: Describe how the style of a floral design depends upon the selection of its container, flowers, foliage, accessories, and design.*** A. Design Process B. Style and Composition C. Harmony and Unity	A2, A3, A4, A5, A7, A8, A9, A11 CR1 CR2 CR4 CR10 CR11	F11.1 F11.2 F11.3 F11.4	10	
4. Color 1. Discuss emotional responses to warm, cool, and individual colors. 2. Demonstrate how to use color to incorporate design principles of balance, depth, and focal point. 3. Discuss how to achieve rhythm, harmony, and unity in a design. 4. Discuss various color schemes and how to us in floral designs.	***Goal: The students will demonstrate knowledge and understanding of the emotional effect of colors and proper usage in design.*** A. Color facts B. Properties of color C. Psychological effects D. Color in design E. Color schemes F. Color inspiration	A2, A3, A4, A5, A6, A7, A8, A9, A11 CR1 CR2 CR4 CR10	F11.1 F11.2 F11.3 F11.4	12	

Legend
A = Anchor
CR = Career Ready
ANR = Ag & Natural Resources Standard
BF = Business & Finance Standard
FID = Fashion & Interior Design Standard
MSS = Marketing, Sales & Service Standard

Instructional Content Instruction will include:	**Student Outcomes** At the end of instruction, the Student will be able to:			**Hours** CL=Classroom CC=Comm. Class	
5. Balance, Proportion, and Scale 1. Identify visual balance and how to achieve in a floral arrangement. 2. Discuss how flowers, foliage, accessories, and containers contribute to balance, proportion, and scale. 3. Discuss how proportion of the arrangement relates to its setting. 4. Discuss how to keep the parts of a floral arrangement in scale to each other.	***Goal: Students will demonstrate knowledge and apply the rules of balance, proportion, and scale.*** A. Balance B. Proportion C. Scale	**Anchor/ CR** A2, A3, A4, A5, A6, A7, A8, A9, A11 CR1 CR2 CR4 CR10	**CTE ANR** F11.1 F11.2 F11.3 F11.4	**CL** 10	**CC**
6. Focal Point and Rhythm 1. Discuss ways of creating focal points in floral designs. 2. Discuss rhythm in floral designs and how to achieve.	***Goal: Students will demonstrate knowledge of creating focal points in floral designs.*** A. Focal Points B. Rhythm	A2, A3, A4, A5, A6, A7, A8, A9, A11 CR1 CR2 CR4 CR10	F11.1 F11.2 F11.3 F11.4	6	
7. Line, Form, Space, and Depth 1. Discuss the types of line in floral design. 2. Discuss the emotional responses of various line directions. 3. Discuss the importance of line, form, space, and depth.	***Goal: The students will demonstrate knowledge of line, form, space, and depth.*** A. Line B. Form C. Space D. Depth	A2, A3, A4, A5, A6, A7, A8, A9, A11 CR1 CR2 CR4 CR10	F11.1 F11.2 F11.3 F11.4	14	
8. Tools, Containers, Mechanics and Basic Terminology 1. Identify proper tools for flower arranging and their functions in floral design. 2. Describe the types of containers and their uses. 3. Discuss the methods of efficient floral and plant design and materials available.	***Goal: The students will demonstrate the knowledge and understanding of tools, containers, mechanics and basic terminology.*** A. Hand Tools B. Containers C. Mechanics of Arrangement D. Plant sleeves and foil E. Bows F. Basic floriculture terminology	A1, A2, A3, A5, A6, A7, A10, A11 CR1 CR2 CR4 CR10 CR12	F11.1 F11.2 F11.3 F11.4	30	

Instructional Content Instruction will include:	**Student Outcomes** At the end of instruction, the Student will be able to:			**Hours** CL=Classroom CC=Comm. Class	
***9. Nomenclature and* Postharvest Physiology** 1. Identify basic flower parts. 2. Discuss how structural differences influence design style. 3. Discuss how foliage can enhance floral arrangements. 4. Discuss the primary metabolic activities that continue during the postharvest period.	***Goal: The students will demonstrate knowledge and understanding of Nomenclature and Postharvest Physiology.*** A. Flower nomenclature B. Postharvest physiology and metabolic processes.	**Anchor/ CR** A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11 CR1 CR2 CR4 CR10 CR12	**CTE ANR** F11.1 F11.2 F11.3	**CL**	**CC**
10. Care and Handling of Fresh Flowers and Foliage Plants 1. Discuss the chain of life. 2. Identify the reasons for early aging of flowers. 3. Discuss the care and handling procedures to increase longevity and quality of flowers. 4. Discuss the ingredients and purpose of floral preservatives and fertilizer. 5. Discuss harvesting and care procedures for garden flowers. 6. Discuss and demonstrate growing and raising of foliage plants.	***Goal: The students will demonstrate knowledge and understanding of the care and handling of fresh flowers.*** A. Chain of life B. Causes of early senescence C. Procedures to delay senescence D. Chemical solutions and procedures E. Refrigeration F. Ethylene G. Care and handling of garden flowers H. Care and handling of floral arrangements I. Care and handling of foliage plants J. Division and transplanting K. Propagation L. Soil preparation	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11 CR1 CR2 CR4 CR10 CR11	F11.1 F11.2 F11.3 F11.4	30	20
11. Shapes of Floral, Plant and Balloon Arrangements 1. Discuss the facts that influence the shape of floral, plant and balloon arrangements. 2. Identify the geometric shapes used in floral, plant and balloon design. 3. Demonstrate the steps in constructing the different shapes of arrangements.	***Goal: The students will demonstrate knowledge and understanding of the shapes of floral, plant and balloon arrangements.*** A. Factors influencing arrangement shape. B. Basic shapes of arrangements C. Triangular design styles D. Circular design styles E. Horizontal design styles F. Dish and basket gardens G. Moss baskets	A2, A3, A4, A5, A6, A7, A8, A9, A10, A11 CR1 CR2 CR4 CR10	F11.1 F11.2 F11.3 F11.4	30	10

Instructional Content Instruction will include:	**Student Outcomes** At the end of instruction, the Student will be able to:			**Hours** CL=Classroom CC=Comm. Class	
12. Seasonal, Holiday, and Special Occasion Designs 1. Discuss popular flowers and foliage of the four seasons. 2. Discuss accessories and color schemes that represent the four seasons. 3. Discuss and identify the major floral holidays. 4. Discuss design guidelines for hospital arrangements.	***Goal: The students will demonstrate knowledge and understanding of seasonal, holiday, and special occasion's designs.*** A. Seasonal themes B. Floral holidays C. Theme designs for special occasions D. Hospital designs.	**Anchor /CR** A1,A2,A3,A4, A5,A6,A7,A8, A9,A10 A11 CR1 CR2 CR4 CR10	**CTE ANR** F11.1 F11.2 F11.3 F11.4	**CL** 6	**CC** 46
13. Flowers to Wear 1. Discuss special occasions to wear flowers. 2. Discuss the visual and physical and guidelines for making basic body flowers. 3. Discuss ways to wear body flowers. 4. Discuss the purpose for wiring and taping natural stems. 5. Describe and demonstrate common wiring methods.	***Goal: The students will demonstrate knowledge and understanding of flowers to wear.*** A. Guidelines for designing body flowers B. Preparation of materials C. Spray painting D. Accessories E. Boutonnieres F. Corsages G. Other designs to wear	A1,A2,A3,A4, A5,A6,A7,A8, A9,A10 A11 CR1 CR2 CR4 CR10	**ANR** F11.1 F11.2 F11.3 F11.4	20	10
14. Introduction to Careers and Continuing Education 1. Career opportunities for qualified professional floral designers 2. Other career opportunities in the floral industry 3. Continuing Education	***Goal: The students will demonstrate knowledge and understanding of careers and continuing education.*** A. Describe various employment opportunities in a retail flower shop. B. Outline the skills and experience required working in specialized areas of floral design. C. Identify other career opportunities within the wholesale and production areas of the floral industry. D. Describe the importance of continuing education in floral design. E. Identify numerous career options within the floral industry. F. Describe and distinguish between the different trade organizations and the opportunities each provides. List some of the many trade publications, design workshops, and educational programs available to increase the knowledge and skills of a floral designer.	A1,A2,A3,A4, A5,A6,A7,A8, A9,A10 A11 CR1 CR2 CR3 CR4 CR5 CR6 CR7 CR8 CR9 CR10 CR11 CR12	**ANR** F11.3	6	

Instructional Content Instruction will include:	**Student Outcomes** At the end of instruction, the Student will be able to:			**Hours** CL=Classroom CC=Comm. Class	
15. Floral Business 1. Discuss importance of location and access for a floral business. 2. Define overhead costs as they relate to operating a successful floral business. 3. Demonstrate techniques to use when creating store displays. 4. Define necessary equipment related to the operation of a floral business. 5. Discuss creative store layouts.	***Goal: The student will understand and demonstrate basic knowledge of Floral Business*** A. Knowledge of appropriate location for a floral business. B. Demonstrate basic knowledge of overhead costs to run a successful floral business. C. Demonstrate basic knowledge of how to create store displays. D. Identify equipment necessary to open and run a floral business. E. Exhibit creative knowledge of store layout to maximize efficiency and client interest.	**Anchor/ CR** A1,A2,A3,A4,A5, A6,A7,A8,A9,A10 A11 CR1 CR2 CR3 CR4 CR5 CR6 CR7 CR8 CR9 CR10 CR11 CR12	**CTE** **ANR** F11.1 F11.2 F11.3 F11.4 **BF** A9.2 A9.3 A9.4 A9.5 **MSS** A6.4 A7.4 A7.7 A7.9 A7.10 **FID** 10.2 10.3 10.4	**CL** 10	**CC**
16. Salesmanship 1. Define pricing to maximize sales and profit. 2. Demonstrate merchandising techniques. 3. Discuss advertising. 4. Demonstrate customer relation techniques and phone etiquette.	***Goal: The student will understand and demonstrate salesmanship.*** A. Demonstrate basic understanding of pricing merchandise. B. Exhibit basic merchandising techniques. C. Identify cost effective advertising campaigns. D. Demonstrate customer relations and phone etiquette.	A1,A2,A3,A4,A5, A6,A7,A8,A9,A10 A11 CR1, CR2,CR3 CR4,CR5,CR6 CR7 CR8 CR9 CR10 CR11 CR12	**ANR** F11.4 **MSS** A8.1 A8.2 A8.4 A8.5 B4.4 4.1- 4.11 A7.1 A7.4 B5.1 B5.2	10	10
17. Floral Associations 1. Discuss and define associations that direct sales and delivery of flowers.	***Goal: The students will demonstrate knowledge and understanding of associations as they pertain to the floral industry.*** A. Identify associations locally, nationally, and internationally that have a direct effect on floral sales and delivery.	A1,A2,A3,A4,A5, A6,A7,A9, A11 CR1, CR2,CR3, CR12	**ANR** F11.4 **MSS** A6.1	4	10

Instructional Content Instruction will include:	**Student Outcomes** At the end of instruction, the Student will be able to:			**Hours** CL=Classroom CC=Comm. Class	
18. Accounting 1. Define recordkeeping procedures important to the successful operation of a floral business. 2. Demonstrate operation of a cash register. 3. Demonstrate procedure for making correct change. 4. Demonstrate guidelines for accepting checks. 5. Demonstrate procedures for processing credit cards.	***Goal: The students will demonstrate knowledge and understanding of associations as they pertain to the floral industry.*** A. Exhibit a basic knowledge of recordkeeping as it pertains to: • Inventory • Delivery • Bank Deposits • Income and expenditures B. Demonstrate basic knowledge of operating a cash register, making change, check approval and credit card processing.	**Anchor/CR** A1,A2,A3,A4,A8,A10 10.7 CR1, CR2,CR4, CR5, CR8, CR12	**CTE** **ANR** F11.4 A4.1 A4.2 **BF** B3.3	**CL** 10	**CC**
19. Communication, Leadership and Opportunities for Occupational Growth 1. Develop leadership skills 2. Develop communication skills 3. Develop interpersonal and intrapersonal skills 4. Develop interview skills 5. Demonstrate a positive self- image 6. Create a career seeking portfolio	***Goal: Student will, through the National FFA Organization, learn leadership skills in interviewing, portfolio development, work and professional attire. They will develop growth in interpersonal and intrapersonal skills working with others and alone. The students will learn the ability to solve problems and think critically on group and individual projects and assignments.***	1, 2, 4, 9, 10, 11, 9.0 CR1, CR2, CR4, CR7, CR8, CR9, CR10, CR12	**FID** A2.1 A2.2		

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Horticulture and the Environment

COURSE NUMBER: ROP67801, ROP67802 (2 Hrs) ROP74701, ROP74702 (1 Hr)

RECOMMENDED GRADE LEVEL: 11, 12, and Adult

ABILITY LEVEL: All

DURATION: 2 Semesters

CREDIT: 10 Units/Semester (2 Hrs) 5 Units/Semester (1 Hr)

MEETS GRADUATION REQUIREMENTS: Practical Arts, CTE

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4051

MEETS UC AND CSU ENTRANCE REQUIREMENTS: No

CREDENTIAL REQUIREMENTS:

REPLACES:

Course Description: This course addresses the three main areas of horticulture: Floriculture, Landscape and Nursery Production. Topics include: 1) the importance of the horticulture industry, 2) horticulture crops and their characteristics, 3) tools and equipment, 4) care and management of horticulture crops, 5) basic principles of design such as corsage and flower arrangement construction, 6) nursery production, 7) greenhouse management, 8) landscape design. The development of leadership and employment skills are emphasized throughout the course.

Recommended Prerequisites: Integrated Ag Science 1-2, 3-4, or consent of instructor

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Date Matched Against State Framework, Model Curriculum Standards, and State Curriculum Guides: September 24, 2013

Board Approved: December 7, 2015

REVIEW CYCLE: 2015-2016 through 2019-20
REQUIRED TEXTBOOK (Title, publisher, year): Introductory Horticulture, Reiley, Shry, Jr., Delmar/Thomson Publishing, 6E or Latest Edition; Sunset Western Garden Book, Sunset Publishing Corporation, 2007 or Latest Edition

INSTRUCTIONAL MATERIALS

Basic Text(s):

Introductory Horticulture, Reiley, Shry, Jr., Delmar/Thomson Learning, 6E or Latest Edition
Sunset Western Garden Book, Sunset Publishing Corporation, 2007 or Latest Edition

Supplementary Texts:

Sunset Western Garden Book, Lang, Sunset, 1995 or Latest Edition

Advanced Cluster, Ornamental Horticulture, California Department of Education, 1995

Flowers, Foliage, and Creative Design, 2000, or Latest Edition, Norah T. Hunter, Thomson Delmar Learning

The Floral Artist's Guide, 2001, or Latest Edition, Pat Diehl Scace, Delmar Thomson Learning

The Knot Book of Wedding Flowers, 2002, or Latest Edition, Carla Roney Chronicle Books, San Francisco

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units		Approximate Length of Instruction for Each Unit (Weeks)
1.	Historical/Cultural	3
2.	Construction	***
3.	Business/Marketing	***
4.	Production	***
5.	FFA/Careers/SAEP	***

***Spread throughout the entire year.

Total number of weeks	36 Weeks

Instructional Content: Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:	**Hours** **CL=Classroom** **L=Lab**			
1. Introduction. 1. Course Objective 2. General Overview 3. Grading	***Goal: The student will understand the general principles of Greenhouse Operations and Management.*** A. Understand the operation of the Greenhouse B. Define & demonstrate Careers/Job Market/Employability. C. Participate in leadership/management. D. Understand the need for leadership & management in the field. E. Analyze systems within the field solve problems.	**Anchor/CR** A1, A2, A3, A5, A9, A11 CR1 CR2 CR3 CR5 CR8	**CTE** F8.1 F9.1	**CL** 3	**L**
2. Safety. 1. General greenhouse safety. 2. Proper clothing & grooming. 3. Safe use of hand & power tools. 4. Restraint systems. 5. Emergency fire & disaster procedures. 6. OSHA rules & regulations. 7. Waste & material disposal. 8. Safe operation of tractors and farm equipment. 9. Safe use of chemicals and pesticides	***Goal: Student will understand the health hazards, safety practices, & environmental hazards related to their work in the greenhouse***. A. Comply with greenhouse safety. B. Wear eye protection. C. Describe proper clothing & grooming. D. Use hand & power tools safely. E. Understand the relationship safety factors, seat belts, roll guard in cabs. F. Follow emergency fire & disaster procedures. G. Comply with OSHA rules & regulations. H. Handle & dispose of materials safely.	A1, A2 A6 A9 CR1 CR2 CR6	F9.2 F9.3	2	2
3. Horticulture Careers. 1. Explore career options in the horticulture industry	***Goal: Understand career paths and employment opportunities in the horticulture industry.*** A. Explore careers B. Identify skills necessary to gain entry level employment. C. Practice interview skills	A1, A2 CR1 CR2 CR3 CR12		2	

Instructional Content: Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:	**Hours** **CL=Classroom** **L=Lab**			
4. Leadership 1. Practice team work 2. Community Service 3. Membership in an organization 4. Completion	***Goal: The student will understand the role that leadership plays in the work environment.*** A. Participate in committee work. B. Be a member of a team. C. Learn skills that will lead to being a good citizen.	**Anchor/CR** A2, A7, A9 CR1 CR2 CR7 CR8	**CTE**	**CL** 2	**L** 5
5. Plant Physiology 1. Root structure and function 2. Leaf structure and function 3. Stem structure and function 4. Flower structure and function	***Goal: The student will be able to apply their knowledge of plant physiology and demonstrate that knowledge.*** A. Name and identify root parts and function. B. Name and identify leaf parts and function. C. Name and identify stem parts and function. D. Name and identify flower parts and function.	A1 A2 CR1 CR2	F2.1 C11.1 C11.2 C11.5 G1.0	5	15
6. Environmental Requirements for Good Growth *1.* Factors for good growth *2.* Soil structure *3.* Chemical fertilizers *4.* Organic fertilizers *5.* Major elements of fertilizer *6.* Minor elements of fertilizer	***Goal: The student will understand basic needs of plants.*** *A.* List the factors effect roots. *B.* Describe the difference of sand, silt and clay *C.* Soil pH *D.* Balanced fertilizer *E.* Above ground requirements for good growth *F.* Understand the major and minor plant nutrients and the growth function	A1 A2 A5 CR1 CR2 CR5	F2.1 F2.4 F2.6 G6.2 G6.1 C10.1 C10.2 C10.4	5	10
7. Integrated Pest Management *1. Understand the control of plant pests* *2. Identify common plant pests*	***Goal: The student will understand basic methods of pest identification and control.*** 1. Outline common plant pests 2. Explain common biological pest control methods 3. Explain integrated pest control 4. List common chemical control methods 5. Proper methods of pesticide application 6. Safe storage of pesticides	A1 A2 A5 A6 CR1 CR2 CR5 CR6	C12.1 C12.2 C12.3 G5.1 G5.2 G5.3 G5.4 G5.5 F4.2 F4.1 F4.4	5	15

Instructional Content: Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:	**Hours** **CL=Classroom** **L=Lab**			
8. Growth Stimulants, Retardants and Rooting Hormones 1. Understand the 4 growth regulators used in the horticulture industry	***Goal: The student will understand the interrelationships of growth regulators in producing top quality plants*** A. Substance used to stimulate growth B. Name commonly used growth retardants C. Explain and use rooting hormone	**Anchor/ CR** A1 A2 CR1 CR2	**CTE** F2.6 F2.4	**CL** 5	**L** 10
9. Seeds 1. Plant propagation using seed	***Goal: The student will understand basic needs of successful seed germination*** *A.* Identify parts of a seed *B.* Use and understand indirect and direct seeding *C.* Prepare medium for seed germination *D.* Understand proper condition for seed germination *E.* Transplants plant plugs	A1 A2 A11 CR1 CR2 CR5	F3.2 G3.2 F5.5	5	15
10. Softwood and Semi hardwood cuttings 1. Collect and root softwood cuttings 2. Collect and root semi hardwood cuttings	***Goal: The student will and demonstrate soft and semi hardwood cuttings*** *A.* Select and root plants using common cutting methods *B.* Use proper hormones to root plant cuttings *C.* Prepare proper media for plant cuttings	A1 A2 A5 A11 CR1 CR2 CR5	F3.2 5.5 F3.0 G4.2	5	15
11. Separation and Division *1.* Propagate plants using separation and division	***Goal: The student will understand importance of separation and division.*** *A.* Describe the process of separation and division *B.* Identify plants that can be propagated using separation and division *C.* Propagate plants by separation and division	A1 A2 A5 A11 CR1 CR2 CR5	F1.4 G2.4 F3.0	3	10
12. Fungicides *1.* Identify common fungal diseases *2.* Understand fungus control	***Goal: Understand and apply knowledge of fungal diseases.*** A. Identify fungal diseases to effect the growth of plants in the greenhouse. B. Identify husbandry practices to prevent fungal growth C. Understand the commonly used fungicides in the greenhouse D. Practice the safe application of fungicides E. Understand the safe storage and disposal of fungicides	A1 A2 A6 A11 CR1 CR2 CR6 CR12	G5.2 G5.4 F4.0 F4.1 F4.2 F4.3 F4.4 C2.1 C2.2	3	5

Instructional Content: Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:	**Hours** **CL=Classroom** **L=Lab**			
13. Herbicides *1*. Proper selection and application of herbicides	***Goal: Students will select and apply proper herbicides in the greenhouse.*** *A.* Identify common weeds *B.* Select proper herbicide for the control of weeds *C.* Understand the difference of selective non-selective herbicides *D.* Practice proper set up and use of sprayer equipment *E.* Understand practice safe use of pesticides *F.* Practice proper disposal and storage of pesticides.	**ANCHOR/ CR** A1 A2 A6 A11 CR1 CR2 CR6 CR12	**CTE** G5.2 G5.4 F4.0 F4.1 F4.2 F4.3 F4.4 C2.1 C2.2	**CL** 3	**L** 10
14. Marketing. Understand the principle of sales and service	***Goal: The student will know the basic procedure for profitable sale of plant materials.*** *A.* Develop a marketing plan. *B.* Use common marketing methods to sale plant materials. *C.* Practice marketing techniques.	A1 A2 A4 A7 A8 A11 CR1 CR2 CR3 CR4 CR5 CR6 CR7 CR8 CR9 CR10 CR11 CR12	A7.1 A7.2 A7.3 A7.4 A7.5 A7.6 A8.0 A8.1 A8.2 A8.3 A9.5 A9.7	5	15

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Individual Studies for Agriculture

COURSE NUMBER: AGR01201 (S1) AGR01202 (S2)

RECOMMENDED GRADE LEVEL: 11-12

DURATION: 2-4 Semesters

CREDIT: 10 - 20

MEETS GRADUATION REQUIREMENTS: N/A

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4043

MEETS UC ENTRANCE REQUIREMENTS: No

MEETS CSU ENTRANCE REQUIREMENTS: Yes

CREDENTIAL REQUIREMENTS:

REPLACES:

Course Description:

Vocational Education in Agriculture is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. This course is an individualized program of study for junior and senior students with definite career goals or interest. The course of study will reflect the student's areas of interest. Participation in FFA leadership activities will reinforce the learning process of these students.

Recommended Prerequisites: None

Credential Requirements:

Date Aligned with State Standards: May 17, 2016

Board Approved: September 26, 2016

REVIEW CYCLE: 2015-16 through 2019-20
REQUIRED TEXTBOOK (Title, publisher, year): MODERN LIVESTOCK AND POULTRY PRODUCTION, Gillespie, Delmar Publishers 2016, 9th or Latest Edition including e-Book

INSTRUCTIONAL MATERIALS

Basic Text(s):

MODERN LIVESTOCK AND POULTRY PRODUCTION, Gillespie, Delmar, 2016 or Latest Edition, Instructor's Manual (download only) Online, 013159477X, 978-0131594777, Online Instructor Manual – PC Zip, Available for download

eBook: Modern Livestock & Poultry Production, Cengage E-Book

Supplementary Text(s):

K12 eBook on Web (ISBN-10: 1435486277/13: 9781435486270)

Instructor's Manual (ISBN-10: 1428318097/13: 9781428318090)

Class Master (ISBN-10: 1428318100/13: 9781428318106)

Classroom Interactivity CD-ROM (ISBN-10: 1428318119/13: 9781428318113)

Student – K12 eBook on Web (ISBN-10: 1435486277/13: 9781435486270)

Student – Class Master (ISBN-10: 1428318100/13: 9781428318106)

FFA Handbook, Future Farmers of America, FFA Foundation

FFA Official Manual, Future Farmers of America, FFA Foundation

All Together, California Ag Council

Any text that will be needed for the student's area of specialization

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units		Approximate Length of Instruction for Each Unit (Weeks)
A.	Agriculture and Safety	*
B.	Work Attitudes, Habits, and Leadership Skills (FFA)	*
C.	Supervised Occupational Experience	*
D.	Ag Careers	*
E.	On-the-Job Training/Special Training	36 weeks

*All of the above will be covered in the special assignment for the advanced student

Total Number of Weeks	36 weeks

1.0 GOAL:

Students will understand the economic importance of the agricultural sector in California, including leading production areas and commodities.

1.1 Identify the major agricultural production areas of California and list three commodities produced in each.

1.2 List the dollar value of the five leading agricultural commodities produced in the county.

1.3 List the dollar value of the five leading agricultural commodities produced in the state.

1.4 Describe and discuss the economic impact of the agricultural sector on the state and national economy.

1.5 Describe and discuss the "cost-price squeeze" and understand its effect on California agriculture.

Anchor Standards: 1, 5, 8
Career Readiness: 1, 2, 12
CTE Ag and Natural Resource: C1.1, C1.2, C1.3, C1.4, C1.5, C1.6

2.0 GOAL:

Students will understand the interrelationship of agriculture and society in California, including factors which influence agricultural activities.

2.1 List three problems faced by California farmers caused by population shifts and social and technological trends.

2.2 Life five governmental agencies which influence and affect agricultural production in California.

Anchor Standards: 6, 8
Career Readiness: 6, 8
CTE Ag and Natural Resource: A6.1, A6.2, A6.3

3.0 GOAL:

Students will understand the impact of agricultural production on the environment and natural resources of California.

3.1 Define the economic effects of air pollution on agricultural production in California.

3.2 Describe the major watersheds of California.

3.3 Identify the major water quality and pollution problems in California.

3.4 Identify the major forest regions of California.

3.5 List three environmental effects of production agriculture in California.

3.6 Understand the relationship of farmers and ranchers as stewards of natural resources.

Anchor Standards: 6, 7
Career Readiness: 6, 7, 12
CTE Ag and Natural Resource: #1.1, E1.2, E1.3, E2.3, E2.5

4.0 GOAL:

Students will appreciate the wide variety of leadership training activities available through the Future Farmers of America organization.

4.1 List, explain, and/or recite the following materials needed to become an FFA member:

a. a short history of the FFA
b. creed
c. motto
d. colors
e. emblem
f. kinds of membership
g. aims and purposes
h. the FFA salute
i. dress code
j. wearing the FFA jacket
k. code of ethics
l. receiving the Greenhand degree

4.2 List and describe the FFA awards available to members.

4.3 Identify contests in which vo-ag students may participate.

4.4 List the requirements for earning the Chapter Farmer, State Farmer, and American Farmer degree.

4.5 Identify regional, state, and national current information. (Use Best Informed Greenhand Contest materials).

4.6 Understand the benefits of FFA membership.

Anchor Standards: 3, 9, 11
Career Readiness: 3, 9, 11
CTE Ag and Natural Resource: 9.0, 9.2, 9.3, 9.8, 9.9

5.0 GOAL:

Students shall appreciate the important role that communication skills play in developing leadership abilities.

5.1 List and describe the importance of public speaking skills.

5.2 Demonstrate the ability to lead a discussion group.

5.3 Describe the importance of being a good listener.

5.4 Demonstrate public speaking abilities by selecting, researching, developing, and delivering an 8-10 minute presentation.

5.5 Identify and demonstrate communication skills using telephones, letters, memos, and verbal communication.

5.6 Identify and demonstrate skills necessary to work on committees effectively and efficiently.

Anchor Standards: 1, 2, 4, 5
Career Readiness: 1, 2, 5, 10
CTE Ag and Natural Resource: 9.2, 9.4, 9.8, 9.10, 9.13

6.0 GOAL:

Students will understand the principles of Parliamentary Procedure.

6.1 Demonstrate how the use of parliamentary procedure improves a meeting.

6.2 List and identify types of motions according to purpose and precedence.

6.3 Identify and demonstrate the steps necessary to properly bring up and dispose of business.

6.4 Verbally demonstrate the procedure for conducting a business meeting.

Anchor Standards: 1, 2, 4, 5
Career Readiness: 1, 2, 5, 10
CTE Ag and Natural Resource: 9.2, 9.4, 9.8, 9.10, 9.13

7.0 GOAL:

Students will understand the basic concepts of scientific inquiry and critical thinking.

7.1 Be able to recognize when a problem exists.

7.2 Be able to specifically identify the problem.

7.3 Define and describe the scientific method of problem solving.

7.4 Identify the information that will be needed to solve the problem.

7.5 Identify how to locate specific information related to the problem.

7.6 List possible solutions to a problem.

7.7 Evaluate the consequences of alternative solutions.

7.8 Be able to determine the best solution among the alternatives.

7.9 List the five characteristics of a critical thinker (e.g., knows the differences between fact and opinion, is a good listener, etc.).

7.10 Define discussion, disagreement, argument, inference, counter-example, propaganda.

Anchor Standards: 1, 2, 5, 9
Career Readiness: 1, 2, 5, 10
CTE Ag and Natural Resource: C13.1, C13.2, C13.3

8.0 GOAL:

Students will appreciate the importance of Supervised Occupational Experience Programs in the total program of vocational agriculture.

8.1 Define SOEP.

8.2 Describe the relationship between SOEP and the total program of Vocational Agriculture.

8.3 Identify and list the benefits of SOEP.

8.4 Describe the types of SOEP.

8.5 Identify and discuss the purpose and characteristics of an SOEP plan.

8.6 Describe how a person can get started in a SOEP.

8.7 Develop a long-range SOEP plan.

8.8 Record all transactions and activities pertinent to the student's SOEP and FFA activities in the California Vocational Agriculture Record Book.

Anchor Standards: 2, 3, 5, 9, 11
Career Readiness: 2, 3, 5
CTE Ag and Natural Resource: 13.1, 13.2, 13.3

9.0 GOAL:

Students will develop a knowledge of job search techniques and resources available to the job seeker.

9.1 Prepare a list of contacts for employment based on personal aptitudes, traits, abilities and interests in relationship to careers choice.

9.2 List the important factors to consider when selecting people to use as resources to locate jobs.

9.3 Locate, read, and understand want ads and posted job vacancies.

9.4 Compare and contrast relative merits of public and private employment agencies and the range of services provided by each.

9.5 Use local placement services for personal job search.

Anchor Standards: 3, 11
Career Readiness: 9, 11
CTE Ag and Natural Resource: A1.1, A1.2, A1.3, A1.4

10.0 GOAL:

Students will develop an understanding of the importance of the first contact in the job search.

10.1 Describe six items that could be included in a personal data summary.

10.2 List important factors to consider when using the telephone for job search.

10.3 Describe the important components of a resume and its use in the job search.

10.4 Write a paragraph describing the necessity and value of the "cold walk-in" procedure as an effective method of job seeking.

10.5 Complete sample job applications.

10.6 List the components of a cover letter and write two examples.

Anchor Standards: 3, 9
Career Readiness: 3, 9
CTE Ag and Natural Resource: 3.1, 3.2, 3.3, 3.9

11.0 GOAL:

Students will begin to understand what occurs during an interview, methods of preparation for the interview, and the purpose of the follow-up letter.

11.1 Develop a list of frequently asked interview questions.

11.2 Describe the various methods of interviewing job candidates (such as formal, informal, and interview by a panel).

11.3 Interview standards for interview preparation in regards to grooming, behavior and clothing.

11.4 Develop an appreciation for other factors involved in job candidate assessment including: first impressions, listening and communicating skills, enthusiasm,

identification of potential employee contributions.

11.5 List the components of a follow-up letter and write two examples.

Anchor Standards: 3, 9
Career Readiness: 3, 9
CTE Ag and Natural Resource: 3.1, 3.2, 3.3, 3.9

12.0 GOAL:

Students will appreciate the fundamental points in keeping a job. They will discuss the importance of interpersonal communication, appropriate dress, and self-evaluation procedures.

12.1 Write a paragraph discussing the concept of professional ethics.

12.2 Identify the important concepts to consider to effectively give and follow directions and develop an appreciation of how this relates to job survival.

12.3 List criteria for self-assessment of one's performance on the job.

12.4 Gain an understanding of the major reasons why workers are fired from their jobs.

12.5 Students will demonstrate job retention skills while participating in their individual S.O.E.'s.

Anchor Standards: 8, 9
Career Readiness: 7, 8
CTE Ag and Natural Resource: A1.1, A1.3, A1.3

13.0 GOAL:

Students will become aware of career opportunities available, skills required for different occupations, and the importance of work to the individual and society.

13.1 Explain the importance of work to the individual and society.

13.2 Identify twelve potential agricultural or agriculturally-related careers.

13.3 Identify four potential local agricultural or agriculturally-related careers.

13.4 Describe economic and technological trends which may affect the work environment.

13.5 Identify ways in which employees may have to adapt to a changing work environment.

Anchor Standards: 7, 8
Career Readiness: 7, 8
CTE Ag and Natural Resource: A5.1, A5.4, A5.5

14.0 GOAL:

Students will develop a tentative occupational goal, and will begin to plan steps appropriate to achieving the stated goal through the career plan.

14.1 Identify and describe a career interest in an agricultural or agriculturally-related occupation.

14.2 Analyze the skills, abilities, and education required to gain entry into the student's occupational choice.

14.3 Develop a plan of action for accomplishing an occupational objective. The occupational goal, the program of study (post-secondary education, if necessary), and S.O.E. program for time in high school should all be included. The plan should be maintained in departmental files.

Anchor Standards: 3, 5, 9
Career Readiness: 3, 5, 10
CTE Ag and Natural Resource: A5.1, A5.3, A5.4, A7.6

15.0 GOAL:

The student will demonstrate the proper work ethic while training at a agriculture related site.

15.1 Given a plan of training and a career-related training site, the instructor and the student will identify a minimum of five new learner expectations to be attained at the training site within the scope of job attitudes, skills, and habits within a semester.

15.2 A special course of interest will be individualized to prepare the student for advanced training in areas of career or interest that are not available in the regular Vocational Ag classes.

Anchor Standards: 3, 9, 11
Career Readiness: 3, 5, 10
CTE Ag and Natural Resource: A1.4, A4.2, A5.4

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Modern Livestock & Poultry Production, 9E eBook

AUTHOR(S): James R. Gillespie/Frank Flanders

PUBLISHER: Delmar Cengage Learning

COPYRIGHT DATE: 2016

ISBN #: 9781435486270

PRICE: $65.49

DEPARTMENT: Agriculture

CLASS: Animal Science (ROP), Individual Studies for Agriculture

GENERAL DESCRIPTION:
Text paints a vivid picture of the animal agriculture industry and provides the information necessary to pursue a career in the field.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: Advisory Committee

Selection Committee:
Mark Nower, Mike Brecht, Kyle Beeman, Gary Gerhardt, Richard Wolfe

Jeff Albritton, Senior Director
Alternative and Vocational Education

Thor Harrison
Senior Director, Educational Services

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Landscape Design and Maintenance Landscape Design and Maintenance 2 Hrs

COURSE NUMBER: ROP68901 (S1) ROP68902 (S2) ROP69001 (S1) ROP69002 (S2)

RECOMMENDED GRADE LEVEL: 11, 12

ABILITY LEVEL: Unsectioned

DURATION: 1-2 Semesters (1 hour and 2 hour sections) or Summer

CREDIT: 5-20; 15-Summer

GRADING FORMAT: Standard 0-4 Grd. Pts.

MEETS GRADUATION REQUIREMENTS: CTE

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4053

MEETS UC AND ENTRANCE REQUIREMENTS: No

MEETS CALIFORNIA STATE UNIVERSITY ENTRANCE REQUIREMENTS: Yes

CREDENTIAL REQUIREMENTS:

REPLACES:

Course Description: Vocational Education in Agriculture is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. Students will receive training in the greenhouse as well as on landscapes. Participation in FFA activities will reinforce the learning process of these students.

Recommended Prerequisites: None

Date Matched Against State Framework, Model Curriculum Standards, and State Curriculum Guides: September 24, 2013

Board Approved: December 7, 2015

REVIEW CYCLE: 2015-16 to 2019-20

REQUIRED TEXTBOOK (Title, publisher, year): Working in Horticulture, Richardson/Moore, Latest Edition; Student Handbooks, Introduction to Horticulture, AgriScience & Technology Series, Latest Edition, Schroeder/Seagle/Felton/Ruter/Kelley/Krewer, Pearson Education, Inc., publishing as Prentice Hall Interstate; Introductory Horticulture, 7th or Latest Edition, Reiley, Shry, Jr., Thomson Delmar Learning; FFA Handbook, Future Farmers of America, FFA Foundation; Sunset, Latest Edition

INSTRUCTIONAL MATERIALS

Basic Text(s):

Introductory Horticulture, 7th or Latest Edition, Reiley, Shry, Jr., Thomson Delmar Learning

Working in Horticulture, Richardson/Moore, Student Handbooks, Latest Edition

Introduction to Horticulture, AgriScience & Technology Series, Latest Edition, Schroeder/Seagle/Felton/Ruter/Kelley/Krewer, Pearson Education, Inc., publishing as Prentice Hall Interstate

FFA Handbook, Future Farmers of America, FFA Foundation

Sunset, Latest Edition

Supplementary Texts:

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units		Approximate Length of Instruction for Each Unit (Weeks)
A.	Knowledge of Facts and Concepts	2 weeks
B.	Work Skills and Attitudes	*
C.	Ornamental Horticulture Maintenance	8 weeks
D.	Nursery Practices and Floriculture	8 weeks
E.	Landscaping	8 weeks
F.	Floristry	8 weeks
G.	Careers	2 weeks

*Work skills and attitudes are stressed entire 36 weeks or Summer session Community classroom and/or cooperative education concept may be used during training.

Total Number of Weeks 36

Note: Summer session is 8-10 weeks @ 4-8 hours per day. Credits/Units are reduced proportionately.

Instructional Content Instruction will include:	**Student Outcomes** At the end of instruction, the Student will be able to:	**Hours** CL=Classroom CC=Comm. Class			
		Anchor/ CR	**CTE**	**CL**	**L**
1. Introduction. 1. Course Objective 2. General Overview 3. Grading	***Goal: The student will understand the general principles of Greenhouse Operations and Management.*** A. Understand the operation of the Greenhouse B. Define & demonstrate Careers/Job Market/Employability. C. Participate in leadership/management. D. Understand the need for leadership & management in the field. E. Analyze systems within the field solve problems.	A1, A2, A3, A5, A9, A11 CR1 CR2 CR3 CR5 CR8	F8.1 F9.1	3	
2. Safety. 1. General greenhouse safety. 2. Proper clothing & grooming. 3. Safe use of hand & power tools. 4. Restraint systems. 5. Emergency fire & disaster procedures. 6. OSHA rules & regulations. 7. Waste & material disposal. 8. Safe operation of tractors and farm equipment. 9. Safe use of chemicals and pesticides	***Goal: Student will understand the health hazards, safety practices, & environmental hazards related to their work in the greenhouse***. A. Comply with greenhouse safety. B. Wear eye protection. C. Describe proper clothing & grooming. D. Use hand & power tools safely. E. Understand the relationship safety factors, seat belts, roll guard in cabs. F. Follow emergency fire & disaster procedures. G. Comply with OSHA rules & regulations. H. Handle & dispose of materials safely.	A1, A2 A6 A9 CR1 CR2 CR6	F9.2 F9.3	2	2
3. Horticulture Careers. 1. Explore career options in the horticulture industry	***Goal: Understand career paths and employment opportunities in the horticulture industry.*** A. Explore careers B. Identify skills necessary to gain entry level employment. C. Practice interview skills	A1, A2 CR1 CR2 CR3 CR12		2	
4. Leadership 1. Practice team work 2. Community Service 3. Membership in an organization 4. Completion	***Goal: The student will understand the role that leadership plays in the work environment.*** A. Participate in committee work. B. Be a member of a team. C. Learn skills that will lead to being a good citizen.	A2, A7, A9 CR1 CR2 CR7 CR8		2	5
5. Landscape Industry 1. Discuss landscape design/architecture. 2. Discuss/define landscape management. 3. Review landscape construction;/installation. 4. Discuss the nursery business 5. Review careers/job market/employability.	***Goal: The student will understand the landscape industry.*** A. Understand landscape design/architecture. B. Understand landscape management. C. Define landscape maintenance. D. Describe landscape construction/installation. E. Understand the nursery business. F. Identify careers/job market/employability.	A1 A2 A3 CR1 CR3 CR4 CR11	F10.1 F10.2 F10.3	25	

Instructional Content Instruction will include:	Student Outcomes At the end of instruction, the Student will be able to:			Hours CL= Classroom CC=ComClass	
6. *Basic Horticultural Concepts* 1. Discuss plant growth and development. 2. Review plant/soil relationships. 3. Define plant nutrition. 4. Define climatic factors. 5. Describe soil types. 6. Demonstrate a landscape plan with binomial plant naming systems. 7. Define the use of plant resource materials. 8. Review plant propagation.	***Goal: The student will understand basic horticultural concepts.*** A. Recognize plant growth and development. B. Explain plant/soil relationships. C. Define plant nutrition. D. Understand climatic factors. E. Describe soil types. F. Identify & label landscape plan with binomial plant naming systems. G. Identify & use plant resource materials. H. Understand plant propagation	**Anchor/ CR** A1, A2, A5, A11 CR1 CR3 CR4 CR5 CR11	**CTE** F2.4 F3.1 F3.2 F4.1 F4.2 F5.1 F5.5 F6.1 F6.2 F6.3 F9.1 F10.1 G3.2	**CL** 20	**CC** 10
7.Tools and Equipment **Hand Tools** 1. Identify hand tools. 2. Discuss the storage of hand tools. 3. Demonstrate safe practice with hand tools following OSHA guidelines. **Power machinery/equipment** 1. Define power tool equipment. 2. Discuss the storage of power tool equipment. 3. Review the maintenance of power tool equipment. 4. Demonstrate safe practice with power tool equipment following OSHA guidelines. **Maintenance Supplies** 1. Review how to store and use supplies. 2. Discuss the maintenance of supplies. 3. Demonstrate safety following OSHA guidelines.	***Goal: Student will demonstrate knowledge and understanding of tools and equipment/materials.*** A. Hand Tools a. Identify and describe hand tools b. Use and storage hand tools. c. Safely practice with hand tools, follow OSHA. B. Power machinery/equipment a. Identify and describe power tool equipment. b. Use and storage power tool equipment. c. Maintain power tools & equipment. d. Safely practice/follow OSHA with tools. C. Identify maintenance supplies a. Store & use supplies. b. Maintain supplies. c. Practice safety OSHA.	A6 A11 CR1 CR3 CR4 CR7	F9.2 F9.3 F9.0 F9.1 B1.1 B1.2 B1.3	20	40

Instructional Content Instruction will include:	Student Outcomes At the end of instruction, the Student will be able to:			Hours CL= Classroom CC=Comm.Class	
8. Lawn Maintenance and Care/Management 1. Discuss types of lawnmowers, turfgrass 2. Demonstrate mowing practices. 3. Demonstrate edging and trimming the lawn. 4. Discuss fertilizing turfgrasses. 5. Review watering turfgrasses. 6. Discuss renovating lawns. 7. Describe prevention and treatment for insects and disease. 8. Describe how to troubleshoot lawn problems. 9. Demonstrate safety practices. 10. Define leadership/management. 11. Discuss the maintenance and general care of plants. 12. Demonstrate pruning plants and trees. 13. Demonstrate transplanting plants and trees. 14. Review prevention, diagnosis and treatment. 15. Discuss weed control. 16. Demonstrate the application of fertilizer in correct rates. 17. Demonstrate watering practices.	***Goal: The student will demonstrate knowledge and understanding of lawn maintenance and care/management.*** A. Describe types of lawnmowers, turfgrass B. Demonstrate mowing practices C. Edge and trim lawn D. Fertilize turfgrasses E. Water turfgrasses F. Renovate lawns G. Prevent & Treat insects and disease H. Troubleshoot lawn problems I. Observe safety practices J. Demonstrate leadership/management K. Maintain & manage general care of plants in the landscape: Trees and shrubs, Ground covers, Annuals and perennials, Vines and specimen plants L. Prune plants, trees M. Transplant plants, trees N. Prevent, diagnose treat O. Control weeds with Pre-emerge herbicides Post-emerge herbicides P. Apply fertilizer in correct rates Q. Implement watering practices	**Anchor/ CR** A1 A2 A3 A5 A6 A11 CR1 CR2 CR5 CR7 CR9 CR10 CR8 CR12	**CTE**	**CL** 40	**CC** 20
9. Lawn Installation 1. Discuss how to identify & select turfgrass. 2. Demonstrate the preparation of proper soil. 3. Define seed lawns. 4. Define sod lawns. 5. Demonstrate how to plan for lawn installation.	***Goal: Students will demonstrate knowledge and understanding of lawn installation.*** A. Identify & select turfgrass B. Prepare proper soil C. Seed lawns D. Sod lawns E. Plan install lawn	A1 A2 A11 CR1 CR2 CR7	F7.0 F7.1 F7.2 F7.3 F10.1 F10.2 F10.3	10	20

Instructional Content: Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:	**Hours** CL=Classroom CC=Comm.Class			
10. Soil Preparation 1. Demonstrate how to add soil amendments and organic matter. 2. Demonstrate how to apply pre-plant fertilizers. 3. Demonstrate how to till soil. 4. Demonstrate how to grade soil. 5. Discuss how to assess drainage considerations. 6. Demonstrate how to treat problem soil. 7. Demonstrate how to test soil.	***Goal: Students will demonstrate knowledge and understanding of soil preparation.*** A. Add soil amendments and organic matter B. Apply pre-plant fertilizers C. Till soil D. Grade soil E. Assess drainage considerations F. Treat problem soils G. Test soil	**Anchor/ CR** A1 A2 A5 A11 CR1 CR2 CR4 CR5	**CTE** G6.2 G6.1 C10.1 C10.2 C10.3 C10.4	**CL** 10	**CC** 10
11. Landscape Design 1. Discuss basic design elements.. 2. Review the planning process. 3. Discuss the usage of shrubs and trees. 4. Discuss the usage of lawn and ground covers. 5. Discuss the usage of drought tolerant plants. 6. Discuss the usage of annuals and perennials. 7. Discuss the usage of native plants. 8. Define how to evaluate and include permanent structures/landscape. 9. Review planning for irrigation. 10. Review assess, design utilities 11. Review how to analyze problem areas. 12. Demonstrate how to measure and layout the plan. 13. Demonstrate how to draw the plan to scale. 14. Demonstrate how to create a computer-assisted design.	***Goal: The students will demonstrate knowledge and understanding of landscape design.*** A. Understand basic design elements: • Continuity, • Texture, • Proportion, • Theme B. Recognize the planning process C. Use shrubs and trees D. Use lawns and ground covers E. Use drought tolerant plants F. Use annuals and perennials G. Use native plants H. Evaluate & include permanent structures/landscape I. Plan irrigation J. Assess, design utilities K. Analyze problem areas L. Measure and layout plan M. Draw plan to scale N. Create computer-assisted design	A1 A4 A5 A11 A2 A3 A10 CR1 CR2 CR4 CR5 CR11 CR12	B12.1 B12.2 B4.1- B4.3 B3.1- B3.5 B2.1- B2.3 B6.1 B6.2 E8.2- E8.4 F10.1- F10.5 F7.0- F7.3 F1.5 G8.2 G8.4 F5.1 – F5.5	10	50
12. Landscape Installation 1. Discuss assessment of site inventory. 2. Demonstrate plan and sequence installation. 3. Demonstrate soil preparation technique. 4. Demonstrate how to install an irrigation system. 5. Demonstrate how to install a drainage system. 6. Discuss how to plan landscape planning. 7. Discuss the implementation of planting practices. 8. Discuss the maintenance and aftercare of plantings.	***Goal: The student will demonstrate knowledge and understanding of landscape installation.*** A. Assess site inventory B. Plan and sequence installation C. Demonstrate soil preparation technique D. Grade and level E. Install irrigation systems F. Install drainage systems G. Plan landscape planning H. Implement planting practices I. Maintain aftercare of plantings	A1, A5, A9, A11, A2, A4 CR1 CR2 CR4 CR5 CR12	F7.0- F7.3 B4.1- B4.4 F10.1 F10.2 F10.3 B3.1- B3.6 B12.2 B12.6 B6.1- B6.3	10	20

Instructional Content: Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:	**Hours** CL=Classroom CC=Comm.Class			
13. Landscape Construction 1. Demonstrate how to build and pour garden borders. 2. Demonstrate how to construct raised beds. 3. Demonstrate how to build wood structures. 4. Demonstrate how to complete brick work. 5. Discuss and demonstrate how to form fences, walls and gates. 6. Discuss how to apply stepping stones and pavers. 7. Demonstrate concrete work.	***Goal: The student will demonstrate knowledge and understanding of landscape construction.*** A. Build or pour garden borders B. Construct raised beds C. Build outdoor wood structures D. Complete brick work E. Describe & form fences, walls, and gates F. Apply stepping stones and pavers G. Demonstrate concrete work	**Anchor/CR** A1 A2 A9 A11 CR1 CR2 CR4 CR5 CR9	**CTE** B2.1- B2.4 B3.1- B3.6 B4.1- B4.4 B6.1- B6.3 B12.2 B12.6 B12.5	**CL** 5	**CC** 10
14.The Nursery/Landscape Business 1. Identify basic business practices. 2. Discuss how to plan a business. 3. Discuss retail garden centers/nurseries. 4. Identify wholesale nurseries. 5. Discuss landscape contracting. 6. Discuss leadership/management/ organizations.	***Goal: The student will demonstrate knowledge and understanding of the nursery/landscape business.*** A. Understand basic business practices B. Plan a business C. Describe retail garden centers/nurseries D. Define wholesale nurseries E. Institute landscape contracting F. Demonstrate leadership/management/organizations	A1, A2, A3, A4, A5, A8, A9, A11 CR1 CRS CR3 CR4 CR5 CR6 CR6 CR8 CR9 CR10 CR11 CR12	F10.0- F10.5 F8.0- F8.4 A1.0- A9.5 **BF** B1.0- B9.8 C1.0- C8.6	10	20

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Project Supervision 1 Hr Project Supervision 2 Hrs

COURSE NUMBER: AGR00601, AGR00602 AGR00701, AGR00702

RECOMMENDED GRADE LEVEL: 10 - 12

DURATION: 1 Year

CREDIT: 5 per semester

MEETS GRADUATION REQUIREMENTS: Practical Arts

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4043

MEETS UC ENTRANCE REQUIREMENTS: No

MEETS CSU ENTRANCE REQUIREMENTS: No

CREDENTIAL REQUIREMENTS:

REPLACES:

Course Description:

Agriculture Education is designed to prepare individuals with the skills needed for their chosen career pathways. This course will give the student the workplace learning experience needed to prepare them for the Agriculture industry.

Recommended Prerequisites: Must have an existing SOEP and must be concurrently enrolled in another Agricultural course.

Date Aligned with State Standards: May 17, 2016

Board Approved: July 25, 2016

REVIEW CYCLE: 2015-16 through 2019-20
REQUIRED TEXTBOOK (Title, publisher, year):

INSTRUCTIONAL MATERIALS

Basic Text(s):

Supplementary Text(s):

FFA Official Manual, FFA Foundation

FFA/SOEP Student Recordbook, FFA Foundation

Working in Ag Mechanics, Shinn, McGraw-Hill, Latest Edition

Welding Power Handbook, Mantz, Union Carbide, Latest Edition

Handbooks: Oxy-Acetylene, MIG Welding, TIG Welding, Shielded Arc Welding, Linde Reference, Union Carbide

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units		Approximate Length of Instruction for Each Unit (Weeks)
1.	Employability Skills	2
B.	Workplace Fundamentals	2
C.	Supervised Occupational Experience	29
D.	Leadership Skills (FFA)	1
E.	Entrepreneurship	1
F.	Careers/SAE	1
	Total Weeks	36

1.1 GOAL:

The students will develop knowledge of job searching techniques and resources available to the job seeker.

1.2 Locate, read, and understand want ads and posted vacancies.

1.3 Identify the uses and locations of local private and/or public employment agencies.

1.4 Write a letter of inquiry (cover letter) for a specific job.

1.5 Become familiar with resources for learning about career options and become experienced with those resources.

1.6 Complete a career search summary and interview someone in a specific career.

1.7 Compare the types of public and private employment seeking services available and describe some of the services provided.

1.8 List the important factors to consider when using the telephone for a job search and practice it in a role-playing situation.

1.9 Develop an understanding of the walk-in technique and the effects it can have on first impressions.

1.10 Develop a list of frequently asked interview questions.

1.11 Be able to discuss the various methods of interviewing job candidates and participate in mock interviews.

Anchor Standards: 2, 3
Career Readiness: 2, 3, 11
CTE Ag and Natural Resource: A1.1, A1.2, A1.3, A9.6

2.1 GOAL:

The students will understand the importance of proper job-related ethics.

2.2 Analyze the effects of family on work.

2.3 Analyze the effects of work on family.

2.4 Cooperate with others in the workplace.

2.5 List the components of a cover letter and write two examples.

2.6 Recognize basic resume principles and put those principles into practice.

2.7 Be able to test suggested components of a personal data sheet.

2.8 Develop a resume.

2.9 Complete sample job applications. Write a paragraph discussing the concept of professional ethics.

2.10 Identify the important concepts to consider effectively following directions and developing an appreciation of how this is related to job survival.

2.11 Become familiar with how employees can evaluate their progress and personal growth on the job.

2.12 Develop an appreciation for reasons workers could be fired from their jobs.

Anchor Standards: 3, 7, 8
Career Readiness: 3, 7, 8, 9
CTE Ag and Natural Resource: A1.4, A6.1, A2.1

3.1 GOAL:

The students will understand the importance of having an SOEP in relation to their career paths and will record information in record book and portfolio.

3.2 Define SOEP.

3.3 Describe the relationship between SOEP and the total program of agricultural education.

3.4 Identify and list the benefits of SOEP.

3.5 Describe the types of SOEP.

3.6 Identify and discuss the purpose and characteristics of an SOEP.

3.7 Describe how a person can get started in a SOEP.

3.8 Develop a long-range SOEP plan.

3.9 Record all transactions and activities pertinent to the student's SOEP and FFA activities in the California Vocational Agriculture Record Book.

Anchor Standards: 2, 3, 7, 11
Career Readiness: 2, 3, 11
CTE Ag and Natural Resource: 13.1, 13.2, 13.3, A3.3

4.1 GOAL:

The students will become aware of the importance of FFA leadership skills in a career pathway.

4.2 Give a six minute speech

4.3 Demonstrate the ability to run a meeting.

4.4 Become involved with an FFA meeting.

4.5 Plan the steps involved to receive the State or American FFA degree.

Anchor Standards: 3, 9, 11
Career Readiness: 3, 9, 11
CTE Ag and Natural Resource: 9.0, 9.2, 9.3, 9.8, 9.9

5.1 GOAL:

5.2 Develop a list of potential occupations based on aptitudes, interests, abilities and traits.

5.3 Research a list of potential resources, including people and organizations. Evaluate the role of the small business in today's economy.

5.4 Examine considerations of starting a business.

Anchor Standards: 2, 3, 9
Career Readiness: 2, 3, 9
CTE Ag and Natural Resource: A1.3, A5.1, A6.1, A6.2, A6.3, A8.1

6.1 GOAL:

Career Opportunities – Describe and give examples of entry, technical, and professional careers in the industry.

6.2 Complete a self-assessment related to work values and interests.

6.3 Develop a personal occupational plan that outlines career goals and an action plan to achieve those goals.

6.4 Develop an SAE project.

Anchor Standards: 2, 3, 9
Career Readiness: 2, 3, 9
CTE Ag and Natural Resource: A1.1, A1.4, A6.1, A8.1

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Structural Ag Welding ROP

COURSE NUMBER: ROP68701, ROP68702 ROP68801, ROP68802 (2 Hrs)

RECOMMENDED GRADE LEVEL: 11, 12

ABILITY LEVEL: Unsectioned

DURATION: 2 Semesters if one hour or 1 semester if two hours

CREDIT: 5-20

GRADING FORMAT: Standard 0-4 Grd. Pts.

MEETS GRADUATION REQUIREMENTS: Practical Arts, CTE

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4032

MEETS UC AND CSU ENTRANCE REQUIREMENTS: No

MEETS CALIFORNIA STATE UNIVERSITY ENTRANCE REQUIREMENTS: Yes

CREDENTIAL REQUIREMENTS: Single Subject: Agriculture or Designated Subjects: Welding

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Course Description: Students will use a laboratory-type situation to cover the principles, and applications of MIG, TIG and oxy-acetylene welding of large equipment. Strong emphasis is put on the instruction and participation of project design, project construction, and cost of materials. Participation in FFA will reinforce skill development in these students.

Recommended Prerequisites: Agricultural Mechanics 1-2, 3-4

Date Matched Against State Framework, Model Curriculum Standards, and State Curriculum Guides: September 25, 2013

Board Approved: December 7, 2015

REVIEW CYCLE: 2011-12 through 2015-16
REQUIRED TEXTBOOK (Title, publisher, year): Welding: Principles and Applications, Jeffus, Delmar Publishers, Latest Edition; Practical Problems in Mathematics for Welders, Schell/Matlock, Delmar Publishers, Latest Edition, Metal Fabrication, Technology for Agriculture, Jeffus, Thomson/Delmar Learning, Latest Edition, Basic Blueprint – Reading and Sketching, Olivo, Thomson/Delmar Learning, Latest Edition

INSTRUCTIONAL MATERIALS

Basic Text(s):

WELDING: Principles and Applications, Jeffus, Delmar Publishers, Latest Edition

Practical Problems in Mathematics for Welders, Schell/Matlock, Delmar Publishers, Latest Edition

Metal Fabrication, Technology for Agriculture, Jeffus, Thomson/Delmar Learning, Latest Edition

Basic Blueprint – Reading and Sketching, Olivo, Thomson/Delmar Learning, Latest Edition

Supplementary Texts:

WELDING: Principles and Applications, Jeffus, Delmar
Student Guide and Lab Manual
Complete Welding Video Package

BLUEPRINT READING FOR WELDERS: Delmar
Text and Workbook

BASIC TECHNICAL DRAWING: Spencer & Dygdon; Glencoe

FFA OFFICIAL MANUAL, Future Farmers of America, FFA Foundation

FFA Handbook, Future Farmers of America, FFA Foundation

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units		Approximate Length of Instruction for Each Unit (Weeks)
A.	Shop Orientation and Safety	2
B.	Supervised Occupational Experience	6
C.	Analytical and Construction Skills	12
D.	Shop/Trade Math	*
E.	Planning/Design for Welding, Structures, Fences	4
F.	Welding: Arc/Oxy-acetylene	4
G.	MIG Welding Process	4
H.	TIG Welding Process	4
I.	Careers	*
*	Included in construction units	
	Total Weeks	36

STRUCTURAL AG WELDING ROP

Instructional Content Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:			**Hours** CL=Classroom CC=Comm. Class	
1. Shop & Machine Safety 1. Review tools & machinery used in class. 2. Review & demonstrate safe operation of tools & machinery. 3. Review shop procedures. 4. Administering oral & written safety tests. 5. Supervision of construction projects: a) Student b) School c) Department d) Community 6. Shop & machine maintenance	***Goal: The student will understand the importance of safety & safe work practices, & the names, functions, & safe uses of tools & machines.*** A. Attain a passing mark in oral & written safety tests. B. Demonstrate safe operation of tools & machinery. C. Demonstrate an understanding of shop procedures. D. Demonstrate an understanding of the procedures, techniques, & processes used in welding & fabrication by attaining a passing mark in all assigned construction projects. E. Perform basic shop & machine maintenance.	**CTE** B1.0 B1.1 B1.2 B5.4 B8.1	**Anchor** A1.0 A2.0 A2.1 A2.2 A2.3 CR6, CR7 CR8	**CL** 15-20	**CC** N/A
2. Arc Welding (SMAW) 1. Weld positions & procedures 2. Welding projects (positions) 3. Maintenance of equipment 4. Layout of mandatory project	***Goal: The student will understand the safe & efficient use of oxyfuel processes & equipment to form, separate, & combine metals.*** A. Identify procedures, techniques, & processes used in welding. B. Successfully complete all projects with a grade of “B” or better. C. Perform basis equipment maintenance. D. Demonstrate weld selection, equipment adjustments, & consumable selection by successfully completing mandatory project.	B8.0 B8.1 B8.2 B8.3 B8.4	A4.0 A4.1 A4.4 A4.5 A4.7 A5.0 A7.0 A7.4 A7.5 A7.7 CR1, CR4 CR5, CR6 CR9, CR10	20-25	N/A
3. Gas Welding (Oxyfuel) 1. Weld positions & procedures 2. Welding projects (positions) 3. Maintenance of equipment 4. Layout of mandatory project	***Goal: The student will understand the safe & efficient use of oxyfuel processes & equipment to form, separate, & combine metals.*** A. Identify procedures, techniques, & processes used in welding & cutting. B. Successfully complete all projects with a grade of “B” or better. C. Perform basis equipment maintenance. D. Demonstrate weld selection, machine adjustments, & rod selection by successfully completing mandatory project.	B7.0 B7.1 B7.2 B7.3 B7.4 B7.5	CR1 CR4 R5 CR6 CR9 CR10	10-15	N/A

Instructional Content Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:			**Hours** CL=Classroom CC=Comm. Class	
4. Gas Metal Arc Welding (GMAW) 1. Theory of Mig 2. Weld positions & procedures 3. Welding projects (positions) 4. Maintenance of equipment 5. Layout of mandatory projec	***Goal: The student will understand the safe & efficient use of oxyfuel processes & equipment to form, separate, & combine metals.*** A. Understand theory of MIG B. Identify procedures, techniques, & processes used in welding. C. Successfully complete all projects with a grade of "B" or better. D. Perform basis equipment maintenance. E. Demonstrate weld selection, machine adjustments, & consumable selection by successfully completing mandatory project.	**CTE** B8.0 – B8.4 B9.0 – B9.7	**Anchor/CR** A4.0, A4.7, A5.0 – A5.4 A10.0, A10.3 A10.6, A10.8 A11.0 – A11.3 CR1, CR4, CR5, CR6, CR10	**CL** 15-20	**CC** N/A
5. TIG Welding 1. Theory of TIG 2. Weld positions & procedures 3. Welding projects (positions) 4. Maintenance of equipment 5. Layout of mandatory project	***Goal: The student will understand the safe & efficient use of oxyfuel processes & equipment to form, separate, & combine metals.*** A. Understand theory of TIG B. Identify procedures, techniques, & processes used in welding. C. Successfully complete all projects with a grade of "B" or better. D. Perform basis equipment maintenance. E. Demonstrate weld selection, machine adjustments, & consumable selection by successfully completing mandatory project.	B8.0 – B8.4 B9.0 – B9.7	A4.0, A4.7, A5.0 – A5.4 A10.0, A10.3 A10.6, A10.8 A11.0 – A11.3 CR1, CR4, CR5, CR6, CR10	5-10	N/A
6. Special Welding Processes. 1. Plasma, Arc cutting/welding 2. Air carbon arc cutting 3. Hard facing 4. Tempering & annealing 5. Pipe & tube welding 6. Resistance ***7.*** Theory of operation in specialty welding processes.	***Goal: The student will have a basic understanding of special processes for welding or cutting unusual materials, extremely thick materials, or very thin materials.*** A. Identify special welding & cutting processes, & describe circumstances in which those processes are used. B. Explain the advantages & disadvantages of each. C. Have a basic understanding of the manner in which pipe & tubing joints and specialty materials are prepared & processes completed.	B8.0 – B8.4 B9.0 – B9.7	A4.0, A4.7, A5.0 – A5.4 A10.0, A10.3 A10.6, A10.8 A11.0 – A11.3 CR1, CR4, CR5, CR6, CR10	5-20	N/A

Instructional Content Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:			**Hours** CL=Classroom CC=Comm. Class	
7. Weld Design. 1. Metallurgy 2. Joint design 3. Stress & distortion 4. Jigs & fixtures 5. Weld testing & certification 6. Material selection 7. General alloys	***Goal: The student will have a basic understanding of weld design.*** A. Understand the chemical, physical, & mechanical properties of welding materials & how welding processes affect these properties. B. Determine costs & select appropriate welding materials. C. Understand joint design. D. Use proper techniques to minimize effects of stress & distortion in welding. E. Demonstrate the ability to weld jigs & fixtures. F. Demonstrate an understanding of general alloys.	**CTE** B9.0 B9.1 B9.2 B9.3 B9.4 B9.5 B9.6	**Anchor/CR** A10.0 A10.1 A10.2 A10.3 CR1 CR4	**CL** 15-20	**CC** N/A
8. Project Design/Blueprint Reading. 1. Reading basic welding symbols. 2. Building a project using project plans. 3. General drafting symbols. 4. Use of 3 view drawings. 5. Creation of shop drawings. 6. Develop Bill of Materials. 7. Cut & order list. 8. Construction sequence.	***Goal: The student will understand the basic elements of proper product or project development & documentation (including estimating, codes & specification, sketching, material & process selection, & print reading) used in welding design.*** A. Read & interpret prints to plan layout & produce welded product.	B9.4 B9.5 B12.2	A5.0 A5.2 A5.3 A10.0 A10.1 CR1 CR4	10-15	N/A
9. Agricultural Equipment Construction/Repair. 1. Construction techniques. 2. Equipment repair, maintenance, & upgrading (hard facing, special welding processes). 3. Equipment selection. 4. Metal forming & restoration. 5. Mathematical & geometrical formulas used in the field: - Right angles; - 45 degree angles; - Pythagorean Theorem; - Circumference of a circle; - Area of a circle. 6. Finish work	***Goal: The student will demonstrate an understanding of basic agricultural equipment construction & repair techniques.*** 1. Demonstrate an understanding of the theory of metal formation & movement. 2. Determine farm & shop needs for welding & other repair equipment. 3. Demonstrate an understanding of basic mathematical & geometrical concepts. 4. Be able to complete individual and/or small group projects.	11.1 B10.1 B9.7 B6.3 B4.4 B2.4	A10.1 10.8 A9.2 A11.0 A11.1 A11.2 CR1 CR4 CR10	150-200	N/A

Instructional Content Instruction will include:	**Student Outcomes** At the end of instruction, the student will be able to:			**Hours** CL=Classroom CC=Comm. Class	
10. Supervised Agricultural Experience Program - Recordkeeping - Leadership. 1. Enterprise (project) development in the field of agriculture. 2. Participation in relevant organized youth activities (minimum of three for the school year). 3. Procedures for maintaining accurate enterprise project records. 4. Careers in welding and fabrication.	***Goal: The student will understand the organization of an enterprise & understand the elements of production management.*** A. Complete project record book. B. Incorporate enterprise project into students' portfolio. C. Growth will be demonstrated by diminishing instructor input. D. Students will be able to identify those skills needed for an entry level position in the welding/fabrication industry.	**CTE** A1.2 A1.4 A1.6 A3.3 A4.2 A4.4 A4.5	**Anchor/CR** A3.0 – A3.9 A4.3 A4.4 A4.7 A5.3 A5.4 A9.0 – A9.13 CR1-CR12	**CL** 15-20	**CC** N/A

MODESTO CITY SCHOOLS

COURSE TITLE: Biology and Sustainable Agriculture

COURSE NUMBER:
RECOMMENDED GRADE LEVEL: 10
ABILITY LEVEL: Unsectioned
DURATION: 2 semesters
CREDIT: 10
MEETS GRADUATION REQUIREMENTS: Science Biology
REQUIRED FOR GRADUATION: Yes
SCHOOLS: Beyer, Downey, Davis, Enochs, Gregori, Johansen, Modesto
CBEDS CODE: 4073
MEETS UC ENTRANCE REQUIREMENTS: Yes – Lab Science: Life Science (Biology)
MEETS CSU ENTRANCE REQUIREMENTS: Yes
CREDENTIAL REQUIREMENTS: Single Subject: Agriculture
REPLACES: Integrated Ag Science 3-4
Prerequisites: Agriscience

COURSE DESCRIPTION:

Sustainability is based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our environment. Sustainability creates and maintains the conditions under which humans and the biotic world can exist in productive harmony, that permit fulfilling the social, economic and other requirements of present and future generations. Sustainability is important to making sure that we have and will continue to have, the water, materials, and resources to protect human health and our environment. (adapted from http://www.epa.gov/ sustainability/basicinfo.htm)

Sustainable Agriculture is a one year course designed to integrate biological science practices and knowledge into the practice of sustainable agriculture. The course is organized into four major sections, or units, each with a guiding question. Unit one addresses the question, what is sustainable agriculture? Unit two: How does sustainable agriculture fit into our environment? Unit three: What molecular biology principles guide sustainable agriculture? Unit four: How do we make decisions to maximize sustainable agricultural practices within a functioning ecosystem? Within each unit specific life science principles will be identified with agricultural principles and practices guiding the acquisition of this knowledge, culminating in the development of a sustainable farm model and portfolio of supporting student research.

Agriculture Education is a comprehensive program and requires students to participate in a Supervised Agriculture Experience Project component as well as FFA leadership activities and events. These activities are a graded component of this course. A student cannot receive an A grade without participation in FFA and SAE.

Date Aligned with State Standards: January, 2015
Board Approved:
REVIEW CYCLE: 2011-2016

REQUIRED TEXTBOOK (Title, publisher, year):

The Science of Agriculture: A Biological Approach, 4th Edition, Delmar Cengage Learning
Author: Ray V. Herren
Edition: current
Product Type: Bound Book
ISBN 13: 9781439057766
ISBN 10: 1439057761
Copyright: 2012
Price: $137.50
9781439057735 - Instructor's Lab Manual
9781439057742 – Lab Manuel
9781439057711 - Classmaster CD-ROM
9781439057759 – Instructors Manual
9781439057711 Classroom Interactive CD-ROM
CourseMate with eBook Instant Access Code for Herren's The Science of Agriculture: A Biological Approach, 4th 9781285086156
5/29/2012 NB
*Bundle: $10.00 Net: $87.50

ePack: eBook: Science of Agriculture: A Biological Approach (6) + CourseMate Instant Access (6) 9781305469907 5/29/2012 BP
Bundle: $102.25 Net: $102.25

Secondary Texts:

Agriscience Fundamentals and Applications 6th edition. Delmar Cengage learning
Author: Burton
Edition: current
Product Type: Bound Book
ISBN 13: 9781133686880
ISBN 10: 1133686885
Copyright: 2015
Price: $185.95
9781133686893 - Instructor's Lab Manual
9781133686897 – Student Lab Manual
PRINT BOOK:
Burton - Agriscience : Fundamentals and Applications
1133686885 | 9781133686880
3/3/2014 © 2015

DIGITAL OPTIONS:
OPTION 1: IAC K12 MT AGRISCIENCE FUNDAMENTALS & APPLICATIONS
9781305950092 W 1/1/2017 NB
Net: $123.50 – 1 YR option. Price for a 6 year option would be $143.50.
This option includes MindTap.

OPTION 2: ePack: eBook: Agriscience: Fundamentals & Applications, (6) + CourseMate Instant Access (6) **9781305467835** 4/24/2014 BP
$133.50. This is a 6-year option Vital Source book plus CourseMate.

Herren, Ray V. Introduction to *Biotechnology: An Agricultural Revolution*. Delmar Thompson Learning. 2005. New York
Camp, William G. and Thomas B. Daugherty. *Managing our Natural Resources*. Del Mar Publishers. 1998. New York
Baker, MeeCee and Robert Mikesell. *Animal Science: Biology and Technology*. 3rd edition. Delmar Cengage Learning. 2011. New York
Bidlack, James and Shelley Jansky. *Stern's Introduction to Plant Biology*. 12th edition. McGraw Hill Publishing. 2010. New York.

Supplemental Materials:

Burton, Devere L. and Elmer L. Cooper. *Agriscience: Fundamentals and Application*. 3rd edition. Delmar Thompson Learning. 2002. New York.
International Food Information Council. *Biotechnology: A Communications Guide to Understanding*. 2003 edition. Washington D.C.
Great Lakes Bioenergy Research Center. 2007-2013. Bioprospecting Laboratories https://www.glbrc.org/education/classroom-materials. Wisconsin.
United States Environmental Protection Agency. 2000-2014. What is Sustainability? www. https://ipa.gov/sustainability/basicinfo.html. Washington D.C.

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Approximate Length of Units	Instruction for Each Unit (Weeks)
Unit 1: FFA and SAE	**7**
Unit 2: What is sustainable agriculture	**7**
Unit 3: How does sustainable agriculture fit into our environment	**7**
Unit 4: What molecular biology principles guide sustainable agriculture	**7**
Unit 5: How do we make decisions to maximize sustainable agricultural practices within a functioning ecosystem	**8**
Total Number of Weeks	36 weeks

Unit 1: FFA and SAE

Students will appreciate the importance of the Future Farmers of America (FFA), Parliamentary Procedure. List, explain or recite the following items needed to be an FFA member.

A. History of the FFA
B. Creed
C. Motto
D. Colors
E. Emblem
F. Kinds of Membership
G. Aims and Purpose
H. Dress
I. Code of Ethics
J. Greenhand Degree
k. California Recordbook

Demonstrate the proper use of parliamentary procedure to improve meetings, using motions, and proper conducting of business.

Students will gain an understanding of supervised agricultural experience (SAE), and farm record keeping through hands-on project involvement. Students will:

A. Describe the benefits of an SAE and how to develop long-range planning.
B. List reasons for good record keeping suing the California Farm Account Book.
C. Demonstrate understanding of various types of records including budgets, journals, income summaries and financial statements

Anchor Standards: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
Career Readiness: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
CTE Pathway Standards: A2.1, A2.2, A2.3, A2.6, A7.1, A7.4, A1.6, A5.4, A5.5, A5.6, D9.3, D12.7
NGSS:

Unit Two: Driving Question: What is sustainable agriculture?

This introductory unit will focus on the biological classifications of agriculture and their associated industry sectors, what sustainability is, and how the scientific method is the driving force behind advancements and developments in sustainable biological practices within agriculture. Students develop an overview of agricultural industries and biologic practices through research projects on facets of California agriculture, and identify what sustainability and sustainable practices are through individualized lab experiments relating to current practices. Ultimately, students will be able to use the scientific method to complete an extensive laboratory experiment that is designed to evaluate potential feed source varieties for sustainable success within their local community.

Assignment Summaries:
"What is sustainable agriculture?"
Students groups will research the various biological divisions of what constitutes agriculture (plant science, animal science, forestry, horticulture, etc.). Within their research they will identify the sub categories of industry that fall within their topic, what career paths are available within each, what are currently identified as "best practices" (such as the three E's of sustainability -- economics, ecology and equity) and what are some of the sustainability issues and biologic concerns within each of these divisions. Students will then develop a multimedia presentation to introduce their particular area of agriculture to the class and identify the most prevalent issues facing their particular field of interest.

"That's Ag - The Science Behind Agriculture" Categorical Based
Mini-Labs:
Student groups will design and complete an inquiry based mini-lab experiment to expand on their knowledge of the particular industry sector they researched from the previous activity. Choosing a focus from one of the areas of concern or issues within their sector, students will then design and implement an experiment that tests factors contributing to the issue and potential impacts they have on the population using scientific method learned in class. Examples might include a lab on animal production and energy flow, a lab on soil degradation and plant germination, a lab on food processing practices, a lab on post-harvest preservation, etc. The labs will introduce the application of inquiry within the agriculture sectors and the importance of the implementation of research in the industry. Design protocols, data, and analysis will be submitted in lab report format. As part of their analysis, students must use their data to make suggestions on how to improve efficiency or yield, or lessen the impact of processing, relevant to their finding of their particular experiment.

Scientific Method and Sustainability Lab - "Work Like a Scientist"
In this lab students are introduced to the scientific method, the basis for all scientific decision making. The native grasses research will provide students with the foundation of scientific investigation application as well providing key research that will be used in the final unit project as well as the end of course project. Students will research the difference between native grasses versus invasive grasses including specific species. Using this knowledge they will hypothesize germination rates between these two variable groups. Students will then design and implement an experiment incorporating quantitative data collection, analysis, and draw conclusions reflective to their hypothesis, and evaluate the grasses for potential sustainability within their communities. As a continuation of the germination experiment, given that the two variables have differing germination rates, students can identify other measures of "success" of a potential feed crop. They will then sample the community environment for the potential factors affecting the continued growth and development of grasses. Samples would include soil testing, (pH, nutrient composition, structure and texture, and water capacity), water availability, and ambient temperatures. Combining this information with the initial background research regarding natives versus invasive, students will hypothesize on the continued success of their germinating grasses, then transplant their seeds into test plots or fodder trays, and allow for continued growth. After a predetermined amount of time, sample plots will be analyzed for percent coverage and measurements of species biomass will be completed. Using this information students will determine the most biologically suitable grass species to plant that would be the most sustainable within the local community through a written lab completed in their lab notebook and a powerpoint presentation of their hypothesis, design, data and conclusion.

Anchor Standards: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
Career Readiness: 1, 2, 4, 5, 7, 8, 9, 10, 11, 12
CTE Pathway Standards: C1.0, C1.1, C1.2, C1.3, C1.4, C1.5, C1.6, C1.7, C3.1, C3.2, C3.5, C13.1, C13.2
NGSS: HS-ETS1-1, HS-ETS1-2, HS-ETS1-3

Unit 3: Driving Question: How does sustainable agriculture fit into our environment?

While unit one examined whole systems, unit two takes a closer look at components within that system. Students will use evidence gathered from a series of laboratory exercises to be able to describe the transfer of energy from one trophic level to another as well as the cycling of nutrients and energy through ecosystems. Students will be able to draw conclusions about these biogeochemical cycles and how they apply to sustainability of production agriculture. Specifically, students will conduct primary research in the areas of photosynthesis and chemical energy creation, nutrient cycling, transpiration and water use, ecological relationships and global farming practices in order to draw biologically-sound conclusions regarding the effects of agriculture on the natural environment. The students learning will culminate in a synthesis of concepts applied to the development of a three year sustainable crop rotation plan.

Assignment Summaries:
"Bacteria at Work" - Nitrogen Fixati

Students will analyze the effects of nitrogen fixation on plants initially by examining prior studies as well as industry publications regarding the role of nitrogen in plant growth and the methods by which farmers enhance nitrogen levels in soil. This should include a thorough look at the microbiology of nitrogen-fixing bacteria, plant and root physiology, nutrient cycling and uptake in plants, chemical processes and cellular respiration in plants and fertilization methods. After garnering that background information, students will conduct an experiment that compares the effects of added nitrogen fertilizer versus nitrogen fixing bacteria on the growth of clover. Students will grow clover plants in soil with no nitrogen added, in soil with nitrogen fertilizer added, and in soil containing nitrogen-fixing bacteria (in this case, a species of rhizobia called Rhizobium legominosarium, or R. legominosarium). Students will monitor the nitrogen levels in each type of soil using a nitrogen testing kit. The students will observe the effects of nitrogen on the health of the clover plants by measuring the increase in biomass of each plant during the experiment. Plants should be harvested, soil washed away, and weights taken on plant material produced. Students will use the data collected to create a graph showing the relationship between nitrogen availability in the soil and crop sustainability. This allows students to not only experience agriculture's role in the nitrogen cycle, but also provides necessary supporting data for decision making in the final end of course project.

"Morning Jolt!"- Photosynthesis Lab
Photosynthesis is the basis for the creation of chemical energy in the natural world.
Plants require light in order to transform one type of energy into another, and the quantity and type of light determine the optimal photosynthesis rates. Students will conduct a laboratory exercise that examines the effects of shade on the growth of plants and the rates of photosynthesis and will develop a written memorandum to the International Coffee Growers Association regarding optimal shade levels for the growth of coffee trees, including information regarding ecological sustainability involved in the practice. The process will begin by using industry journals to examine coffee production methods; primarily comparing and contrasting industrial coffee production with shade-grown, sustainable coffee production. Students should come up with the following information: arabica coffee has the highest yields under 35 to 65% shade. In addition, growing coffee under shade also discourages weed growth, may reduce pathogen infection, protect the crop from frost, and helps to increase numbers of pollinators which results in better fruit set. However, in order to produce faster, higher yields and prevent

the spread of coffee leaf rust (Hemileia vastatrix), many coffee plantations began to grow coffee under sunnier conditions. The fewer shade trees that are in coffee plantations, the less biodiversity there is in those plantations.

The laboratory exercise will use several small coffee plant starts (available for purchase online as seeds or a houseplant) and will grow them for a series of days under varying shade levels. Students will conduct visual assessments of plant health and growth, then conduct a traditional floating leaf disc assay protocol to assess photosynthesis levels under varying light conditions. Students will use both the previously gathered background information regarding industry practices, sustainability and plant growth as well results of the primary research to develop the memorandum regarding optimal shade levels for sustainable coffee growth.

"Move on Through" - Transpiration Lab

Students will initially conduct background research into water use in agriculture and the demands placed on farmers to be efficient and careful with this scarce natural resource. Students will then investigate transpiration as part of the hydrologic system, based on different genetic variations of plant structure (leaf type and shape, for example). Students will conduct a research exercise by examining transpiration in plants with various leaf structures. This can occur using locally-grown crops or by using exotic crops and adding a component regarding appropriate plant selection. In this lab, students will use the plant weight protocol to measure the transpiration rates of individual plants. Students give plants a predetermined amount of water, reweigh the plants, and continue weighing the plants over time to contrast weight differentials and determine water loss through transpiration. Students will monitor observable physical changes in the different plants' condition as water is depleted, collecting qualitative data and measuring the diurnal transpiration rates. Students will apply the individual plant water usage data to larger scale acreage to analyze water usage. Students will create a written case study to justify plant selection within the context of the sustainability of the hydrologic system. Optional extension: include in the case study how trends in daily transpiration rates change if water losses were replenished through different irrigation management techniques (drip, flood, etc.).

"From Trash to Gas" - Sustainable Waste Management

Students will use both primary and secondary research to discover that food scraps, dead plants, manure, and other decaying organic matter, called *biomass* are a rich source of energy. Energy can be procured from biomass by turning it into a gas called *biogas.* The process will begin by students examining agricultural examples of biogas production (small scale composting, dairy lagoon gas extraction, codigestion, etc.) as well as the microbiological basis for biogas production, including aerobic and anaerobic fermentation, cellular respiration, lignocellulosic breakdown, etc. As part of this analysis, students will compare the amounts of biogas produced by different types of biomass. In order to quantify their findings, students will conduct an experiment with three soda bottles filled to the same volume with various types of biomass commonly used in biogas production. Bottle one will contain cow manure, bottle two will contain cow manure and household kitchen scraps, and bottle three will contain cow manure and a biological waste product of the students choosing (teacher approved). Bottles will be topped with a small balloon. Students will record the circumference of each of the balloons at the same time of day over a period of 10 days as well as record observations of the biomass inside of the bottles. Students will create a graph representing the circumference of balloons and the number of days. Students will compare graphs to determine which biomass type produced the fastest inflation of the balloon. Upon completion of the experiment, the students will then need to develop a farming situation.

In addition to incorporating their data, this plan should include: research on how the gas is used, the scientific processes behind biogas creation (fermentation, anaerobic digestion, etc.), biomass feedstocks that can be used to create efficient quantities of biogas, potential uses of biogas, and potential economic and sustainable benefits of instituting a biomass digester.

"Composting, Do the Rot Thing"

Students will examine the principle of composting organic material, and the process of converting complex organic matter into the basic nutrients needed by living organisms. Prior to conducting the experiment, students will use industry and extension publications to learn the processes of composting, as well as the benefits and challenges of compost production (available nutrient levels, community perceptions, hazardous materials, smell, storage, etc.). Following the background research, students will conduct a laboratory exercise that will examine the utilization of organic wastes (household) as nutrients for plants. It will allow students to investigate which waste products can be composted and best utilized by plants. Based off of prior knowledge of an ecosystem and how ecosystems regenerate as well as the interaction of food and fiber systems with natural cycles, students will justify specific nutrient requirements, as well as renewable and nonrenewable natural resources. Students will prepare three test plots, one plot with just soil, one with soil and household waste products collected by students, and one plot with animal waste products. Students will then monitor plant growth and development to graph their results. Students will create an informational, six paneled brochure that explains a waste management plan using compost. Included in the brochure should be information regarding the microbiology of compost production in addition to the practical household application of the research. Additionally, the brochure should outline the removal of organic matter to increase ecological sustainability while having the least environmental impact on the farm and community.

Unit Assessment

Plant, Grow, Rotate, Repeat Sustainable Crop Management Plan

Students will apply concepts of the biogeochemical cycles as well as waste management to create a 3 year sustainable crop rotation plan that produces the highest crop yields for any given location with the least environmental impact. Students must analyze current soil conditions as well as community needs when considering their crops for production. Student focus should be on nitrogen fixation of specified crops. Students will use previous knowledge of ecosystems, invasive species, and producer and consumer relationships as well as research current market prices and local demands, to assess the environmental contribution and the economical impact from each crop. When creating the 3 year crop rotations students will defend their selections and the ecological impacts of their decisions. The synthesis of the students research will culminate in written proposal to a local producer.

Anchor Standards: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
Career Readiness: 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12
CTE Pathway Standards: C2.1, C2.2, C2.3, C2.4, C2.5, C4.3, C3.5, C3.1, C32, C2.1, C2.2, C2.3, C2.4, C2.5, C11.1, C11.2, C11.3, C11.4, C11.5, C11.6, C5.1, C5.2
NGSS: HSLS1-5, HSLS1-6, HSLS1-7, HSLS2-3, HSLS2-4, HSLS2-5, HSLS2-1, HSLS2-6, HSLS2-7

Unit 4: Driving Question - What molecular biology principles guide sustainable agriculture?

In this unit, students will examine the science of agriculture and evaluate the efficiency and sustainability of current methods. Students will explore the concepts of taxonomy of plants and nomenclature of animals, cell structure, cellular division, DNA, and chromosomes. Students will apply this knowledge to evaluate desirable inheritable traits in each species to artificially select characteristics to breed more efficient and productive offspring as a part of their created breeding plan. Students will be introduced to genetic markers, genetically modified organisms, and biotechnology. With this knowledge students will examine and evaluate biotechnology, the ethics of genetic manipulation, and its implication on the sustainability of agriculture and our ability to feed a growing population. As a culminating project for the first two units students will design, conduct, and interpret their own agricultural research project on a biological issue facing agriculture and present their findings with a visual, written, and oral report.

Assignment Summaries:

"Breed For The Need"- Sustainable Breeding Evaluation

Animal genetics play a role in sustainability. An animal that is genetically predicted to become heavier muscled in a shorter period of time will utilize less pasture and nutritive resources than one that takes longer to reach the same weight. A female who produces more milk to feed her offspring will utilize less resources for both her and her progeny. Therefore, summative phenotypic traits are important to evaluate in a sustainable ecosystem in order to efficiently utilize natural resources. By analyzing these traits students can determine the probability of the trait expression in an animal's offspring. After instruction on chromosomal physiology, multicellular organization, animal anatomy, basic heredity, and genetic expression, students will identify desirable characteristics from a group of four animals of the same species to create a sustainable breeding plan that will include: hybrid vigor, genetic efficiency and other genetic traits. Students will use three components to evaluate the group of four animals that include the farmer's sustainability scenario, expected progeny difference data and phenotypic evaluation of the animals. First students will read an agricultural producer's written scenario that describes the targeted phenotypic traits a farmer desires based on the environment that must sustain the health and nutrition of the specific animals while not depleting the natural resources within that biological system. The parameters of the traits the students will evaluate include milk production (the weight of the weaned offspring that was contributed to the amount of milk the mother produced), weaning weight (the weight of the offspring when removed from the mother), yearling weight (the weight of the offspring at eighteen months of age and birth weight (the weight of the offspring at birth). Next, the students will read and analyze Expected Progeny Difference (Summative phenotype expression) data. Finally, students will perform visual observations of the phenotypic traits in those four animals. Students will assess and prioritize the three analyzed components based on importance and collectively use them to place the four animals in phenotypic order from the most desirable for the environment to the least desirable according to the farmer's sustainability scenario. Students will give an oral defense with evidence to support reasoning.

"Where Should I Make My Home?"- Sustainable Production Plan

The students will be put into groups and collectively evaluate the same animals from the previous activity with summative phenotypic traits for each of the bio-geological growing zones in California which are desert and high desert, coastal, valley, foothills and mountains. Instruction should occur on plant taxonomy and livestock anatomical suitability (large animals in areas with

poor biomass production, genetic hardiness factors, etc.) prior to the secondary research being done. Research done on each zone will provide information on the possible sustainability plans in which the four animals could be raised. Students will research the ecosystem of each area, analyzing what crops, pasture and range can be grown and the effects of climate and rainfall on the availability of nutrients for the animals' sustainability. Based on the data accumulated from the research they will reevaluate the four animals from the previous lab including EPD data. For each zone they will place the animals in order from the one most suited and efficient to the least. Students construct a written defense for their decision in the placing of those animals in each zone based on their data and research. They will argue the merits of their placing based on the data from their zone research: native and nonnative grass and crop survivability in each zone that provides nutrition to the animals, biological merits and disadvantages of each zone on the animals. They will then use the zone information to reevaluate the EPD data and how it can be best utilized to meet the animal's biological needs. Using the research and accumulated data students can determine a class placing for each region of California.

"Battle of the Seeds" - Biotechnology Use in Agriculture

Crop decisions made by agricultural producers are often predicated on understanding the climate, rainfall and topography needs of their growing area. These decisions often prioritize crop yield, but also must take into account the biological health of each system. The previous lab focused on evaluating the efficiency of specific animals introduced into an ecosystem where the biological components were predetermined and consistent. In this activity, students explore the introduction of new plants into predetermined, consistent ecosystems by investigating how germination, growth and efficiency of plants (crops) can be affected by genetic and environmental changes. Prior to the experiment, students should be instructed in cell division and structure as functions of organism growth, genotypic traits and variable expression, traditional hybridization methods and modern genetic manipulation. For the primary research exercise, students will set up three demonstration plots to compare growth and yield rates of plants. Half of the class will grow unweeded plots of plants, manually weed-controlled beds, and chemically controlled beds with plants that have been genetically modified to withstand the effects of a widely-used herbicide. The other half of the class will grow hybrid seed, non-hybrid seed, and genetically enhanced seed of the same plant. Upon analyzing data of plant growth and yield rates students will calculate the cost in time and money for the methods demonstrated. Students will formulate a written opinion/thesis and defend from evidence the most sustainable method of growing food based on their experiment. Students determine the statistical, economical and biological differences of genetically modified organisms as compared to natural organisms. Students will then research public concern of genetically modified organisms to prepare for a class debate. Utilizing their experimental results and research students debate the use of biotechnology and genetically modified organisms playing one of four following roles; a leader of a developing nation where hunger is a problem among their citizens, a biotechnology company specializing in producing genetically modified plants, a farmer, or a parent who primarily purchases organic produce. Students will reflect on their original opinion and write what they learned as a result of this experience.

Anchor Standards: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
Career Readiness: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
CTE Pathway Standards: C5.3, C5.4, C7.1, C7.2, C7.3, C7.4, C7.5, C8.1, C8.2, C8.3
NGSS: HS-LS1-1, HS-LS1-2, HS-LS1-3, HS-LS1-4, HS-LS3-1, HS-LS3-2, HS-LS3-3, HS-LS4-3, HS-LS4-1

Unit Assessment:
"Hypothesize, Analyze, Repeat" - Formal Research Project
Labs and activities have been done in this unit that represent the common applications of biological factors such as genetic potential and variability of plants and animals, the symbiosis of animals and plants within an ecosystem and the impact of new species introduced into an established environment. Students will utilize the science of nature they learned in unit three, how that science fits into the biological systems from unit two and how those systems contribute to sustainability in unit one to develop a comprehensive agriscience experimental research project. Students will identify a problem related to agriculture that is the result of completing the first three units of the course (plant science, animal science, natural resources). Students will utilize the empirical method to design an experiment that will test their own authentic hypothesis using the skills and processes learned throughout the course that include dissecting published research and studies, testing the hypothesis, collecting, synthesizing, analyzing and interpreting data, accepting or rejecting the hypothesis based upon the data, technical reading and writing, and scientific collaboration. Specific expectations for the written research project are outlined below:
1. Forming a Hypothesis
Students will use credible sources to conduct background research on the agricultural issue they are investigating, and they will use this research to generate a testable hypothesis related to the scientific problem they have identified. The hypothesis developed by the student will be constructed with the independent and dependent variables in mind.
2. Experimental design and conducting experimentation
Students will construct an experimental design to test their hypothesis. A written experimental design should be constructed consistent with scientific protocol using a systematic approach outlined in the previous units. Students will have their experimental designs reviewed by industry experts, agricultural instructors, local growers/producers, researchers or university representatives. After validating the design using the peer review process, students will move to the experimentation phase of their research. Experimental designs should include replicates, control groups, and determine the variables to be controlled and how. Additionally, a determination should be made as to the type of data that will be collected and in what ways, with the emphasis placed on quantitative data or quantifying data that is qualitative in nature. Students will use their experimental design to test their hypothesis. For example, in a study of primed versus non-treated seeds, seeds would be planted in identical environments, multiple test groups would be established and compared to a control group, and the number of germinated seeds would be counted and recorded to quantify the outcome. Raw data should be recorded using a field book or electronic device.
3. Analyzing data, interpreting data and forming conclusions.
Students will determine the best methods for organizing their data using tables. Students will use mathematical principles to synthesize their data, calculating a mean, for example. Furthermore, a statistical analysis of the data will help the student determine if the results are due to chance or the independent variable that was tested. Students will choose the best way to present their data using graphs they believe will most effectively demonstrate their findings, and will further summarize what each graph shows. Finally, students will interpret the data and formulate conclusions based on the results. In the written conclusion, students will use their data to either accept or reject the original hypothesis. Conclusions should be directly supported by the data and supported by previous research. Students will also identify the limitations of their research,

improvements that could be made to the experimental design, as well as future studies that may be conducted that relate the study at hand.

4. Evidence of Performing the Agriscience Research Project

Students will submit their research in a written paper, and it will include the following components: problem/purpose, background research, hypothesis, methodology, results/data, and discussion/ conclusion. The paper will be written using skills associated with technical and scientific writing, for example, refraining from the use of personal pronouns or keeping discussion limited to what the research and data suggest rather than personal opinion and bias. APA format will be utilized to reference and cite sources. Students will create a visual display board, using a digital format that mirrors the use of research posters in higher education, which will also include all of the components of the paper, but in a condensed form. The peer group that reviewed the original experimental design will review the final research paper. The project and its findings will be shared with the class in an oral presentation, with the research board on display to aid in communicating the results of the research.

Unit 5: Driving Question: How do we make decisions to maximize sustainable agricultural practices within a functioning ecosystem?

Description of Topic: Students will understand common practices in the agriculture industry that promote sustainability. They will evaluate and/or refine technological solutions that reduce impacts of human activities on natural systems by using practices that utilize cellular biology, genetics, energy cycles, biological systems, plant and animal nomenclature and how these units collectively create ecosystems that were covered in the previous units. Students will conduct production practices in the areas of animal science, horticulture, and natural resources. Students will experience how the biological systems can be changed at the cellular level, promoting the emergence of new energy cycles that produce useful, recyclable products that have a positive impact on the environment, thus decreasing the impact of agriculture on the environment and promoting sustainability. Students will investigate positive sustainable approaches to changing negative impacts agriculture has on the land by testing methods of efficiency in laboratory work. This experience will give students perspective on production costs and resource needs in relation to animal welfare, mechanization versus labor, and use of chemicals to non-use of chemicals. Students will utilize this hands-on production experience to develop their own sustainable farm as a culminating final project to illustrate the management of agricultural systems, management of natural resources, and the sustainability of an ecosystem for the future while preserving biodiversity.

“Show Me You Care” - Practice in Animal Health Management

Common animal production practices are done to ensure multi-system homeostasis and to foster productive animal growth and general welfare. Prior to conducting a laboratory exercise, students will engage in secondary research that seeks to correlate common livestock production practices to maintaining system health in animals. For example, castration, tail banding, hoof trimming and vaccinations prevent pathogen (viral, bacterial, fungal and parasitic) infections and thereby ensuring the health of the immune system, lymphatic system and respiratory system, among others. Shearing, clipping and dehorning are noninvasive procedures that provide recycling opportunities of animal byproducts but are also designed to maintain homeostasis and to protect vital organs throughout multiple systems (shearing reduces overall stress on the circulatory system, for example). Animal identification requires animals to have a traceable number like the

scrapie tag that traces the animal to the breeder in case an animal tests positive for the genetic disease and ensure herd health (preventing disease outbreaks that can stress multiple systems). After the conclusion of the background research, students will engage in a laboratory experience where they will conduct common livestock production procedures practiced in the United States through the application of: castration methods, dehorning practices, vaccination protocols, identification systems and shearing techniques. Students will divide into groups to demonstrate one or more of the common livestock production practices within several species of livestock and small animals. After the conclusion of each of these demonstrations, students will choose one method they demonstrated and write an explanatory position paper that correlates the production practice to physiological health in the animal, highlighting homeostatic mechanisms and system nomenclature.

"If You Root It, They Will Grow" - Sustainable Practices in Horticulture

The ability to graft, increase growth rates and clone species of plant, trees and crops is an option that can increase the number of organisms that can be planted in a shorter amount of time. Using one plant to create many or the ability to grow different varieties of fruit on one tree maximizes the efficiency of each organism within an ecosystem. The ability to utilize this technology increases species diversity while positively affecting land biomass. Students will experience a laboratory activity, conducting propagation techniques that make plants more efficient and in return contribute to the energy cycles within the ecosystem potentially maximizing sustainability of the plant and its production. This laboratory lets students use asexual propagation through the application of auxins directly onto plants used as a common practice in the horticultural industry. Students will also research the role of auxins and make predictions on its effectiveness on their assigned mother stock plant. Through teacher demonstration, students will learn the proper steps of asexual propagation and make cuttings of their plant. Each student will test the effectiveness of auxins (rooting growth hormone) with one row in a flat being a different concentration of hormone and one control. After two weeks students will collect data every three days and record the rate at which their plant cutting roots. Students will calculate the cost of hormone treatment versus the time for cuttings to root to recommend the use or non-use of auxins on their assigned plant in their lab report. In the next step of the laboratory students will practice the proper steps of transplanting and fertilizer use as regular practice in the horticultural industry. Students will take their rooted cuttings and transplant them to a larger container. After direct instruction on types of fertilizers, students will make predictions on the most effective type of fertilizer for their rooted cuttings; liquid, slow release, and organic. Students will be assigned a growing area (landscape plot, or one gallon containers) to conduct their experiment. Students will test each type of fertilizer with four rows of plants. One row will be the control, without fertilizer application and the other three rows will have liquid, slow release, and organic fertilizer applications. Students will take daily measurements and make final conclusions of fertilizer effectiveness for their plant. Students will also compare cost of fertilizer to effectiveness to determine final recommendations in their lab report.

"It's Easy Being Green - Growing Green Communities" - Landscaping

Students will utilize the Horticulture report and experience to create a landscape plan in groups. Students will utilize the original cuttings from the previous activity which are now grown plants. Each group will use those plants in designing a landscape for a specific area designated by the teacher that could include areas around the school and/or community. Students must consider plant growth requirements, resources such as water, soil quality, and fertilization needs. Students must address the long term needs of their landscape and write a reflection on the positive and negative aspects with recommendations for more sustainable qualities. The students will submit

their designs in a written proposal to the school and or community organizations for approval. Those approved will be planted and maintained by the group for the rest of the year.

"Use Me Responsibly or Lose Me Forever" - Using Nature's Natural Resources

Students will delve deeper into natural resources conducting research on bioprospecting. They will use the knowledge gained within this unit regarding the potential to change the future through bioprospecting and the need to prevent the exploitation of those resources to preserve the biospheres for future generations. Students will read articles about the use of plants and animals in nature like coral producing a natural sunscreen named, "Sunscreen 855". To prevent the harvest of coral in order to save the barrier reef they isolated the compound and produced it in a lab that will be the most naturally occurring sunscreen developed. Students will discuss the importance of bioprospecting, as well as how the prospect of products from plants and animals argues for the continued maintenance of biodiversity and sustainability as long as the resources are not exploited. (Biology, Prentice Hall) After the discussion students will research other types of bioprospecting happening in agriculture. They will choose one material (natural resource) being prospected and find the following information from their research: what research is being done on the material, how are they utilizing the material and how does the research and use of the material play a role in sustainability. The information accumulated on the material bioprospecting will be utilized in a flyer created by each student. The flyers will be set-up in a walking gallery where the students will use a bioprospecting rubric to score the importance of each natural resource presented as a valuable material for continued research. The students will have a class discussion about which three natural resources are the most valuable source of bioprospecting to contribute to sustainability of the human population.

Bioprospecting - "Motoring with Microbes" -
Discovering Cellulose Microbes for Biofuel Efficiency

The students will then conduct a research lab on Bioprospecting for Cellulose-Degrading Microbes: Filter Paper Assay Method where Students collect samples that they predict will contain communities of cellulose-degrading microbes and test for the ability of microorganisms in their samples to break down pure cellulose (filter paper). In the process, groups collect evidence to test predictions about which environmental microbial samples will be the most effective for degrading cellulose. By comparing results across groups, students can begin to uncover patterns and develop explanations about the types of environments that support cellulose-degrading microbes. This lab method is nearly identical to that used by researchers and student results could help scientists discover new enzymes for efficient biofuel production that is key in agriculture's ability to remain sustainable in the next century. https://www.glbrc.org/education/classroom-materials Students will turn in a completed lab using scientific method and write an abstract of their research to send to the Great Lakes Bioenergy Research Center as part of their ongoing research on biofuel.

Anchor Standards: 1, 2, 4, 5, 6, 7, 8, 9, 10, 11,
Career Readiness: 1, 2, 4, 5, 9, 10, 11, 12
CTE Pathway Standards: C9.1, C9.2, C9.3, C9.4, C9.5, C11.1, C11.2, C11.3, C11.4, C11.5, C11.6, F5.1, F5.2, F5.3, F5.4, F9.6, F9.2, F9.3, F9.4, F10.1, F10.2, F10.3, F10.4
NGSS: HS-LS2-6, HS-LS1-3, HS-LS2-1, HS-LS4-6, HS-ETS1-1, HS-ETS1-2, HS-ETS1-3

Unit Assessment and End of Course Project

"I Believe in the Future of Agriculture" - Sustainable Farming Project

Students will design a solution for developing, managing, and utilizing energy and resources through the development of a completely sustainable farm on 400 acres that must include a minimum of three crops and two species of animals. A comprehensive farming portfolio will be created. The portfolio will include data and research done from each unit within the course to be used to create their farm as well as provide evidence to defend the sustainability of that farm and thus, the best representative of sustainability. The students must research genetic varieties of crops and species coral in order to save the barrier reef they isolated the compound and produced it in a lab that will be the most naturally occurring sunscreen developed. Students will discuss the importance of bioprospecting, as well as how the prospect of products from plants and animals argues for the continued maintenance of biodiversity and sustainability as long as the resources are not exploited. (Biology, Prentice Hall) After the discussion students will research other types of bioprospecting happening in agriculture. They will choose one material (natural resource) being prospected and find the following information from their research: what research is being done on the material, how are they utilizing the material and how does the research and use of the material play a role in sustainability. The information accumulated on the material bioprospecting will be utilized in a flyer created by each student. The flyers will be set-up in a walking gallery where the students will use a bioprospecting rubric to score the importance of each natural resource presented as a valuable material for continued research. The students will have a class discussion about which three natural resources are the most valuable source of bioprospecting to contribute to sustainability of the human population.

Bioprospecting - "Motoring with Microbes" -

Discovering Cellulose Microbes for Biofuel Efficiency

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MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: The Science of Agriculture: A Biological Approach, 5th Edition

AUTHOR(S): Ray Herren

PUBLISHER: Delmar Publishers

COPYRIGHT DATE: 2018

ISBN #: 9781337271585

PRICE:

DEPARTMENT: Agriculture

CLASS: Biology and Sustainable Agriculture

GENERAL DESCRIPTION:

This fifth edition of *The Science of Agriculture: A Biological Approach* continues the primary objectives of earlier editions, with the following main purposes:

All of the knowledge we have about biology has but three applications: medicine, ecology, and agriculture. By far, the widest application is that of agriculture. In fact, advances in medicine and ecology often come about as a result of agricultural research

The Science of Agriculture: A Biological Approach explains the scientific principles behind the production of food and fiber. All of modern agriculture is built on these principles, and it is through scientific inquiry that we progress

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY:

Selection Committee: MCS Agriculture Education Advisory Committee
Mike Brecht, Mark Nower, Gary Gerhardt, Nancy Miguel

Curriculum Area Chairperson, Jeff Albrittion
Director ROP

Senior Director, Educational Services
Mike Coates

Resource and supplement access for:

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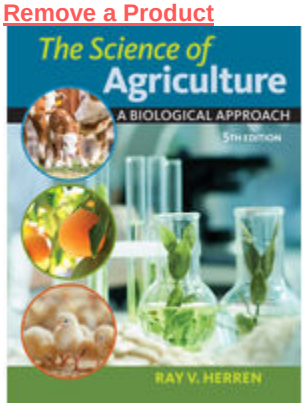

The Science of Agriculture: A Biological Approach , 5th Edition

Ray V. Herren
ISBN-10: 1-337-27158-6
ISBN-13: 978-1-337-27158-5

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MindTap® Agriscience for Herren's The Science of Agriculture: A Biological Approach

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MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Veterinary Science 1 Veterinary Science 2

COURSE NUMBER: AGR01901 AGR01902

RECOMMENDED GRADE LEVEL: 11-12

ABILITY LEVEL: Unsectioned

DURATION: 2 Semesters

CREDIT: 5 per Semester

MEETS GRADUATION REQUIREMENTS: Practical Arts

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4020

MEETS UC AND CSU ENTRANCE REQUIREMENTS: Yes

CREDENTIAL REQUIREMENTS:

REPLACES:

Course Description:

Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animal science. This course will emphasize Veterinary Science.

Recommended Prerequisites: None

Date Matched Against State Framework, Model Curriculum Standards, and State Curriculum Guides: February, 2007

Board Approved: February 6, 2012

REVIEW CYCLE: 2011-12 through 2015-16
REQUIRED TEXTBOOK (Title, publisher, year): Introduction to Veterinary Science, Lawhead & Baker, Thomson Learning Latest Edition; Biology-The Science of Agriculture, A Biological Approach, Herren, Ray, Delmar, Latest Edition

INSTRUCTIONAL MATERIALS

Basic Text(s):

Introductory to Veterinary Science, Lawhead & Baker, Thomson Learning, Latest Edition
Biology-The Science of Agriculture, A Biological Approach, Ray Herren, Delmar, Latest Edition

Supplementary Text(s):

An Illustrated Guide to Veterinary Medical Terminology, Janet A. Romich, Latest Edition
Clinical Textbook for Veterinary Technicians, W. B. Saunders Co., Latest Edition
Pharmacology for Veterinary Technicians, Robert Bill, DVM
Handbook of Veterinary Anesthesia, Wm. Muir, DVM, Mosby Company
Clinical Anatomy & Physiology for Veterinary Technicians, Mosby-Harcourt Science Company
California FFA Recordbook

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units		Approximate Length of Instruction for Each Unit (Weeks)
A.	Anatomy and Physiology	9*
B.	Nutrition	3*
C.	Infectious Diseases	3*
D.	Science Laboratory	8*
E.	Pharmacology	2*
F.	Genetics	2*
G.	Professional Opportunities	5
H.	FFA/SAE	3*
I.	Careers	1*
	Total Number of Weeks	36

*Continuing throughout entire year

EXPECTATIONS FOR STUDENT LEARNING

1.0 GOAL: The student will understand how to access research material from the library, internet, and other sources to complete increasingly challenging assignments as self-directed learners. An in-depth study of anatomy and physiology of a variety of animal species is designed to build knowledgeable problem solvers in the field of veterinary science.

1.1 Anatomical Systems
1.2 Blood Components and Functions
1.3 Bones and Joints
1.4 Genders and Hormones
1.5 Brain and Spinal cord
1.6 Immunity
1.7 Movement and Age
1.8 Cells/Molecular Structure
1.9 Animal Species

2.0 GOAL: The student will prepare for post-secondary level education in animal science, biology, and/or zoology.

2.1 Major Components of Diets/Structure and Significance
2.2 General Principles of Animal Nutrition
2.3 Differences in Animal Species Nutritional Needs

3.0 GOAL: The student will acquire advanced animal principles, know and respect diversity in the animal kingdom, and become an animal advocate for their welfare on all levels encompassing family pets, domestic livestock and our wildlife resources. Infectious diseases affect everything.

3.1 Koch's Postulates
3.2 Major Disease Agents/Features/Resulting Diseases
3.3 Disease Components of Disease Prevention
3.4 Vaccines
3.5 Disease Classifications/Species Math/Clinical Significance
3.6 Contagious Diseases: Animals to Humans
3.7 Disease Diagnosis/Principles of Surgery

4.0 GOAL: The student will understand how the combination of science labs and academic research enables students to use complex, creative thinking skills to reach sound conclusions. Hands-on laboratory experiments used.

4.1 Laboratory Safety/Equipment
4.2 Mitosis and Meiosis
4.3 Surgical Basic Principals/Success
4.4 Healing Process

5.0 GOAL: The student will demonstrate ability to solve problems and think critically by effectively completing challenging group and individual projects and assignments. Pharmacology will be examined.

5.1 Pharmacology Terms
5.2 Schedules/Controlled Substances/Usage
5.3 Pharmacology Agents/Dosages/Side Effects
5.4 Drug Labels & Inserts
5.5 Drug Administration/Excretion Routes
5.6 Biotransformation/Chemical Reactions

6.0 GOAL: The student will demonstrate advanced communication, leadership and research skills concerning genetics.

6.1 Genetic engineering Pros & Cons
6.2 Animal Theory of Classification
6.3 Genetic Diseases/Disorders

7.0 GOAL: The student will develop and enhance computer skills while working on individual and group projects relating to professional opportunities.

7.1 Requirements/Registered Professional
7.2 Veterinary Licensing Acquisition
7.3 Work Ethics
7.4 Professional Portfolio/Interviews

8.0 GOAL: Students will develop the knowledge and skills of the National FFA Organization and develop leadership. The students will also gain practical experience through a Supervised Agricultural Experience project.

8.1 List, explain, or recite the following items needed to be an FFA member.

A. History of the FFA
B. Creed
C. Motto
D. Colors
E. Emblem
F. Kinds of Membership
G. Aims and Purpose
H. Dress
I. Code of Ethics
J. Greenhand Degree

8.2 Demonstrate the proper use of parliamentary procedure to improve meetings, using motions, and proper conducting of business.
8.3 Students will gain an understanding of supervised agricultural experience (SAE), and farm record keeping through hands-on project involvement. Students will.

A. Describe the benefits of an SAE and how to develop long-range planning.
B. List reasons for good record keeping using the California Farm Account Book.
C. Demonstrate understanding of various types of records including budgets, journals, income summaries and financial statements.

9.0 GOAL: Career Opportunities – Describe and give examples of entry, technical, and professional careers in the industry.

9.1 Complete a self-assessment related to Agricultural work values and interests.
9.2 Develop a personal occupational plan that outlines career goals and an action plan to achieve those goals.

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: Introduction To Veterinary Science

AUTHOR(S): Lawhead & Baker

PUBLISHER: Thomson Learning

COPYRIGHT DATE: 2005

ISBN #: 0-7668-3302-X

PRICE: $66.95

DEPARTMENT: Agriculture

CLASS: Veterinary Science

GENERAL DESCRIPTION:
Goals for text are to afford learners a base knowledge of veterinary science by moving through topics ranging from cell to surgery, and to provide a view of the practice of veterinary medicine through the eyes of an experienced practitioner.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: District Agriculture Advisory Committee

Selection Committee:
Mark Nower and Roger Dickson

Curriculum Area Chairperson

Linda Erickson, Director
Director, Curriculum & Staff Development, 7-12

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: The Science of Agriculture: A Biological Approach

AUTHOR(S): Ray V. Herren

PUBLISHER: Delmar/Thomson Learning

COPYRIGHT DATE: 2002 or Latest Edition

ISBN #: 0-7668-1669-9

PRICE: $58.95

DEPARTMENT: Agriculture

CLASS: Veterinary Science

GENERAL DESCRIPTION:
This text concentrates on the scientific principles of the central components of the agricultural industry…Areas such as the environment, food safety, and the future of agriculture are addressed.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: District Agriculture Advisory Committee

Selection Committee:
Mark Nower and Roger Dickson

Curriculum Area Chairperson

Linda Erickson
Director, Curriculum & Staff Development, 7-12

Criteria 1 B: Sequence of Classes

Central Region Agricultural Education Career Pathway Consortium

Industry Sector ***AGRICULTURE***

Pathway ***Ag Mechanics***

Sub-Sector:

Level	Grade	English/ Language Arts	Math	Fine Arts/Elec	Social Studies	Science	CTE Courses	Other Required Courses or Recommended Electives		
Middle										
School										
Secondary	9	English 9	**Secondary Math I**	PE	Health/Wd Relgions	Int. Ag Science 1-2	Ag Mech 1-2/Sm Eng		For Lang	Ag 1
	10	English 10	Secondary Math 2	PE	World History	Int. Ag Science 3-4	Ag Mech 3-4/Sm Eng II		For Lang	Ag 2
	11	English 11	Secondary Math 3	Floral	U.S. History	Agriscience Systems M Management	Ag Mech 5-6/Ag Power	Welding 1	For Lang	Ag 3
	12	English 12	Finite Math		Econ/ Government	Animal Sci /Vet Sci/Food Sci	Struc Welding/Diesel Mech	Welding ROP	For Lang	Ag 4
Articulated dual credit courses must be taken/moved to the secondary level for articulation/dual credit										
Post-Secondary	13				CRC, MJC, MCC	CRC, MJC, MCC	CRC, MJC, MCC	CRC, MJC, MCC	CRC, MJC, MCC	
	14									
	15									
	16									

District:	
Middle School:	
High School	
Com. College	
University	
Author:	Contact:

Color Key As Follws	
Required Courses	
Career Technical Education Courses	
Other Required Courses or Electives	
Dual/Concurrent Enrollment - Articulated Courses	
Administrator;	Date:

Sample Occupations Relating to this pathway

Occupations Requiring a HS Diploma

Shop Assistant
Fabricator
Operator
Plumber

Occupations Requiring Some Post Secondary Training

Sales Assistant
Power System Mechanic
Refrigeration Specialist
Greenhouse Maintenance Tech

Occupations Requiring an Associates 2 year Degree

Diesel Tech
Irrigation System installer
Welding inspector
Hydraulic Technician

Occupations Requiring a BA/BS Degree

Ag & Biomedical Engineer
GIS/GPS Engineer
Soil Scientist
Ag Teacher

Certifications, Licenses, Credentials or Apprenticeships

Welding Certification
Smog Check Certification
Class A License
Teaching Credential

Central Region Agricultural Education Career Pathway Consortium

Industry Sector *AGRICULURE*

Pathway *OH*

Sub-Sector:

Level	Grade	English/ Language Arts	Math	Fine Arts/Elec	Social Studies	Science	CTE Courses	Other Required Courses or Recommended Electives		
Middle										
School										
Secondary	9	English 9	Secondary Math I	PE	Health/Wd Relgions	Int. Ag Science 1-2	Beg OH		For Lang	Ag 1
	10	English 10	Secondary Math 2	PE	World History	Int. Ag Science 3-4	Landscape		For Lang	Ag 2
	11	English 11	Secondary Math 3		U.S. History	Agriscience Systems M Management	Floral	Ag Mech	For Lang	Ag 3
	12	English 12	Finite Math		Econ/ Government	Ag Computers	Floral II	Food Sci	For Lang	Ag 4
Articulated dual credit courses must be taken/moved to the secondary level for articulation/dual credit										
Post Secondary	13				CRC, MJC, MCC	CRC, MJC, MCC	CRC, MJC, MCC	CRC, MJC, MCC	CRC, MJC, MCC	
	14									
	15									
	16									

District:		Color Key As Follws	
Middle School:		Required Courses	
High School		Career Technical Education Courses	
Com. College		Other Required Courses or Electives	
University		Dual/Concurrent Enrollment - Articulated Courses	
Author:		Contact:	
Administrator;		Date:	

Sample Occupations Relating to this pathway

Occupations Requiring a HS Diploma

Nursery Worker
Landscaper
Floral Shop Assisstant

Occupations Requiring Some Post Secondary Training

Florist
Landscape Irrigation Technician
Small Engine Mechanic
Greenhouse Technician

Occupations Requiring an Associates 2 year Degree

Landscape Designer
Arborist
Turf Manager
Refrigeration Specailist

Occupations Requiring a BA/BS Degree

Certified CropAdvisor/Agronomist
Ag Research Station Manager
Water Research Manger
Ag Teacher

Certifications, Licenses, Credentials or Apprenticeships

CA Certified Florist
Irrigation Designer
CANGC
Teaching Credential

Central Region Agricultural Education Career Pathway Consortium

Industry Sector *AGRICULTURE*

Pathway *Ag Science*

Sub-Sector:

Level	Grade	English/ Language Arts		Fine Arts/Elec	Social Studies	Science	CTE Courses	Other Required Courses or Recommended Electives		
Middle										
School										
Secondary	9	English 9	Secondary Math I	PE	Health/Wd Relgions	Int. Ag Science 1-2	Int. Ag Science 1-2	Ag Mech	For Lang	Ag 1
	10	English 10	Secondary Math 2	PE	World History	Int. Ag Science 3-4	Int. Ag Science 3-4	Ag Computers	For Lang	Ag 2
	11	English 11	Secondary Math 3	Floral	U.S. History	Agriscience Systems M Management	Agriscience Systems M Management	Food Sci	For Lang	Ag 3
	12	English 12	Finite Math		Econ/ Government	Animal Sci /Vet Sci	Animal Sci /Vet Sci	Ag Elec	Ag Elec	Ag 4
Articulated dual credit courses must be taken/moved to the secondary level for articulation/dual credit										
Post-Secondary	13				CRC, MJC, MCC	CRC, MJC, MCC	CRC, MJC, MCC	CRC, MJC, MCC	CRC, MJC, MCC	
	14									
	15									
	16									

District:		Color Key As Follws	
Middle School:		Required Courses	
High School		Career Technical Education Courses	
Com. College		Other Required Courses or Electives	
University		Dual/Concurrent Enrollment - Articulated Courses	
Author:	Contact:	Administrator;	Date:

Sample Occupations Relating to this pathway

Occupations Requiring a HS Diploma

Kennel Tech
Animal Caretaker
Livestock Showperson

Occupations Requiring Some Post Secondary Training

Feedstore Sales
Refrigeration Specialist
Butcher
Biotech Lab Tech

Occupations Requiring an Associates 2 year Degree

Veterinary Technician
Food Service
Biotech Lab Technician

Occupations Requiring a BA/BS Degree

Veterinarian
Food Service Manager
Geneticist
Ag Teacher

Certifications, Licenses, Credentials or Apprenticeships

Butcher
USDA Inspector
Serve-SAFE Food Handlers Certification
Teaching Credential

Criteria 1 C: Master School Schedule

Gregori

Teacher	DEPT	RM	Per 0	Per 1	Per 2	Per 3	Per 4	Per 5	Per 6	Per 7	Per 8
[redacted]	SP ED	C115		**Teacher Prep**	Appl Hlth and Sci	Appl Career Training	Appl Intro to Voc Ed		Appl Eng	Appl Math	
[redacted]	MATH	C207		Sec Math III	Sec Math III	Sec Math III	Finite Math College		Sec Math III	**Teacher Prep**	
[redacted]	AG	M105		**Teacher Prep**	Ag Mechanics 5-7	Ag Mechanics 3	Landscape Design and		Ag Mechanics 1	Ag Mechanics 1	
[redacted]	SCI	L103		**Teacher Prep**	CP Biology	AP Biology	CP Biology		AP Biology	CP Biology	
[redacted]	ART	K105		Art 1	Art 1	Sculptural Design	Art 1		Art 1	**Teacher Prep**	
[redacted]	RS	C116	School Service	Resource Gen	Resource Gen	Push In	Push In		**Teacher Prep**	Push In	
[redacted]	SP ED	N117		READ 180 A Par	READ 180 Support	READ 180 10 PAR	Read 180 Support		**Teacher Prep**	Earth Sci Prll	
[redacted]	SCI	L202		**Teacher Prep**	CP Earth Sci	Pre AP Biology	Pre AP Biology		Pre AP Biology	Pre AP Biology	
[redacted]	ENG	C204		CP Eng 3	CP Eng 3	**Teacher Prep**	CP Eng 3		CP Eng 3	CP Eng 3	
[redacted]	ENG	N217		**Teacher Prep**	CP Eng 7	CP Eng 7	CP Eng 7		CP Eng 7	CP Eng 7	
[redacted]	ENG	N201		Pre AP GATE Eng 1	**Teacher Prep**	Pre AP GATE Eng 1	Pre AP GATE Eng 1		Pre AP GATE Eng 1	Pre AP GATE Eng 1	
[redacted]	SOC SCI	N121		CP Wld Hist	CP US Hist	CP Wld Hist	**Teacher Prep**		CP Wld Hist	CP Wld Hist	
[redacted]	ART	K104		Art 1	**Teacher Prep**	Art 1	Drawing and Painting		Art 1	Art 1	
[redacted]	SCI	L201		**Teacher Prep**	CP Earth Sci	CP Earth Sci	CP Earth Sci		CP Earth Sci	CP Earth Sci	
[redacted]	MATH	N214		Pre AP Sec Math I	Pre AP Sec Math I	Sec Math III	Pre AP Sec Math I		Pre AP Sec Math II	**Teacher Prep**	
[redacted]	TOPS	K103		TOPS	TOPS	TOPS	TOPS		TOPS	TOPS	
[redacted]	HEALTH	C102	Hlth A	Hlth A	Hlth A	Hlth A	*Special Assignment*		*Special Assignment*	**Teacher Prep**	
[redacted]	AG	M103		Hist and Art of Floral	Adv Floral ROP	Hist and Art of Floral					
[redacted]	TOPS	K101		TOPS	TOPS	TOPS	TOPS		TOPS	TOPS	
[redacted]	SCI	L104		Human Anatomy	Human Anatomy	Human Anatomy	Human Anatomy		CP Earth Sci	**Teacher Prep**	
[redacted]	ENG	C202		**Teacher Prep**	CP Eng 3	CP Eng 1	CP Eng 3		CP Eng 1	CP Eng 3	
[redacted]	MATH	C100		**Teacher Prep**	Sec Math II	Pre AP Sec Math II	Sec Math II		Pre AP Sec Math II	Pre AP Sec Math II	
[redacted]	FOR LANG	B103		Span I	Span I	Span II	Span I				
[redacted]	SOC SCI	C212		Psych I	Psych I	**Teacher Prep**	Psych I		Wld Geo and Wld Rels	AP Psych	
[redacted]	SP ED	C105		Biology Prll	Soc Sci Prll	Eng Prll	Geo Prll		Gov and Econ Prll	**Teacher Prep**	
[redacted]	MATH	N203		Pre AP Sec Math III	Sec Math II	Pre AP Sec Math III	Pre AP GATE Pre Calculus		**Teacher Prep**	Pre AP GATE Pre Calculus	
[redacted]	FOR LANG	N101		Span II	Span I	**Teacher Prep**	Span II		Span II	Span II	
[redacted]	PE	GYM	Adv Kin 3 Cond	Intro Kinesiology 1	Intro Kinesiology 1	Intro Kinesiology 1	Intro Kinesiology 1		Intro Kinesiology 2	**Teacher Prep**	
[redacted]	ENG	N204		CP Eng 5	CP Eng 3	**Teacher Prep**	CP Eng 5		CP Eng 5	CP Eng 3	
[redacted]	MATH	C220		Sec Math II	**Teacher Prep**	Sec Math II	Sec Math I		Sec Math I	Sec Math II	
[redacted]	SP ED	L107		ED ELA	ED Math	ED General Sci	ED Elective		ED Elective	ED Phys Ed	
[redacted]	RS	C118		Push In	Push In	Resource General	Resource General		Resource General	**Teacher Prep**	
[redacted]	ENG	N107		CP Eng 1	READ 180	READ 180 Support	CP Eng 1		**Teacher Prep**	ELA Support 1	
[redacted]	MUSIC	J103	Jazz Band 1-7	*Unscheduled*	Orchestra 1-7	Music of the 20th Century	**Teacher Prep**		Music of the 20th Century	Band 1-7	
[redacted]	MATH	N123		Sec Math II	Sec Math II	**Teacher Prep**	Sec Math II		Sec Math II	Sec Math II	
[redacted]	MATH	N206/ L110		*Unscheduled*	Pre AP Sec Math I	Sec Math II	**Teacher Prep**		Pre AP Sec Math I	STEM (L110)	
[redacted]	SOC SCI	N209		CP US Hist	AP US Hist	CP US Hist	AP US Hist		**Teacher Prep**	CP US Hist	
[redacted]	MATH	N207		SM I Support	Sec Math II	Sec Math I	Sec Math II		Sec Math I	**Teacher Prep**	
[redacted]	SOC SCI	N219		CP US Gov and Economics	CP US Gov and Economics	**Teacher Prep**	CP Wld Hist		CP US Gov and Economics	CP US Gov and Economics	
[redacted]	SCI	L106		Adv Biology	CP Biology	**Teacher Prep**	Adv Biology		CP Biology	CP Biology	
[redacted]	ENG	N221		CP Eng 1	CP Eng 5	CP Eng 1	Journalism 3-5 Yearbook		CP Eng 1	**Teacher Prep**	
[redacted]	ENG	C120		Speech	CP Eng 7	CP Eng 3	ELA Support 3		Speech	Speech	
[redacted]	BUSS	C106		Adv Fash and Home Merch	Fashion Merchandising	Buss Tech Core 1	Virtual Buss		Small Buss Ownersh ROP	**Teacher Prep**	
[redacted]	MATH	N210		**Teacher Prep**	AP Calculus AB	AP Calculus BC	AP Calculus AB		AP Calculus AB	Sec Math I	
[redacted]	FOR LANG	N119		**Teacher Prep**	French II	French III & IV	French I		French II	French I	
[redacted]	ENG	N212		**Teacher Prep**	AP Eng Lang and Comp	AP Eng Lang and Comp	CP Eng 5		AP Eng Lang and Comp	CP Eng 5	
[redacted]	FOR LANG	N213		Span I	Span I	**Teacher Prep**	Span for Span Spk 3		Span I	Span I	
[redacted]	ENG/DRAMA	J101/J 102		**Teacher Prep**	*Unscheduled*	Drama 1	CP Eng 7 (J101)		CP Eng 7 (J101)	Drama 1	Theater Stagecraft
[redacted]	RS	N113		Resource General	Resource General	Push In	Push In		Resource General	**Teacher Prep**	
[redacted]	DIGITAL	C114		Video Arts and Production 1	**Teacher Prep**	Broadcast Journalism	Multimedia Production		Journalism 1	Video Arts and Production 1	
[redacted]	MATH	C217		Financial Math	Financial Math	**Teacher Prep**	Financial Math		Financial Math	Financial Math	
[redacted]	RS	N115		Resource General	Resource General	Resource General	Resource General		**Teacher Prep**		
[redacted]	ENG	C215		CP Eng 5	Expository Rdg and Writing	CP Eng 5	Expository Rdg and Writing		**Teacher Prep**	CP Eng 5	
[redacted]	SOC SCI	C213		CP US Hist	Wld Geo and Wld Rels	Wld Geo and Wld Rels	Wld Geo and Wld Rels		**Teacher Prep**	CP US Hist	
[redacted]	SCI	L206		AP Enviro Sci	**Teacher Prep**	AP Enviro Sci	AP Enviro Sci		AP Enviro Sci	AP Enviro Sci	
[redacted]	SCI	L207		Pre AP Physics	Pre AP Physics	AP Physics	**Teacher Prep**		AP Physics	Physics	

Teacher			Per 0	Per 1	Per 2	Per 3	Per 4	Per 5	Per 6	Per 7	Per 8
[redacted]	PE	GYM		Intro Kinesiology 1	Intro Kinesiology 1	Intro Kinesiology 1	Adv Kinesiology 3 Aerobics		Intro Kinesiology 1	Intro Kinesiology 1	
[redacted]	SCI	L205		CP Biology	Adv Biology	CP Biology	CP Biology		**Teacher Prep**	Adv Biology	
[redacted]	SOC SCI	N106		AP Gov and Politics	CP US Gov and Economics	AP Gov and Politics	CP US Gov and Economics		AP Gov and Politics	**Teacher Prep**	
[redacted]	ENG	C208		ALD 9	*District Assignment*	ALD 10	*District Assignment*		**Teacher Prep**	*District Assignment*	
[redacted]	AG	L105/M 103		Int Ag Sci 3	**Teacher Prep**	Int Ag Sci 3	AgriSci Systems Mgmt		Int Ag Sci 3	Hist and Art of Floral (M103)	
[redacted]	SOC SCI	N109		**Teacher Prep**	AP Human Geo	AP Human Geo	AP Human Geo		AP Human Geo	AP Human Geo	Success Skills 1
[redacted]	AG	M102		Veterinary Sci ROP	Int Ag Sci 1	Int Ag Sci 1	Int Ag Sci 1		**Teacher Prep**	*Special Assignment*	
[redacted]	ENG	N208		CP Eng 7	AP Eng Lit and Comp	CP Eng 7	AP Eng Lit and Comp		**Teacher Prep**	AP Eng Lit and Comp	
[redacted]	FOR LANG	C218		Span II	Span II	**Teacher Prep**	Span for Span Spk 5		Span II	Span II	
[redacted]	PE	DANCE RM		Intro Kinesiology Dance	Intro Kinesiology	Adv Kinesiology 3 Dance	**Teacher Prep**		Intro Kinesiology Dance	Adv Kinesiology 3 Dance Prod	
[redacted]	SCI	L204		Pre AP Chem	**Teacher Prep**	CP Chem	Pre AP Chem		Pre AP Chem	Pre AP Chem	
[redacted]	SCI	L203/ L110		CP Chem	Principles of Eng (L110)	**Teacher Prep**	CP Chem		CP Chem	AP Chemistry	
[redacted]		B103	Leadership Dev	*Special Assignment*	*Special Assignment*	*Special Assignment*	Teacher Prep		*Special Assignment*	*Special Assignment*	
[redacted]	ENG	N211		Pre AP GATE Eng 3	Speech	Pre AP GATE Eng 3	Pre AP GATE Eng 3		Pre AP GATE Eng 3	**Teacher Prep**	
[redacted]	SOC SCI	C222		CP US Gov and Economics	AP European Hist	CP US Gov and Economics	AP European Hist		**Teacher Prep**	AP European Hist	
[redacted]	FOR LANG	N205		Span III	Span III	Pre AP Span III	Span III		**Teacher Prep**	Pre AP Span III	
[redacted]	ENG	N105		CP Eng 5	CP Eng 5	READ 180	READ 180 Support		CP Eng 5	**Teacher Prep**	
[redacted]	MATH	C210		AP Statistics	AP Statistics	AP Statistics	**Teacher Prep**		AP Statistics	Sec Math I	
[redacted]	SOC SCI	C200		CP US Gov and Economics	CP US Gov and Economics	CP US Gov and Economics	CP US Hist		**Teacher Prep**	CP US Gov and Economics	
[redacted]	SOC SCI	N215		Wld Geo and Wld Rels	CP US Hist	Wld Geo and Wld Rels	CP US Hist		CP US Hist	**Teacher Prep**	
[redacted]	SOC SCI	N111		CP US Hist	CP Wld Hist	CP Wld Hist	CP US Hist		CP Wld Hist	CP Wld Hist	
[redacted]	MATH	C216		Pre AP Sec Math III	Sec Math I	Pre AP Sec Math III	Sec Math I		*Unscheduled*	*Unscheduled*	
[redacted]	SP ED	C104	Career Exploratio	**Teacher Prep**	Secondary Math I Par	Alg Readiness Prll	Financial Math Prll		Wld Hist Prll	Alg Par	
[redacted]	PE/HEALTH	GYM		Adv Kinesiology 3	Intro Kinesiology 2	Hlth A	Hlth A		Hlth A	Intro Kinesiology 2	
[redacted]	SP ED	N116		**Teacher Prep**	Func Math	Func Sci and Hlth	Func Soc Studies		Funct Interpers Living Skills YR 2	Func Lang Arts	
[redacted]	MATH	C205		Sec Math III	**Teacher Prep**	Sec Math I	Sec Math I		Sec Math III	Sec Math I	
[redacted]	BUSS	B104		NFTE Entre Owning Future	Marketing Essentials	**Teacher Prep**	Comp Lit 1		Comp Lit 1	Comp Buss Appl	
[redacted]	SOC SCI	C203		**Teacher Prep**	CP Wld Hist	CP US Hist	CP Wld Hist		CP Wld Hist	CP Wld Hist	
[redacted]	PE	GYM	Adv Kin 3 Cond	Adv Kinesiology 3 Weight Train	**Teacher Prep**	Adv Kinesiology 3 Weight Train	Adv Kinesiology 3 Weight Train		Adv Kinesiology 3 Weight Train	Adv Kinesiology 3 Weight Train	
[redacted]	ENG	C214			**Teacher Prep**	CP Eng 1	CP Eng 1		ALD 11	CP Eng 1	Success Skills 1
[redacted]	SCI	L208		Pre AP Physics	CP Chem	Pre AP Physics	CP Chem		Pre AP Physics	**Teacher Prep**	
[redacted]	MATH	N223/ L110		Sec Math I	Sec Math I	Sec Math I	Sec Math I Support		STEM (L110)	Sec Math I	
[redacted]	FOR LANG	C206		Span I	AP Span Lang	Span I	**Teacher Prep**		AP Span Lang	Span I	
Teachers:89											

Joseph A. Gregori High School

2016-2017

Activities Calendar at a Glance

August

8 – Fall Sports Begin
8 – First Day of School
16 – Tailgate Football Game
19 - Senior Sunrise
23- Back to School Night – Minimum Day
26 – Music Concert, MPR
30 – College Visit – UCSD @ Gregori
30 – FFA Meeting, MPR
31 – College Visit – UCSB, Soka @ Gregori

September

1 – College Visit – UCLA @ Gregori
5 – Labor Day, No School
15 – Club Rush Day
16– Jostens Ring Order Day
16 – Football Tail Gate
21 – Renaissance Kick Off
26, 27 & 30 –Senior Portraits, Class of 2017 (Gov Classes)

October

1 & 2 – Regional FFA Leadership Conference
3 – Mock Trail Begins
6 – FFA Tri-Tip BBQ Fundraiser
TBA – Homecoming Royalty Voting – Elections
7 – First Quarter End – Minimum Day
12 – FFA Tuolumne/Stanislaus Opening Ceremonies
12 – Powder Puff Football Game (GHS Stadium)
14 – Homecoming Rally/ Football Game/Homecoming Dance
19 – PSAT (Practice SAT Test) GYM
19 – Senior Grad Trip Fundraiser Begins
23-31 – Red Ribbon Week
25 – Blood Drive - Tentative

November

3 & 4 -SENIORS - Announcements and Cap & Gown Orders
4 – ASB Leadership Movie Night
4 – Fall Sports SENIOR Night (@ football game)
7 – Winter Sports Begin
10 – Renaissance QTR 2
11 –Veteran's Day – No School
17 & 18 – Fall Dance Hip Hop Concert
23 – Minimum Day
24 & 25 – Thanksgiving Holiday

December

2 & 3, 9 & 10 Boys Soccer Tournament
12 & 13 – Cocoa & Cram
14, 15 & 16 – Fall Semester Finals – Minimum Days
16 - End of 2nd Quarter
19 to 30 - Winter Break

January

2 to 6 - Winter Break
TBA – Winter Homecoming Royalty Elections
16 - MLK Holiday – NO School
17 – Club Yearbook Photos
21 – Winter Formal (GYM)
26 – Parent Info Spring Sports Meeting

February

6 – Spring Sports Begin
10 – Senior Night, Boys Basketball, Cheer
11 - Athletic Booster Crab Feed
13– Lincoln's Birthday – NO School
14 – Senior Night, Girls Basketball
20 – Washington's Birthday – NO School
23 – Open House – 8th Grade Parent Night

March

10 – Gregori's Got Talent Show
10 – End of third Quarter – Minimum Day
17 – Spring Fling – Sadie Hawkins Dance
20 to 24 – Spring Break
28 – Blood Drive (Tentative)
29 – Academic Block "G" Banquet (Tentative)

April

25 & 26 – JAG Awards Nights (DMB & VPA 4-25, CT & GS 4-26)
TBA – Renaissance Day On The Green
29 – PROM (Modesto Center Plaza)

May

TBA - Spring Dance Production – MHS
2 – AP Information Night (GYM) (Tentative)
TBA– AP Tests – Various Dates
10 – FFA Awards Banquet
TBA - Senior Grad Night Trip – Disneyland
16 – Senior Awards Night (Tentative)
18 - Senior Sunset (Tentative)
TBA – Senior Breakfast
23-25 – Spring Semester Finals – Minimum Days
25 – Last Day of School for 2016-17
TBA – 5th Graduation Ceremony, Class of 2017

MODESTO CITY SCHOOLS
2017-2018 TRADITIONAL CALENDAR

JULY 2017

M	T	W	TH	F	
3	4	5	6	7	Independence Day
10	11	12	13	14	
17	18	19	20	21	
24	25	26	27	28	
31					

AUGUST 2017

M	T	W	TH	F	
	1	2	3	4	
7	8	9	10	11	
*14T	15T	16E	17B	18G	Classes Begin: 8/14
21B	22G	23T	24B	25G	
28B	29G	30E	31B		14 Days

SEPTEMBER 2017

M	T	W	TH	F	
				1G	
4	5B	6G	7M	8T	Labor Day/
11B	12G	13E	14B	15G	Back to School Night
18B	19G	20T	21B	22G	
25B	26G	27E	28B	29G	20 Days

OCTOBER 2017

M	T	W	TH	F	
2B	3G	4T	5B	6G	
9B	10G	11B	12G	13✓M	1st Qtr = 44 Days
16	17B	18G	19B	20G	Non-Attendance Day
23B	24G	25E	26B	27G	
30B	31G				21 Days

NOVEMBER 2017

M	T	W	TH	F	
		1E	2B	3G	
6B	7G	8B	9G	10	Veteran's Day
13B	14G	15T	16B	17G	
20B	21G	22M	23	24	Thanksgiving Holiday
27B	28G	29E	30B		19 Days

DECEMBER 2017

M	T	W	TH	F	16 Days
				1G	
4B	5G	6T	7B	8G	2nd Qtr = 46 Days
11B	12G	13E	14B	15G	1st Sem = 90 Days
18B	19G	20M	21M	22✓M	
25	26	27	28	29	Winter Break

JANUARY 2018

M	T	W	TH	F	
1	2	3	4	5	Winter Break
8	9	10	11	12	
15	16B	17G	18B	19G	MLK Day
22B	23G	24E	25B	26G	
29B	30G	31T			12 Days

FEBRUARY 2018

M	T	W	TH	F	
			1B	2G	
5B	6G	7E	8B	9G	
12	13B	14G	15B	16G	Lincoln's Day
19	20B	21G	22M	23T	President's Day/Open House
26B	27G	28T			18 Days

MARCH 2018

M	T	W	TH	F	
			1B	2G	
5B	6G	7T	8B	9G	
12B	13G	14E	15T	16✓M	3rd Qtr = 42 Days
19B	20G	21T	22B	23G	17 Days
26	27	28	29	30	Spring Break/Holiday

APRIL 2018

M	T	W	TH	F	
2B	3G	4T	5B	6G	
9B	10G	11E	12B	13G	
16B	17G	18T	19B	20G	
23B	24G	25E	26B	27G	
30B					21 Days

MAY 2018

M	T	W	TH	F	
	1G	2T	3B	4G	4th Qtr = 48 Days
7B	8G	9T	10B	11G	2nd Sem = 90 Days
14B	15G	16E	17B	18G	22 Days
21B	22G	23T	24B	25G	
28	29M	30M	31✓M		Memorial Day/Classes End: 5/31

B	**Blue Block Days (0,1,3,5,6)**
G	**Gold Block Days (0,2,4,5,7)**
T	**Traditional Days - All Periods**
M	**Minimum Days - Dismissal 12:48pm**
E	**Early Release - Dismissal 12:48pm**

Winter Break: 12/25/16-1/12/17
Spring Break: 3/26/18-3/29/18
Classes Begin: 8/14/17
Classes End: 5/31/18

✓ End of Quarter HOLIDAY Non-Attendance Day * First Day of School

Criteria 1 D: Ag Career Awareness

1 E Career Awareness

Gregori high school is broken into 4 SLC one of which is the Career Tech SLC which the Ag department is part of. The Career tech SLC promotes career awareness through cross-curricular efforts between faculty. For example, on select days we show clips of different occupational sectors and have class discussions to allow the students to be exposed to a verity of career opportunities. Our SLC also takes advantage of several county and district programs such as careers in manufacturing that students can participate in to get better exposer to local employers and build their job seeking skills.

We also have several community employers from the Ag Mechanics, Floral and Veterinary Science's that have presented to individual classes information on job placement and skills required to be employed.

Within the Ag Department, we work with several local business to provide internship opportunities to our students. The number of internships very each year but students that participate in the internships often end up with fulltime employment upon graduation from high school. These internships have quickly become rather competitive and have been a great recruitment as well as teaching tool for job readiness.

Criteria 1 E: Computer Hardware-Software

1 F Computer Hardware and Software

Modesto City Schools has provide every student a HP 360 laptop and has removed all classroom labs that were purchased or upgraded with district funds. This has left our department with only 6 computers in our department computer lab this is down from the 38 we had prior to the switch. Teachers are all provide a Microsoft Surface pro 3 as their primary device along with a media cart equipped with a projector, document camera, VHS /DVD player and docking station for the surface pro.

The district has percussed corporate licenses for Microsoft office 360 the full Adobe creative cloud suite allowing both faculty and students to utilize the software. Other programs/ web application include powerschool, schoology, nearapod, studeysink, and google docks.

Criteria 1 F: Computer Aided Instruction

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: Agriculture Computer Literacy 1 Agriculture Computer Literacy 2

COURSE NUMBER: AGR01101 AGR01102

RECOMMENDED GRADE LEVEL: 9-12

ABILITY LEVEL: Unsectioned

DURATION: One Year

CREDIT: 5 per Semester

MEETS GRADUATION REQUIREMENTS: Computer Literacy

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4098

MEETS UC AND CSU ENTRANCE REQUIREMENTS: No

CREDENTIAL REQUIREMENTS:

REPLACES:

Course Description:
The course in Agriculture Computer Literacy is designed to expose students to the selection, use, and practical applications of computers in the diverse fields of Agriculture. The student will be able to apply computer technology in typical agriculture business management decision-making situations; to develop familiarity with the role of information in making sound business decisions and integration of labor, supplies, and machinery in the agriculture business management process; and to develop an understanding of the importance of income tax planning and calculations in the agri-business profit and loss column; also the use of computer application software tools for word processing, data base, spread sheet, presentation software and internet access will be used.

Recommended Prerequisites: None

Date Matched Against State Framework, Model Curriculum Standards, and State Curriculum Guides: February, 2007

Board Approved: January 17, 2012

REVIEW CYCLE: 2011-12 through 2015-16
REQUIRED TEXTBOOK: A Guide To Microsoft Office 2010, Jan Marrelli, 2011, EMC Publishing, LLC or Latest Edition

INSTRUCTIONAL MATERIALS

Basic Text:

A Guide To Microsoft Office 2010, Jan Marrelli, 2011, EMC Publishing, LLC
or Latest Edition

Supplementary Text(s):

Introduction to Agribusiness, Ricketts/Rawlins, Delmar Publishers, 2010
or Latest Edition

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units		Approximate Length of Instruction for Each Unit (Weeks)

Career planning, leadership skills, FFA, SOEP, and general employability skills are included in every Agriculture Computer Literacy course. The level of competency expected of each student is dependent upon the individual's ability level and prior coursework in Computer Education

A.	Introduction	1
B.	Word Processing	6
C.	FFA	3
D.	SOEP	3
E.	Spreadsheet	6
F.	Data Base	5
G.	Power Point	6
H.	Internet	5
I.	Careers	1
	Total Number of Weeks	36

AGRICULTURE COMPUTER LITERACY

1.0 GOAL: Students will understand and use the computer equipment properly.

- 1.1 Given a set of computer terms, the student will be able to define them.
- 1.2 Given pieces of computer equipment, the student will be able to demonstrate his/her ability to properly use each piece of equipment.
- 1.3 Given a description of equipment, the student will be able to describe the capabilities and limitations.

2.0 GOAL: Students will use word processing software to create text and understand the capabilities and limitations of word processors.

- 2.1 Given a document, the student will be able to enter the document onto a computer system and obtain a printout of the document.
- 2.2 Given a document that needs to be modified, with the modifications specified, the student will produce the document using a computer system.
- 2.3 Given a situation calling for the production of a text such as "Public Speaking, Extemporaneous Speaking" the student will create the text and print it without error.
- 2.4 Learn design procedures.

3.0 GOAL: Students will use spreadsheet software to understand the capabilities and limitations of spreadsheets.

- 3.1 Given a spreadsheet that has multiple entries, the student will be able to replicate the spreadsheet on the computer system.
- 3.2 Given a spreadsheet and stipulated modifications that are to be carried out on the sheet, the student will be able to complete the modification.
- 3.3 Given a situation calling for the utilization of a spreadsheet, the student will be able to create a spreadsheet to adequately solve the problem that needs to be addressed.
- 3.4 Given the California Recordbook, students shall be able to enter data and create a spreadsheet determining the student's net worth.

4.0 GOAL: Students will use database software to enter data, generate reports, and to understand the capabilities and limitations of the database.

- 4.1 Given a file, the student will be able to replicate the file on a computer system.
- 4.2 Given a file that needs to be modified with the modification stipulated, the student will be able to carry out the modification.
- 4.3 Given a situation calling for the creation of a file, the student will be able to identify the appropriate data elements and create the file needed to produce the required solution.

5.0 GOAL: Students will create multimedia and slide presentations using application software.

5.1 Given data and slide information, students will be able to replicate a slide presentation using application software. Project will include commercial demonstrations for agriculture businesses.

5.2 Students will be able to create an informative presentation from scratch pictures, clip art and sound files.

6.0 GOAL: Students will master problem solving via navigation of the Internet.

6.1 Students will demonstrate the ability to open and navigate a browser to access a designated web site.

6.2 Students will demonstrate the ability to follow links from web pages on a given topic.

6.3 Students will be able to store information obtained from a web site.

6.4 Students will be able to research a topic using three (3) sources.

6.5 Students will research FFA Careers and report on five (5) different areas.

MODESTO CITY SCHOOLS

TEXTBOOK ADOPTION

NAME OF BOOK: A Guide To Microsoft Office 2010

AUTHOR(S): Jan Marrelli

PUBLISHER: EMC Publishing, LLC

COPYRIGHT DATE: 2011, or Latest Edition

ISBN #: _____

PRICE: _____

DEPARTMENT: Agriculture

CLASS: Agriculture Computer Literacy

GENERAL DESCRIPTION:

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ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: Agriculture Advisory Committee

Selection Committee:

_____

_____

_____

_____ _____

Curriculum Area Chairperson

Thor Harrison, Director
Director, Educational Services

MODESTO CITY SCHOOLS

COURSE OUTLINE

COURSE TITLE: History and Art of Floral Design

COURSE NUMBER:

RECOMMENDED GRADE LEVEL: 10-12

ABILITY LEVEL: Unsectioned

DURATION: 2 Semesters

CREDIT: 5 per Semester

GRADING FORMAT: Standard 0-4 Grd. Pts.

MEETS GRADUATION REQUIREMENTS IN: Practical Arts/Visual and Performing Arts

REQUIRED FOR GRADUATION: Yes

SCHOOLS OFFERED: Beyer, Davis, Downey, Elliott, Johansen, Modesto

CBEDS CODE: 4050

MEETS UNIVERSITY OF CALIFORNIA ENTRANCE REQUIREMENTS: Pending

MEETS CALIFORNIA STATE UNIVERSITY ENTRANCE REQUIREMENTS: Pending

REPLACES: Floral Design

Course Description: History and Art of Floral Design provides an introduction to the artistic and creative approach to Floral Design. This includes aesthetic valuing through a series of projects in various media including tempera, paint, flowers, glass and tile. Students will be introduced to the elements and principles of visual art such as line, shape, form, color, balance, and an emphasis using floral based projects to explore the connections, relations and application of Floral Design. Assignments will be based on abstract two and three dimensional designs, color theory, and an analytical critique of various Floral Art work using design vocabulary while developing technical skills in Floral Art.

Recommended Prerequisites: None

Date Matched Against State Framework,
Model Curriculum Standards and State
Curriculum Guides: October 2007

Board Approved: _____

REVIEW CYCLE: 2004-05

REQUIRED TEXTBOOK: Floriculture Designing & Merchandising, Griner, Charles, Delmar Publishers, 1995

SUMMARY OF MAJOR UNITS OF INSTRUCTION

Units		Approximate Length of Instruction for Each Unit (Weeks)
1.	General Expectations	6 *
2.	Specific Expectations	28
	Floral Industry History and Art of Floral Design Cultural Dimensions Tools and Supplies Plants and Flowers Design Principles and Elements Handling Techniques/Arrangements Nomenclature/Communication Skills Creative Expression through Floral Design Application of Visual Art Record Keeping Computer Usage Marketing	
3.	Career Exploration	2*
	Portfolio	
		—
	Total Number of Weeks	36

* Reinforced throughout year

INSTRUCTIONAL MATERIALS

Basic Text:

Floriculture Designing & Merchandising, Griner, Charles, Delmar Publishers, 1995

Supplementary Text(s):

Impressionist Flowers, Art of the Bouquet, Whelan, Richard, First Glance Books, Cobb, California 1998

A Bouquet from the MET, Metropolitan Museum of Art, Plumb, Barbara, Harry N. Abrams, Inc., 1998

The Complete Guide to Flower Arranging, Packer, Jane, DK Publishing, Inc., 1998

The Flower Arranging Expert, Hessayon, Dr. D.G., Transworld Publishers, 1996

Wheat Weaving and Straw Craft, Owens, Celli, Morgyn Geoffrey, Larks Books, 1997

Visual and Performing Arts Framework, California Department of Education, 1995

AUDIO-VISUAL MATERIALS:

A-V Instructional Materials from the County A-V Department
A-V Instructional Materials from the School Library
A-V Instructional Materials from the City Library
A-V Instructional Materials from Commercial Sources

History and Art of Floral Design

1.0 Introduction to History and Art of Floral Design

1.1 Art Variety
Goal: The students will be able to write an art evaluation using known designs, i.e.: Ikebana, VanGough, Picasso, Monet and how flowers were depicted in the art works. (4.1, 4.3)

1.2 What is Art?
Goal: The students will understand the philosophy of art, the aesthetic value of objects, artistic impression, Art appreciation and the world of art. The students will create a notebook that will contain lecture notes, drawings and sample class exercises. (5.4, 1.5)

1.3 Floral Symbolism
Goal: Students will be able to identify flowers, foliage and their symbolism in Art. Students will be able to research and write a description of the historical symbolism of flowers. Students will develop a cultural understand of floral arrangements. (3.1, 3.3, 3.4)

2.0 Contributions and Cultural Dimensions of Floral Design

2.1 Interpretation
Goal: Students will understand the meaning of Art and the elements of Art history. (1.3, 1.5, 1.6)

2.2 History of Floral Art
Goal: Students will be able to evaluate art examples, from various time periods. Create a visual presentation on floral history and specific periods, i.e.: European, Impressionistic, Oriental and American. Create two or three dimensional displays i.e.: Free form, Expression, Geometric mass, Art Deco, Art Novae, Modern and Contemporary media. (2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4)

2.3 Influences of Floral Artists
Goal: Students will understand styles and techniques of Floral Design. Understand the artistic components of floral periods, holidays, religious symbolism, funeral, wedding and ethnic arrangements. (4.1, 4.2, 4.3, 4.5, 5.2)

3.0 Making judgments on Floral Art work and Individual works of Art

3.1 Works of Floral Art
Goal: Students will be able to critique floral art using appropriate art terms. Students will be able to analyze floral work in terms of elements and design principles, using touch, sight and smell. (7.2, 2.5, 2.6)

3.2 Evaluation of Work
Goal: Students will be able to critique their own floral work and work done be others. Students will demonstrate knowledge of art rubrics and convey floral art knowledge through an oral presentation. (5.3, 5.4)

4.0 Design Elements in Floral Art

4.1 Lines
Goal: Students will understand implied and expressive use of lines in Floral Art work. Those vertical, horizontal and diagonal lines are utilized in all elements of design. (2.3, 2.6)

4.2 Shapes/Forms
Goal: Students will be able to use and understand the elements of shape and forms in design. Creating a project utilizing all elements and principles of design. (2.3, 2.6)

4.3 Colors
Goal: Students will be able to identify and list the origin of color through visual art. The use of monochromatic, analogous, complementary, and triadic schemes in visual art works. The students will create a color wheel using primary, secondary, tertiary, warm, cool, value, tint, tone. (4.2, 4.3)

4.4 Textures
Goals: Students will understand visual and tactile components through floral art using fine, medium, and course-textured media. The students will use container and material components of floral art, through flower and foliage usage through arrangements. (4.2, 4.3)

4.5 Value
Goals: The students will learn to light and dark with the use of visuals within the changes of floral art. Students will use a portfolio/notebook to draw floral design, using shading to show value, and color harmony. (4.2, 2.3, 2.6)

4.6 Space and Depth
Goals: Students will understand the use of space in two and three dimensions, interpreting space in our environment. The use of space in visual designs by applying angling and overlapping media in floral art designs. Placing significance of size and color of media in Floral Art. (4.3)

5.0 Principles of Art Design

5.1 Balance
Goals: Students will be able to use symmetrical and asymmetrical balance in floral art, through the development of floral art. By creating design projects utilizing all elements using principles of design, in floral art. Completion of worksheets for elements and principles of design. (1.1, 1.2, 4.2, 4.3)

5.2 Proportion/Scale
Goals: The students will learn about proportion and scale through application of floral art designs using the following techniques: flower to container, flower to flower, and flower to foliage, and arrangement to environment. Using geometrical techniques in floral art and visual designs. (2.3, 4.2, 4.3)

5.3 Emphasis
Goals: Students will learn to use/convey the understanding of location, size, pattern, framing, and isolation in floral art designs. The use of line direction and directional facing, applying focal points to the student's floral projects. (1.1, 1.2, 2.3, 4.2)

5.4 Rhythm
Goals: Students will use floral art using eye movement, transition and radiating lines in floral art works. Creating and using emotions and color that can/will influence a student's project. (2.3, 4.2, 4.3)

5.5 Harmony and Unity
Goals: Students will be able to understand harmony and unity through applying color combinations to visual designs. Using placement, transition and proximity in visual art works, to critique student works in floral design. Through the use of classroom color wheels, display boards. Notes and drawing added to the student's portfolios on color, harmony and value and schemes. (1.3, 1.4, 2.3)

5.6 Contrast

Goals: Students will be able to use color schemes in floral art design using various media. Students will make a color wheel using five different textures, found within the classroom. Using tint, hue, and contrast, to create the color wheel. (1.1, 1.2, 2.3, 4.3)

6.0 Creative Expression Through Appling Artistic Processes and Skills to Original Works of Art

6.1 Two-Dimensional Media

Goals: Students will be able to draw a basic layout: using simple perspective drawing, sketching original art works and project layouts. Using painting techniques for floral art through developing a color wheel and still life floral artwork, the use of photographic, and computer art to show design. Creating a presentation board displaying basic drawing and layout skills. Flower and foliage media techniques for specific floral art: Mass Flower and Foliage, Filler Flower and Foliage, Form Flower and Foliage, Fresh Flower and Foliage, Dry Flower and Foliage, and Artificial Flower and Foliage. (2.1, 2.3, 2.6, 3.1)

6.2 Three-Dimensional Sculpture

Goals: Students will be able to create: display flowers and foliage, mass flower and foliage, filler flower and foliage, line flower and foliage, form flower and foliage, fresh flower and foliage, dry flower and foliage, and artificial flower and foliage. Using/Creating the mechanics, materials, and media through introduction to proper care and usage of floral equipment and media. Learning specific styles and techniques using Oriental, European, and Exhibition Styles: Chinese, Japanese, Vertical, Circular, Triangular, and Wear and Carry Designs. (3.1, 3.4, 3.5, 4.4)

7.0 Connections, Relationships, and Applications Learned in Visual Art

7.1 Relationships to Other Disciplines

Goals: Students will be able to compare and contrast works of art to other discipline areas. Using all design principles: mosaic/geometric, emotional poetic, color influenced design, historical time periods, floral advertisement using art elements, creating a two-dimensional or three-dimensional design using specific themes and culture. By writing a report on artistic works, using the historical time periods given, in floral design history. Create a dimensional design incorporating elements and principles as applied to a specific theme and culture.

8.0 Communication, Leadership and Opportunities for Occupational Growth

8.1 Communication Skills

Goals: Students will learn communication skills through telephone orders, public speaking events in the FFA Organization and effective description of floral design elements in front of the class.

8.2 Leadership and Growth

Goals: Students will through the National FFA Organization learn leadership skills in interviewing, portfolio development, work ethic, and professional attire. They will develop growth in interpersonal and intrapersonal skills working with others and alone. The students will learn the ability to solve problems and think critically on group and individual projects and assignments.

Criteria 1 G: Record Keeping

1 H Record Keeping

Records are stored in several ways within our department. Located in our staff office is a filing cabinet that we store all of the necessary files for our departments PO's, Travels, and applications. We keep a hard copy of all of these documents as well as hard copy backups of any district memos or reports that we may need to access. Student files are stored in M-102 and hold hard copies of all student records, permission slips, travel forms, safety test that pertain to each student. All other student information is stored electronically via AET for all FFA records or through our district database MOSIS. Curriculum is primarily stored digitally by the individual instructor via one drive, Google drive, drop box, or external hard drive. We have not decide on a standard platform for saving and sharing digital files as our district has not fully supported one format over the other, once we have a clear idea of which will be supported long term by our district we will likely transition to one standard digital format.

Criteria 1 H: Department Files for Students

1 I Department Files for Students

Student files are stored in one of three locations. MOSIS is the district database that stores all students' academic and demographic information along with state testing results, disciplinary records and parental contact information. AET is the new record book system that tracks and stores the students FFA activities, SAE project records and any state or national degree applications. The final location student information is stored is via hard copy in a filing cabinet for all other document such as permission slips, medical releases, completed safety test and all parental acknowledgment forms.

Criteria 1 I: Alternative Course Credit

Gregori High School

UC/CSU Approved "A-G" Course List

The following courses meet requirements for admission to the University of California and the California State University Systems.

a-History / Social Science	b-English	c-Mathematics	d-Laboratory Science
2 years Required • Human Geography (AP) • World History (CP) • European History (AP) • U.S. History (CP) • U.S. History (AP) • U.S. Gov't/Econ (CP) • U.S. Gov't/Econ (AP)	4 years required • English 1-2 (CP) • Pre-AP English 1-2 • English 3-4 (CP) • Pre-AP English 3-4 • English 5-6 (CP) • English Language (AP) • English 7-8 (CP) • English Literature (AP) • ERWC	3 years required 4 years recommended • Algebra • Geometry • Adv. Algebra • Finite Math • Pre-Calculus • Pre-AP Pre-Calculus • AP Statistics • AP Calculus AB • AP Calculus BC • Secondary Math I • Pre-AP Sec. Math I • Secondary Math II • Pre-AP Sec. Math II • Secondary Math III • Pre-AP Sec Math III	2 years required 3 years recommended • Biology (CP) • Pre-AP Biology • Biology (AP) • Advanced Biology(CP) • Anatomy and Physiology(CP) • Chemistry (CP) • Pre-AP Chemistry • Integ. Ag. Science 1-2 & 3-4 • Environmental Science (AP)
e-Language Other than English 2 yrs required 3 yrs recommended • Spanish I/French I • Spanish II/French II • Spanish III/French III Pre-AP Spanish III Spanish IV/French IV • Spanish for Span. Speakers 3-6 • Pre-AP Spanish Literature • Spanish Language (AP) • Spanish Literature (AP)	**f-Visual & Performing Arts** 1 year required • Art 1-2 • Band 1-8/Jazz Band/Orchestra 1-8 • Ceramics 1-2 • Choir 1-8 • Dance 1-4/Dance Production • Drama 1-8 • History of Art & Floral Design • Oral Interpretation/ Performing Arts • Photo Capture & Manipulation • Sculptural Design • Video Arts Production 1-2	**g-Elective** 1 year required • Psychology (CP) • Psychology (AP) • Speech/Adv. Speech • Integ. Ag Science 1-2 • CP Earth Science • Journalism 1-2 • Pre-AP Physics	

UNIVERSITY OF CALIFORNIA A-G Course List (/list/search)

Printed on: 11-02-2017 12:12 PM

UC/CSU - Approved Course List

Joseph A. Gregori High School

College Board Code: 052031

Modesto City School District

Location: Modesto, CA

Website: https://gregori.mcs4kids.com (https://gregori.mcs4kids.com)

Course List Manager: Mary Lomax
Course List Manager Phone: (209) 574-1746

School Governance: Public
School Type: Comprehensive High School
School Subtype(s): Site-Based/Traditional

Note: New School 2012

School accredited through June 30, 2020

Course list for 2017-18

Updated as of Apr 20th, 2017

History / Social Science ("a") 2 years required

Two units (equivalent to two years) of history/social science required, including: one year of world history, cultures or historical geography and one year of U.S. history; or one-half year of U.S. history and one-half year of civics or American government.

Title/Discipline	Transcript Abbreviation(s)	Course Details
American Government MVA Civics / American Government	American Government MVA S1 American Government MVA S2	Classroom-based Half Year
AP European History *Adopted from: The College Board Advanced Placement Program* World History / Cultures / Historical Geography	AP Eur Hist AP European History S1 AP European History S2 h ap eur hist	★ UC Honors Classroom-based Full Year
AP Government and Politics United States *Adopted from: The College Board Advanced Placement Program* Civics / American Government	AP Government and Politics United Sta S1 AP Government and Politics United Sta S2 h ap us govt	★ UC Honors Classroom-based Half Year
AP Human Geography *Adopted from: The College Board Advanced Placement Program* World History / Cultures / Historical Geography	AP Hum Geo AP Human Geography S1 AP Human Geography S2	★ UC Honors Classroom-based Full Year
AP United States History *Adopted from: The College Board Advanced Placement Program* U.S. History	AP U.S. History AP United States History S1 AP United States History S2 ap us history h ap us hist H AP US History	★ UC Honors Classroom-based Full Year
Government/Economics CP Civics / American Government	US Government and Economics S1 US Government and Economics S2	Classroom-based Half Year
U.S. Government and Politics *Adopted from: APEX Learning* Civics / American Government	US Government and Politics S1 US Government and Politics S2	Online-based (UC approved through **2018-19**) Half Year
U.S. History (Core) *Adopted from: APEX Learning* U.S. History	U. S. History Core S1 U. S. History Core S2	Online-based (UC approved through **2020-21**) Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
U.S. History CP U.S. History	CP US HIST CP US HISTORY CP US History S1 CP US History S2 US HISTORY	Classroom-based Full Year
World History *Adopted from: APEX Learning* World History / Cultures / Historical Geography	World History A S1 World History B S2	Online-based (UC approved through **2019-20**) Full Year
World History CP World History / Cultures / Historical Geography	CP WORLD HIST CP World History S1 CP World History S2 WORLD HIST	Classroom-based Full Year

English ("b") 4 years required

Four units (equivalent to four years) of college preparatory English composition and literature required, integrating extensive reading, frequent writing, and practice listening and speaking with different audiences. Students may only use 1 year of ESL/ELD English.

Title/Discipline	Transcript Abbreviation(s)	Course Details
AP English Language and Composition *Adopted from: The College Board Advanced Placement Program* English	AP English Language and Composition S1 AP English Language and Composition S2	★ UC Honors Classroom-based Full Year
AP English Literature and Composition *Adopted from: The College Board Advanced Placement Program* English	AP English Literature and Composition S1 AP English Literature and Composition S2	★ UC Honors Classroom-based Full Year
English 10 *Adopted from: APEX Learning* English	English 10 S1 English 10 S2	Online-based (UC approved through **2018-19**) Full Year
English 11 *Adopted from: APEX Learning* English	English 11 S1 English 11 S2	Online-based (UC approved through **2018-19**) Full Year
English 12 *Adopted from: APEX Learning* English	English 12 S1 English 12 S2	Online-based (UC approved through **2018-19**) Full Year
English 1-2 CP English	CP ENGLISH 1 CP ENGLISH 2 ENGLISH 1 ENGLISH 2	Classroom-based Full Year
English 3-4 CP English	CP ENGLISH 3 CP ENGLISH 3-4 CP English 4 ENGLISH 3-4	Classroom-based Full Year
English 5-6 CP English	CP English 5 CP ENGLISH 5-6 CP English 6 ENGLISH 5-6	Classroom-based Full Year
English 7-8 CP English	CP English 7 CP ENGLISH 7-8 CP English 8	Classroom-based Full Year
English 9 *Adopted from: APEX Learning* English	English 9 S1 English 9 S2	Online-based (UC approved through **2018-19**) Full Year
English I *Adopted from: APEX Learning* English	English 1A Freshman S1 English 1A Freshman S2	Online-based (UC approved through **2018-19**) Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
English III *Adopted from: APEX Learning* English	English 3A Junior S1 English 3A Junior S2	Online-based (UC approved through **2018-19**) Full Year
English IV *Adopted from: APEX Learning* English	English 4A Senior S1 English 4A Senior S2	Online-based (UC approved through **2018-19**) Full Year
Expository Reading and Writing Course English	Expository Reading and Writing Course S1 Expository Reading and Writing Course S2	Classroom-based Full Year
Pre AP/GATE English 1-2 (H) English	H PRE-AP/GATE ENG 1 H PRE-AP/GATE ENG 2 Pre AP GATE English 1 Pre AP GATE English 2 PRE-AP/GATE ENG 1 PRE-AP/GATE ENG 2	Classroom-based Full Year
Pre AP/GATE English 3-4 (H) English	H PRE-AP/GATE ENG 3 H PRE-AP/GATE ENG 3- Pre AP GATE English 3 Pre AP GATE English 4 PRE-AP/GATE ENG 3-	Classroom-based Full Year

Mathematics ("c") 3 years required, 4 years recommended

Three units (equivalent to three years) of college-preparatory mathematics (four units are strongly recommended), including or integrating topics covered in elementary algebra, advanced algebra, and two-and three-dimensional geometry.

Title/Discipline	Transcript Abbreviation(s)	Course Details
Adv. Algebra Algebra II	ADV ALGEBRA Advanced Algebra S1 Advanced Algebra S2	Classroom-based Full Year
Algebra Algebra I	ALGEBRA ALGEBRA A SHELT ALGEBRA II Algebra S1 Algebra S2	Classroom-based Full Year
Algebra B Algebra I	ALGEBRA B	Classroom-based Full Year
Algebra II *Adopted from: APEX Learning* Algebra II	Algebra 2A S1 Algebra 2B S2	Online-based (UC approved through **2020-21**) Full Year
Algebra SDAIE Algebra I	ALGEBRA A SHELT ALGEBRA B SHELT Algebra SDAIE S1 Algebra SDAIE S2 algebra shelt	Classroom-based Full Year
AP Calculus AB *Adopted from: The College Board Advanced Placement Program* Calculus	AP Calculus AB S1 AP Calculus AB S2	★ UC Honors Classroom-based Full Year
AP Calculus BC *Adopted from: The College Board Advanced Placement Program* Calculus	AP Calculus (BC) AP Calculus S1 AP Calculus S2	★ UC Honors Classroom-based Full Year
AP Statistics *Adopted from: The College Board Advanced Placement Program* Statistics	AP Statistics S1 AP Statistics S2	★ UC Honors Classroom-based Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
Finite Math: College Entrance Math Prep Advanced Mathematics	Finite Math College Entran Math Prep S1 Finite Math College Entran Math Prep S2 Finite Math: College Entrance Math Prep	Classroom-based Full Year
Geometry Geometry	GEOMETRY Geometry S1 Geometry S2	Classroom-based Full Year
Geometry SDAIE Geometry	Geometry SDAIE Geometry SDAIE S1 Geometry SDAIE S2 Geometry Sheltered	Classroom-based Full Year
Integrated 1 Math Mathematics I	Integrated 1 Math S1 Integrated 1 Math S2 Mathematics Integrated 1 Secondary Math I S1 Secondary Math I S2	Classroom-based Full Year
Mathematics I *Adopted from: APEX Learning* Mathematics I	Mathematics I S1 Mathematics I S2	Online-based (UC approved through **2020-21**) Full Year
Mathematics II *Adopted from: APEX Learning* Mathematics II	Mathematics II S1 Mathematics II S2	Online-based (UC approved through **2020-21**) Full Year
Mathematics III *Adopted from: APEX Learning* Mathematics III	Mathematics III S1 Mathematics III S2	Online-based (UC approved through **2020-21**) Full Year
Pre AP Secondary Math I Mathematics I	Pre AP Secondary Math I S1 Pre AP Secondary Math I S2	Classroom-based Full Year
Pre AP Secondary Math II Mathematics II	Pre AP Secondary Math II S1 Pre AP Secondary Math II S2	Classroom-based Full Year
Pre AP Secondary Math III Mathematics III	Pre AP Secondary Math III S1 Pre AP Secondary Math III S2	Classroom-based Full Year
Pre AP/GATE Adv. Algebra (H) Algebra II	H PRE-AP GATE ADVALG Pre AP GATE Adv Algebra S1 Pre AP GATE Adv Algebra S2 PRE-AP GATE ADVALG	Classroom-based Full Year
Pre AP/GATE Geometry (H) Geometry	Pre AP GATE Geometry S1 Pre AP GATE Geometry S2	Classroom-based Full Year
Pre AP/GATE Pre-Calculus (H) Advanced Mathematics	H PRE-AP/HG PRE-CALC Pre AP GATE Pre Calculus S1 Pre AP GATE Pre Calculus S2 PRE-AP/HG PER-CALC PRE-AP/HG PRE-CALC	★ UC Honors Classroom-based Full Year
Precalculus *Adopted from: APEX Learning* Advanced Mathematics	Precalculus S1 Precalculus S2	Online-based (UC approved through **2020-21**) Full Year
Pre-Calculus Advanced Mathematics	Pre Calculus S1 Pre Calculus S2 PRE-CALCULUS	Classroom-based Full Year
Secondary Math II Mathematics II	Secondary Math II S1 Secondary Math II S2	Classroom-based Full Year
Secondary Math III Mathematics III	Secondary Math III S1 Secondary Math III S2	Classroom-based Full Year
Statistics Statistics	Statistics S1 Statistics S2	Classroom-based Full Year

Laboratory Science ("d") 2 years required, 3 years recommended

Two units (equivalent to two years) of laboratory science are required (three units are strongly recommended), providing fundamental knowledge in two of the following: biology, chemistry, or physics. A yearlong interdisciplinary, **or** integrated, **or** earth and space science course can meet one year of this requirement.

Title/Discipline	Transcript Abbreviation(s)	Course Details
Advanced Biology Biology / Life Sciences	Advanced Biology S1 Advanced Biology S2	Classroom-based Full Year
Advanced Interdiscplinary Science for Sustainable Agriculture *Adopted from: University of California Curriculum Integration (UCCI)* Interdisciplinary Sciences	Agriscience Systems Management S1 Agriscience Systems Management S2	★ UC Honors Classroom-based Full Year
AP Biology *Adopted from: The College Board Advanced Placement Program* Biology / Life Sciences	AP BIOLOGY AP Biology S1 AP Biology S2	★ UC Honors Classroom-based Full Year
AP Chemistry *Adopted from: The College Board Advanced Placement Program* Chemistry	AP CHEM AP Chemistry S1 AP Chemistry S2 H AP CHEM	★ UC Honors Classroom-based Full Year
AP Environmental Science *Adopted from: The College Board Advanced Placement Program* Interdisciplinary Sciences	AP Environmental Science S1 AP Environmental Science S2 h ap env science	★ UC Honors Classroom-based Full Year
AP Physics C: Electricity and Magnetism *Adopted from: The College Board Advanced Placement Program* Physics	AP Phys C: EM	★ UC Honors Classroom-based Half Year
AP Physics C: Mechanics *Adopted from: The College Board Advanced Placement Program* Physics	AP Phys C: M	★ UC Honors Classroom-based Half Year
Biology Core *Adopted from: APEX Learning* Biology / Life Sciences	Biology A S1 Biology B S2	Online-based (UC approved through **2020-21**) Full Year
Biology CP Biology / Life Sciences	BIOLOGY CP BIOLOGY CP Biology S1 CP Biology S2	Classroom-based Full Year
Chemistry Core *Adopted from: APEX Learning* Chemistry	Chemistry A S1 Chemistry B S2	Online-based (UC approved through **2020-21**) Full Year
Chemistry CP Chemistry	CP CHEMISTRY CP Chemistry S1 CP Chemistry S2	Classroom-based Full Year
Chemistry in the Community Chemistry	Chemistry in the Community S1 Chemistry in the Community S2	Classroom-based Full Year
Human Anatomy and Physiology Biology / Life Sciences	Anatomy Physiology Human Anatomy and Physiology S1 Human Anatomy and Physiology S2 Human Anatomy Physiology	Classroom-based Full Year
Integrated Ag Science 3-4 Integrated Science	int ag sci 3 int ag sci 4 Integrated Agriculture Sci 3 CP Integrated Agriculture Sci 4 CP	Classroom-based Full Year
Integrated Agricultural Biology Biology / Life Sciences	Integrated Agricultural Biology S1 Integrated Agricultural Biology S2	Classroom-based Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
Physics Physics	Physics S1 Physics S2	Classroom-based Full Year
Pre AP/Gate Biology (H) Biology / Life Sciences	H PRE-AP BIOLOGY Pre AP Biology S1 Pre AP Biology S2 PRE-AP BIOLOGY	★ UC Honors Classroom-based Full Year
Pre AP/GATE Chemistry (H) Chemistry	H PRE-AP CHEM Pre AP Chemistry S1 Pre AP Chemistry S2 PRE-AP CHEM	★ UC Honors Classroom-based Full Year

Language Other than English ("e") 2 years required, 3 years recommended

Two units (equivalent to two years, or through the second level of high school instruction) of the same language other than English (three units recommended). LOTE levels are defined by the number of years of high school instruction; e.g. LOTE 1= 1 yr.; LOTE 2 = 2 years, etc.

Title/Discipline	Transcript Abbreviation(s)	Course Details
American Sign Language I LOTE Level 1	American Sign Language I American Sign Language I S1 American Sign Language I S2	Classroom-based Full Year
American Sign Language II LOTE Level 2	American Sign Language II American Sign Language II S1 American Sign Language II S2	Classroom-based Full Year
AP Spanish Language and Culture *Adopted from: The College Board Advanced Placement Program* LOTE Level 4+	AP SPANISH AP Spanish Language S1 AP Spanish Language S2 AP Spanish Language Sp for Sp Spks 5 S1 AP Spanish Language Sp for Sp Spks 5 S2	★ UC Honors Classroom-based Full Year
AP Spanish Literature and Culture *Adopted from: The College Board Advanced Placement Program* LOTE Level 4+	AP Spanish Literature Sp for Sp Spk 6 S1 AP Spanish Literature Sp for Sp Spk 6 S2 span speak 6/AP Span Lit	★ UC Honors Classroom-based Full Year
Chinese I LOTE Level 1	Chinese I S1 Chinese I S2	Classroom-based Full Year
French I LOTE Level 1	FRENCH I French I S1 French I S2	Classroom-based Full Year
French II LOTE Level 2	FRENCH II French II S1 French II S2	Classroom-based Full Year
French III LOTE Level 3	FRENCH III French III S1 French III S2	Classroom-based Full Year
French IV LOTE Level 4+	French IV S1 French IV S2	Classroom-based Full Year
Pre-AP Spanish III LOTE Level 3	Pre AP Spanish III S1 Pre AP Spanish III S2 Pre-AP Spanish III	Classroom-based Full Year
Pre-AP Spanish Literature LOTE Level 3	Pre AP Spanish Lit Spanish Spk III S1 Pre AP Spanish Lit Spanish Spk III S2 Pre-AP Spanish Literature	Classroom-based Full Year
Spanish for Spanish Speakers 3 LOTE Level 3	span speak 3 Spanish for Spanish Speakers 3 S1 Spanish for Spanish Speakers 3 S2	Classroom-based Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
Spanish for Spanish Speakers 4 LOTE Level 4+	span speak 4 Spanish for Spanish Speakers 4 S1 Spanish for Spanish Speakers 4 S2	Classroom-based Full Year
Spanish for Spanish Speakers 5 (3rd Year) LOTE Level 3	Sp/Sp Spkrs 5 Spanish for Spanish Speakers 5 3rd Yr S1 Spanish for Spanish Speakers 5 3rd Yr S2	Classroom-based Full Year
Spanish for Spanish Speakers 6 (4th Year) LOTE Level 4+	Sp/Sp Spkrs 6 Spanish for Spanish Speakers 6 4th Yr S1 Spanish for Spanish Speakers 6 4th Yr S2	Classroom-based Full Year
Spanish for Spanish Speakers I LOTE Level 1	Spanish for Spanish Speakers I Spanish for Spanish Speakers I S1 Spanish for Spanish Speakers I S2	Classroom-based Full Year
Spanish I LOTE Level 1	SPANISH I Spanish I S1 Spanish I S2	Classroom-based Full Year
Spanish II LOTE Level 2	SPANISH II Spanish II S1 Spanish II S2	Classroom-based Full Year
Spanish III LOTE Level 3	SPANISH III Spanish III S1 Spanish III S2	Classroom-based Full Year
Spanish IV LOTE Level 4+	Spanish IV S1 Spanish IV S2	Classroom-based Full Year

Visual & Performing Arts ("f") 1 year required

One unit (equivalent to one year) required, chosen from one of the following categories: dance, music, theater, interdisciplinary arts, or visual arts (e.g., painting, web/graphic design, film/video, inter/multimedia arts).Two one-semester courses from the same discipline is also acceptable.

Title/Discipline	Transcript Abbreviation(s)	Course Details
Advanced Ceramics Visual Arts	Advanced Ceramics 1 Advanced Ceramics 2	Classroom-based Full Year
Advanced Kinesiology Course 3 Dance Dance	Adv Kinesiology 3 Dance QF Adv Kinesiology 3 Dance QS Adv Kinesiology 3 Dance S1 Adv Kinesiology 3 Dance S2	Classroom-based Full Year
Advanced Kinesiology Course 3 Dance Production Dance	Adv Kinesiology 3 Dance Production QF Adv Kinesiology 3 Dance Production QS Adv Kinesiology 3 Dance Production S1 Adv Kinesiology 3 Dance Production S2	Classroom-based Full Year
Advanced Photography 1-2 Visual Arts	Advanced Photography Advanced Photography 1 Advanced Photography 2	Classroom-based Full Year
Advanced Treble Clef Choir 3-4 Music	Adv Treble Clef Choir 3-4 Advanced Treble Clef Choir 3 Advanced Treble Clef Choir 4	Classroom-based Half Year
Advanced Treble Clef Choir 5-6 Music	Adv Treble Clef Choir 5-6 Advanced Treble Clef Choir 5 Advanced Treble Clef Choir 6	Classroom-based Half Year
Advanced Treble Clef Choir 7-8 Music	Adv Treble Clef Choir 7-8 Advanced Treble Clef Choir 7 Advanced Treble Clef Choir 8	Classroom-based Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
AP Art History *Adopted from: The College Board Advanced Placement Program* Visual Arts	AP Art History S1 AP Art History S2	★ UC Honors Classroom-based Full Year
AP Music Theory *Adopted from: The College Board Advanced Placement Program* Music	AP Music Theory S1 AP Music Theory S2	★ UC Honors Classroom-based Full Year
AP Studio Art: 2-D Design *Adopted from: The College Board Advanced Placement Program* Visual Arts	AP Art 2D	★ UC Honors Classroom-based Full Year
AP Studio Art: 3-D Design *Adopted from: The College Board Advanced Placement Program* Visual Arts	AP Art 3D	★ UC Honors Classroom-based Full Year
AP Studio Art: Drawing *Adopted from: The College Board Advanced Placement Program* Visual Arts	AP Studio Art S1 AP Studio Art S2	★ UC Honors Classroom-based Full Year
Art 1,2 Visual Arts	Art 1 ART 1-2 Art 2	Classroom-based Full Year
Band 1,2 Music	Band 1 Marching Band 1 PE Marching BAND 1-8 BAND 1-8 (PE) BAND 1-8(MARCHING) BAND 1-8(PE) Band 2 Marching Band 2 PE Marching Band 3 Marching Band 3 PE Marching Band 4 Marching Band 4 PE Marching Band 5 Marching Band 5 PE Marching Band 6 Marching Band 6 PE Marching Band 7 Marching Band 7 PE Marching Band 8 Marching Band 8 PE Marching	Classroom-based Full Year
Band 3-4 Music	Band 3 Band 4	Classroom-based Full Year
Band 5-6 Music	Band 5 Band 6	Classroom-based Full Year
Band 7-8 Music	Band 7 Band 8	Classroom-based Full Year
Bass Clef Choir Music	Bass Clef Choir 1 Bass Clef Choir 1-8 Bass Clef Choir 2 Bass Clef Choir 3 Bass Clef Choir 4 Bass Clef Choir 5 Bass Clef Choir 6 Bass Clef Choir 7 Bass Clef Choir 8	Classroom-based Full Year
Beginning Band 1,2 Music	Beginning Band 1 Beginning Band 2	Classroom-based Full Year
Ceramics 1,2 Visual Arts	Ceramics 1 Ceramics 2	Classroom-based Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
Choir 1-2 Music	Choir 1 CHOIR 1-8 Choir 2	Classroom-based Full Year
Choir 3-4 Music	Choir 3 Choir 4	Classroom-based Full Year
Choir 5-6 Music	Choir 5 Choir 6	Classroom-based Full Year
Choir 7-8 Music	Choir 7 Choir 8	Classroom-based Full Year
Concert Choir 1,2 Music	Concert Choir 1 CONCERT CHOIR 1-8 Concert Choir 2	Classroom-based Full Year
Concert Choir 3-4 Music	Concert Choir 3 Concert Choir 4	Classroom-based Full Year
Concert Choir 5-6 Music	Concert Choir 5 Concert Choir 6	Classroom-based Full Year
Concert Choir 7-8 Music	Concert Choir 7 Concert Choir 8	Classroom-based Full Year
Dance 1,2 Dance	Dance 1 Dance 2	Classroom-based Full Year
Dance 3,4 Dance	Dance 3 Dance 4	Classroom-based Full Year
Dance Production Dance	DANCE PROD Dance Production S1 Dance Production S2	Classroom-based Full Year
Drama 1,2 Theater	Drama 1 DRAMA 1-2 Drama 2	Classroom-based Full Year
Drama 3-4 Theater	Drama 3 Drama 4	Classroom-based Full Year
Drama 5-6 Theater	Drama 5 Drama 6	Classroom-based Full Year
Drama 7-8 Theater	Drama 3-8 Drama 7 Drama 8	Classroom-based Full Year
Drawing & Painting Water Col & Acry Visual Arts	DRAW/PAINT Water Colors and Acrylics S1 Water Colors and Acrylics S2	Classroom-based Full Year
Drawing and Painting Visual Arts	Drawing and Painting S1 Drawing and Painting S2 Drawing/Painting	Classroom-based Full Year
DSLR Photography 1-2 Visual Arts	DSLR Photography 1 DSLR Photography 2	Classroom-based Full Year
Graphic Design 1-2 Visual Arts	Graphic Design 1 Graphic Design 1-2 Graphic Design 2	Classroom-based Full Year
Guitar 1,2 Music	Guitar 1 Guitar 2	Classroom-based Full Year
Guitar 3,4 Music	Guitar 3 Guitar 4	Classroom-based Full Year
History and Art of Floral Design I Visual Arts	History & Art of Floral Design History and Art of Floral Design S1 History and Art of Floral Design S2	Classroom-based Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
Intermediate Treble Clef Choir 1-8 Music	Interm Treble Clef Choir 1-8 Intermediate Treble Clef Choir 1 Intermediate Treble Clef Choir 2 Intermediate Treble Clef Choir 3 Intermediate Treble Clef Choir 4 Intermediate Treble Clef Choir 5 Intermediate Treble Clef Choir 6 Intermediate Treble Clef Choir 7 Intermediate Treble Clef Choir 8	Classroom-based Full Year
Introduction to Fine Arts Visual Arts	Intro to Fine Arts Introduction to Fine Arts S1 Introduction to Fine Arts S2	Classroom-based Full Year
Introduction to Kinesiology Dance Dance	Introduction to Kinesiology Dance QF Introduction to Kinesiology Dance QS Introduction to Kinesiology Dance S1 Introduction to Kinesiology Dance S2	Classroom-based Full Year
Jazz Band 1,2 Music	Jazz Band 1 Jazz Band 1-8 Jazz Band 2 Jazz Band 3 Jazz Band 4 Jazz Band 5 Jazz Band 6 Jazz Band 7 Jazz Band 8	Classroom-based Full Year
Music of the 20th Century Music	MUS 20TH CEN Music of the Twentieth Century S1 Music of the Twentieth Century S2	Classroom-based Full Year
Music Theory 1-2 Music	Music Theory 1 Music Theory 1-2 Music Theory 2	Classroom-based Full Year
Music Theory 3-4 Music	Music Theory 3 Music Theory 3-4 Music Theory 4	Classroom-based Full Year
Music Theory 5,6 Music	Music 5 Music 6 Music Theory 5 Music Theory 6	Classroom-based Full Year
Oral Interpretation/Performing Arts Theater	Oral Interpretation and Perform Arts S1 Oral Interpretation and Perform Arts S2 Oral Interpretation/Performing Arts	Classroom-based Full Year
Orchestra 1-2 Music	ORCH 1-8 1HR Orchestra 1 Orchestra 2	Classroom-based Full Year
Orchestra 3-4 Music	Orchestra 3 Orchestra 4	Classroom-based Full Year
Orchestra 5-6 Music	Orchestra 5 Orchestra 6	Classroom-based Full Year
Orchestra 7-8 Music	Orchestra 7 Orchestra 8	Classroom-based Full Year
Photo Capture and Manipulation Visual Arts	Photo Cap Manip Photo Capture and Manipulation S1 Photo Capture and Manipulation S2	Classroom-based Full Year
Photography 1, 2 Visual Arts	Photography 1 Photography 1, 2 Photography 2	Classroom-based Full Year
Piano 1,2 Music	Piano 1 Piano 2	Classroom-based Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
Piano 3-4 Music	Piano 3 Piano 3-8 Piano 4	Classroom-based Full Year
Piano 5-6 Music	Piano 3-8 Piano 5 Piano 6	Classroom-based Full Year
Piano 7-8 Music	Piano 3-8 Piano 7 Piano 8	Classroom-based Full Year
Sculptural Design Visual Arts	Sculptural Design Sculptural Design S1 Sculptural Design S2	Classroom-based Full Year
Technical Theatre *Adopted from: California Partnership Academies (CPA)* Theater	Technical Theatre (CPA) S1 Technical Theatre (CPA) S2	Classroom-based Full Year
The History and Art of Floral Design *Adopted from: Yosemite ROP* Visual Arts	History and Art of Floral Design ROP S1 History and Art of Floral Design ROP S2	Classroom-based Full Year
Theater Stagecraft 1-2 Theater	Theater Stagecraft 1 Theater Stagecraft 1-2 Theater Stagecraft 2	Classroom-based Full Year
Video Arts and Production 1-2 Visual Arts	Video Arts and Production 1 Video Arts and Production 2	Classroom-based Full Year

College-Preparatory Elective ("g") 1 year required

One unit (equivalent to one year) chosen from the "a-f" courses beyond those used to satisfy the requirements of the "a-f" subjects, or courses that have been approved solely in the elective area.

Title/Discipline	Transcript Abbreviation(s)	Course Details
Adv. Environmental Systems Laboratory Science – Physical Sciences	Advanced Environmental Systems S1 Advanced Environmental Systems S2	Classroom-based Full Year
Adv. Speech English	ADV SPEECH Advanced Speech S1 Advanced Speech S2	Classroom-based Full Year
Animal Science 3/4 Laboratory Science – Biology / Life Sciences	Animal Science 3 Animal Science 4	Classroom-based Full Year
AP Computer Science A *Adopted from: The College Board Advanced Placement Program* Mathematics - Computer Science	AP Computer Science A S1 AP Computer Science A S2	★ UC Honors Classroom-based Full Year
AP Computer Science Principles *Adopted from: The College Board Advanced Placement Program* Mathematics - Computer Science	AP Computer Science Principles S1 AP Computer Science Principles S2	★ UC Honors Classroom-based Full Year
AVID 10 *Adopted from: AVID - Advancement Via Individual Determination* Interdisciplinary	AVID 10 S1 AVID 10 S2 AVID 10th Grade S1 AVID 10th Grade S2	Classroom-based Full Year
AVID 11 *Adopted from: AVID - Advancement Via Individual Determination* Interdisciplinary	AVID 11 S1 AVID 11 S2 AVID 11th Grade S1 AVID 11th Grade S2	Classroom-based Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
AVID 12 *Adopted from: AVID - Advancement Via Individual Determination* Interdisciplinary	AVID 12th Grade S1 AVID 12th Grade S2 AVID Senior Seminar A S1 AVID Senior Seminar A S2 AVID Senior Seminar B S1 AVID Senior Seminar B S2 AVID Senior Seminar S1 AVID Senior Seminar S2	Classroom-based Full Year
AVID 9 *Adopted from: AVID - Advancement Via Individual Determination* Interdisciplinary	AVID 9 S1 AVID 9 S2 AVID 9th Grade S1 AVID 9th Grade S2	Classroom-based Full Year
Computer Programming I Mathematics - Computer Science	Computer Programming I 1 Hr S1 Computer Programming I 1 Hr S2 Computer Programming I 2 Hrs S1 Computer Programming I 2 Hrs S2	Classroom-based Full Year
Computer Technology Mathematics - Computer Science	Computer Technology 1 Hr S1 Computer Technology 1 Hr S2 Computer Technology 2 Hrs S1 Computer Technology 2 Hrs S2	Classroom-based Full Year
CP Earth Science Laboratory Science – Physical Sciences	CP Earth Science S1 CP Earth Science S2	Classroom-based Full Year
Creative Writing English	Creative Writing S1 Creative Writing S2	Classroom-based Full Year
Economics CP History / Social Science	Economics S1 Economics S2	Classroom-based Half Year
Entrepreneurship *Adopted from: San Joaquin County Office of Education - Career Techncal Education (formerly San Joaquin County ROP)* History / Social Science	NFTE Entrepreneur Owning Your Future S1 NFTE Entrepreneur Owning Your Future S2 NFTE Entrepreneurship: Owning Your Future S1 NFTE: Entrepreneurship: Owning Your Future S2	Classroom-based Full Year
Foods and Nutrition 1-2 Interdisciplinary	Foods and Nutrition 1 Foods and Nutrition 2	Classroom-based Full Year
Foods and Nutrition 3-4 Interdisciplinary	Foods and Nutrition 3 Foods and Nutrition 4	Classroom-based Full Year
Humanities Interdisciplinary	Humanities S1 Humanities S2	Classroom-based Half Year
Integrated Ag Science 1-2 Laboratory Science – Integrated Science	Integrated Agriculture Sci 1 CP Integrated Agriculture Sci 2 CP	Classroom-based Full Year
Interpretative Dramatic Arts Visual & Performing Arts	interpretative arts Interpretive Arts S1 Interpretive Arts S2	Classroom-based Full Year
Introduction to Engineering Design *Adopted from: Project Lead the Way (PLTW)* Interdisciplinary	Introduction to Engineering Design S1 Introduction to Engineering Design S2	Classroom-based Full Year
Journalism 1-2 English	Journalism 1 Journalism 2	Classroom-based Full Year
Pre APPhysics Laboratory Science – Physical Sciences	H PRE-AP PHY SCI H PRE-AP/HG PHY SCI Pre AP Physics 1 Pre AP Physics 2 PRE-AP PHY SCI Pre-AP Physics PRE-AP/HG PHY SCI	Classroom-based Full Year
Pre-Engineering Programming in C/C++ & Mathematics *Adopted from: Yosemite ROP* Interdisciplinary	Pre Engineer Prog in C C++ and Math ROP S1 Pre Engineer Prog in C C++ and Math ROP S2	Classroom-based Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
Principles of Engineering *Adopted from: Project Lead the Way (PLTW)* Interdisciplinary	Principles of Engineering I S1 Principles of Engineering I S2 Principles of Engineering S1 Principles of Engineering S2	Classroom-based Full Year
Programming and Game Design Mathematics - Computer Science	Programming and Game Design S1 Programming and Game Design S2	Classroom-based Full Year
Psychology I History / Social Science	Psychology I S1 Psychology I S2	Classroom-based Full Year
Robotics Engineering I *Adopted from: Yosemite ROP* Interdisciplinary	Robotics Engineering I S1 Robotics Engineering I S2	Classroom-based Full Year
Robotics Engineering II Interdisciplinary	Robotics Engineering II S1 Robotics Engineering II S2	Classroom-based Full Year
Robotics Engineering III Interdisciplinary	Robotics Engineering III S1 Robotics Engineering III S2	Classroom-based Full Year
Speech English	SPEECH Speech S1 Speech S2	Classroom-based Full Year
U.S. History since the Civil War *Adopted from: APEX Learning* History / Social Science	U. S. History A S1 U. S. History B S2	Online-based (UC approved through **2018-19**) Full Year
Veterinary Science Laboratory Science – Biology / Life Sciences	Veterinary Science Veterinary Science 1 Veterinary Science 2 Veterinary Science ROP Veterinary Science ROP S1 Veterinary Science ROP S2	Classroom-based Full Year

Criteria Two: Leadership and Citizenship Development

Criteria 2 A: Charter

National FFA Organization

Founded 1928

Charter No. CA0545

This is to certify that the Gregori Chapter
having satisfied all the requirements for affiliation with the
California FFA Association
and the National FFA Organization
is hereby officially chartered as a duly recognized chapter
and is entitled to all of the rights and privileges pertaining thereto.
In witness whereof, we have affixed our signatures
this 18 day of April, 2010.

Charter Members

[redacted]

School Administrator

Adrienne Bradley
State President

National President

Mark Nowe
Chapter Advisor

Bob Huevel
State Advisor

National Advisor

Natalie Sevano

The FFA Mission

FFA makes a positive difference in the lives of students by developing their potential for **premier leadership, personal growth and career success** through agricultural education.

Criteria 2 B: Chapter Program of Work

Gregori High School

Program of Work

2017-18

Introduction

The Future Farmers of America, or the FFA as it is commonly known, is the national organization of, by, and for students studying agriculture education in public secondary schools under the provisions of the national vocational education acts.

As an integral part of the program of education in agriculture in the public school system of America, the FFA has become well known in recent years. No national student organization enjoys greater freedom of self-government under adult counsel and guidance than the FFA.

Organized in November of 1928, the foundation of which the Future Farmers of America organization is built includes leadership and charter development, sportsmanship, cooperation, service, thrift, scholarships, improved agriculture, organized recreation, citizenship, and patriotism. We are honored to have been elected to serve as your 2009-10 officers. We would like to encourage both old and new members to get involved in our many FFA activities. May you enjoy this Program of Work and discover what the Future Farmers of America organization has to offer.

The 2014-15 Officer Team has developed some goals for the 2014-15 school year:

1. Increased Member Involvement
2. Increased Enrollment for the 2013-14 school year
3. Chapter officer cooperation
4. Increase numbers of people in various FFA activities
5. Better recruitment.

President's Message

Dear Gregori FFA members and guests,

As your current FFA chapter President, I would like to personally welcome you on behalf of the Gregori chapter officer team to the 2017-2018 school year. Proceeding into our 8th year serving our school and our community as an FFA chapter. During our year of service, we want to encourage our members to reach their greatest potential. We want to in store the traits of the FFA Organization by promoting premiere leadership, personal growth, and career success. In order to accomplish this year, we must engage in classroom learning and applying the skills we obtain to pursue in our daily lives. The FFA Organization creates well-rounded individuals that lead into the next generations of agriculturists.

We have a fun and eventful year planned in store for our members this year including several fund-raisers, many fun and exciting FFA activities, as well as opportunities within the agriculture community. We encourage you to be involved and take advantage of all the opportunities that the FFA will provide. We look forward to a great and an exhilarating year!

Sincerely,

[redacted]

OFFICERS – Gregori FFA 2017-18

President	[redacted]
Vice President	[redacted]
Secretary	[redacted]
Treasurer	[redacted]
Reporter	[redacted]
Sentinel	[redacted]
Historian	[redacted]
Chaplain	
Parliamentarian	
Activity Chair	
Advisor	[redacted]

Officers – State FFA 2017-2018

[redacted]	**State President**	**San Luis Obispo**
[redacted]	**State Vice President**	**Atwater**
[redacted]	**State Secretary**	**Ferndale**
[redacted]	**State Treasure**	**Holtville**
[redacted]	**State Reporter**	**Tracy**
[redacted]	**State Sentinel**	**Turlock**

Stan T Section Officers 2017-2018

[redacted]	President	Oakdale
[redacted]	Vice President	Oakdale
[redacted]	Secretary	Modesto
[redacted]	Treasurer	Don Pedro
[redacted]	Reporter	Modesto-Central
[redacted]	Sentinel	Modesto

Central Region FFA Officers 2017-18

[redacted]	President	Tokay
[redacted]	VP At large	
[redacted]	VP North Area	
[redacted]	VP South	Atwater
[redacted]	Secretary	
[redacted]	Treasurer	Mariposa
[redacted]	Reporter	
[redacted]	Sentinel	Escalon

Major Duties of Chapter Officers and Members

President:
Preside over meetings
Appoint committees
Be familiar with bylaws
Be familiar with the constitution
Check on progress of chapter
Represent chapter on occasion
Set example for members

Vice President:
Assist the President
Have charges of committee work
Member of all committees
Preside in absences of President
Program of work chairperson

Secretary:
Prepare and read minutes
Prepare and read reports
Attend to official correspondence
Keep membership roll
Keep degree roll
Keep meeting attendance records
Keep business meeting reports

Treasurer:
Keep record of chapter funds
Complete membership roster dues
Assist in preparing annual budget
Pay out funds as authorized
Encourage individual thrift
Encourage chapter thrift
Deposit funds and complete deposit slips
Prepare and read monthly financial reports

Reporter:
Prepare chapter news articles
Keep file of chapter news
Contract newspapers, PSA, TV
Arrange for publicity
Maintain FFA displays
Slide / Video show
Apply for Star Reporter

Sentinel:
Set up the meeting room
Care for the equipment
Attend the door
Welcome visitors
Keep meeting room comfortable
Assist in entertainment
Assist with refreshments
Point Award System

Historian:
Maintain scrapbook
Assist Reporter
Chapter Photography
Slide/ Video Show

Chaplain

Present the invocation at banquets and other functions.
Coordinate FFA participation at local area churches during National FFA Week.
Conduct reflections services at summer camps and conferences.

Chairperson:
Attend chapter meetings
Wear official dress to chapter meetings
Organize at least one activity each month
Communicate with the officer or

Parliamentarian

Be proficient with parliamentary procedure.
Rule on all questions of parliamentary conduct at chapter meetings.
Serve as a participant or an ex-officio member of the parliamentary procedure team.
Conduct parliamentary procedure workshops at the chapter level.
Chair or serve as ex-officio member on the conduct of meetings committee

Members:
Be familiar with Program of Work
Attend meetings
Participate in chapter activities
Be familiar with constitution and bylaws
Be responsible for submitting points gained in chapter activities

Advisor:
Help members in committees
Check qualifications of those seeking advance degrees and offices.
Train, direct and inform officers and members.
See that all ceremonies are carried out.
See that standard chapter equipment and supplies are secured and used.

Aims & Purposes
of the
Future Farmers of America

1. To develop competent and aggressive agricultural leadership.
2. To create and nurture a love of agriculture life.
3. To strengthen the confidence of students of vocational agriculture in themselves and their work.
4. To create more interest in the intelligent choice of agriculture occupations.
5. To encourage members in the development of individual occupational experience programs in agriculture and establishment in agricultural careers.
6. To encourage members to improve the home and its surroundings.
7. To participate in worthy undertakings for the improvement of the industry of agriculture.
8. To develop character, train for useful citizenship, and foster patriotism.
9. To participate in cooperative effort.
10. To encourage and practice thrift.
11. To encourage improvement in scholarships.
12. To provide and encourage the development of organized recreational activities.

FFA Motto

Learning to do,
Doing to learn,
Earning to live,
Living to serve.

Degrees in the FFA

Future Farmers of America includes four degrees for members:
(1)Greenhand Degree (2) Chapter Degree (3) State Degree (4) American Degree

Greenhand Degree

The Greenhand degree is the first degree in the FFA, and is given upon entry into a vocational education course and satisfactory completion of plans for a supervised occupational experience program.

Chapter FFA Degree

The Chapter FFA Degree is the highest degree given at the chapter level. To earn this degree, students must satisfactory complete one semester of instruction in vocational agriculture and must have earned from their own efforts $150.00 from agriculture production, or completed 150 hours of work in their supervised occupational experience program(s).

State FFA Degree

Any student qualified for their state farmer degree may be elected to the State FFA Degree. To qualify, students must be FFA members for at least two years; demonstrate leadership abilities; and have earned from their own efforts in agriculture production at least $1,000, which they have productively invested or deposited in a bank or have completed 600 hours of work in their supervised occupational experience program(s). Members must have their SOEP record books up to date. For more information see your FFA Advisor.

American FFA Degree

The America FFA Degree is the highest degree in FFA, and is conferred only on active members. To qualify, individuals must have received the State FFA Degree, earned and productively invested a minimum of $10,000 from agricultural production or work in their supervised occupational experience program(s). They must also be leaders in their communities and have records of all their agricultural endeavors in the following graduation from high school, if applicable.

Awards and Scholarships

A. **Proficiency Awards**

1. Sheep Production
2. Dairy Production
3. Beef Production
4. Swine Production
5. Horses
6. Nursery
7. Specialty Animal Production
8. Sales and Service
9. Agriculture Mechanics
10. Diversified Livestock
11. Fish/Wildlife Management
12. Landscape Management
13. Placement in Ag Production
14. Poultry
15. Field Crops
16. Many Others

B. **Other Awards**

1. Cooperation Awards
2. Star Greenhand
3. Star Chapter Farmer
4. Point Award
5. Bank of America Award
6. Edward P. Griswold Achievement Award
7. Student of the Month
8. Officer Pins
9. Scholarship pins
10. Ag Boosters Scholarships
11. FFA Scholarship

The FFA Creed

By
E.M. Tiffany

I believe in the future of agriculture, with a faith born not of words but of deeds- achievements. Won by the present and past generations by agriculturists; in the promise of better days through better ways, even as the better things we now enjoy have come to us from the struggles of former years.

I believe that to live and work on a good farm, or to be engaged in other agricultural pursuits, is pleasant as well as challenging; for I know the joys and discomforts of agricultural life and hold an inborn fondness for those associations which, even in hours of discouragement, I cannot deny.

I believe in leaderships from ourselves and respect from others. I believe in my own ability to work efficiently and think clearly, with such knowledge and skill as I can secure, and the ability of progressive agriculturists to serve our own and the public interest in producing and marketing the product of our toil.

I believe in less dependence on begging and more power in bargaining; in the life abundant and enough honest wealth to help make it so-for others as well as myself; in less need for charity and more of it when needed; in being happy myself and playing square with those whose happiness depends upon me.

I believe that American agriculture can and will hold true to the best tradition of our national life and that I can exert and influence in my home and community which will stand solid for my part in that inspiring task.

Gregori FFA Chapter

2016-17 Budget

	Receipts	Expenses
Chicken Dinner	$ 3000	$ 2000
CATA/FFA Mtgs.		$ 200
Chapter Meetings		$ 500
Tri-Tip BBQ	$ 3000	$ 1000
Candy/Pepperoni Sticks Fundraiser	$ 3000	
State Conference	$ 0	$ 1000
California Excellence Conference	$ 0	$ 400
Sectional Leadership Conference	$ 0	$ 1000
State Conference	$ 0	$ 600
Parent/Member Banquet	$ 0	$ 200
Trips	$ 0	$ 500
Field Days	$ 0	$ 1200
Total	$9,000	Total $ 8,600
	Balance = $400	

The FFA Code of Ethics

1. Dress neatly and appropriately for the occasion.

2. Showing respect for the rights of the other and being courteous

3. Being honest and not taking unfair advantages of others.

4. Respect property of others.

5. Refraining from loud, swearing, and other unbecoming conduct.

6. Demonstration of sportsmanship in the show, ring, judging contest, and meetings. Modest in winning and generous in defeat.

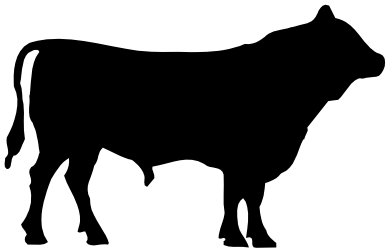
7. Attending meetings promptly and respecting opinions of others in discussion.

8. Taking pride in our organization, in our activities, in our supervised experience programs, and in the occupation of agriculture.

9. Sharing with others experiences and the knowledge gained by attending national and state meetings.

Market Steer Project Plan Sheet

Estimated Expenses:	
Steer	2000.00
Feed	1000.00
Veterinary	20.00
Scotch Comb	7.00
Finish Brush	4.00
Rice Root Brush	6.00
Leather Show Halter	25.00
Rope Halter	3.00
Neck Rope	2.00
Show Stick	15.00
Spray Glue	4.00
Orvus	4.00
Total Estimated Expenses	3,000.00
Estimated Receipts:	
Sale of animal	1,625.00
(1300 lb. steer at $2.00/cwt)	
Net Loss:	**-400**



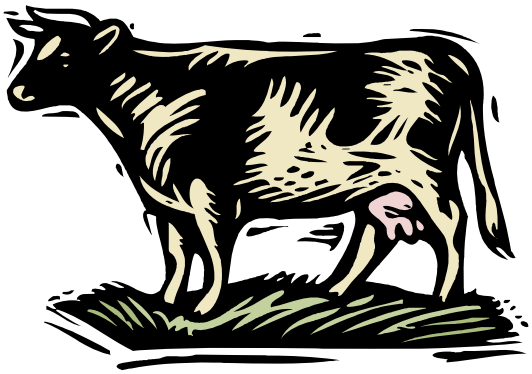
Dairy Project Plan Sheet
(2 Year project)

Estimated Expenses:

Cost of Animal:	1100.00
(4 months old)	
Veterinary	20.00
(shots and medicine)	
Feed:	750.00
Equipment:	
Rope Halter:	5.00
Show Halter:	20.00
Bucket and Brush:	12.00
Entry Fees:	5.00
Total Estimated Expenses:	1,912.00

Estimated Receipts:

Sale of Animal	2.500.00
Total Estimated Receipts	1,277.00
Estimated Net Profit	588.00



Market Lamb Project Plan Sheet

Estimated Expenses:

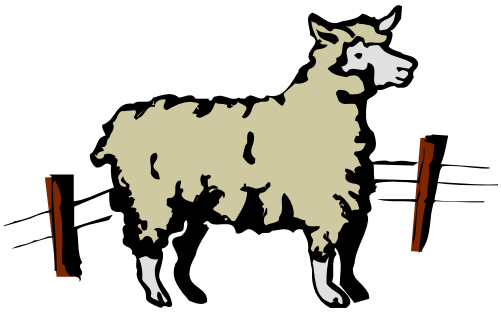
Lamb	350.00
Feed (hay and grain)	100.00
Veterinary Care (shots and dewormer)	5.00
Halter	10.00
Insurance	15.00
Total Estimated Expenses	480.00

The chapter will provide all other fitting equipment.
Blocking stand
Soap
Blower
Clippers

Estimated Receipts:

Sale of animal	480.00
(need a buyer at $2.00 per pound)	
Net Profit:	0.00

Other supplies needed at fair:
Towels
Toothbrush
Q-tips
Show Uniform
Feed for a week



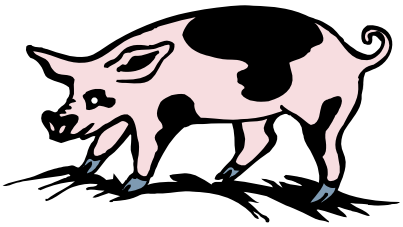
Market Hog Project Plan Sheet

Estimated Expenses:

Pig	**350.00**
Feed	200.00
Veterinary Care	5.00
Supplies	10.00
Insurance	5.00
Total Estimated Expenses	570.00

Estimated Receipts:

Sale of animal	
(240 lb. hog at $1.75/lb.)	600.00
Net Profit:	30.00



Market Goat Project Plan Sheet

Estimated Expenses:

Lamb	350.00
Feed (hay and grain)	50.00
Veterinary Care (shots and dewormer)	5.00
Halter	10.00
Insurance	15.00
Total Estimated Expenses	430.00

The chapter will provide all other fitting equipment.
Blocking stand
Soap
Blower
Clippers

Estimated Receipts:

Sale of animal	$450.00
(need a buyer at $2.00 per pound)	
Net Profit:	$20.00

Other supplies needed at fair:
Towels
Toothbrush
Q-tips
Show Uniform
Feed for a week

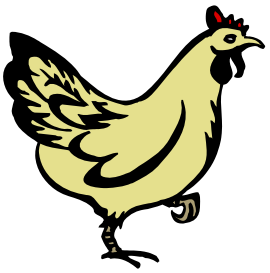
Meat Pen Poultry Project Plan Sheet

Estimated Expenses:

Chicks (25)	12.50
Feed	25.00
Miscellaneous	2.00
Total Estimated Expenses	**34.50**

Estimated Receipts:

Broilers (25)	
Private Sale	125.00
Livestock Sale	120.00
Net Profit	
Private Sale	90.50
Livestock Sale	165.50



Meat Pen Rabbit Project Plan Sheet

Estimated Expenses:	
Rabbits (3)	21.00
Feed	10.00
Miscellaneous	5.00
Total Estimated Expenses:	**36.00**
Estimated Receipts:	
Rabbits (3)	
Private Sale	75.00
Livestock Sale	200.00
Net Profit:	
Private Sale	39.00
Livestock Sale	164.00

DO YOU JUST BELONG?

Are you an active member, the kind that would be missed?
Or are you just content to have your name upon the list?
Do you attend the meetings and mingle with the flock?
Or do you usually stay away and criticize and knock?
Do you take an active part, to help the work along?
Or are you satisfied to be the kind that just belongs?
Do you pitch in, and do your share, to really make things tick?
Or leave the work to just a few, that you would call the "clique."
There's quite a program scheduled that we're sure you heard about.
And we'll appreciate it if you too, will help us work things out.
So come to the meetings often, and help with hand and heart.
Don't just be another member, but take an active part.
Think this over, friend, 'cause you know right from wrong.
Are you an "active member" or do you "***just belong***?"

Author Unknown

THE EMBLEM

The National emblem of the Future Farmers of America is significant and meaningful in every detail. Used by members in all recognized units of the organization, it is made up five symbols: the owl, the plow, and the rising sun, within the cross section of an ear of corn, which is surmounted by the American eagle, upon the face of the emblem appear also the words, "Vocational Agriculture," and the letters "FFA." The owl is symbolic of labor and tillage of the soil; the rising sun is symbolic of progress and the new day that will dawn when all farmers are trained and have learned to cooperate. The cross section of an ear of corn represents common agricultural interest since corn is native to America and grown in every state; and the eagle is indicative of the national scope of the organization.

Committees That
Encourage students to work together

Quality Standards	**Activities**
Chapter Recruitment activities conducted to increase the agricultural education enrollment and/or FFA membership and encourage greater participation.	Mailings, Petting Zoos, 8th Grade Recruitment, FFA Week Activities, and Chapter Newsletter.
Financial activities conducted to encourage thrift and good financial management among members through earnings, savings, and investments.	Budgets, Record Keeping Activities, Football Concessions, Fund-raising, Pepsi Machine, and others.
Public relations activities conducted to promote a positive image and inform students, parents, school officials and the community about chapter and member accomplishments.	News Articles, PSA, TX Broadcasts, Scrapbook, School Marquee, Chapter Newsletters, National FFA Week, National Farm Safety Week, and National Agriculture Day.
Leadership activities conducted to develop teamwork and cooperative skills among chapter officers, committees, and members.	Officer Training, Chapter Workshops, Conferences, and Chapter Degrees.
Supporter activities conducted to develop and maintain positive relations among the FFA, parents, community leaders, and industry.	Agriculture Boosters, Parent/Student Organizations, Fair Boosters, Open House, Guest Speakers, Advisory Committee, MJC Young Farmers, and School Officials.

CONSTITUTION OF THE GREGORI CHAPTER

ARTICLE I – Name and Purposes

Section A The name of this organization shall be the "Gregori FFA Chapter" of the Future Farmers of America" and the letters, "FFA" may be used to designate the chapter, its activities, or members thereof.

Section B The Primary aim of the Gregori FFA Chapter is to develop agricultural leadership, cooperation, and citizenship within cooperation, and citizenship within the community.

Section C The purposes for which this chapter is formed are as follows:

1. To develop competent and aggressive agricultural leadership.
2. To create and nurture a love of agricultural life.
3. To strengthen the confidence of students of vocational agriculture in themselves and their work.
4. To create more interest in the intelligent choice of agricultural occupations.
5. To encourage members in the development of individual occupational experience programs and establishment in agricultural careers.
6. To encourage members to improve the home and its surroundings.
7. To participate in worthy undertakings for the improvement of the industry of agriculture.
8. To develop character, train for useful citizenship, and foster patriotism.
9. To participate in cooperative effort.
10. To encourage and practice thrift.
11. To encourage improvement in scholarship.
12. To provide and encourage the development of organized recreational activities.

ARTICLE II – Organization

Section A The Gregori FFA Chapter is a chartered local unit of the California Association of Future Farmers of America which is chartered by the National FFA Organization.

Section B This chapter accepts in full the provisions of the constitution and bylaws of the California Association of FFA as well as those of the National FFA Organization.

ARTICLE III – Membership

Section A Membership in this chapter shall be of three kinds: (1) Active; (2) Alumni; and (3) Honorary, as defined by the National FFA Constitution.

Section B The regular work of this chapter shall be carried on by the active membership.

Section C Honorary membership in this chapter shall be limited to the Honorary Chapter FFA Degree.

Section D Active members in good standing may vote on all business brought before

the chapter. An active member shall be considered in good standing when:

1. They attend local chapter meetings with reasonable regularity.
2. They show an interest in, and take part in the affairs of the chapter.
3. Maintain at least a 2.0 grade point average and have no more than one failing grade or one unsatisfactory citizenship each grading term
4. Conduct oneself in a manner becoming a member of this organization,
5. as defined in the "Code of Ethics."
6. Are properly affiliated with the state and national FFA organizations. Any student that is enrolled in agriculture education at Gregori High School is entitled to be an active member of this chapter. Active membership may be maintained throughout their entire high school career and for three years after the first national convention following high school graduation, leaving high school, or until twenty-one years of age, which ever has the greatest length of time.

Section E Names of applicants for membership shall be filed with the membership committee.

ARTICLE IV - Emblems

Section A The emblem of the FFA shall be the emblem for the chapter.

Section B Emblems used by the members shall be designated by the national organization of FFA.

ARTICLE V – Membership Degrees and Privileges

Section A There shall be four grades of active membership in this chapter. These grades are: (1) The Greenhand FFA Degree, (2) The Chapter FFA Degree, (3) The State FFA Degree, and (4) The American FFA Degree.

All "Greenhands" are entitled to wear the regulation bronze emblem pin. All members holding the Degree of Chapter FFA are entitled to wear the silver emblem pin All members holding the State FFA Degree are entitled to wear the regulation gold emblem charm. All members holding the American FFA Degree are entitled to wear the regulation gold emblem key.

Section B Greenhand FFA Degree. Minimum qualifications for election: (Refer to State Constitution for a complete list of degree requirements.)

1. Be regularly enrolled in a class in vocational education course for an agricultural occupation and have satisfactory and acceptable plans for a program of supervised farming, and/or other agricultural occupational experiences.
2. Learn and explain the FFA Creed, Motto, and Salute.
3. Describe the FFA emblem, colors, and symbols.
4. Explain the proper use of the FFA jacket.
5. Have satisfactory knowledge of the history of the organization.
6. Know the duties and responsibilities of the FFA members.
7. Personally own or have access to Official FFA Manual.
8. Submit written application for the Degree for Chapter records.

Section C Chapter FFA Degree. Minimum qualifications for election: (Refer to State Constitution for a complete list of degree requirements.)

1. Must have the Degree of Greenhand and have a record of satisfactory participation in the activities of the local chapter.
2. Must have satisfactorily completed at least one year of instruction in vocational agriculture, have in operation an approved supervised farming, and/or other agricultural occupational experience program, and be regularly enrolled in a vocational agriculture class.
3. Be familiar with the purposes and programs of activities of the state association and national organization.
4. Be familiar with the provisions of the constitution of the local chapter.
5. Be familiar with parliamentary procedure.
6. Be able to lead a group discussion for fifteen minutes.
7. Must have earned by his/ her own efforts from his/ her supervised farming and/or other agricultural occupations program and deposited in a bank or otherwise productively invested at least $150 or worked 100 hours on his/her SAE in excess of scheduled class time.

Section D State FFA Degree: Minimum qualifications for election:

1. Qualifications for the State FFA Degree are those set forth in the Constitution of the State Association

Section E American FFA Degree. Minimum qualifications for election:

1. Qualifications for the American FFA Degree are those set forth in the Constitution of the National FFA Organization.

Section F Special Committees shall review the qualifications of members and make recommendations to the chapter concerning degree advancement.

ARTICLE VI - Officers

Section A The officers of the chapter shall be as follows: President, Vice President, Secretary, Treasurer, Reporter, Sentinel. The executive committee has the option of having an election for Chaplain, Historian and Parliamentarian. The local Advisor shall be the teacher of vocational agriculture in the school where the chapter is located. Officers shall perform the usual duties of their respective offices. Officer's duties are described in the National FFA Constitution.

Section B Officers shall be elected semi-annually or annually by a majority vote of the members present at a regular meeting.

Section C The officers of the chapter together with the chairmen in charge of the major sections of the annual program of activities shall constitute the Chapter Executive Committee The Executive Committee shall have full power to act as necessary for the chapter in accordance with actions taken at chapter meetings and various regulations or bylaws adopted from time to time.

Section D Honorary members shall not vote nor shall they hold any office in the chapter except that of Advisor.

Section E Chapter officers must hold the Chapter FFA Degree, except during the first year after the chapter is organized.

Section F The advisor shall be one of the agricultural instructor's of the agriculture dept.

Section G

All chapter officers must attend all chapter activities, which shall be determined by the executive committee, chapter officers will attend COLC and Chapter officer leadership camp, and be registered in the agricultural leadership class.

Section H

The advisor(s) shall give advice to the chapter members and shall assist the president and the executive committee in coordination of chapter activities. All FFA activities and plans are subject to approval of the advisor.

Section I

Impeachment of an officer- Prior to the officer elections the executive committee shall submit a written list of officer responsibilities and requirements to be signed by all candidates. If any officer does not meets these requirements the executive committee will call a special meeting to review the dedication of the officer if the executive committee feels the officer can no longer meet the requirements of office he/she will then be impeached with majority vote from the executive committee.

Section J

Replacement of an officer- In the event of an opening in office all FFA members shall be informed of the vacancy. Any member meeting the requirements to run for office
may then submit an application to the executive committee. The executive committee will then review the applicants and slate at least two hers for the opening. Any active member can then vote for one of the slated members at the time and place set up by the executive committee. In the event an officer resigns, or is impeached the president has the power to appoint a temporary officer until the "the replacement of an officer" can be followed.

ARTICLE VII – Meetings

Section A Regular chapter meetings shall be held once a month during the school year and once during the remaining months of the year at such time and place as is designated by the Chapter Executive Committee. Special meetings may be called at any time.

Section B Standard meeting equipment shall be used at each meeting. All regular meetings shall open and close with the official ceremony. Parliamentary procedure shall be used in transacting all business at each meeting.

Section C Delegates, as specified by the State Constitution, shall be elected annually from the active membership to represent the chapter at the State Leadership Conference. Other delegates may be named as necessary in order to have proper representation at various other FFA meetings within the State.

Section D A majority of the active members listed on the secretary's membership roll shall constitute a quorum, and a quorum must be present at any meeting at which business is transacted or a vote taken committing the chapter to any proposal or action.

ARTICLE VIII – Elections

Section A A majority of the active members listed on the secretary's membership roll shall constitute a quorum, and a quorum must be present at any meeting at

which business is transacted or a vote taken committing the chapter to any proposal or action.

Section B

Election Procedure and Requirements: Officers shall be elected to serve terms of one year to begin and end with the annual parent member banquet. Officers shall be elected as the first order of business during the last regular meeting immediately preceding the parent member banquet.

Section C

To be eligible to run for a chapter office you must meet the following;

1. You must be a member in good standing (defined in article 3, section D, 3)
2. The member must at least be an incoming sophomore in high school.
3. You must have received the greenhand degree and be receiving the chapter FFA degree before or during your term.

Section D

After presenting an application to a member of the officer team each candidate will be reviewed and slated for an office by the executive committee they will then be placed on the ballot.

Section E

Balloting procedure**-** Balloting for elective office shall be in this order: president, vice president, secretary, treasurer, reporter, and sentinel, Historian, Chaplain and Parliamentarian. A majority vote of those voting shall be required for election. In the case no candidate receives a majority there shall be required for those candidates whose total vote is equal or exceeding a majority

ARTICILE IX – Dues

Section A

Local, State, and National Dues are paid for by the active local chapter.

ARTICLE IXI – Amendments

Section A

The constitution may be amended or changed at any regular meeting by a two-thirds vote of the active members present providing it is not in conflict with the state association constitution or that of the National FFA Organization.

Section B

Bylaws may be adopted to fit the needs of the chapter at any regular chapter meeting by a two-thirds vote of the active members present providing it is not in conflict with the state association bylaws or that of the National FFA Organization.

Bylaws of the Gregori FFA Chapter

ARTICLE I - MEETINGS

Section A

Regular Meetings- regular meetings of the chapter shall be held at least once a month during the school year the time and place shall be determined by the executive committee.

Section B.

Special Meetings- a special meeting of the chapter may be called by the president at any time for the consideration of special business with the approval of the executive comm17tee, or upon presentation to the secretary of a petition bearing the signatures of one third of active members in good standing in the chapter

Section C.

Parent Member Banquet- one parent member banquet shall be held each year at the end of the school year to honor members, parents, and other friends of the FFA. The executive committee shall determine the time and place.

Section D.

Quorum- The quorum shall be 15% of the students enrolled in agriculture class at Gregori high school. No business may be accomplished without the quorum being met.

Section E.

Summer meetings- at least one meeting shall be called during the summer when school is not in session.

Section F.

The greenhand officers shall be responsible for one meeting.

Article II - Committees

Section A.

Standing committees- the standing committees shall be:

1. Student development
2. Chapter development
3. Community development

The standing committees shall meet at least once every two months. All standing committee chairmen shall *be* appointed by the executive committee for terms of one year the duties of the committees shall be in the "program of activities".

Section B.

Temporary committees- temporary cobs may be set up for specific purpose and their method of selecting the chairmen and members shall be stated in the motion.

Section C.

The executive committee- the members of the executive committee shall be the officers of the chapter and the advisors. The vice president of the chapter shall be the presiding officer of the executive committee. The executive committee shall be empowered to act in the name of the chapter between meetings of the chapter the members of the executive committee under the supervision of their advisor shall develop the program of activities at the beginning of their term.

Section D.

The governing committee- the members of the governing committee shall be the president, vice president, and secretary. The governing committee shall be empowered to act in the name of the chapter when school is not in session and it would be impractical to call a meeting of the executive committee.

Article III - Amendments

Section A.

Amendments to this constitution may be adopted at any regular chapter meeting providing the proposal has been submitted to the executive committee two weeks prior to the above mentioned meeting.

Section B.

In order to pass an amendment a vote of 2/3 of the quorum must be met.

Article IV - Insignia and uniforms

Section A -

Insignia- the insignia of tile Gregori Chapter of FFA shall be the emblem which is adopted and approved by the national FFA organization.

Section B.

Dress uniform- the official FFA dress for males shall be the official FFA jacket, zipped to the top, worn with a collared dress shirt, official FFA necktie, black slacks, black socks, and black dress shoes. The official dress for females shall be the official FFA jacket, zipped to the top, worn with a white, collared dress blouse, an official FFA scarf, black skirt (of appropriate length), and black dress shoes. Black jeans may be worn only with prior approval from the advisor.

Section C.

Show uniform- the official FFA show uniform shall be worn by all FFA exhibitors and by helpers in individual and chapter group while showing at fairs and livestock shows. The uniform shall. Consist of white pants, white dress shirt or blouse with the FFA emblem attached to the left pocket, and the official FFA blue necktie for males or the FFA scarf for the females. The official FFA jacket is optional; if worn, the shirt emblem is not required.

A. General Rules Governing Gregori FFA Members at Chapters Activities and While Wearing the Official FFA Jacket

I. Procedure

A. Prior to entering an FFA activity governed by the rules or the acquisition of the official FFA jacket, each FFA member will read a copy of the rules and sign a statement indication their intent to follow the prescribed rules.

B. An instructor or chaperon must accompany each student entering a chapter activity, and this person must be with his student during the night, prevent noise and other disturbances that may interfere with the welfare of other individuals. Every effort must be made to maintain orderly, quiet, and proper conduct at all times. Any violations will be considered cause for disciplinary action determined by the Chapter Executive Committee.

C. The activities that the Gregori FFA members will be allowed to participate in are outlined in the Chapter Program of Activities.

Article V - General Rules

A. Members are prohibited from smoking, *chewing tobacco* and drinking alcoholic beverages while wearing the FFA jacket, officially representing the organization, and taking part in any official activity.

B. The use of, or possession of, firecrackers or bullwhips will be grounds for immediate expulsion from the show or activity.

C. Lariats or other pieces of equipment subjecting anyone to injury are forbidden.

D. No member is to leave the grounds without the permission of his instructor. No cars are to be used at any time without the approval of the instructor in charge.

E. Lady-like and gentlemanly conduct is expected at all times. Obscene language and roughhousing will not be tolerated at any time.

F. Card playing and gambling in any form is strictly forbidden.

G. Students who are reported to the committee for neglect of stock will be brought before the committee for appropriate action.

H. Appropriate dress will be required at activities participated in by Future Farmers of America. All members shall be expected to use good judgment in dress and shall wear the recognized uniform for members when applicable. Shirts without sleeves, shirts or t-shirts with insignia other than the FFA or acceptable names are forbidden.

I. Advisors shall discourage any display of overly affectionate attention between boy and girl members. Persistent abuse of this rule shall be cause for suspension from the show.

J. Hair shall be clean, cut and neat in appearance to be decided by advisors and officers of the FFA Chapter.

K. It is highly recommended that any items that are valuable or will be a problem to lockup, or be left at home; such as - large radios, rings, more money than needed for the week, cowboy hats, expensive cowboy boots, etc.

Article VI -Official FFA Jackets

A. Persons who are members in good standing of the chapter should only wear the jacket.

B. It should always be kept clean and neat at all times.

C. The jacket should have only a large emblem on the back and a small emblem on the front; the name of the State Association and the name of the local chapter on the back; and the name of the individual.

D. Officers and members should wear it on official FFA occasions, as well as other occasions, where the chapter is represented. It may be worn to school and other appropriate places.

E. The jacket should be worn only to places that are appropriate for members to visit.

F. School letters and insignia of other organizations should not be attached to or worn on the jacket.

G. The jacket should not be worn with garments bearing the insignia of other organizations.

H. When the jacket becomes too faded and worn to wear in public, it should be discarded or the emblems and lettering removed.

I. The emblems and lettering should be removed if the jacket is given or sold to a nonmember.

J. When members wear jackets they should conduct themselves in a gentlemanly or ladylike fashion.

K. Members are prohibited from smoking and drinking alcoholic beverages while wearing the FFA jacket, officially representing the organization and taking part in any official activity.

L. All chapter degree, officer, and award medals should be worn beneath the name on the right side of the jacket, with the exception that a single State FFA charm and the American FFA Key should be worn above the name or attached to a standard key chain.

M. Violation of the above rules governing the use of the official FFA jacket will warrant the Executive Committee to revoke the member's ownership of the jacket

Article VII - Fair Exhibits & Exhibitors

A. You, your animal and your chapter are on exhibit during the entire show. You will be expected to keep our exhibit area and adjacent aisles dean at all times.
B. Stalls must be cleaned, with old bedding put into the designated time set by the agriculture instructors. Keep the aisles clean at all times. This is a safety and health factor as well as a feature of your exhibit.
C. Each exhibitor is responsible for his or her own animals at all times. If he cannot be present he must have prior approval of his instructor to leave. The person designated to care for the animals must then be present at the fair.

D. Destruction of property, not cooperating with employees of the shove or cooperating groups all add up to a bad image of a Future Farmer; thus, you will be expected to cooperate at all times. Exhibitors will be held responsible for damage to any facilities or equipment.

Section A. - Dormitory

A. Each fair has written dormitory rules as to the time each member is to be check in. It is the member's responsibility to familiarize himself/herself with these rules and abide by them.

B. You are expected to keep your dormitory area clean of refuse, your bed made, and the bunk area policed.

Article VIII - Disciplinary Action

A. Individuals who have been found to violate any of these rules will be subject to disciplinary action by the Chapter Executive Committee and the advisors of the chapter.

B. If the violation warrants it, this committee has the authority to immediately bar the individual or individuals involved from any further FFA activities, ownership of official FFA jacket, and membership of the organization.

Article VIIII - Members in Good Standing

A. (The following policy is being implemented to protect the rights and opportunities of FFA students in the Vo-Ag program. Due to some very serious violations by students in the past, our chapter and department found it necessary to outline the proper procedure for a member to be in good standing.)

B. Every member will start out in good standing. Only by their actions will their standing become unsatisfactory. We hope this statement will provide a clear understanding of acceptable conduct, attitude and procedure on the part of the members.

Chapter History

Gregori Chapter Presidents

[redacted] 2010-2011
[redacted] 2011-2012
[redacted] 2012-2013
[redacted] 2013-2014
[redacted] 2014-2015
[redacted] 2015-2016
[redacted] 2016-2017
[redacted] 2017-2018

Merit Award Winner

[redacted] 2010-2011
[redacted] 2011-2012
[redacted] 2012-2013
[redacted] 2013-2014

Dekalb Award Winner

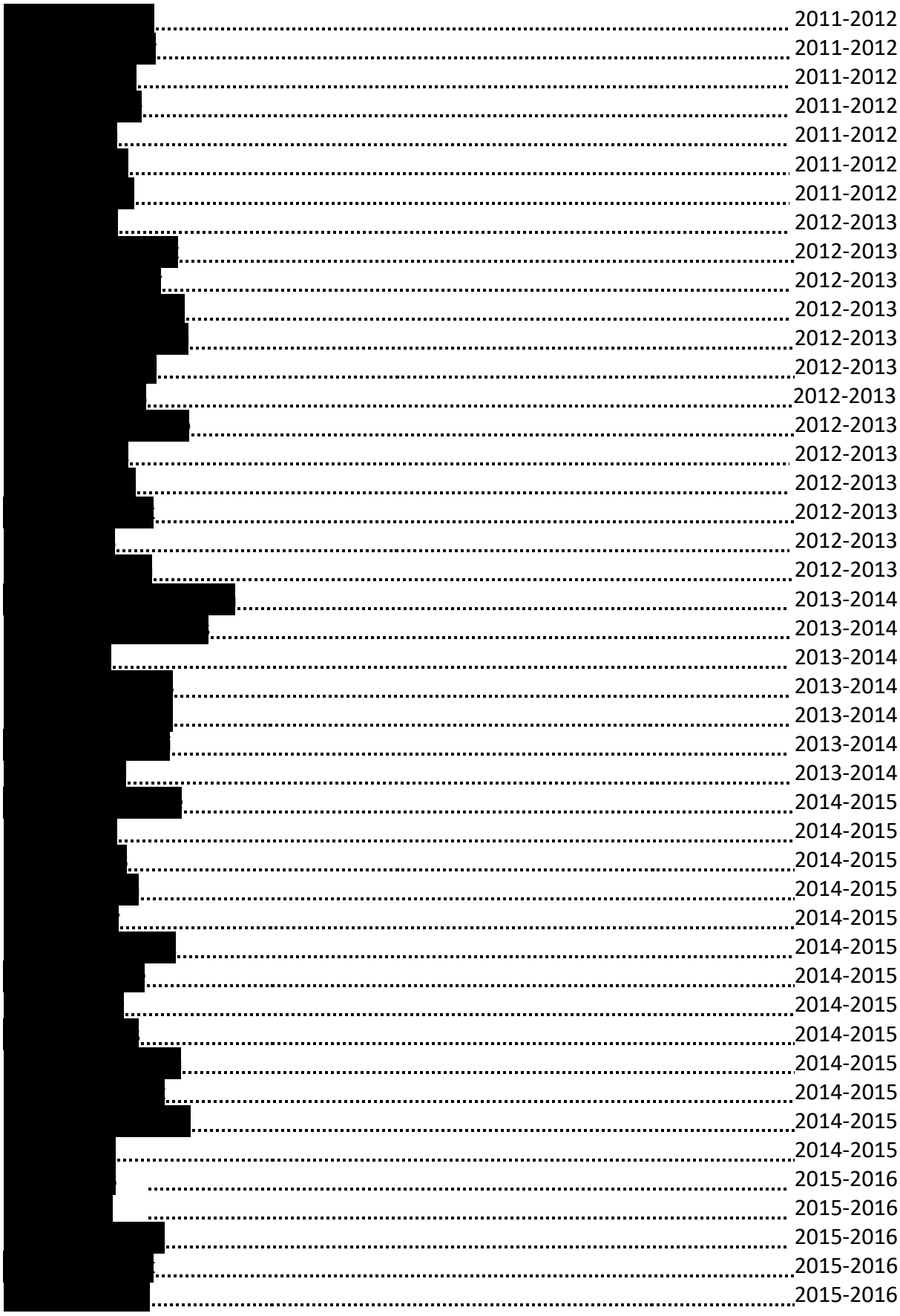
[redacted] 2010-2011
[redacted] 2011-2012
[redacted] 2012-2013
[redacted] 2013-2014
[redacted] 2016-2017

Gregori Honorary Chapter Farmers

Honorary membership: supervisors, school superintendents, principals, members of the Board of Education, instructors, helping to advance vocational agriculture and the FFA, honorary membership by a majority vote of members present at any regular meeting or convention. The following people hold the Honorary Farmer Degree.

[redacted] 2010-2011
[redacted] 2010-2011
[redacted] 2011-2012
[redacted] 2011-2012
[redacted] 2012-2013
[redacted] 2012-2013
[redacted] 2012-2013
[redacted] 2013-2014
[redacted] 2013-2014
[redacted] 2014-2015
[redacted] 2014-2015
[redacted] 2014-2015
[redacted] 2015-2016
[redacted] 2015-2016
[redacted] 2016-2017
[redacted] 2016-2017

Gregori State Farmers



[redacted] 2015-2016
[redacted] 2015-2016
[redacted] 2015-2016
[redacted] 2015-2016
[redacted] 2015-2016
[redacted] 2015-2016
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[redacted] 2015-2016
[redacted] 2015-2016
[redacted] 2016-2017
[redacted] 2016-2017
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[redacted] 2016-2017
[redacted] 2016-2017
[redacted] 2016-2017
[redacted] 2016-2017
[redacted] 2016-2017

Gregori American Farmers

[redacted] 2013-2014
[redacted] 2013-2014
[redacted] 2014-2015
[redacted] 2015-2016
[redacted] 2015-2016
[redacted] 2015-2016
[redacted] 2015-2016
[redacted] 2016-2017
[redacted] 2016-2017
[redacted] 2016-2017

Gregori Proficiency Winners

[redacted]; Wildlife Production & Management; Section and Regional 2010-2011
[redacted]; Wildlife Production & Management; Section, Regional & State 2011-2012
[redacted]; Diversified Crop Production; Section, Regional 2012-2013
[redacted]; Wildlife Production & Management; Section and Regional 2012-2013
[redacted]; Diversified Crop Production; Section, Regional 2013-2014
[redacted]; Nursery Production; Section and Regional & State
National - Silver 2013-2014
[redacted]; Ag Mechanics Repair; Section, Regional 2014-2015
[redacted]; Pomology; Section, ... 2014-2015
[redacted]; Landscape Management; Section 2015-2016
[redacted]; Beef Production; Section 2016-2017

Gregori Star Winners

[redacted]; Star Placement; Section, ... 2014-2015

Gregori Star Greenhand Winners

[redacted] 2010-2011
[redacted] 2011-2012
[redacted] 2012-2013
[redacted] 2013-2014
[redacted] 2013-2014
[redacted] 2014-2015
[redacted] 2014-2015
[redacted] 2015-2016
[redacted] 2015-2016
[redacted] 2016-2017

Gregori Star Chapter Farmer Winners

[redacted] 2010-2011
[redacted] 2011-2012
[redacted] 2012-2013
[redacted] 2013-2014
[redacted] 2014-2015
[redacted] 2015-2016
[redacted] 2016-2017

Gregori
Agriculture Department

For Live Calendar Updates: www.gregoriffa.weebly.com

Criteria 2 C: Participation Grade

Gregori High School Agriculture Department

Supervised Occupational Experience Project (SOEP) Guidelines

1. The SOEP shall be described in the student career plan.
2. Students enrolled in their first year in Agricultural Education shall be engaged in their S.O.E.P activities during each year of their enrollment.
3. Continuing students or advanced students in Agricultural Education courses must conduct S.O.E.P activities during each year of their enrollment.
4. Each student must maintain a California Agriculture Record Book and keep current information. The record book is part of the S.O.E.P. Grade.
5. The S.O.E.P. will account for 10% of the student's grade. The project grade will be decided based on the objectivity of the instructor. Students will be encouraged to enter local project competition or make a class presentation on their project for a grade.
6. A student S.O.E. must increase in scope and/or become more diverse from one year to the next.
7. Each student's records are evaluated and graded each quarter and visited/observed at least twice per year by the supervising teacher.
   & Students may use school facilities to include animal units, green/shade houses with instructor approval and by completing the required GHS Agriculture Department forms.
8. The Agriculture instructor and the facilities are covered by district insurance. However, the students S.O.E.P.'s are not covered by district insurance. Livestock insurance is available for students to purchase for a nominal fee; This insurance is provided by the California FFA Livestock Insurance and not affiliated with Modesto City Schools.

Description and Role of SOEP

The SOEP stands for Supervised Occupational Experience Program. Gregori FFA is very involved in the SOEP, ranging from work experience to ownership enterprises.

The students in this Agriculture Department are involved in many different kinds of projects. The projects include market and breeding sheep, market beef, market and breeding swine, poultry, Dairy, Ag Mechanics, rabbits, ornamental horticulture, and landscape projects. The major work experience programs are in the fields of Landscaping and Maintenance, agriculture sales and service. The teachers encourage students to concentrate on projects that relate to their future career goals. During this first year, the students work with the agriculture instructor to develop a four-year program plan that integrates SOEP, course work, and FFA Activities. The teachers plan to expand the diversity of the SOEP projects as well as continue their efforts to involve students. Students are graded on their SOEP projects. Their projects are worth 10% of the student's grade. SOEP's provide students with "HANDS ON EXPERIENCE" exercises in management, responsibility, growth, money management and much more. Most projects are kept at the school farm, which is fully equipped for the projects.

MODESTO CITY SCHOOLS
CITIZENSHIP MARK GUIDELINES

Course Title Int. Ag Science 3-4 **Teacher: Brittany Nelms**

1. **Attends class daily:** *Four or more unexcused absences will result in an unsatisfactory citizenship mark*.

2. **Comes to class on time**: *Five or more unexcused tardies in a quarter will result in an unsatisfactory citizenship mark. Students must be in their seats when the bell ring, materials out, ready to work (Sharpen pencils before the bell)*

3. **Class Seats:** *Seating will be assigned by the instructor, with changes made only to improve the learning environment.*

4. **Comes to class with necessary materials:** *Students are expected to bring a notebook, paper, planner and pencil or pen every day.*

5. **Turns in assignments/homework/projects on time.** *Academic work will count toward academic grade - not citizenship. Make up work is given only for excused absences. It is the students responsibility to request make up work within 2 days of returning from an absence. Students have 2x the number of days absent to complete and turn in work.*

6. **FFA Activities:** *Students must maintain academic eligibility to be involved in FFA activities, fairs etc. Students who are not eligible at third quarter grades may not show at the fair.*

7. **Does own work when independent work is required: does not cheat:** *Any cheating episode will result in an unsatisfactory grade. All work to be turned in must have a clear first and last name, be neat and organized, free from drawings etc. pencil, blue or black ink will be used unless otherwise stated.*

8. **Exercises reasonable care of school property:** *Students are expected to treat public property as they would treat their own, unreasonable care of the ray will result in an unsatisfactory mark.*

9. **Shows respect for others:** *My classroom is an area of free ideas and discussion. Students are expected to respect the individual rights of others.*

10. **Does not disrupt class: exercises good conduct:** *My goal is for the students to learn as much Agriculture and Science as possible. If a student's conduct impedes this goal, an unsatisfactory will result. Students are to remain in seats unless asked to move. The instructor will dismiss the class each day, not the bell. All students should be back in their seats before the bell.*

11. **Independent Study:** *Independent study requests for homework require 5 days to complete.*

12. **Grade Checks:** *Grade checks are only completed on Fridays. Plan ahead.*

13. **Classroom:** *The following items should not be visible during class or used in class: Make up, personal pictures, phones, Walkman's, IPODs, sports equipment, non-class magazines, assignments from other classes.*

14. **Computer Lab:** *Students must have their own user account to use the lab. To use the internet students must pass the district" Internet Drivers License" test. The lab is for educational uses only. Students MAY NOT use the computers to play music / videos, personal email, games, etc.*

15. **Personal Items:** *The Agriculture Department is not responsible of items left in the Department.*

EXPECTATIONS FOR OUTSTANDING CITIZENSHIP MARKS

- Politeness, Respect yourself and others, property, and Sensitivity towards others
- Tolerance of others opinions
- Involvement in class discussions
- Willingness to do the best possible job every day.
- Use acceptable behavior and language at all times

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
COURSE INFORMATION SHEET
Gregori **HIGH SCHOOL**

COURSE TITLE: Int. Ag Science 3-4

TEXTBOOK: *Biology*

OTHER REQUIRED MATERIALS:
California Record Book and FFA Leadership Manual

MAJOR UNITS OF INSTRUCTION:
Ecology, Cell Biology, Genetics, Theory of Evolution, Leadership, FFA, SOEP

GRADING/EVALUATION POLICY:
Types of Evaluation and Weighted Value:

Tests	= 20%
FFA	= 20%
SOEP	= 10%
Homework	= 30%
Lab Work	= 10%
Daily Work	= 20%

Description of Final examination (including Weighted value in semester grade):

Regular Final = 5%

TEACHER: Brittany Nelms

Method of Grading and Scale:

100% - 90%	= A
80% - 89%	= B
70% - 79%	= C
54% - 69%	= D
53% and Below	= F

EXTRA CREDIT POLICY:
Must see teacher for extra-credit assignment.

Make-up Practices: Students whose absence is excused shall be allowed two days for each day of absence to make-up work. Responsibility for making up missed work lies with the student. Refer to the Student Conduct Code regarding make-up practices for other types of absences.

Other:
Missing work receives a zero for a grade.

Homework Practices (including frequency):
Homework will be given 2-3 times per week and will be due on assigned day.

Other:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animals and/or plants.

SPECIAL NOTE: Any test or assignment that a student may not keep following its return and review will be retained by the teacher for at least 9 weeks following the issuance of the report cards.

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
CITIZENSHIP MARK GUIDELINES

Course Title - Ag Leadership **Teacher: Mark Nower**

1. **Attends class daily:** *Four or more unexcused absences will result in an unsatisfactory citizenship mark*.

2. **Comes to class on time**: *Five or more unexcused tardies in a quarter will result in an unsatisfactory citizenship mark. Students must be in their seats when the bell ring, materials out, ready to work (Sharpen pencils before the bell)*

3. **Class Seats:** *Seating will be assigned by the instructor, with changes made only to improve the learning environment.*

4. **Comes to class with necessary materials:** *Students are expected to bring a notebook, paper, planner and pencil or pen every day.*

5. **Turns in assignments/homework/projects on time.** *Academic work will count toward academic grade - not citizenship. Make up work is given only for excused absences. It is the students responsibility to request make up work within 2 days of returning from an absence. Students have 2x the number of days absent to complete and turn in work.*

6. **FFA Activities:** *Students must maintain academic eligibility to be involved in FFA activities, fairs etc. Students who are not eligible at third quarter grades may not show at the fair.*

7. **Does own work when independent work is required: does not cheat:** *Any cheating episode will result in an unsatisfactory grade. All work to be turned in must have a clear first and last name, be neat and organized, free from drawings etc. pencil, blue or black ink will be used unless otherwise stated.*

8. **Exercises reasonable care of school property:** *Students are expected to treat public property as they would treat their own, unreasonable care of the ray will result in an unsatisfactory mark.*

9. **Shows respect for others:** *My classroom is an area of free ideas and discussion. Students are expected to respect the individual rights of others.*

10. **Does not disrupt class: exercises good conduct:** *My goal is for the students to learn as much Agriculture and Science as possible. If a student's conduct impedes this goal, an unsatisfactory will result. Students are to remain in seats unless asked to move. The instructor will dismiss the class each day, not the bell. All students should be back in their seats before the bell.*

11. **Independent Study:** *Independent study requests for homework require 5 days to complete.*

12. **Grade Checks:** *Grade checks are only completed on Fridays. Plan ahead.*

13. **Classroom:** *The following items should not be visible during class or used in class: Make up, personal pictures, phones, walkmans, IPODs, sports equipment, no- class magazines, assignments from other classes.*

14. **Computer Lab:** *Students must have their own user account to use the lab. To use the internet students must pass the district" Internet Drivers License" test. The lab is for educational uses only. Students MAY NOT use the computers to play music / videos, personal email, games, etc.*

15. **Personal Items:** *The Agriculture Department is not responsible of items left in the Department.*

EXPECTATIONS FOR OUTSTANDING CITIZENSHIP MARKS

- Politeness, Respect yourself and others, property, and Sensitivity towards others
- Tolerance of others opinions
- Involvement in class discussions
- Willingness to do the best possible job every day.
- Use acceptable behavior and language at all times

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
COURSE INFORMATION SHEET
Gregori **HIGH SCHOOL**

TEACHER: Mark Nower

COURSE TITLE: Ag Leadership

TEXTBOOK: *FFA Leadership Manual*

OTHER REQUIRED MATERIALS:
California Record Book

MAJOR UNITS OF INSTRUCTION:
FFA, SOEP, Leadership, Public Speaking, Recruitment.

GRADING/EVALUATION POLICY:
Types of Evaluation and Weighted Value:

Tests	= 20%
FFA	= 20%
SOEP	= 10%
Homework	= 30%
Daily Work	= 20%

Description of Final examination (including Weighted value in semester grade):

Regular Final = 5%

Method of Grading and Scale:

100% - 90%	= A
80% - 89%	= B
70% - 79%	= C
54% - 69%	= D
53% and Below	= F

EXTRA CREDIT POLICY:
Must see teacher for extra-credit assignment.

Make-up Practices: Students whose absence is excused shall be allowed two days for each day of absence to make-up work. Responsibility for making up missed work lies with the student. Refer to the Student Conduct Code regarding make-up practices for other types of absences.

Other:
Missing work receives a zero for a grade.

Homework Practices (including frequency):
Homework will be given 2-3 times per week and will be due on assigned day.

Other:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animals and/or plants.

SPECIAL NOTE: Any test or assignment that a student may not keep following its return and review will be retained by the teacher for at least 9 weeks following the issuance of the report cards.

MODESTO CITY SCHOOLS
CITIZENSHIP MARK GUIDELINES

Course Title – Advanced Animal Science **Teacher: Mark Nower**

1. **Attends class daily:** *Four or more unexcused absences will result in an unsatisfactory citizenship mark*.

2. **Comes to class on time**: *Five or more unexcused tardies in a quarter will result in an unsatisfactory citizenship mark. Students must be in their seats when the bell ring, materials out, ready to work (Sharpen pencils before the bell)*

3. **Class Seats:** *Seating will be assigned by the instructor, with changes made only to improve the learning environment.*

4. **Comes to class with necessary materials:** *Students are expected to bring a notebook, paper, planner and pencil or pen every day.*

5. **Turns in assignments/homework/projects on time.** *Academic work will count toward academic grade - not citizenship. Make up work is given only for excused absences. It is the students responsibility to request make up work within 2 days of returning from an absence. Students have 2x the number of days absent to complete and turn in work.*

6. **FFA Activities:** *Students must maintain academic eligibility to be involved in FFA activities, fairs etc. Students who are not eligible at third quarter grades may not show at the fair.*

7. **Does own work when independent work is required: does not cheat:** *Any cheating episode will result in an unsatisfactory grade. All work to be turned in must have a clear first and last name, be neat and organized, free from drawings etc. pencil, blue or black ink will be used unless otherwise stated.*

8. **Exercises reasonable care of school property:** *Students are expected to treat public property as they would treat their own, unreasonable care of the ray will result in an unsatisfactory mark.*

9. **Shows respect for others:** *My classroom is an area of free ideas and discussion. Students are expected to respect the individual rights of others.*

10. **Does not disrupt class: exercises good conduct:** *My goal is for the students to learn as much Agriculture and Science as possible. If a student's conduct impedes this goal, an unsatisfactory will result. Students are to remain in seats unless asked to move. The instructor will dismiss the class each day, not the bell. All students should be back in their seats before the bell.*

11. **Independent Study:** *Independent study requests for homework require 5 days to complete.*

12. **Grade Checks:** *Grade checks are only completed on Fridays. Plan ahead.*

13. **Classroom:** *The following items should not be visible during class or used in class: Make up, personal pictures, phones, Walkman's, IPODs, sports equipment, non-class magazines, assignments from other classes.*

14. **Computer Lab:** *Students must have their own user account to use the lab. To use the internet students must pass the district" Internet Drivers License" test. The lab is for educational uses only. Students MAY NOT use the computers to play music / videos, personal email, games, etc.*

15. **Personal Items:** *The Agriculture Department is not responsible of items left in the Department.*

EXPECTATIONS FOR OUTSTANDING CITIZENSHIP MARKS

- Politeness, Respect yourself and others, property, and Sensitivity towards others
- Tolerance of others opinions
- Involvement in class discussions
- Willingness to do the best possible job every day.
- Use acceptable behavior and language at all times

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
COURSE INFORMATION SHEET
Gregori **HIGH SCHOOL**

COURSE TITLE: *Advanced Animal Science*

TEXTBOOK: *Modern Livestock & Poultry Production*

OTHER REQUIRED MATERIALS:
California Record Book and FFA Leadership Manual

MAJOR UNITS OF INSTRUCTION:
FFA, SOEP, Leadership, Livestock Facilities, Equipment and Tools, Nutrition, Maintenance of Organ Systems, Livestock Breeding, Health Problems, Livestock Pests and Diseases, Basic Care Principals, Basic Concepts Leading to Sale, Pasture/Rangeland Management, Waste management, Livestock Judging

GRADING/EVALUATION POLICY:
Types of Evaluation and Weighted Value:

Tests	= 20%
FFA	= 20%
SOEP	= 10%
Homework	= 30%
Daily Work	= 20%

Description of Final examination (including Weighted value in semester grade):
Regular Final = 5%

TEACHER: Mark Nower

Method of Grading and Scale:

100% - 90%	= A
80% - 89%	= B
70% - 79%	= C
54% - 69%	= D
53% and Below	= F

EXTRA CREDIT POLICY:
Must see teacher for extra-credit assignment.

Make-up Practices: Students whose absence is excused shall be allowed two days for each day of absence to make-up work. Responsibility for making up missed work lies with the student. Refer to the Student Conduct Code regarding make-up practices for other types of absences.

Other:
Missing work receives a zero for a grade.

Homework Practices (including frequency):
Homework will be given 2-3 times per week and will be due on assigned day.

Other:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animals and/or plants.

SPECIAL NOTE: Any test or assignment that a student may not keep following its return and review will be retained by the teacher for at least 9 weeks following the issuance of the report cards.

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MODESTO CITY SCHOOLS
CITIZENSHIP MARK GUIDELINES

Course Title - Ag Mechanics 1-2 **Teacher: Kyle Beeman**

1. **Attends class daily:** *Four or more unexcused absences will result in an unsatisfactory citizenship mark*.

2. **Comes to class on time**: *Five or more unexcused tardies in a quarter will result in an unsatisfactory citizenship mark. Students must be in their seats when the bell ring, materials out, ready to work (Sharpen pencils before the bell)*

3. **Class Seats:** *Seating will be assigned by the instructor, with changes made only to improve the learning environment.*

4. **Comes to class with necessary materials:** *Students are expected to bring a notebook, paper, planner and pencil or pen every day.*

5. **Turns in assignments/homework/projects on time.** *Academic work will count toward academic grade - not citizenship. Make up work is given only for excused absences. It is the students responsibility to request make up work within 2 days of returning from an absence. Students have 2x the number of days absent to complete and turn in work.*

6. **FFA Activities:** *Students must maintain academic eligibility to be involved in FFA activities, fairs etc. Students who are not eligible at third quarter grades may not show at the fair.*

7. **Does own work when independent work is required: does not cheat:** *Any cheating episode will result in an unsatisfactory grade. All work to be turned in must have a clear first and last name, be neat and organized, free from drawings etc. pencil, blue or black ink will be used unless otherwise stated.*

8. **Exercises reasonable care of school property:** *Students are expected to treat public property as they would treat their own, unreasonable care of the ray will result in an unsatisfactory mark.*

9. **Shows respect for others:** *My classroom is an area of free ideas and discussion. Students are expected to respect the individual rights of others.*

10. **Does not disrupt class: exercises good conduct:** *My goal is for the students to learn as much Agriculture and Science as possible. If a student's conduct impedes this goal, an unsatisfactory will result. Students are to remain in seats unless asked to move. The instructor will dismiss the class each day, not the bell. All students should be back in their seats before the bell.*

11. **Independent Study:** *Independent study requests for homework require 5 days to complete.*

12. **Grade Checks:** *Grade checks are only completed on Fridays. Plan ahead.*

13. **Classroom:** *The following items should not be visible during class or used in class: Make up, personal pictures, phones, Walkman's, IPODs, sports equipment, non-class magazines, assignments from other classes.*

14. **Computer Lab:** *Students must have their own user account to use the lab. To use the internet students must pass the district" Internet Drivers License" test. The lab is for educational uses only. Students MAY NOT use the computers to play music / videos, personal email, games, etc.*

15. **Personal Items:** *The Agriculture Department is not responsible of items left in the Department.*

EXPECTATIONS FOR OUTSTANDING CITIZENSHIP MARKS

- Politeness, Respect yourself and others, property, and Sensitivity towards others
- Tolerance of others opinions
- Involvement in class discussions
- Willingness to do the best possible job every day.
- Use acceptable behavior and language at all times

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
COURSE INFORMATION SHEET
Gregori **HIGH SCHOOL**

COURSE TITLE: *Agriculture Mechanics 1-2*

TEXTBOOK: *Agricultural Mechanics – 6th Edition*

OTHER REQUIRED MATERIALS:
California Record Book and FFA Leadership Manual

MAJOR UNITS OF INSTRUCTION:
FFA, SOEP, Leadership, Tools, Safety, Measurement, Tool Fitting, Oxy-Acetylene, Welding, Arc Welding, Metal Work, Woodworking, Drawing, Concrete, Electricity, Ropework, Plumbing.

GRADING/EVALUATION POLICY:
Types of Evaluation and Weighted Value:

Tests	= 20%
FFA	= 20%
SOEP	= 10%
Homework	= 30%
Daily Work	= 20%

Description of Final examination (including Weighted value in semester grade):

Regular Final = 5%

TEACHER: Kyle Beeman

Method of Grading and Scale:

100% - 90%	= A
80% - 89%	= B
70% - 79%	= C
54% - 69%	= D
53% and Below	= F

EXTRA CREDIT POLICY:
Must see teacher for extra-credit assignment.

Make-up Practices: Students whose absence is excused shall be allowed two days for each day of absence to make-up work. Responsibility for making up missed work lies with the student. Refer to the Student Conduct Code regarding make-up practices for other types of absences.

Other:
Missing work receives a zero for a grade.

Homework Practices (including frequency):
Homework will be given 2-3 times per week and will be due on assigned day.

Other:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animals and/or plants.

SPECIAL NOTE: Any test or assignment that a student may not keep following its return and review will be retained by the teacher for at least 9 weeks following the issuance of the report cards.

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
CITIZENSHIP MARK GUIDELINES

Course Title - Ag Mechanics 3-4 **Teacher: Kyle Beeman**

1. **Attends class daily:** *Four or more unexcused absences will result in an unsatisfactory citizenship mark.*

2. **Comes to class on time**: *Five or more unexcused tardies in a quarter will result in an unsatisfactory citizenship mark. Students must be in their seats when the bell ring, materials out, ready to work (Sharpen pencils before the bell)*

3. **Class Seats:** *Seating will be assigned by the instructor, with changes made only to improve the learning environment.*

4. **Comes to class with necessary materials:** *Students are expected to bring a notebook, paper, planner and pencil or pen every day.*

5. **Turns in assignments/homework/projects on time.** *Academic work will count toward academic grade - not citizenship. Make up work is given only for excused absences. It is the students responsibility to request make up work within 2 days of returning from an absence. Students have 2x the number of days absent to complete and turn in work.*

6. **FFA Activities:** *Students must maintain academic eligibility to be involved in FFA activities, fairs etc. Students who are not eligible at third quarter grades may not show at the fair.*

7. **Does own work when independent work is required: does not cheat:** *Any cheating episode will result in an unsatisfactory grade. All work to be turned in must have a clear first and last name, be neat and organized, free from drawings etc. pencil, blue or black ink will be used unless otherwise stated.*

8. **Exercises reasonable care of school property:** *Students are expected to treat public property as they would treat their own, unreasonable care of the ray will result in an unsatisfactory mark.*

9. **Shows respect for others:** *My classroom is an area of free ideas and discussion. Students are expected to respect the individual rights of others.*

10. **Does not disrupt class: exercises good conduct:** *My goal is for the students to learn as much Agriculture and Science as possible. If a student's conduct impedes this goal, an unsatisfactory will result. Students are to remain in seats unless asked to move. The instructor will dismiss the class each day, not the bell. All students should be back in their seats before the bell.*

11. **Independent Study:** *Independent study requests for homework require 5 days to complete.*

12. **Grade Checks:** *Grade checks are only completed on Fridays. Plan ahead.*

13. **Classroom:** *The following items should not be visible during class or used in class: Make up, personal pictures, phones, Walkman's, IPODs, sports equipment, non-class magazines, assignments from other classes.*

14. **Computer Lab:** *Students must have their own user account to use the lab. To use the internet students must pass the district" Internet Drivers License" test. The lab is for educational uses only. Students MAY NOT use the computers to play music / videos, personal email, games, etc.*

15. **Personal Items:** *The Agriculture Department is not responsible of items left in the Department.*

EXPECTATIONS FOR OUTSTANDING CITIZENSHIP MARKS

- Politeness, Respect yourself and others, property, and Sensitivity towards others
- Tolerance of others opinions
- Involvement in class discussions
- Willingness to do the best possible job every day.
- Use acceptable behavior and language at all times

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
COURSE INFORMATION SHEET
Gregori **HIGH SCHOOL**

COURSE TITLE: *Agriculture Mechanics 3-4*

TEXTBOOK: *Agricultural Mechanics – 6th Edition*

OTHER REQUIRED MATERIALS:
California Record Book and FFA Leadership Manual

MAJOR UNITS OF INSTRUCTION:
Students will use a classroom and laboratory-type Situation to cover the principals, care of, and Maintenance of small gas and diesel engines. Areas if instruction include: use of equipment manuals, equipment maintenance, and types of engines, oxy-acetylene welding, arc welding, measurement, drawing, safety, FFA, SOEP, and project construction.

GRADING/EVALUATION POLICY:
Types of Evaluation and Weighted Value:

Tests	= 20%
FFA	= 20%
SOEP	= 10%
Homework	= 30%
Shop Work	= 30%

Description of Final examination (including Weighted value in semester grade):

Final = 10%

TEACHER: Kyle Beeman

Method of Grading and Scale:

100% - 90%	= A
80% - 89%	= B
70% - 79%	= C
54% - 69%	= D
53% and Below	= F

EXTRA CREDIT POLICY:
Must see teacher for extra-credit assignment.

Make-up Practices: Students whose absence is excused shall be allowed two days for each day of absence to make-up work. Responsibility for making up missed work lies with the student. Refer to the Student Conduct Code regarding make-up practices for other types of absences.

Other:
Missing work receives a zero for a grade.

Homework Practices (including frequency):
Homework will be given 2-3 times per week and will be due on assigned day.

Other:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animals and/or plants.

SPECIAL NOTE: Any test or assignment that a student may not keep following its return and review will be retained by the teacher for at least 9 weeks following the issuance of the report cards.

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
CITIZENSHIP MARK GUIDELINES

Course Title - Ag Mechanics 5-6 **Teacher: Kyle Beeman**

1. **Attends class daily:** *Four or more unexcused absences will result in an unsatisfactory citizenship mark*.

2. **Comes to class on time**: *Five or more unexcused tardies in a quarter will result in an unsatisfactory citizenship mark. Students must be in their seats when the bell ring, materials out, ready to work (Sharpen pencils before the bell)*

3. **Class Seats:** *Seating will be assigned by the instructor, with changes made only to improve the learning environment.*

4. **Comes to class with necessary materials:** *Students are expected to bring a notebook, paper, planner and pencil or pen every day.*

5. **Turns in assignments/homework/projects on time.** *Academic work will count toward academic grade - not citizenship. Make up work is given only for excused absences. It is the students responsibility to request make up work within 2 days of returning from an absence. Students have 2x the number of days absent to complete and turn in work.*

6. **FFA Activities:** *Students must maintain academic eligibility to be involved in FFA activities, fairs etc. Students who are not eligible at third quarter grades may not show at the fair.*

7. **Does own work when independent work is required: does not cheat:** *Any cheating episode will result in an unsatisfactory grade. All work to be turned in must have a clear first and last name, be neat and organized, free from drawings etc. pencil, blue or black ink will be used unless otherwise stated.*

8. **Exercises reasonable care of school property:** *Students are expected to treat public property as they would treat their own, unreasonable care of the ray will result in an unsatisfactory mark.*

9. **Shows respect for others:** *My classroom is an area of free ideas and discussion. Students are expected to respect the individual rights of others.*

10. **Does not disrupt class: exercises good conduct:** *My goal is for the students to learn as much Agriculture and Science as possible. If a student's conduct impedes this goal, an unsatisfactory will result. Students are to remain in seats unless asked to move. The instructor will dismiss the class each day, not the bell. All students should be back in their seats before the bell.*

11. **Independent Study:** *Independent study requests for homework require 5 days to complete.*

12. **Grade Checks:** *Grade checks are only completed on Fridays. Plan ahead.*

13. **Classroom:** *The following items should not be visible during class or used in class: Make up, personal pictures, phones, walkmans, IPODs, sports equipment, non-class magazines, assignments from other classes.*

14. **Computer Lab:** *Students must have their own user account to use the lab. To use the internet students must pass the district" Internet Drivers License" test. The lab is for educational uses only. Students MAY NOT use the computers to play music / videos, personal email, games, etc.*

15. **Personal Items:** *The Agriculture Department is not responsible of items left in the Department.*

EXPECTATIONS FOR OUTSTANDING CITIZENSHIP MARKS

- Politeness, Respect yourself and others, property, and Sensitivity towards others
- Tolerance of others opinions
- Involvement in class discussions
- Willingness to do the best possible job every day.
- Use acceptable behavior and language at all times

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
COURSE INFORMATION SHEET
Gregori **HIGH SCHOOL**

COURSE TITLE: *Agriculture Mechanics 5-6*

TEXTBOOK: *Agricultural Mechanics – 6th Edition*

OTHER REQUIRED MATERIALS:
California Record Book and FFA Leadership Manual

MAJOR UNITS OF INSTRUCTION:
Students will use a classroom and laboratory-type Situation to cover the principals of surveying, power hydraulics, equipment maintenance, oxy-acetylene welding, arc welding, MIG and TIG Welding. Project Construction will emphasize project drawing, measurement, and cost analysis.

GRADING/EVALUATION POLICY:
Types of Evaluation and Weighted Value:

Tests	= 10%
FFA	= 20%
SOEP	= 10%
Shop Work	= 70%

Description of Final examination (including Weighted value in semester grade):

Regular Final = 5%

TEACHER: Kyle Beeman

Method of Grading and Scale:

100% - 90%	= A
80% - 89%	= B
70% - 79%	= C
54% - 69%	= D
53% and Below	= F

EXTRA CREDIT POLICY:
Must see teacher for extra-credit assignment.

Make-up Practices: Students whose absence is excused shall be allowed two days for each day of absence to make-up work. Responsibility for making up missed work lies with the student. Refer to the Student Conduct Code regarding make-up practices for other types of absences.

Other:
Missing work receives a zero for a grade.

Homework Practices (including frequency):
Homework will be given 2-3 times per week and will be due on assigned day.

Other:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animals and/or plants.

SPECIAL NOTE: Any test or assignment that a student may not keep following its return and review will be retained by the teacher for at least 9 weeks following the issuance of the report cards.

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
CITIZENSHIP MARK GUIDELINES

Course Title - The Art And History of Floral Design **Teacher: Jennifer Delnero & Brittany Nelms**

1. **Attends class daily:** *Four or more unexcused absences will result in an unsatisfactory citizenship mark*.

2. **Comes to class on time**: *Five or more unexcused tardies in a quarter will result in an unsatisfactory citizenship mark. Students must be in their seats when the bell ring, materials out, ready to work (Sharpen pencils before the bell)*

3. **Class Seats:** *Seating will be assigned by the instructor, with changes made only to improve the learning environment.*

4. **Comes to class with necessary materials:** *Students are expected to bring a notebook, paper, planner and pencil or pen every day.*

5. **Turns in assignments/homework/projects on time.** *Academic work will count toward academic grade - not citizenship. Make up work is given only for excused absences. It is the students responsibility to request make up work within 2 days of returning from an absence. Students have 2x the number of days absent to complete and turn in work.*

6. **FFA Activities:** *Students must maintain academic eligibility to be involved in FFA activities, fairs etc. Students who are not eligible at third quarter grades may not show at the fair.*

7. **Does own work when independent work is required: does not cheat:** *Any cheating episode will result in an unsatisfactory grade. All work to be turned in must have a clear first and last name, be neat and organized, free from drawings etc. pencil, blue or black ink will be used unless otherwise stated.*

8. **Exercises reasonable care of school property:** *Students are expected to treat public property as they would treat their own, unreasonable care of the ray will result in an unsatisfactory mark.*

9. **Shows respect for others:** *My classroom is an area of free ideas and discussion. Students are expected to respect the individual rights of others.*

10. **Does not disrupt class: exercises good conduct:** *My goal is for the students to learn as much Agriculture and Science as possible. If a student's conduct impedes this goal, an unsatisfactory will result. Students are to remain in seats unless asked to move. The instructor will dismiss the class each day, not the bell. All students should be back in their seats before the bell.*

11. **Independent Study:** *Independent study requests for homework require 5 days to complete.*

12. **Grade Checks:** *Grade checks are only completed on Fridays. Plan ahead.*

13. **Classroom:** *The following items should not be visible during class or used in class: Make up, personal pictures, phones, Walkman's, IPODs, sports equipment, non-class magazines, assignments from other classes.*

14. **Computer Lab:** *Students must have their own user account to use the lab. To use the internet students must pass the district" Internet Drivers License" test. The lab is for educational uses only. Students MAY NOT use the computers to play music / videos, personal email, games, etc.*

15. **Personal Items:** *The Agriculture Department is not responsible of items left in the Department.*

EXPECTATIONS FOR OUTSTANDING CITIZENSHIP MARKS

- Politeness, Respect yourself and others, property, and Sensitivity towards others
- Tolerance of others opinions
- Involvement in class discussions
- Willingness to do the best possible job every day.
- Use acceptable behavior and language at all times

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
COURSE INFORMATION SHEET
Gregori **HIGH SCHOOL**

COURSE TITLE: The Art and History of Floral Design

TEXTBOOK: The Art of Floral Design.

OTHER REQUIRED MATERIALS:
California Record Book and FFA Leadership Manual

MAJOR UNITS OF INSTRUCTION:
This class is designed to allow students to apply an artistic approach to floral design. Students will explore elements and principles of floral design, two or three dimensional designs, history of floral art, arrangement styles and techniques, seasonal, holiday and occasional designs. Students will achieve this through creating, designing, identifying, explaining and evaluating all topics of study. Students will use the skills learned to create the following designs. This course receives UC Fine Art Credit.

GRADING/EVALUATION POLICY:
Types of Evaluation and Weighted Value:

Tests	= 20%
FFA	= 20%
SOEP	= 10%
Homework	= 10%
Daily Work	= 40%

Description of Final examination (including Weighted value in semester grade):

Regular Final = 5%

TEACHER: Jennifer Delnero & Brittany Nelms

Method of Grading and Scale:

100% - 90%	= A
80% - 89%	= B
70% - 79%	= C
54% - 69%	= D
53% and Below	= F

EXTRA CREDIT POLICY:
Must see teacher for extra-credit assignment.

Make-up Practices: Students whose absence is excused shall be allowed two days for each day of absence to make-up work. Responsibility for making up missed work lies with the student. Refer to the Student Conduct Code regarding make-up practices for other types of absences.

Other:
Missing work receives a zero for a grade.

Homework Practices (including frequency):
Homework will be given 1-2 times per week and will be due on assigned day.

Other:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animals and/or plants.

SPECIAL NOTE: Any test or assignment that a student may not keep following its return and review will be retained by the teacher for at least 9 weeks following the issuance of the report cards.

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
CITIZENSHIP MARK GUIDELINES

Course Title - ROP Vet Science **Teacher: Mark Nower**

1. **Attends class daily:** *Four or more unexcused absences will result in an unsatisfactory citizenship mark*.

2. **Comes to class on time**: *Five or more unexcused tardies in a quarter will result in an unsatisfactory citizenship mark. Students must be in their seats when the bell ring, materials out, ready to work (Sharpen pencils before the bell)*

3. **Class Seats:** *Seating will be assigned by the instructor, with changes made only to improve the learning environment.*

4. **Comes to class with necessary materials:** *Students are expected to bring a notebook, paper, planner and pencil or pen every day.*

5. **Turns in assignments/homework/projects on time.** *Academic work will count toward academic grade - not citizenship. Make up work is given only for excused absences. It is the students responsibility to request make up work within 2 days of returning from an absence. Students have 2x the number of days absent to complete and turn in work.*

6. **FFA Activities:** *Students must maintain academic eligibility to be involved in FFA activities, fairs etc. Students who are not eligible at third quarter grades may not show at the fair.*

7. **Does own work when independent work is required: does not cheat:** *Any cheating episode will result in an unsatisfactory grade. All work to be turned in must have a clear first and last name, be neat and organized, free from drawings etc. pencil, blue or black ink will be used unless otherwise stated.*

8. **Exercises reasonable care of school property:** *Students are expected to treat public property as they would treat their own, unreasonable care of the ray will result in an unsatisfactory mark.*

9. **Shows respect for others:** *My classroom is an area of free ideas and discussion. Students are expected to respect the individual rights of others.*

10. **Does not disrupt class: exercises good conduct:** *My goal is for the students to learn as much Agriculture and Science as possible. If a student's conduct impedes this goal, an unsatisfactory will result. Students are to remain in seats unless asked to move. The instructor will dismiss the class each day, not the bell. All students should be back in their seats before the bell.*

11. **Independent Study:** *Independent study requests for homework require 5 days to complete.*

12. **Grade Checks:** *Grade checks are only completed on Fridays. Plan ahead.*

13. **Classroom:** *The following items should not be visible during class or used in class: Make up, personal pictures, phones, Walkman's, IPODs, sports equipment, non-class magazines, assignments from other classes.*

14. **Computer Lab:** *Students must have their own user account to use the lab. To use the internet students must pass the district" Internet Drivers License" test. The lab is for educational uses only. Students MAY NOT use the computers to play music / videos, personal email, games, etc.*

15. **Personal Items:** *The Agriculture Department is not responsible of items left in the Department.*

EXPECTATIONS FOR OUTSTANDING CITIZENSHIP MARKS

- Politeness, Respect yourself and others, property, and Sensitivity towards others
- Tolerance of others opinions
- Involvement in class discussions
- Willingness to do the best possible job every day.
- Use acceptable behavior and language at all times

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
COURSE INFORMATION SHEET
Gregori **HIGH SCHOOL**

COURSE TITLE: ROP Vet Science

TEXTBOOK: Introduction to Veterinary Science, Lawhead & baker, Thomson Learning First Edition,
An Illustrated Guide to Veterinary Medical Terminology, 1st Edition, Janet A. Romich

OTHER REQUIRED MATERIALS:
California Record Book and
FFA Leadership Manual, Clinical Textbook for Veterinary Technicians, 4th Edition, W. B. Saunders Company
Pharmacology for Veterinary Technicians, Robert Bill, DVM
Handbook of Veterinary Anesthesia, William Muir, DVM, Mosby Company
Clinical Anatomy & Physiology for Veterinary Technicians, Mosby-Harcort Science Co

MAJOR UNITS OF INSTRUCTION:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animal science. This course will emphasize Veterinary Science.

GRADING/EVALUATION POLICY:
Types of Evaluation and Weighted Value:

Tests	= 20%
FFA	= 20%
SOEP	= 10%
Homework	= 10%
Daily Work	= 50%

Description of Final examination (including Weighted value in semester grade):

Regular Final = 5%

TEACHER: Mark Nower

Method of Grading and Scale:

100% - 90%	= A
80% - 89%	= B
70% - 79%	= C
54% - 69%	= D
53% and Below	= F

EXTRA CREDIT POLICY:
Must see teacher for extra-credit assignment.

Make-up Practices: Students whose absence is excused shall be allowed two days for each day of absence to make-up work. Responsibility for making up missed work lies with the student. Refer to the Student Conduct Code regarding make-up practices for other types of absences.

Other:
Missing work receives a zero for a grade.

Homework Practices (including frequency):
Homework will be given 1-2 times per week and will be due on assigned day.

Other:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animals and/or plants.

SPECIAL NOTE: Any test or assignment that a student may not keep following its return and review will be retained by the teacher for at least 9 weeks following the issuance of the report cards.

MODESTO CITY SCHOOLS
CITIZENSHIP MARK GUIDELINES

Course Title - Floral Design II (ROP) **Teacher: Jennifer Delnero**

1. **Attends class daily:** *Four or more unexcused absences will result in an unsatisfactory citizenship mark*.

2. **Comes to class on time**: *Five or more unexcused tardies in a quarter will result in an unsatisfactory citizenship mark. Students must be in their seats when the bell ring, materials out, ready to work (Sharpen pencils before the bell)*

3. **Class Seats:** *Seating will be assigned by the instructor, with changes made only to improve the learning environment.*

4. **Comes to class with necessary materials:** *Students are expected to bring a notebook, paper, planner and pencil or pen every day.*

5. **Turns in assignments/homework/projects on time.** *Academic work will count toward academic grade - not citizenship. Make up work is given only for excused absences. It is the students responsibility to request make up work within 2 days of returning from an absence. Students have 2x the number of days absent to complete and turn in work.*

6. **FFA Activities:** *Students must maintain academic eligibility to be involved in FFA activities, fairs etc. Students who are not eligible at third quarter grades may not show at the fair.*

7. **Does own work when independent work is required: does not cheat:** *Any cheating episode will result in an unsatisfactory grade. All work to be turned in must have a clear first and last name, be neat and organized, free from drawings etc. pencil, blue or black ink will be used unless otherwise stated.*

8. **Exercises reasonable care of school property:** *Students are expected to treat public property as they would treat their own, unreasonable care of the ray will result in an unsatisfactory mark.*

9. **Shows respect for others:** *My classroom is an area of free ideas and discussion. Students are expected to respect the individual rights of others.*

10. **Does not disrupt class: exercises good conduct:** *My goal is for the students to learn as much Agriculture and Science as possible. If a student's conduct impedes this goal, an unsatisfactory will result. Students are to remain in seats unless asked to move. The instructor will dismiss the class each day, not the bell. All students should be back in their seats before the bell.*

11. **Independent Study:** *Independent study requests for homework require 5 days to complete.*

12. **Grade Checks:** *Grade checks are only completed on Fridays. Plan ahead.*

13. **Classroom:** *The following items should not be visible during class or used in class: Make up, personal pictures, phones, walkmans, IPODs, sports equipments, non class magazines, assignments from other classes.*

14. **Computer Lab:** *Students must have their own user account to use the lab. To use the internet students must pass the district" Internet Drivers License" test. The lab is for educational uses only. Students MAY NOT use the computers to play music / videos, personal email, games, etc.*

15. **Personal Items:** *The Agriculture Department is not responsible of items left in the Department.*

EXPECTATIONS FOR OUTSTANDING CITIZENSHIP MARKS

- Politeness, Respect yourself and others, property, and Sensitivity towards others
- Tolerance of others opinions
- Involvement in class discussions
- Willingness to do the best possible job every day.
- Use acceptable behavior and language at all times

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
COURSE INFORMATION SHEET
Gregori **HIGH SCHOOL**

TEACHER: Jennifer Delnero

COURSE TITLE: Floral Design II (ROP)

TEXTBOOK: The Art of Floral Design.

OTHER REQUIRED MATERIALS:
California Record Book and FFA Leadership Manual

MAJOR UNITS OF INSTRUCTION:
In Floriculture/Design II, the students will explore the floriculture industry on a more technical and advanced level. Students will expand upon their creative expression, aesthetic valuing, perceptions, and historical and cultural context. The art elements and principles of design will serve as a foundation for each unit covered.

GRADING/EVALUATION POLICY:
Types of Evaluation and Weighted Value:

Tests	= 20%
FFA	= 20%
SOEP	= 10%
Homework	= 10%
Daily Work	= 40%

Description of Final examination (including Weighted value in semester grade):

Regular Final = 5%

Method of Grading and Scale:

100% - 90%	= A
80% - 89%	= B
70% - 79%	= C
54% - 69%	= D
53% and Below	= F

EXTRA CREDIT POLICY:
Must see teacher for extra-credit assignment.

Make-up Practices: Students whose absence is excused shall be allowed two days for each day of absence to make-up work. Responsibility for making up missed work lies with the student. Refer to the Student Conduct Code regarding make-up practices for other types of absences.

Other:
Missing work receives a zero for a grade.

Homework Practices (including frequency):
Homework will be given 1-2 times per week and will be due on assigned day.

Other:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animals and/or plants.

SPECIAL NOTE: Any test or assignment that a student may not keep following its return and review will be retained by the teacher for at least 9 weeks following the issuance of the report cards.

MODESTO CITY SCHOOLS
CITIZENSHIP MARK GUIDELINES

Course Title – Ag Computers **Teacher: Mark Nower**

1. **Attends class daily:** *Four or more unexcused absences will result in an unsatisfactory citizenship mark.*

2. **Comes to class on time**: *Five or more unexcused tardies in a quarter will result in an unsatisfactory citizenship mark. Students must be in their seats when the bell ring, materials out, ready to work (Sharpen pencils before the bell)*

3. **Class Seats:** *Seating will be assigned by the instructor, with changes made only to improve the learning environment.*

4. **Comes to class with necessary materials:** *Students are expected to bring a notebook, paper, planner and pencil or pen every day.*

5. **Turns in assignments/homework/projects on time.** *Academic work will count toward academic grade - not citizenship. Make up work is given only for excused absences. It is the students responsibility to request make up work within 2 days of returning from an absence. Students have 2x the number of days absent to complete and turn in work.*

6. **FFA Activities:** *Students must maintain academic eligibility to be involved in FFA activities, fairs etc. Students who are not eligible at third quarter grades may not show at the fair.*

7. **Does own work when independent work is required: does not cheat:** *Any cheating episode will result in an unsatisfactory grade. All work to be turned in must have a clear first and last name, be neat and organized, free from drawings etc. pencil, blue or black ink will be used unless otherwise stated.*

8. **Exercises reasonable care of school property:** *Students are expected to treat public property as they would treat their own, unreasonable care of the ray will result in an unsatisfactory mark.*

9. **Shows respect for others:** *My classroom is an area of free ideas and discussion. Students are expected to respect the individual rights of others.*

10. **Does not disrupt class: exercises good conduct:** *My goal is for the students to learn as much Agriculture and Science as possible. If a student's conduct impedes this goal, an unsatisfactory will result. Students are to remain in seats unless asked to move. The instructor will dismiss the class each day, not the bell. All students should be back in their seats before the bell.*

11. **Independent Study:** *Independent study requests for homework require 5 days to complete.*

12. **Grade Checks:** *Grade checks are only completed on Fridays. Plan ahead.*

13. **Classroom:** *The following items should not be visible during class or used in class: Make up, personal pictures, phones, walkmans, IPODs, sports equipment, non-class magazines, assignments from other classes.*

14. **Computer Lab:** *Students must have their own user account to use the lab. To use the internet students must pass the district" Internet Drivers License" test. The lab is for educational uses only. Students MAY NOT use the computers to play music / videos, personal email, games, etc.*

15. **Personal Items:** *The Agriculture Department is not responsible of items left in the Department.*

EXPECTATIONS FOR OUTSTANDING CITIZENSHIP MARKS

- Politeness, Respect yourself and others, property, and Sensitivity towards others
- Tolerance of others opinions
- Involvement in class discussions
- Willingness to do the best possible job every day.
- Use acceptable behavior and language at all times

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
COURSE INFORMATION SHEET
Gregori **HIGH SCHOOL**

COURSE TITLE: Ag Computers

TEXTBOOK: *Microsoft Office 2010*

OTHER REQUIRED MATERIALS:
California Record Book and FFA Leadership Manual

MAJOR UNITS OF INSTRUCTION:
FFA, Public Speaking, Word, Excel, Power Point, Internet, Record Book, Ag Business

GRADING/EVALUATION POLICY:
Types of Evaluation and Weighted Value:

Tests	= 20%
FFA	= 20%
SOEP	= 10%
Homework	= 10%
Daily Work	= 40%

Description of Final examination (including Weighted value in semester grade):

Regular Final = 5%

TEACHER: Mark Nower

Method of Grading and Scale:

100% - 90%	= A
80% - 89%	= B
70% - 79%	= C
54% - 69%	= D
53% and Below	= F

EXTRA CREDIT POLICY:
Must see teacher for extra-credit assignment.

Make-up Practices: Students whose absence is excused shall be allowed two days for each day of absence to make-up work. Responsibility for making up missed work lies with the student. Refer to the Student Conduct Code regarding make-up practices for other types of absences.

Other:
Missing work receives a zero for a grade.

Homework Practices (including frequency):
Homework will be given 1-2 times per week and will be due on assigned day.

Other:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animals and/or plants.

SPECIAL NOTE: Any test or assignment that a student may not keep following its return and review will be retained by the teacher for at least 9 weeks following the issuance of the report cards.

CITIZENSHIP MARK GUIDELINES

Course Title – Agricultural Small Engine Repair 1-2 **Teacher: Kyle Beeman**

1. **Attends class daily:** *Four or more unexcused absences will result in an unsatisfactory citizenship mark.*

2. **Comes to class on time**: *Five or more unexcused tardies in a quarter will result in an unsatisfactory citizenship mark. Students must be in their seats when the bell ring, materials out, ready to work (Sharpen pencils before the bell)*

3. **Class Seats:** *Seating will be assigned by the instructor, with changes made only to improve the learning environment.*

4. **Comes to class with necessary materials:** *Students are expected to bring a notebook, paper, planner and pencil or pen every day.*

5. **Turns in assignments/homework/projects on time.** *Academic work will count toward academic grade - not citizenship. Make up work is given only for excused absences. It is the students responsibility to request make up work within 2 days of returning from an absence. Students have 2x the number of days absent to complete and turn in work.*

6. **FFA Activities:** *Students must maintain academic eligibility to be involved in FFA activities, fairs etc. Students who are not eligible at third quarter grades may not show at the fair.*

7. **Does own work when independent work is required: does not cheat:** *Any cheating episode will result in an unsatisfactory grade. All work to be turned in must have a clear first and last name, be neat and organized, free from drawings etc. pencil, blue or black ink will be used unless otherwise stated.*

8. **Exercises reasonable care of school property:** *Students are expected to treat public property as they would treat their own, unreasonable care of the ray will result in an unsatisfactory mark.*

9. **Shows respect for others:** *My classroom is an area of free ideas and discussion. Students are expected to respect the individual rights of others.*

10. **Does not disrupt class: exercises good conduct:** *My goal is for the students to learn as much Agriculture and Science as possible. If a student's conduct impedes this goal, an unsatisfactory will result. Students are to remain in seats unless asked to move. The instructor will dismiss the class each day, not the bell. All students should be back in their seats before the bell.*

11. **Independent Study:** *Independent study requests for homework require 5 days to complete.*

12. **Grade Checks:** *Grade checks are only completed on Fridays. Plan ahead.*

13. **Classroom:** *The following items should not be visible during class or used in class: Make up, personal pictures, phones, walkmans, IPODs, sports equipments, non class magazines, assignments from other classes.*

14. **Computer Lab:** *Students must have their own user account to use the lab. To use the internet students must pass the district" Internet Drivers License" test. The lab is for educational uses only. Students MAY NOT use the computers to play music / videos, personal email, games, etc.*

15. **Personal Items:** *The Agriculture Department is not responsible of items left in the Department.*

EXPECTATIONS FOR OUTSTANDING CITIZENSHIP MARKS

- Politeness, Respect yourself and others, property, and Sensitivity towards others
- Tolerance of others opinions
- Involvement in class discussions
- Willingness to do the best possible job every day.
- Use acceptable behavior and language at all times

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
COURSE INFORMATION SHEET
Gregori **HIGH SCHOOL**

COURSE TITLE: – Agricultural Small Engine Repair 1-2

TEXTBOOK: Small Gas Engines Alfred C. Roth, Goodheart-Wilcox, 2004

OTHER REQUIRED MATERIALS:
California Record Book and FFA Leadership Manual

MAJOR UNITS OF INSTRUCTION:
This course is designed to educate students about the fast growing industry of small engines and compact power equipment. There is a large demand for small engine technicians in the areas of lawn, garden, farm and construction equipment. This course places emphasis on overhaul, repair, adjustment, and troubleshooting of lawnmowers, chainsaws, and other agricultural compact power equipment. Also covered is FFA and the California RecordBook.

GRADING/EVALUATION POLICY:
Types of Evaluation and Weighted Value:

Tests	= 10%
FFA	= 20%
SOEP	= 10%
Homework	= 10%
Daily Work	= 50%

Description of Final examination (including Weighted value in semester grade):

Regular Final = 5%

TEACHER: Kyle Beeman

Method of Grading and Scale:

100% - 90%	= A
80% - 89%	= B
70% - 79%	= C
54% - 69%	= D
53% and Below	= F

EXTRA CREDIT POLICY:
Must see teacher for extra-credit assignment.

Make-up Practices: Students whose absence is excused shall be allowed two days for each day of absence to make-up work. Responsibility for making up missed work lies with the student. Refer to the Student Conduct Code regarding make-up practices for other types of absences.

Other:
Missing work receives a zero for a grade.

Homework Practices (including frequency):
Homework will be given 1-2 times per week and will be due on assigned day.

Other:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animals and/or plants plus mechanics and or work experience.

SPECIAL NOTE: Any test or assignment that a student may not keep following its return and review will be retained by the teacher for at least 9 weeks following the issuance of the report cards.

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
CITIZENSHIP MARK GUIDELINES

Course Title – Landscape Design and Maintenance **Teacher: Kyle Beeman**

16. **Attends class daily:** *Four or more unexcused absences will result in an unsatisfactory citizenship mark.*

17. **Comes to class on time**: *Five or more unexcused tardies in a quarter will result in an unsatisfactory citizenship mark. Students must be in their seats when the bell ring, materials out, ready to work (Sharpen pencils before the bell)*

18. **Class Seats:** *Seating will be assigned by the instructor, with changes made only to improve the learning environment.*

19. **Comes to class with necessary materials:** *Students are expected to bring a notebook, paper, planner and pencil or pen every day.*

20. **Turns in assignments/homework/projects on time.** *Academic work will count toward academic grade - not citizenship. Make up work is given only for excused absences. It is the students responsibility to request make up work within 2 days of returning from an absence. Students have 2x the number of days absent to complete and turn in work.*

21. **FFA Activities:** *Students must maintain academic eligibility to be involved in FFA activities, fairs etc. Students who are not eligible at third quarter grades may not show at the fair.*

22. **Does own work when independent work is required: does not cheat:** *Any cheating episode will result in an unsatisfactory grade. All work to be turned in must have a clear first and last name, be neat and organized, free from drawings etc. pencil, blue or black ink will be used unless otherwise stated.*

23. **Exercises reasonable care of school property:** *Students are expected to treat public property as they would treat their own, unreasonable care of the ray will result in an unsatisfactory mark.*

24. **Shows respect for others:** *My classroom is an area of free ideas and discussion. Students are expected to respect the individual rights of others.*

25. **Does not disrupt class: exercises good conduct:** *My goal is for the students to learn as much Agriculture and Science as possible. If a student's conduct impedes this goal, an unsatisfactory will result. Students are to remain in seats unless asked to move. The instructor will dismiss the class each day, not the bell. All students should be back in their seats before the bell.*

26. **Independent Study:** *Independent study requests for homework require 5 days to complete.*

27. **Grade Checks:** *Grade checks are only completed on Fridays. Plan ahead.*

28. **Classroom:** *The following items should not be visible during class or used in class: Make up, personal pictures, phones, Walkman's, IPODs, sports equipment, non -class magazines, assignments from other classes.*

29. **Computer Lab:** *Students must have their own user account to use the lab. To use the internet students must pass the district" Internet Driver's License" test. The lab is for educational uses only. Students MAY NOT use the computers to play music / videos, personal email, games, etc.*

30. **Personal Items:** *The Agriculture Department is not responsible of items left in the Department.*

EXPECTATIONS FOR OUTSTANDING CITIZENSHIP MARKS

- Politeness, Respect yourself and others, property, and Sensitivity towards others
- Tolerance of others opinions
- Involvement in class discussions
- Willingness to do the best possible job every day.
- Use acceptable behavior and language at all times

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
COURSE INFORMATION SHEET
Gregori **HIGH SCHOOL**

COURSE TITLE: – Landscape Design & Maintenance

TEXTBOOK: Introduction to Horticulture, Latest Edition

OTHER REQUIRED MATERIALS:
California Record Book and FFA Leadership Manual

MAJOR UNITS OF INSTRUCTION:
Vocational Education in Agriculture is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. Students will receive training in the greenhouse as well as on landscapes. Participation in FFA activities will reinforce the learning process of these students.

GRADING/EVALUATION POLICY:
Types of Evaluation and Weighted Value:

Tests	= 10%
FFA	= 20%
SOEP	= 10%
Homework	= 10%
Daily Work	= 50%

Description of Final examination (including Weighted value in semester grade):

Regular Final = 5%

TEACHER: Kyle Beeman

Method of Grading and Scale:

100% - 90%	= A
80% - 89%	= B
70% - 79%	= C
54% - 69%	= D
53% and Below	= F

EXTRA CREDIT POLICY:
Must see teacher for extra-credit assignment.

Make-up Practices: Students whose absence is excused shall be allowed two days for each day of absence to make-up work. Responsibility for making up missed work lies with the student. Refer to the Student Conduct Code regarding make-up practices for other types of absences.

Other:
Missing work receives a zero for a grade.

Homework Practices (including frequency):
Homework will be given 1-2 times per week and will be due on assigned day.

Other:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animals and/or plants plus mechanics and or work experience.

SPECIAL NOTE: Any test or assignment that a student may not keep following its return and review will be retained by the teacher for at least 9 weeks following the issuance of the report cards.

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
CITIZENSHIP MARK GUIDELINES

Course Title – Agricultural Small Engine Repair 3-4 **Teacher: Kyle Beeman**

31. **Attends class daily:** *Four or more unexcused absences will result in an unsatisfactory citizenship mark.*

32. **Comes to class on time**: *Five or more unexcused tardies in a quarter will result in an unsatisfactory citizenship mark. Students must be in their seats when the bell ring, materials out, ready to work (Sharpen pencils before the bell)*

33. **Class Seats:** *Seating will be assigned by the instructor, with changes made only to improve the learning environment.*

34. **Comes to class with necessary materials:** *Students are expected to bring a notebook, paper, planner and pencil or pen every day.*

35. **Turns in assignments/homework/projects on time.** *Academic work will count toward academic grade - not citizenship. Make up work is given only for excused absences. It is the students responsibility to request make up work within 2 days of returning from an absence. Students have 2x the number of days absent to complete and turn in work.*

36. **FFA Activities:** *Students must maintain academic eligibility to be involved in FFA activities, fairs etc. Students who are not eligible at third quarter grades may not show at the fair.*

37. **Does own work when independent work is required: does not cheat:** *Any cheating episode will result in an unsatisfactory grade. All work to be turned in must have a clear first and last name, be neat and organized, free from drawings etc. pencil, blue or black ink will be used unless otherwise stated.*

38. **Exercises reasonable care of school property:** *Students are expected to treat public property as they would treat their own, unreasonable care of the ray will result in an unsatisfactory mark.*

39. **Shows respect for others:** *My classroom is an area of free ideas and discussion. Students are expected to respect the individual rights of others.*

40. **Does not disrupt class: exercises good conduct:** *My goal is for the students to learn as much Agriculture and Science as possible. If a student's conduct impedes this goal, an unsatisfactory will result. Students are to remain in seats unless asked to move. The instructor will dismiss the class each day, not the bell. All students should be back in their seats before the bell.*

41. **Independent Study:** *Independent study requests for homework require 5 days to complete.*

42. **Grade Checks:** *Grade checks are only completed on Fridays. Plan ahead.*

43. **Classroom:** *The following items should not be visible during class or used in class: Make up, personal pictures, phones, Walkman's, IPODs, sports equipment, non-class magazines, assignments from other classes.*

44. **Computer Lab:** *Students must have their own user account to use the lab. To use the internet students must pass the district" Internet Driver's License" test. The lab is for educational uses only. Students MAY NOT use the computers to play music / videos, personal email, games, etc.*

45. **Personal Items:** *The Agriculture Department is not responsible of items left in the Department.*

EXPECTATIONS FOR OUTSTANDING CITIZENSHIP MARKS

- Politeness, Respect yourself and others, property, and Sensitivity towards others
- Tolerance of others opinions
- Involvement in class discussions
- Willingness to do the best possible job every day.
- Use acceptable behavior and language at all times

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
COURSE INFORMATION SHEET
Gregori **HIGH SCHOOL**

COURSE TITLE: – Agricultural Small Engine Repair 3-4

TEXTBOOK: Small Gas Engines Alfred C. Roth, Goodheart-Wilcox, 2004

OTHER REQUIRED MATERIALS:
California Record Book and FFA Leadership Manual

MAJOR UNITS OF INSTRUCTION:

This course is designed to enhance the students former knowledge about the fast growing industry of small engines and compact power equipment. This course places emphasis on advanced techniques of overhauling, repairing, adjusting, and troubleshooting of two and four-stroke agricultural compact power equipment.

GRADING/EVALUATION POLICY:
Types of Evaluation and Weighted Value:

Tests	= 10%
FFA	= 20%
SOEP	= 10%
Homework	= 10%
Daily Work	= 50%

Description of Final examination (including Weighted value in semester grade):

Regular Final = 5%

TEACHER: Kyle Beeman

Method of Grading and Scale:

100% - 90%	= A
80% - 89%	= B
70% - 79%	= C
54% - 69%	= D
53% and Below	= F

EXTRA CREDIT POLICY:
Must see teacher for extra-credit assignment.

Make-up Practices: Students whose absence is excused shall be allowed two days for each day of absence to make-up work. Responsibility for making up missed work lies with the student. Refer to the Student Conduct Code regarding make-up practices for other types of absences.

Other:
Missing work receives a zero for a grade.

Homework Practices (including frequency):
Homework will be given 1-2 times per week and will be due on assigned day.

Other:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animals and/or plants plus mechanics and or work experience.

SPECIAL NOTE: Any test or assignment that a student may not keep following its return and review will be retained by the teacher for at least 9 weeks following the issuance of the report cards.

CITIZENSHIP MARK GUIDELINES

Course Title – Animal Science ROP **Teacher: Mark Nower**

46. **Attends class daily:** *Four or more unexcused absences will result in an unsatisfactory citizenship mark.*

47. **Comes to class on time**: *Five or more unexcused tardies in a quarter will result in an unsatisfactory citizenship mark. Students must be in their seats when the bell ring, materials out, ready to work (Sharpen pencils before the bell)*

48. **Class Seats:** *Seating will be assigned by the instructor, with changes made only to improve the learning environment.*

49. **Comes to class with necessary materials:** *Students are expected to bring a notebook, paper, planner and pencil or pen every day.*

50. **Turns in assignments/homework/projects on time.** *Academic work will count toward academic grade - not citizenship. Make up work is given only for excused absences. It is the students responsibility to request make up work within 2 days of returning from an absence. Students have 2x the number of days absent to complete and turn in work.*

51. **FFA Activities:** *Students must maintain academic eligibility to be involved in FFA activities, fairs etc. Students who are not eligible at third quarter grades may not show at the fair.*

52. **Does own work when independent work is required: does not cheat:** *Any cheating episode will result in an unsatisfactory grade. All work to be turned in must have a clear first and last name, be neat and organized, free from drawings etc. pencil, blue or black ink will be used unless otherwise stated.*

53. **Exercises reasonable care of school property:** *Students are expected to treat public property as they would treat their own, unreasonable care of the ray will result in an unsatisfactory mark.*

54. **Shows respect for others:** *My classroom is an area of free ideas and discussion. Students are expected to respect the individual rights of others.*

55. **Does not disrupt class: exercises good conduct:** *My goal is for the students to learn as much Agriculture and Science as possible. If a student's conduct impedes this goal, an unsatisfactory will result. Students are to remain in seats unless asked to move. The instructor will dismiss the class each day, not the bell. All students should be back in their seats before the bell.*

56. **Independent Study:** *Independent study requests for homework require 5 days to complete.*

57. **Grade Checks:** *Grade checks are only completed on Fridays. Plan ahead.*

58. **Classroom:** *The following items should not be visible during class or used in class: Make up, personal pictures, phones, Walkman's, IPODs, sports equipment, non-class magazines, assignments from other classes.*

59. **Computer Lab:** *Students must have their own user account to use the lab. To use the internet students must pass the district" Internet Driver's License" test. The lab is for educational uses only. Students MAY NOT use the computers to play music / videos, personal email, games, etc.*

60. **Personal Items:** *The Agriculture Department is not responsible of items left in the Department.*

EXPECTATIONS FOR OUTSTANDING CITIZENSHIP MARKS

- Politeness, Respect yourself and others, property, and Sensitivity towards others
- Tolerance of others opinions
- Involvement in class discussions
- Willingness to do the best possible job every day.
- Use acceptable behavior and language at all times

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
COURSE INFORMATION SHEET
Gregori **HIGH SCHOOL**

COURSE TITLE: – Animal Science ROP

TEXTBOOK: Modern Livestock & Poultry Production; Animal Science Biology & Technology

OTHER REQUIRED MATERIALS:
California Record Book and FFA Leadership Manual; Intro to Vet Science

MAJOR UNITS OF INSTRUCTION:
This course will provide the student with principles in Animal Science focusing on the areas of mammalian production, anatomy, physiology, reproduction, nutrition, respiration, and genetics. This course is intended to successfully prepare those students who plan on majoring in Agricultural Sciences at a college or university.
Frequent opportunities are also given to develop and apply rational and creative thinking processes of observing, comparing, organizing, relating, inferring, applying and communicating. Also, there is an emphasis on developing values, aspirations, and attitudes that promote the student's understanding personal involvement with the scientific explorations and discoveries of the future. These hands-on science experiences are designed to enhance the student's understanding of Agriculture, the environment, and society.

GRADING/EVALUATION POLICY:
Types of Evaluation and Weighted Value:

Tests	= 10%
FFA	= 20%
SOEP	= 10%
Homework	= 10%
Daily Work	= 50%

Description of Final examination (including Weighted value in semester grade):

Regular Final = 5%

TEACHER: Mark Nower

Method of Grading and Scale:

100% - 90%	= A
80% - 89%	= B
70% - 79%	= C
54% - 69%	= D
53% and Below	= F

EXTRA CREDIT POLICY:
Must see teacher for extra-credit assignment.

Make-up Practices: Students whose absence is excused shall be allowed two days for each day of absence to make-up work. Responsibility for making up missed work lies with the student. Refer to the Student Conduct Code regarding make-up practices for other types of absences.

Other:
Missing work receives a zero for a grade.

Homework Practices (including frequency):
Homework will be given 1-2 times per week and will be due on assigned day.

Other:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animals and/or plants plus mechanics and or work experience.

SPECIAL NOTE: Any test or assignment that a student may not keep following its return and review will be retained by the teacher for at least 9 weeks following the issuance of the report cards.

MODESTO CITY SCHOOLS
CITIZENSHIP MARK GUIDELINES

Course Title – Agriculture Power Mechanics **Teacher: Kyle Beeman**

61. **Attends class daily:** *Four or more unexcused absences will result in an unsatisfactory citizenship mark.*

62. **Comes to class on time**: *Five or more unexcused tardies in a quarter will result in an unsatisfactory citizenship mark. Students must be in their seats when the bell ring, materials out, ready to work (Sharpen pencils before the bell)*

63. **Class Seats:** *Seating will be assigned by the instructor, with changes made only to improve the learning environment.*

64. **Comes to class with necessary materials:** *Students are expected to bring a notebook, paper, planner and pencil or pen every day.*

65. **Turns in assignments/homework/projects on time.** *Academic work will count toward academic grade - not citizenship. Make up work is given only for excused absences. It is the students responsibility to request make up work within 2 days of returning from an absence. Students have 2x the number of days absent to complete and turn in work.*

66. **FFA Activities:** *Students must maintain academic eligibility to be involved in FFA activities, fairs etc. Students who are not eligible at third quarter grades may not show at the fair.*

67. **Does own work when independent work is required: does not cheat:** *Any cheating episode will result in an unsatisfactory grade. All work to be turned in must have a clear first and last name, be neat and organized, free from drawings etc. pencil, blue or black ink will be used unless otherwise stated.*

68. **Exercises reasonable care of school property:** *Students are expected to treat public property as they would treat their own, unreasonable care of the ray will result in an unsatisfactory mark.*

69. **Shows respect for others:** *My classroom is an area of free ideas and discussion. Students are expected to respect the individual rights of others.*

70. **Does not disrupt class: exercises good conduct:** *My goal is for the students to learn as much Agriculture and Science as possible. If a student's conduct impedes this goal, an unsatisfactory will result. Students are to remain in seats unless asked to move. The instructor will dismiss the class each day, not the bell. All students should be back in their seats before the bell.*

71. **Independent Study:** *Independent study requests for homework require 5 days to complete.*

72. **Grade Checks:** *Grade checks are only completed on Fridays. Plan ahead.*

73. **Classroom:** *The following items should not be visible during class or used in class: Make up, personal pictures, phones, Walkman's, IPODs, sports equipment, non-class magazines, assignments from other classes.*

74. **Computer Lab:** *Students must have their own user account to use the lab. To use the internet students must pass the district" Internet Driver's License" test. The lab is for educational uses only. Students MAY NOT use the computers to play music / videos, personal email, games, etc.*

75. **Personal Items:** *The Agriculture Department is not responsible of items left in the Department.*

EXPECTATIONS FOR OUTSTANDING CITIZENSHIP MARKS

- Politeness, Respect yourself and others, property, and Sensitivity towards others
- Tolerance of others opinions
- Involvement in class discussions
- Willingness to do the best possible job every day.
- Use acceptable behavior and language at all times

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
COURSE INFORMATION SHEET
Gregori **HIGH SCHOOL**

COURSE TITLE: – Agriculture Power Mechanics

TEXTBOOK: Modern Livestock & Poultry Production; Animal Science Biology & Technology

OTHER REQUIRED MATERIALS:
California Record Book and FFA Leadership Manual; Intro to Vet Science

MAJOR UNITS OF INSTRUCTION:

This year long course combines classroom and field work experience. Students will learn general preventive maintenance, operation, construction, and repair of common farm equipment.
Thirty hours of additional outside class time will be required (by arrangement) of each student for field trips, extended class projects and participation in a supervised occupational experience program.

GRADING/EVALUATION POLICY:
Types of Evaluation and Weighted Value:

Tests	= 10%
FFA	= 20%
SOEP	= 10%
Homework	= 10%
Daily Work	= 50%

Description of Final examination (including Weighted value in semester grade):

Regular Final = 5%

TEACHER: Kyle Beeman

Method of Grading and Scale:

100% - 90%	= A
80% - 89%	= B
70% - 79%	= C
54% - 69%	= D
53% and Below	= F

EXTRA CREDIT POLICY:
Must see teacher for extra-credit assignment.

Make-up Practices: Students whose absence is excused shall be allowed two days for each day of absence to make-up work. Responsibility for making up missed work lies with the student. Refer to the Student Conduct Code regarding make-up practices for other types of absences.

Other:
Missing work receives a zero for a grade.

Homework Practices (including frequency):
Homework will be given 1-2 times per week and will be due on assigned day.

Other:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animals and/or plants plus mechanics and or work experience.

SPECIAL NOTE: Any test or assignment that a student may not keep following its return and review will be retained by the teacher for at least 9 weeks following the issuance of the report cards.

MODESTO CITY SCHOOLS
CITIZENSHIP MARK GUIDELINES

Course Title – AgriScience System Management **Teacher: Brittany Nelms**

1. **Attends class daily:** *Four or more unexcused absences will result in an unsatisfactory citizenship mark*.

2. **Comes to class on time**: *Five or more unexcused tardies in a quarter will result in an unsatisfactory citizenship mark. Students must be in their seats when the bell ring, materials out, ready to work (Sharpen pencils before the bell)*

3. **Class Seats:** *Seating will be assigned by the instructor, with changes made only to improve the learning environment.*

4. **Comes to class with necessary materials:** *Students are expected to bring a notebook, paper, planner and pencil or pen every day.*

5. **Turns in assignments/homework/projects on time.** *Academic work will count toward academic grade - not citizenship. Make up work is given only for excused absences. It is the students responsibility to request make up work within 2 days of returning from an absence. Students have 2x the number of days absent to complete and turn in work.*

6. **FFA Activities:** *Students must maintain academic eligibility to be involved in FFA activities, fairs etc. Students who are not eligible at third quarter grades may not show at the fair.*

7. **Does own work when independent work is required: does not cheat:** *Any cheating episode will result in an unsatisfactory grade. All work to be turned in must have a clear first and last name, be neat and organized, free from drawings etc. pencil, blue or black ink will be used unless otherwise stated.*

8. **Exercises reasonable care of school property:** *Students are expected to treat public property as they would treat their own, unreasonable care of the ray will result in an unsatisfactory mark.*

9. **Shows respect for others:** *My classroom is an area of free ideas and discussion. Students are expected to respect the individual rights of others.*

10. **Does not disrupt class: exercises good conduct:** *My goal is for the students to learn as much Agriculture and Science as possible. If a student's conduct impedes this goal, an unsatisfactory will result. Students are to remain in seats unless asked to move. The instructor will dismiss the class each day, not the bell. All students should be back in their seats before the bell.*

11. **Independent Study:** *Independent study requests for homework require 5 days to complete.*

12. **Grade Checks:** *Grade checks are only completed on Fridays. Plan ahead.*

13. **Classroom:** *The following items should not be visible during class or used in class: Make up, personal pictures, phones, Walkman's, IPODs, sports equipment, non-class magazines, assignments from other classes.*

14. **Computer Lab:** *Students must have their own user account to use the lab. To use the internet students must pass the district" Internet Driver's License" test. The lab is for educational uses only. Students MAY NOT use the computers to play music / videos, personal email, games, etc.*

15. **Personal Items:** *The Agriculture Department is not responsible of items left in the Department.*

EXPECTATIONS FOR OUTSTANDING CITIZENSHIP MARKS

- Politeness, Respect yourself and others, property, and Sensitivity towards others
- Tolerance of others opinions
- Involvement in class discussions
- Willingness to do the best possible job every day.
- Use acceptable behavior and language at all times

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
COURSE INFORMATION SHEET
Gregori **HIGH SCHOOL**

COURSE TITLE: – AgriScience System Management

TEXTBOOK: Modern Livestock & Poultry Production; Animal Science Biology & Technology

OTHER REQUIRED MATERIALS:
California Record Book and FFA Leadership Manual; Intro to Vet Science

MAJOR UNITS OF INSTRUCTION:
This integrated class combines an interdisciplinary approach to laboratory science and research with agricultural management principles. Using skills and principles learned in the course, students design systems and experiments to solve agricultural management issues currently facing the industry. Additionally, students will connect the products created in this class with industry activities to link real world encounters and implement skills demanded by both colleges and careers. The course culminates with an agriscience experimental research project in which students design and conduct an experiment to solve a relevant issue. Final projects will be eligible for Career Development Event competition at FFA events. Throughout the course, students will be graded on participation in intracurricular FFA activities as well as the development and maintenance of an ongoing Supervised Agricultural Experience (SAE) program.

GRADING/EVALUATION POLICY:
Types of Evaluation and Weighted Value:

Tests	= 10%
FFA	= 20%
SOEP	= 10%
Homework	= 10%
Daily Work	= 50%

Description of Final examination (including Weighted value in semester grade):

Regular Final = 5%

TEACHER: Brittany Nelms

Method of Grading and Scale:

100% - 90%	= A
80% - 89%	= B
70% - 79%	= C
54% - 69%	= D
53% and Below	= F

EXTRA CREDIT POLICY:
Must see teacher for extra-credit assignment.

Make-up Practices: Students whose absence is excused shall be allowed two days for each day of absence to make-up work. Responsibility for making up missed work lies with the student. Refer to the Student Conduct Code regarding make-up practices for other types of absences.

Other:
Missing work receives a zero for a grade.

Homework Practices (including frequency):
Homework will be given 1-2 times per week and will be due on assigned day.

Other:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animals and/or plants plus mechanics and or work experience.

SPECIAL NOTE: Any test or assignment that a student may not keep following its return and review will be retained by the teacher for at least 9 weeks following the issuance of the report cards.

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
CITIZENSHIP MARK GUIDELINES

Course Title – Structural Ag Welding **Teacher: Kyle Beeman**

16. **Attends class daily:** *Four or more unexcused absences will result in an unsatisfactory citizenship mark.*

17. **Comes to class on time**: *Five or more unexcused tardies in a quarter will result in an unsatisfactory citizenship mark. Students must be in their seats when the bell ring, materials out, ready to work (Sharpen pencils before the bell)*

18. **Class Seats:** *Seating will be assigned by the instructor, with changes made only to improve the learning environment.*

19. **Comes to class with necessary materials:** *Students are expected to bring a notebook, paper, planner and pencil or pen every day.*

20. **Turns in assignments/homework/projects on time.** *Academic work will count toward academic grade - not citizenship. Make up work is given only for excused absences. It is the students responsibility to request make up work within 2 days of returning from an absence. Students have 2x the number of days absent to complete and turn in work.*

21. **FFA Activities:** *Students must maintain academic eligibility to be involved in FFA activities, fairs etc. Students who are not eligible at third quarter grades may not show at the fair.*

22. **Does own work when independent work is required: does not cheat:** *Any cheating episode will result in an unsatisfactory grade. All work to be turned in must have a clear first and last name, be neat and organized, free from drawings etc. pencil, blue or black ink will be used unless otherwise stated.*

23. **Exercises reasonable care of school property:** *Students are expected to treat public property as they would treat their own, unreasonable care of the ray will result in an unsatisfactory mark.*

24. **Shows respect for others:** *My classroom is an area of free ideas and discussion. Students are expected to respect the individual rights of others.*

25. **Does not disrupt class: exercises good conduct:** *My goal is for the students to learn as much Agriculture and Science as possible. If a student's conduct impedes this goal, an unsatisfactory will result. Students are to remain in seats unless asked to move. The instructor will dismiss the class each day, not the bell. All students should be back in their seats before the bell.*

26. **Independent Study:** *Independent study requests for homework require 5 days to complete.*

27. **Grade Checks:** *Grade checks are only completed on Fridays. Plan ahead.*

28. **Classroom:** *The following items should not be visible during class or used in class: Make up, personal pictures, phones, Walkman's, IPODs, sports equipment, non-class magazines, assignments from other classes.*

29. **Computer Lab:** *Students must have their own user account to use the lab. To use the internet students must pass the district" Internet Driver's License" test. The lab is for educational uses only. Students MAY NOT use the computers to play music / videos, personal email, games, etc.*

30. **Personal Items:** *The Agriculture Department is not responsible of items left in the Department.*

EXPECTATIONS FOR OUTSTANDING CITIZENSHIP MARKS

- Politeness, Respect yourself and others, property, and Sensitivity towards others
- Tolerance of others opinions
- Involvement in class discussions
- Willingness to do the best possible job every day.
- Use acceptable behavior and language at all times

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
COURSE INFORMATION SHEET
Gregori **HIGH SCHOOL**

COURSE TITLE: – Structural Ag Welding

TEXTBOOK: WELDING: -Principles and Applications, Jeffus, Delmar Publishers, Latest Edition
-Practical Problems in Mathematics for Welders, Schell/Matlock, Delmar Publishers, Latest Edition
-Metal Fabrication, Technology for Agriculture, Jeffus, Thomson/Delmar Learning, Latest Edition
-Basic Blueprint – Reading and Sketching, Olivo, Thomson/Delmar Learning, Latest Edition

OTHER REQUIRED MATERIALS:
California Record Book & FFA Leadership Manual

MAJOR UNITS OF INSTRUCTION:
Students will use a laboratory-type situation to cover the principles, and applications of MIG, TIG and oxy-acetylene welding of large equipment. Strong emphasis is put on the instruction and participation of project design, project construction, and cost of materials. Participation in FFA will reinforce skill development in these students.Final projects will be eligible for the Stanislaus County Fair. Throughout the course, students will be graded on participation in intracurricular FFA activities as well as the development and maintenance of an ongoing Supervised Agricultural Experience (SAE) program.

GRADING/EVALUATION POLICY:
Types of Evaluation and Weighted Value:

Tests	= 10%
FFA	= 20%
SOEP	= 10%
Homework	= 10%
Daily Work	= 50%

Description of Final examination (including Weighted value in semester grade):

Regular Final = 5%

TEACHER: Kyle Beeman

Method of Grading and Scale:

100% - 90%	= A
80% - 89%	= B
70% - 79%	= C
54% - 69%	= D
53% and Below	= F

EXTRA CREDIT POLICY:
Must see teacher for extra-credit assignment.

Make-up Practices: Students whose absence is excused shall be allowed two days for each day of absence to make-up work. Responsibility for making up missed work lies with the student. Refer to the Student Conduct Code regarding make-up practices for other types of absences.

Other:
Missing work receives a zero for a grade.

Homework Practices (including frequency):
Homework will be given 1-2 times per week and will be due on assigned day.

Other:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animals and/or plants plus mechanics and or work experience.

SPECIAL NOTE: Any test or assignment that a student may not keep following its return and review will be retained by the teacher for at least 9 weeks following the issuance of the report cards.

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
CITIZENSHIP MARK GUIDELINES

Course Title – Agriculture and Soil Chemistry **Teacher: Mark Nower**

31. **Attends class daily:** *Four or more unexcused absences will result in an unsatisfactory citizenship mark.*

32. **Comes to class on time**: *Five or more unexcused tardies in a quarter will result in an unsatisfactory citizenship mark. Students must be in their seats when the bell ring, materials out, ready to work (Sharpen pencils before the bell)*

33. **Class Seats:** *Seating will be assigned by the instructor, with changes made only to improve the learning environment.*

34. **Comes to class with necessary materials:** *Students are expected to bring a notebook, paper, planner and pencil or pen every day.*

35. **Turns in assignments/homework/projects on time.** *Academic work will count toward academic grade - not citizenship. Make up work is given only for excused absences. It is the students responsibility to request make up work within 2 days of returning from an absence. Students have 2x the number of days absent to complete and turn in work.*

36. **FFA Activities:** *Students must maintain academic eligibility to be involved in FFA activities, fairs etc. Students who are not eligible at third quarter grades may not show at the fair.*

37. **Does own work when independent work is required: does not cheat:** *Any cheating episode will result in an unsatisfactory grade. All work to be turned in must have a clear first and last name, be neat and organized, free from drawings etc. pencil, blue or black ink will be used unless otherwise stated.*

38. **Exercises reasonable care of school property:** *Students are expected to treat public property as they would treat their own, unreasonable care of the ray will result in an unsatisfactory mark.*

39. **Shows respect for others:** *My classroom is an area of free ideas and discussion. Students are expected to respect the individual rights of others.*

40. **Does not disrupt class: exercises good conduct:** *My goal is for the students to learn as much Agriculture and Science as possible. If a student's conduct impedes this goal, an unsatisfactory will result. Students are to remain in seats unless asked to move. The instructor will dismiss the class each day, not the bell. All students should be back in their seats before the bell.*

41. **Independent Study:** *Independent study requests for homework require 5 days to complete.*

42. **Grade Checks:** *Grade checks are only completed on Fridays. Plan ahead.*

43. **Classroom:** *The following items should not be visible during class or used in class: Make up, personal pictures, phones, Walkman's, IPODs, sports equipment, non-class magazines, assignments from other classes.*

44. **Computer Lab:** *Students must have their own user account to use the lab. To use the internet students must pass the district" Internet Driver's License" test. The lab is for educational uses only. Students MAY NOT use the computers to play music / videos, personal email, games, etc.*

45. **Personal Items:** *The Agriculture Department is not responsible of items left in the Department.*

EXPECTATIONS FOR OUTSTANDING CITIZENSHIP MARKS

- Politeness, Respect yourself and others, property, and Sensitivity towards others
- Tolerance of others opinions
- Involvement in class discussions
- Willingness to do the best possible job every day.
- Use acceptable behavior and language at all times

Violation of the rules/policies/procedures will be handled as outlined in the student handbook.

MODESTO CITY SCHOOLS
COURSE INFORMATION SHEET
Gregori **HIGH SCHOOL**

COURSE TITLE: – Agriculture and Soil Chemistry

TEXTBOOK: - Plant & Soil Science Fundamentals and Applications by Rick Parker, Delmar Cengage Learning Author: Rick Parker, Ph.D.
- Managing Our Natural Resources, 6th edition, Camp, Cengage Learning Author: Camp and Camp.

OTHER REQUIRED MATERIALS:
California Record Book & FFA Leadership Manual

MAJOR UNITS OF INSTRUCTION:
This course explores the physical and chemical nature of soil as well as the relationships between soil, plants, animals and agricultural practices. Students will examine properties of soil and land and their connections to plant and animal production. Using knowledge of scientific protocols as well as course content, students will develop an Agriscience research program to be conducted throughout the first semester of the course.

GRADING/EVALUATION POLICY:
Types of Evaluation and Weighted Value:

Tests	= 10%
FFA	= 20%
SOEP	= 10%
Homework	= 10%
Daily Work	= 50%

Description of Final examination (including Weighted value in semester grade):

Regular Final = 5%

TEACHER: Mark Nower

Method of Grading and Scale:

100% - 90%	= A
80% - 89%	= B
70% - 79%	= C
54% - 69%	= D
53% and Below	= F

EXTRA CREDIT POLICY:
Must see teacher for extra-credit assignment.

Make-up Practices: Students whose absence is excused shall be allowed two days for each day of absence to make-up work. Responsibility for making up missed work lies with the student. Refer to the Student Conduct Code regarding make-up practices for other types of absences.

Other:
Missing work receives a zero for a grade.

Homework Practices (including frequency):
Homework will be given 1-2 times per week and will be due on assigned day.

Other:
Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a postsecondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with animals and/or plants plus mechanics and or work experience.

SPECIAL NOTE: Any test or assignment that a student may not keep following its return and review will be retained by the teacher for at least 9 weeks following the issuance of the report cards.

Criteria 2 D: FFA Affiliation

Gregori FFA 2017-2018 Membership

	[redacted]	ChapterName	Gender	DOB	FFAID	GradYear	FFAStatus	YearsInAg
1	[redacted]	Modesto - Gregori	Male	5/4/2002	602436200	2020	FFA Member	2
2	[redacted]	Modesto - Gregori	Female	7/14/2002		2021	FFA Member	1
3	[redacted]	Modesto - Gregori	Female	7/8/2003		2021	FFA Member	1
4	[redacted]	Modesto - Gregori	Female	4/18/2001	602429986	2019	FFA Member	3
5	[redacted]	Modesto - Gregori	Male	11/14/2000	602429677	2019	FFA Member	3
6	[redacted]	Modesto - Gregori	Female	11/2/2001		2020	FFA Member	1
7	[redacted]	Modesto - Gregori	Male	11/11/2001		2019	FFA Member	1
8	[redacted]	Modesto - Gregori	Male	10/15/2001	602436261	2020	FFA Member	2
9	[redacted]	Modesto - Gregori	Male	7/16/2000		2018	FFA Member	1
10	[redacted]	Modesto - Gregori	Male	12/9/1999	602430236	2018	FFA Member	3
11	[redacted]	Modesto - Gregori	Female	9/29/2000	602436641	2018	FFA Member	2
12	[redacted]	Modesto - Gregori	Female	2/23/2002	602436289	2020	FFA Member	2
13	[redacted]	Modesto - Gregori	Male	4/24/2003		2021	FFA Member	1
14	[redacted]	Modesto - Gregori	Male	3/29/2002		2020	FFA Member	1
15	[redacted]	Modesto - Gregori	Male	4/15/2003		2021	FFA Member	1
16	[redacted]	Modesto - Gregori	Male	12/9/1999	602430391	2018	FFA Member	3
17	[redacted]	Modesto - Gregori	Male	9/30/2002	602436208	2020	FFA Member	2
18	[redacted]	Modesto - Gregori	Female	9/16/2000	602430213	2019	FFA Member	3
19	[redacted]	Modesto - Gregori	Male	12/5/2001	602436221	2020	FFA Member	2
20	[redacted]	Modesto - Gregori	Male	11/14/2000	602436313	2017	FFA Member	2
21	[redacted]	Modesto - Gregori	Male	9/19/2003		2021	FFA Member	1
22	[redacted]	Modesto - Gregori	Male	4/13/2002	602436217	2020	FFA Member	2
23	[redacted]	Modesto - Gregori	Female	4/17/2000	602430234	2018	FFA Member	3
24	[redacted]	Modesto - Gregori	Female	9/10/2002		2021	FFA Member	1
25	[redacted]	Modesto - Gregori	Male	5/6/2000	601124326	2018	FFA Member	4
26	[redacted]	Modesto - Gregori	Female	5/10/2000	601124327	2018	FFA Member	4
27	[redacted]	Modesto - Gregori	Male	1/1/2000		2018	FFA Member	1
28	[redacted]	Modesto - Gregori	Male	5/28/2002	602436278	2020	FFA Member	2
29	[redacted]	Modesto - Gregori	Male	4/30/2000	602436305	2019	FFA Member	2
30	[redacted]	Modesto - Gregori	Male	2/12/2003		2021	FFA Member	1
31	[redacted]	Modesto - Gregori	Male	8/17/2003		2021	FFA Member	1
32	[redacted]	Modesto - Gregori	Male	1/4/2002		2020	FFA Member	1
33	[redacted]	Modesto - Gregori	Male	10/18/2001	602436193	2020	FFA Member	2
34	[redacted]	Modesto - Gregori	Female	10/4/2000		2019	FFA Member	1
35	[redacted]	Modesto - Gregori	Male	12/30/2002		2021	FFA Member	1
36	[redacted]	Modesto - Gregori	Male	10/29/2001	602429987	2019	FFA Member	3
37	[redacted]	Modesto - Gregori	Male	7/19/2002		2021	FFA Member	1
38	[redacted]	Modesto - Gregori	Female	2/21/2002	602436150	2020	FFA Member	2
39	[redacted]	Modesto - Gregori	Male	11/3/2001	602436255	2020	FFA Member	2
40	[redacted]	Modesto - Gregori	Female	8/21/1999		2018	FFA Member	1
41	[redacted]	Modesto - Gregori	Female	2/20/2002	602436286	2020	FFA Member	2
42	[redacted]	Modesto - Gregori	Male	10/26/2001	602436259	2020	FFA Member	2

43	[redacted]	Modesto - Gregori	Female	10/18/2001		2019	FFA Member	1
44	[redacted]	Modesto - Gregori	Male	6/18/1999	602429949	2018	FFA Member	3
45	[redacted]	Modesto - Gregori	Male	10/17/1999	601123553	2018	FFA Member	4
46	[redacted]	Modesto - Gregori	Male	5/19/2003		2021	FFA Member	1
47	[redacted]	Modesto - Gregori	Female	5/19/2003		2021	FFA Member	1
48	[redacted]	Modesto - Gregori	Male	7/4/2001		2019	FFA Member	1
49	[redacted]	Modesto - Gregori	Male	10/28/2002		2021	FFA Member	1
50	[redacted]	Modesto - Gregori	Female	12/5/2001	602436198	2020	FFA Member	2
51	[redacted]	Modesto - Gregori	Male	8/2/2000	602638779	2018	FFA Member	2
52	[redacted]	Modesto - Gregori	Male	1/21/1999	601123555	2018	FFA Member	4
53	[redacted]	Modesto - Gregori	Male	3/8/2003		2021	FFA Member	1
54	[redacted]	Modesto - Gregori	Male	2/14/2000		2018	FFA Member	1
55	[redacted]	Modesto - Gregori	Female	8/8/2001	601610066	2019	FFA Member	3
56	[redacted]	Modesto - Gregori	Female	2/12/2000		2018	FFA Member	1
57	[redacted]	Modesto - Gregori	Female	3/14/2003		2021	FFA Member	1
58	[redacted]	Modesto - Gregori	Female	12/18/2000	602429989	2019	FFA Member	3
59	[redacted]	Modesto - Gregori	Female	11/15/2002		2021	FFA Member	1
60	[redacted]	Modesto - Gregori	Male	9/27/2001	602430003	2019	FFA Member	3
61	[redacted]	Modesto - Gregori	Male	4/3/2002	602436235	2020	FFA Member	2
62	[redacted]	Modesto - Gregori	Male	12/13/2001	602436262	2020	FFA Member	2
63	[redacted]	Modesto - Gregori	Male	1/21/2017		2021	FFA Member	1
64	[redacted]	Modesto - Gregori	Female	7/29/2002		2020	FFA Member	1
65	[redacted]	Modesto - Gregori	Female	3/25/2000		2018	FFA Member	1
66	[redacted]	Modesto - Gregori	Male	3/27/2003		2021	FFA Member	1
67	[redacted]	Modesto - Gregori	Female	11/10/2000		2019	FFA Member	1
68	[redacted]	Modesto - Gregori	Male	3/9/1999	601123561	2018	FFA Member	4
69	[redacted]	Modesto - Gregori	Female	1/19/2000		2018	FFA Member	1
70	[redacted]	Modesto - Gregori	Male	4/14/2000	601123563	2018	FFA Member	4
71	[redacted]	Modesto - Gregori	Female	3/27/2002	602436225	2020	FFA Member	2
72	[redacted]	Modesto - Gregori	Male	7/7/2000		2018	FFA Member	1
73	[redacted]	Modesto - Gregori	Male	2/25/2000		2018	FFA Member	1
74	[redacted]	Modesto - Gregori	Female	3/6/2002	602436205	2020	FFA Member	2
75	[redacted]	Modesto - Gregori	Male	3/19/2000	601610073	2018	FFA Member	2
76	[redacted]	Modesto - Gregori	Male	8/27/2000	601123568	2018	FFA Member	3
77	[redacted]	Modesto - Gregori	Male	11/10/2000		2019	FFA Member	1
78	[redacted]	Modesto - Gregori	Withheld	2/15/2002	602436237	2020	FFA Member	2
79	[redacted]	Modesto - Gregori	Male	6/8/2003		2021	FFA Member	1
80	[redacted]	Modesto - Gregori	Female	8/22/2000		2018	FFA Member	1
81	[redacted]	Modesto - Gregori	Male	3/24/2000	601123570	2018	FFA Member	3
82	[redacted]	Modesto - Gregori	Female	10/7/1999	601124026	2018	FFA Member	4
83	[redacted]	Modesto - Gregori	Female	7/4/2002	602436249	2020	FFA Member	2
84	[redacted]	Modesto - Gregori	Female	5/18/2000		2018	FFA Member	1
85	[redacted]	Modesto - Gregori	Female	10/19/2003		2021	FFA Member	1
86	[redacted]	Modesto - Gregori	Female	5/2/2003		2021	FFA Member	1
87	[redacted]	Modesto - Gregori	Male	1/17/2000	601124027	2018	FFA Member	2
88	[redacted]	Modesto - Gregori	Male	12/17/2001	602436245	2020	FFA Member	2
89	[redacted]	Modesto - Gregori	Female	7/14/2001	602429669	2019	FFA Member	3

90	[redacted]	Modesto - Gregori	Female	3/13/2002	602436213	2020	FFA Member	2
91	[redacted]	Modesto - Gregori	Male	6/9/2000	602429992	2019	FFA Member	3
92	[redacted]	Modesto - Gregori	Male	4/18/2000		2020	FFA Member	1
93	[redacted]	Modesto - Gregori	Male	2/5/2000	601610077	2018	FFA Member	2
94	[redacted]	Modesto - Gregori	Male	1/8/2002	602436194	2020	FFA Member	2
95	[redacted]	Modesto - Gregori	Male	5/26/2000		2018	FFA Member	1
96	[redacted]	Modesto - Gregori	Male	4/28/2002	602436292	2020	FFA Member	2
97	[redacted]	Modesto - Gregori	Male	8/12/1999	602436538	2018	FFA Member	2
98	[redacted]	Modesto - Gregori	Female	2/26/2000	601775776	2019	FFA Member	3
99	[redacted]	Modesto - Gregori	Female	8/27/2001		2019	FFA Member	1
100	[redacted]	Modesto - Gregori	Female	12/14/2000	602429683	2019	FFA Member	3
101	[redacted]	Modesto - Gregori	Male	8/23/2003		2021	FFA Member	1
102	[redacted]	Modesto - Gregori	Male	5/28/2002	602436264	2020	FFA Member	2
103	[redacted]	Modesto - Gregori	Male	7/21/2001	602429993	2019	FFA Member	3
104	[redacted]	Modesto - Gregori	Female	1/17/2002	602436263	2020	FFA Member	2
105	[redacted]	Modesto - Gregori	Male	6/30/1999	602436509	2017	FFA Member	4
106	[redacted]	Modesto - Gregori	Female	5/30/2002		2020	FFA Member	1
107	[redacted]	Modesto - Gregori	Male	4/16/2001		2019	FFA Member	1
108	[redacted]	Modesto - Gregori	Male	12/26/1999		2018	FFA Member	1
109	[redacted]	Modesto - Gregori	Female	1/24/2001		2019	FFA Member	1
110	[redacted]	Modesto - Gregori	Female	6/15/2000		2018	FFA Member	1
111	[redacted]	Modesto - Gregori	Female	10/8/2000		2017	FFA Member	1
112	[redacted]	Modesto - Gregori	Male	5/12/2002		2020	FFA Member	1
113	[redacted]	Modesto - Gregori	Male	5/9/2000		2019	FFA Member	1
114	[redacted]	Modesto - Gregori	Male	1/18/2003		2021	FFA Member	1
115	[redacted]	Modesto - Gregori	Male	6/19/2000	602436497	2018	FFA Member	2
116	[redacted]	Modesto - Gregori	Male	11/7/2000		2019	FFA Member	1
117	[redacted]	Modesto - Gregori	Male	2/9/1999		2018	FFA Member	1
118	[redacted]	Modesto - Gregori	Male	11/22/2000	602638777	2019	FFA Member	2
119	[redacted]	Modesto - Gregori	Female	5/6/2003		2021	FFA Member	1
120	[redacted]	Modesto - Gregori	Male	12/20/1999	602436308	2017	FFA Member	2
121	[redacted]	Modesto - Gregori	Male	5/12/2000		2018	FFA Member	1
122	[redacted]	Modesto - Gregori	Male	3/13/2000		2018	FFA Member	1
123	[redacted]	Modesto - Gregori	Female	6/25/1999		2018	FFA Member	1
124	[redacted]	Modesto - Gregori	Male	5/19/2001	602429982	2019	FFA Member	3
125	[redacted]	Modesto - Gregori	Male	12/10/2000	602429679	2019	FFA Member	3
126	[redacted]	Modesto - Gregori	Male	5/25/2002		2020	FFA Member	1
127	[redacted]	Modesto - Gregori	Male	5/26/2003		2021	FFA Member	1
128	[redacted]	Modesto - Gregori	Female	5/11/2000		2019	FFA Member	1
129	[redacted]	Modesto - Gregori	Male	11/20/1999		2018	FFA Member	1
130	[redacted]	Modesto - Gregori	Male	8/24/1999	601124046	2018	FFA Member	4
131	[redacted]	Modesto - Gregori	Female	8/30/2001	602436531	2019	FFA Member	2
132	[redacted]	Modesto - Gregori	Female	3/1/2000	602436516	2018	FFA Member	2
133	[redacted]	Modesto - Gregori	Male	4/6/2001		2019	FFA Member	1
134	[redacted]	Modesto - Gregori	Male	2/24/2000	602436508	2018	FFA Member	2
135	[redacted]	Modesto - Gregori	Male	7/11/2002	602436291	2020	FFA Member	2
136	[redacted]	Modesto - Gregori	Female	6/20/2017	601610097	2019	FFA Member	2

137	[redacted]	Modesto - Gregori	Female	1/29/2002	602436233	2020	FFA Member	2
138	[redacted]	Modesto - Gregori	Male	8/15/2002	602436280	2020	FFA Member	2
139	[redacted]	Modesto - Gregori	Male	9/4/2002		2021	FFA Member	1
140	[redacted]	Modesto - Gregori	Male	11/24/2002		2021	FFA Member	1
141	[redacted]	Modesto - Gregori	Male	3/18/2000		2018	FFA Member	1
142	[redacted]	Modesto - Gregori	Male	3/2/2003		2021	FFA Member	1
143	[redacted]	Modesto - Gregori	Male	10/28/2002	602436297	2020	FFA Member	2
144	[redacted]	Modesto - Gregori	Male	1/14/2000	602436191	2018	FFA Member	2
145	[redacted]	Modesto - Gregori	Male	1/6/2002	602436275	2020	FFA Member	2
146	[redacted]	Modesto - Gregori	Male	11/6/2002	602436218	2020	FFA Member	2
147	[redacted]	Modesto - Gregori	Female	12/10/1999		2018	FFA Member	1
148	[redacted]	Modesto - Gregori	Male	9/20/2000		2019	FFA Member	1
149	[redacted]	Modesto - Gregori	Male	10/29/2001	602436159	2020	FFA Member	2
150	[redacted]	Modesto - Gregori	Female	5/21/2003		2021	FFA Member	1
151	[redacted]	Modesto - Gregori	Female	8/13/1999	602436145	2017	FFA Member	2
152	[redacted]	Modesto - Gregori	Male	1/4/2000	601124329	2018	FFA Member	2
153	[redacted]	Modesto - Gregori	Male	10/1/2000		2019	FFA Member	1
154	[redacted]	Modesto - Gregori	Female	3/15/1999	600902889	2017	FFA Member	5
155	[redacted]	Modesto - Gregori	Female	4/20/2001		2019	FFA Member	1
156	[redacted]	Modesto - Gregori	Male	10/16/1999		2018	FFA Member	1
157	[redacted]	Modesto - Gregori	Male	10/16/1999		2018	FFA Member	1
158	[redacted]	Modesto - Gregori	Male	4/18/2001	602429984	2019	FFA Member	3
159	[redacted]	Modesto - Gregori	Female	6/18/1999	601124334	2017	FFA Member	4
160	[redacted]	Modesto - Gregori	Female	5/13/2003		2021	FFA Member	1
161	[redacted]	Modesto - Gregori	Male	6/1/2000		2018	FFA Member	1
162	[redacted]	Modesto - Gregori	Male	7/15/2001		2019	FFA Member	1
163	[redacted]	Modesto - Gregori	Male	6/30/2000		2018	FFA Member	1
164	[redacted]	Modesto - Gregori	Female	11/7/2000	601124337	2018	FFA Member	4
165	[redacted]	Modesto - Gregori	Female	5/7/2003		2021	FFA Member	1
166	[redacted]	Modesto - Gregori	Female	2/11/2000		2018	FFA Member	1
167	[redacted]	Modesto - Gregori	Male	2/9/2002		2021	FFA Member	1
168	[redacted]	Modesto - Gregori	Female	9/9/2003		2021	FFA Member	1
169	[redacted]	Modesto - Gregori	Withheld	12/22/2001	602436196	2020	FFA Member	2
170	[redacted]	Modesto - Gregori	Male	12/20/1999		2018	FFA Member	1
171	[redacted]	Modesto - Gregori	Female	9/9/2001		2019	FFA Member	1
172	[redacted]	Modesto - Gregori	Male	7/1/2000		2018	FFA Member	1
173	[redacted]	Modesto - Gregori	Female	10/6/2002	602436211	2020	FFA Member	2
174	[redacted]	Modesto - Gregori	Male	3/12/2001		2020	FFA Member	1
175	[redacted]	Modesto - Gregori	Male	3/4/2002	602436201	2020	FFA Member	2
176	[redacted]	Modesto - Gregori	Female	3/28/2000		2018	FFA Member	1
177	[redacted]	Modesto - Gregori	Male	3/25/2002	602436306	2020	FFA Member	2
178	[redacted]	Modesto - Gregori	Female	6/15/2001	602429641	2019	FFA Member	3
179	[redacted]	Modesto - Gregori	Female	6/27/2002	602436149	2020	FFA Member	2
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424	[redacted]	Modesto - Gregori	Female	4/3/2002	602436253	2020	FFA Member	2
425	[redacted]	Modesto - Gregori	Male	3/21/1999	601123687	2017	FFA Member	4
426	[redacted]	Modesto - Gregori	Female	2/11/2001		2019	FFA Member	1
427	[redacted]	Modesto - Gregori	Female	10/10/2001		2019	FFA Member	1
428	[redacted]	Modesto - Gregori	Female	7/2/2003		2021	FFA Member	1
429	[redacted]	Modesto - Gregori	Male	10/6/1999		2018	FFA Member	1
430	[redacted]	Modesto - Gregori	Male	1/25/2002	602436312	2020	FFA Member	2
431	[redacted]	Modesto - Gregori	Male	1/23/2000	601123761	2018	FFA Member	4
432	[redacted]	Modesto - Gregori	Female	6/27/2001	602429654	2019	FFA Member	3
433	[redacted]	Modesto - Gregori	Female	9/7/1999	601123691	2018	FFA Member	4
434	[redacted]	Modesto - Gregori	Female	9/6/2002		2020	FFA Member	1
435	[redacted]	Modesto - Gregori	Female	12/29/1999		2018	FFA Member	1
436	[redacted]	Modesto - Gregori	Female	2/19/1999	600903946	2017	FFA Member	3
437	[redacted]	Modesto - Gregori	Male	5/17/2003		2021	FFA Member	1
438	[redacted]	Modesto - Gregori	Male	2/5/2000	601123694	2018	FFA Member	2
439	[redacted]	Modesto - Gregori	Female	6/6/2002		2020	FFA Member	1
440	[redacted]	Modesto - Gregori	Male	7/7/2000	602429686	2019	FFA Member	3
441	[redacted]	Modesto - Gregori	Female	12/1/2000		2018	FFA Member	1
442	[redacted]	Modesto - Gregori	Male	5/23/2002		2020	FFA Member	1
443	[redacted]	Modesto - Gregori	Male	11/13/2003		2021	FFA Member	1
444	[redacted]	Modesto - Gregori	Male	7/30/2001	602645251	2019	FFA Member	2
445	[redacted]	Modesto - Gregori	Female	4/15/2000	601123697	2018	FFA Member	4
446	[redacted]	Modesto - Gregori	Male	5/30/2000	601123698	2018	FFA Member	2
447	[redacted]	Modesto - Gregori	Male	11/29/2002		2021	FFA Member	1
448	[redacted]	Modesto - Gregori	Female	7/1/2000		2018	FFA Member	1
449	[redacted]	Modesto - Gregori	Male	10/18/2000	602429998	2019	FFA Member	3
450	[redacted]	Modesto - Gregori	Male	3/3/2001	602429983	2019	FFA Member	3
451	[redacted]	Modesto - Gregori	Male	7/13/2000	602645250	2018	FFA Member	2
452	[redacted]	Modesto - Gregori	Male	6/8/2001		2019	FFA Member	1
453	[redacted]	Modesto - Gregori	Male	8/6/2001	602436210	2020	FFA Member	2
454	[redacted]	Modesto - Gregori	Male	5/7/2000		2018	FFA Member	1
455	[redacted]	Modesto - Gregori	Male	2/20/2001	602429681	2019	FFA Member	3
456	[redacted]	Modesto - Gregori	Male	4/23/2001		2017	FFA Member	1
457	[redacted]	Modesto - Gregori	Male	1/30/2003		2021	FFA Member	1
458	[redacted]	Modesto - Gregori	Male	4/3/2000	602436188	2018	FFA Member	2
459	[redacted]	Modesto - Gregori	Male	11/20/2000		2018	FFA Member	1
460	[redacted]	Modesto - Gregori	Male	2/25/2003		2021	FFA Member	1
461	[redacted]	Modesto - Gregori	Female	6/27/2001	602430362	2019	FFA Member	3
462	[redacted]	Modesto - Gregori	Female	12/14/1999	601609533	2018	FFA Member	2
463	[redacted]	Modesto - Gregori	Female	9/25/2002		2020	FFA Member	1
464	[redacted]	Modesto - Gregori	Female	9/27/2002	602436254	2020	FFA Member	2
465	[redacted]	Modesto - Gregori	Female	11/23/1999		2018	FFA Member	1

466	[redacted]	Modesto - Gregori	Female	6/26/2001		2019	FFA Member	1
467	[redacted]	Modesto - Gregori	Male	10/5/2001	602429674	2019	FFA Member	3
468	[redacted]	Modesto - Gregori	Female	6/28/2003		2021	FFA Member	1
469	[redacted]	Modesto - Gregori	Female	12/18/2000	602429672	2019	FFA Member	3
470	[redacted]	Modesto - Gregori	Female	4/6/2003		2021	FFA Member	1
471	[redacted]	Modesto - Gregori	Male	11/1/1999	602436189	2018	FFA Member	2
472	[redacted]	Modesto - Gregori	Female	5/10/2002	602436192	2020	FFA Member	2
473	[redacted]	Modesto - Gregori	Female	10/4/2002	602436240	2020	FFA Member	2
474	[redacted]	Modesto - Gregori	Female	6/27/2000		2018	FFA Member	1
475	[redacted]	Modesto - Gregori	Male	2/13/2003		2021	FFA Member	1
476	[redacted]	Modesto - Gregori	Female	5/25/2000		2017	FFA Member	1
477	[redacted]	Modesto - Gregori	Female	12/5/2001	602436231	2020	FFA Member	2
478	[redacted]	Modesto - Gregori	Male	3/3/2037		2021	FFA Member	1
479	[redacted]	Modesto - Gregori	Female	7/16/2000	601123717	2018	FFA Member	4
480	[redacted]	Modesto - Gregori	Male	6/6/2003		2021	FFA Member	1
481	[redacted]	Modesto - Gregori	Male	10/13/2003		2021	FFA Member	1
482	[redacted]	Modesto - Gregori	Female	3/12/2000	602638774	2018	FFA Member	2
483	[redacted]	Modesto - Gregori	Female	6/25/2002	602436195	2020	FFA Member	2
484	[redacted]	Modesto - Gregori	Female	9/20/2001	602436491	2020	FFA Member	2
485	[redacted]	Modesto - Gregori	Female	8/10/2003		2021	FFA Member	1
486	[redacted]	Modesto - Gregori	Male	6/27/2000		2018	FFA Member	1
487	[redacted]	Modesto - Gregori	Male	1/10/1995		2019	FFA Member	1
488	[redacted]	Modesto - Gregori	Female	4/1/2002	602436204	2020	FFA Member	2
489	[redacted]	Modesto - Gregori	Male	6/24/2002	602436215	2020	FFA Member	2
490	[redacted]	Modesto - Gregori	Male	1/5/2000	602436533	2018	FFA Member	2
491	[redacted]	Modesto - Gregori	Female	10/29/2001	602436222	2020	FFA Member	2
492	[redacted]	Modesto - Gregori	Male	6/14/2002	602436226	2020	FFA Member	2
493	[redacted]	Modesto - Gregori	Male	4/20/2002	602436212	2020	FFA Member	2
494	[redacted]	Modesto - Gregori	Female	10/27/2000		2018	FFA Member	1
495	[redacted]	Modesto - Gregori	Female	3/5/2000		2018	FFA Member	1
496	[redacted]	Modesto - Gregori	Female	3/19/2002	602436232	2020	FFA Member	2
497	[redacted]	Modesto - Gregori	Male	6/6/2000		2018	FFA Member	1
498	[redacted]	Modesto - Gregori	Male	6/27/2003		2021	FFA Member	1
499	[redacted]	Modesto - Gregori	Female	8/10/2001	602429680	2019	FFA Member	3
500	[redacted]	Modesto - Gregori	Male	12/17/1999	602430237	2018	FFA Member	3

Criteria 2 E: FFA Activities

ANNUAL FFA CHAPTER ACTIVITIES CHECK SHEET

Criteria 2e **Year** **17-18** **School** **#REF!**

Must meet at least 12 areas

LEADERSHIP ACTIVITY	YES	NO
Attended State Leadership Conference	x	
Attended Regional Meeting	x	
Attended Regional Leadership Conference	x	
Attended Greenhand Conference	x	
Attended Made for Excellence Conference	x	
Attended Advanced Leadership Academy	x	
Attended Sacramento Experience		
Participated in Opening-Closing Contest - Sectional	x	
Participated in Best Informed Contest - Sectional	x	
Participated in Parliamentary Pro Contests - Sectional		
Participated in Prepared Public Speaking - Sectional	x	
Participated in Extemporaneous Speaking - Sectional	x	
Participated in Creed Recitation - Sectional	x	
Participated in Job Interview Contest - Sectional	x	
Participated in Agricultural COOP Quiz Contest - Sectional		
Submitted State FFA Degree Application	x	
Submitted American FFA Degree Application	NA	
Submitted Proficiency Application - Sectional or Regional		
Submitted Chapter Award Application - Sectional or Regional		
Participated in Project Competition - Sectional	x	
Participated in any FFA Judging Activity (other than above)	x	
Participated in any other FFA Sectional Activity	x	
Participated in Local Leadership Activities (3 maximum - list below)	x	
Officer Retreat		
FFA Meetings		
Local Project Competition Gregori High School		
TOTAL AREAS MET	17	

Gregori High School Agriculture Department

August 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Jul 2017 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		1	2	3	4	5
6	7	8	9	10	11	12
13	14 1st day of School	15	16	17	18	19
20	21	22 Greenhand Conf. - MJC Ag pavillion - All Day	23 Greenhand Social - Lunch in the Ag Dept.	24 Dept Mtg - 2:30pm	25	26
27	28	29 FFA Meeting - 6pm Rainforest Cafe	30	31 Dept Mtg - 2:30pm	Sep 2017 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	

Gregori High School Agriculture Department

September 2017

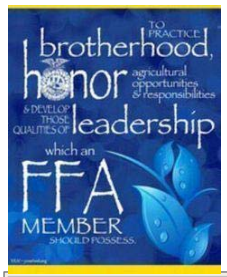
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Breakfast - 6am	2
3	4 Labor Day - No School	5	6	7 Min Day	8 Camp Sylvestor 5pm	9 Camp Sylvestor
10 Camp Sylvestor	11	12	13	14	15 Harvest Lunch-In - MJC Ag Pavillion 11:00 am	16
17	18	19 FFA Meeting @ Lunch in the Gym	20	21 Stan/T CATA Meeting 4:00 pm.	22	23
24	25	26	27	28	29	30

Aug 2017

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Oct 2017

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				



Gregori High School Agriculture Department

October 2017

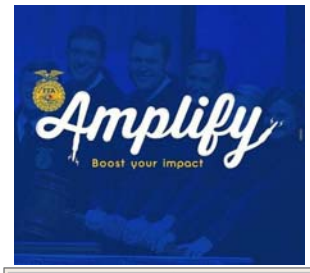
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5 Pork Loin Dinner Fundraiser - Front of School - 2:30-7:00pm	6 Breakfast 6am	7 COLC - All Day @ Gregori
8	9	10 Stan/T Opening-Closir Ceremonies - 4:00pm @ Gregori	11	12 Dept. Mtg. - 2:30pm	13 Min Day MJC Senior Day @ MJC - Seniors Only	14
15	16 No School - Non Attendance Day	17	18	19 Dept. Mtg. - 2:30pm	20	21
22	23 National FFA Convention Trip @ Indy and Washington DC	24 National FFA Convention Trip @ Indy and Washington DC	25 National FFA Convention Trip @ Indy and Washington DC	26 Dept. Mtg. - 2:30pm FFA Meeting @ 6pm in L101 National FFA Convention Trip @ Indy and Washington DC	27 National FFA Convention Trip @ Indy and Washington DC	28 National FFA Convention Trip @ Indy and Washington DC
29 National FFA Convention Trip @ Indy and Washington DC	30 National FFA Convention Trip @ Indy and Washington DC	31 Halloween National FFA Convention Trip @ Indy and Washington DC				

Sep 2017

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Nov 2017

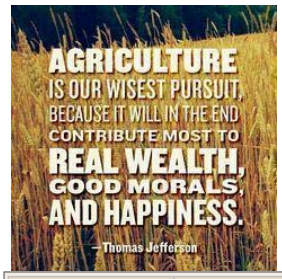
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		



Gregori High School Agriculture Department

November 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Oct 2017 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Dec 2017 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31			1	2 Dept. Mtg. - 2:30 pm	3 Breakfast - 6am	4
5	6	7	8	9 Dept. Mtg. - 2:30 pm	10 No School - Holiday	11
12	13	14 Stan/T Admin Night 6:00 pm @ MJC	15 FFA Meeting - Degree's Ceremony @ 6pm in the Cafeteria	16 Dept. Mtg. - 2:30 pm	17 CATA Regional Raod Show	18 CATA Fall Regional Meeting
19	20	21	22 Min Day	23 Thanksgiving - Holiday	24 No School - Holiday	25
26	27	28	29	30		



Gregori High School Agriculture Department

December 2017

Nov 2017

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

Jan 2018

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Breakfast - 6am	2
3	4	5	6 FFA Meeting @ Lunch in the Ag Dept.	7 Stan/T Speech Contests @ 4pm @ Enochs	8	9
10	11	12	13	14 Dept. Mtg. - 2:30 pm	15	16
17	18	19	20 Finals Min Day	21 Finals Min Day	22 Finals Min Day	23
24 Christmas Eve	25 Christmas Day Winter Break	26 Winter Break	27 Winter Break	28 Winter Break	29 Winter Break	30 Winter Break
31 Winter Break						

Gregori High School Agriculture Department

January 2018

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Winter Break	2 Winter Break	3 Winter Break	4 Winter Break	5 Winter Break	6 Winter Break
7 Winter Break	8 Winter Break	9 Winter Break	10 Winter Break	11 Winter Break	12 Winter Break	13
14	15 MLK - Holiday - No School	16 2nd semester begins	17	18 Dept. Mtg. - 2:30 pm	19	20 Roberts Island Serving Fundraiser @ 4pm
21	22	23	24	25 Stan/T State Degrees & Prof. 4pm @ Gregori	26	27
28	29	30	31 FFA Meeting @ Lunch in the Gym			

Dec 2017

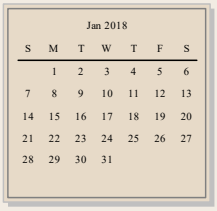
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Feb 2018

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

Gregori High School Agriculture Department

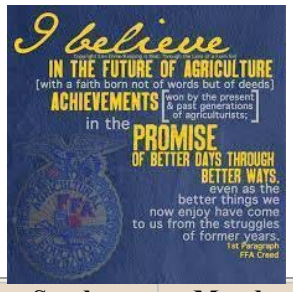
February 2018

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 Dept. Mtg. - 2:30 pm	2 Breakfast - 6am	3 Arbuckle FFA Field Day
4	5	6	7	8 Dept. Mtg. - 2:30 pm	9 MFE & ALA - Modesto - Noon Friday to Noon Sat.	10 MFE & ALA - Modesto - Noon Friday to Noon Sat.
11	12 No School - Lincoln's Bday Regional Prof. Scoring @ Ripon HS @ 9am	13 World Ag Expo	14 Valentine's Day World Ag Expo	15 Dept. Mtg. - 2:30 pm World Ag Expo	16	17 Duck Club Serving Fundraiser - Robert's Island
18	19 No School - Washington's Bday FFA Week	20 SLE - Sacramento FFA Week	21 FFA Meeting @ Lunch in the Gym SLE - Sacramento FFA Week	22 1/2 Chicken BBQ 2-6:30 PM Min Day Open House/8th Grade Parent Night SLE - Sacramento	23 SLE - Sacramento FFA Week	24 Stan Swiss Club Crab Dinner Serving Fundraiser
25	26	27	28			

Gregori High School Agriculture Department

March 2018

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Feb 2018 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28		Apr 2018 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30		1 Dept. Mtg. - 2:30 pm	2 Breakfast - 6am	3 UC Davis FFA Field Day
4	5	6	7	8 Dept. Mtg. - 2:30 pm	9	10 Chico State FFA Field Day
11	12	13 FFA Meeting @ Lunch in the Gym State Degree @ Awards Ceremony @ Delta College @ 6pm	14	15 Dept. Mtg. - 2:30 pm	16 Min Day Regional Speech Contest - MJC	17 Merced FFA Field Day St. Patrick's Day
18	19	20	21	22 Dept. Mtg. - 2:30 pm	23	24 MJC FFA Field Day
25	26 Spring Break	27 Spring Break	28 Spring Break	29 Spring Break	30 Spring Break	31



Gregori High School Agriculture Department

April 2018

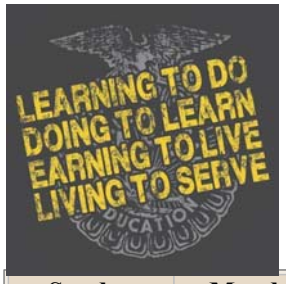
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 Easter Sunday	2	3	4	5 Dept. Mtg. - 2:30 pm	6 Breakfast - 6am	7
8	9	10	11	12 Dept. Mtg. - 2:30 pm	13 Ag Aware Lunch-In At MJC Ag Pavillion - 11am	14 CRC & Reedley FFA Field Day Regional Scrapbook Judging @ CRC
15	16	17	18	19 Dept. Mtg. - 2:30 pm FFA Meeting @ 6pm in L101 State Speaking Finals in Fresno	20	21 Fresno FFA Field Day
22 FFA State Convention @ Anaheim	23 FFA State Convention @ Anaheim	24 FFA State Convention @ Anaheim	25 FFA State Convention @ Anaheim	26 Dept. Mtg. - 2:30 pm	27	28
29	30					

Mar 2018

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

May 2018

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		



Gregori High School Agriculture Department

May 2018

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Apr 2018 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30		1	2 7th Grade Ag Day @ Salida Middle School - All Day	3 Dept. Mtg. - 2:30 pm	4 State Judging Finals @ Cal Poly - SLO	5 State Judging Finals @ Cal Poly - SLO
6	7	8	9 FFA Banquet @ 5:30 pm in the Rainforest Cafe.	10 Dept. Mtg. - 2:30 pm	11 Breakfast - 6am	12
13 Mother's Day	14	15	16	17 Stan/T CATA Mtg @ 4pm @ Grace Davis	18	19
20	21	22	23	24	25	26
27	28 Holiday - Memorial Day	29 Finals Min Day	30 Finals Min Day	31 Finals Min Day	Jun 2018 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	

Gregori High School Agriculture Department

June 2018

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 No School	2
3				7	8	9
10				14	15	16
17 Father's Day	18	19	20	21	22	23
24	25 CATA Summer Conf. @ Cal Poly - SLO	26 CATA Summer Conf. @ Cal Poly - SLO	27 CATA Summer Conf. @ Cal Poly - SLO	28 CATA Summer Conf. @ Cal Poly - SLO	29	30

May 2018

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

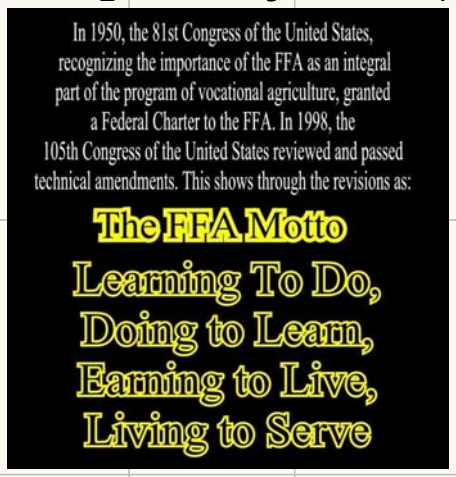
Jul 2018

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Gregori High School Agriculture Department

July 2018

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8				12	13 Stanislaus County Fair	14 Stanislaus County Fair
15 Stanislaus County Fair	16 Stanislaus County Fair	17 Stanislaus County Fair	18 Stanislaus County Fair	19 Stanislaus County Fair	20 Stanislaus County Fair	21 Stanislaus County Fair
22 Stanislaus County Fair	23	24	25	26	27	28
29	30	31				



Jun 2018

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Aug 2018

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Criteria 2 F: Student Leadership

CONSTITUTION OF THE GREGORI CHAPTER

ARTICLE I – Name and Purposes

Section A The name of this organization shall be the "Gregori FFA Chapter" of the Future Farmers of America" and the letters, "FFA" may be used to designate the chapter, its activities, or members thereof.

Section B The Primary aim of the Gregori FFA Chapter is to develop agricultural leadership, cooperation, and citizenship within cooperation, and citizenship within the community.

Section C The purposes for which this chapter is formed are as follows:

1. To develop competent and aggressive agricultural leadership.
2. To create and nurture a love of agricultural life.
3. To strengthen the confidence of students of vocational agriculture in themselves and their work.
4. To create more interest in the intelligent choice of agricultural occupations.
5. To encourage members in the development of individual occupational experience programs and establishment in agricultural careers.
6. To encourage members to improve the home and its surroundings.
7. To participate in worthy undertakings for the improvement of the industry of agriculture.
8. To develop character, train for useful citizenship, and foster patriotism.
9. To participate in cooperative effort.
10. To encourage and practice thrift.
11. To encourage improvement in scholarship.
12. To provide and encourage the development of organized recreational activities.

ARTICLE II – Organization

Section A The Gregori FFA Chapter is a chartered local unit of the California Association of Future Farmers of America which is chartered by the National FFA Organization.

Section B This chapter accepts in full the provisions of the constitution and bylaws of the California Association of FFA as well as those of the National FFA Organization.

ARTICLE III – Membership

Section A Membership in this chapter shall be of three kinds: (1) Active; (2) Alumni; and (3) Honorary, as defined by the National FFA Constitution.

Section B The regular work of this chapter shall be carried on by the active membership.

Section C Honorary membership in this chapter shall be limited to the Honorary Chapter FFA Degree.

Section D Active members in good standing may vote on all business brought before

the chapter. An active member shall be considered in good standing when:

1. They attend local chapter meetings with reasonable regularity.
2. They show an interest in, and take part in the affairs of the chapter.
3. Maintain at least a 2.0 grade point average and have no more than one failing grade or one unsatisfactory citizenship each grading term
4. Conduct oneself in a manner becoming a member of this organization,
5. as defined in the "Code of Ethics."
6. Are properly affiliated with the state and national FFA organizations. Any student that is enrolled in agriculture education at Gregori High School is entitled to be an active member of this chapter. Active membership may be maintained throughout their entire high school career and for three years after the first national convention following high school graduation, leaving high school, or until twenty-one years of age, which ever has the greatest length of time.

Section E Names of applicants for membership shall be filed with the membership committee.

ARTICLE IV - Emblems

Section A The emblem of the FFA shall be the emblem for the chapter.

Section B Emblems used by the members shall be designated by the national organization of FFA.

ARTICLE V – Membership Degrees and Privileges

Section A There shall be four grades of active membership in this chapter. These grades are: (1) The Greenhand FFA Degree, (2) The Chapter FFA Degree, (3) The State FFA Degree, and (4) The American FFA Degree.

All "Greenhands" are entitled to wear the regulation bronze emblem pin. All members holding the Degree of Chapter FFA are entitled to wear the silver emblem pin All members holding the State FFA Degree are entitled to wear the regulation gold emblem charm. All members holding the American FFA Degree are entitled to wear the regulation gold emblem key.

Section B Greenhand FFA Degree. Minimum qualifications for election: (Refer to State Constitution for a complete list of degree requirements.)

1. Be regularly enrolled in a class in vocational education course for an agricultural occupation and have satisfactory and acceptable plans for a program of supervised farming, and/or other agricultural occupational experiences.
2. Learn and explain the FFA Creed, Motto, and Salute.
3. Describe the FFA emblem, colors, and symbols.
4. Explain the proper use of the FFA jacket.
5. Have satisfactory knowledge of the history of the organization.
6. Know the duties and responsibilities of the FFA members.
7. Personally own or have access to Official FFA Manual.
8. Submit written application for the Degree for Chapter records.

Section C Chapter FFA Degree. Minimum qualifications for election: (Refer to State Constitution for a complete list of degree requirements.)

1. Must have the Degree of Greenhand and have a record of satisfactory participation in the activities of the local chapter.
2. Must have satisfactorily completed at least one year of instruction in vocational agriculture, have in operation an approved supervised farming, and/or other agricultural occupational experience program, and be regularly enrolled in a vocational agriculture class.
3. Be familiar with the purposes and programs of activities of the state association and national organization.
4. Be familiar with the provisions of the constitution of the local chapter.
5. Be familiar with parliamentary procedure.
6. Be able to lead a group discussion for fifteen minutes.
7. Must have earned by his/ her own efforts from his/ her supervised farming and/or other agricultural occupations program and deposited in a bank or otherwise productively invested at least $150 or worked 100 hours on his/her SAE in excess of scheduled class time.

Section D State FFA Degree: Minimum qualifications for election:

1. Qualifications for the State FFA Degree are those set forth in the Constitution of the State Association

Section E American FFA Degree. Minimum qualifications for election:

1. Qualifications for the American FFA Degree are those set forth in the Constitution of the National FFA Organization.

Section F Special Committees shall review the qualifications of members and make recommendations to the chapter concerning degree advancement.

ARTICLE VI - Officers

Section A The officers of the chapter shall be as follows: President, Vice President, Secretary, Treasurer, Reporter, Sentinel. The executive committee has the option of having an election for Chaplain, Historian and Parliamentarian. The local Advisor shall be the teacher of vocational agriculture in the school where the chapter is located. Officers shall perform the usual duties of their respective offices. Officer's duties are described in the National FFA Constitution.

Section B Officers shall be elected semi-annually or annually by a majority vote of the members present at a regular meeting.

Section C The officers of the chapter together with the chairmen in charge of the major sections of the annual program of activities shall constitute the Chapter Executive Committee The Executive Committee shall have full power to act as necessary for the chapter in accordance with actions taken at chapter meetings and various regulations or bylaws adopted from time to time.

Section D Honorary members shall not vote nor shall they hold any office in the chapter except that of Advisor.

Section E Chapter officers must hold the Chapter FFA Degree, except during the first year after the chapter is organized.

Section F The advisor shall be one of the agricultural instructor's of the agriculture dept.

Section G

All chapter officers must attend all chapter activities, which shall be determined by the executive committee, chapter officers will attend COLC and Chapter officer leadership camp, and be registered in the agricultural leadership class.

Section H

The advisor(s) shall give advice to the chapter members and shall assist the president and the executive committee in coordination of chapter activities. All FFA activities and plans are subject to approval of the advisor.

Section I

Impeachment of an officer- Prior to the officer elections the executive committee shall submit a written list of officer responsibilities and requirements to be signed by all candidates. If any officer does not meets these requirements the executive committee will call a special meeting to review the dedication of the officer if the executive committee feels the officer can no longer meet the requirements of office he/she will then be impeached with majority vote from the executive committee.

Section J

Replacement of an officer- In the event of an opening in office all FFA members shall be informed of the vacancy. Any member meeting the requirements to run for office
may then submit an application to the executive committee. The executive committee will then review the applicants and slate at least two hers for the opening. Any active member can then vote for one of the slated members at the time and place set up by the executive committee. In the event an officer resigns, or is impeached the president has the power to appoint a temporary officer until the "the replacement of an officer" can be followed.

ARTICLE VII – Meetings

Section A Regular chapter meetings shall be held once a month during the school year and once during the remaining months of the year at such time and place as is designated by the Chapter Executive Committee. Special meetings may be called at any time.

Section B Standard meeting equipment shall be used at each meeting. All regular meetings shall open and close with the official ceremony. Parliamentary procedure shall be used in transacting all business at each meeting.

Section C Delegates, as specified by the State Constitution, shall be elected annually from the active membership to represent the chapter at the State Leadership Conference. Other delegates may be named as necessary in order to have proper representation at various other FFA meetings within the State.

Section D A majority of the active members listed on the secretary's membership roll shall constitute a quorum, and a quorum must be present at any meeting at which business is transacted or a vote taken committing the chapter to any proposal or action.

ARTICLE VIII – Elections

Section A A majority of the active members listed on the secretary's membership roll shall constitute a quorum, and a quorum must be present at any meeting at

which business is transacted or a vote taken committing the chapter to any proposal or action.

Section B

Election Procedure and Requirements: Officers shall be elected to serve terms of one year to begin and end with the annual parent member banquet. Officers shall be elected as the first order of business during the last regular meeting immediately preceding the parent member banquet.

Section C

To be eligible to run for a chapter office you must meet the following;

1. You must be a member in good standing (defined in article 3, section D, 3)
2. The member must at least be an incoming sophomore in high school.
3. You must have received the greenhand degree and be receiving the chapter FFA degree before or during your term.

Section D

After presenting an application to a member of the officer team each candidate will be reviewed and slated for an office by the executive committee they will then be placed on the ballot.

Section E

Balloting procedure**-** Balloting for elective office shall be in this order: president, vice president, secretary, treasurer, reporter, and sentinel, Historian, Chaplain and Parliamentarian. A majority vote of those voting shall be required for election. In the case no candidate receives a majority there shall be required for those candidates whose total vote is equal or exceeding a majority

ARTICILE IX – Dues

Section A

Local, State, and National Dues are paid for by the active local chapter.

ARTICLE IXI – Amendments

Section A

The constitution may be amended or changed at any regular meeting by a two-thirds vote of the active members present providing it is not in conflict with the state association constitution or that of the National FFA Organization.

Section B

Bylaws may be adopted to fit the needs of the chapter at any regular chapter meeting by a two-thirds vote of the active members present providing it is not in conflict with the state association bylaws or that of the National FFA Organization.

Bylaws of the Gregori FFA Chapter

ARTICLE I - MEETINGS

Section A

Regular Meetings- regular meetings of the chapter shall be held at least once a month during the school year the time and place shall be determined by the executive committee.

Section B.

Special Meetings- a special meeting of the chapter may be called by the president at any time for the consideration of special business with the approval of the executive comm17tee, or upon presentation to the secretary of a petition bearing the signatures of one third of active members in good standing in the chapter

Section C.

Parent Member Banquet- one parent member banquet shall be held each year at the end of the school year to honor members, parents, and other friends of the FFA. The executive committee shall determine the time and place.

Section D.

Quorum- The quorum shall be 15% of the students enrolled in agriculture class at Gregori high school. No business may be accomplished without the quorum being met.

Section E.

Summer meetings- at least one meeting shall be called during the summer when school is not in session.

Section F.

The greenhand officers shall be responsible for one meeting.

Article II - Committees

Section A.

Standing committees- the standing committees shall be:

1. Student development
2. Chapter development
3. Community development

The standing committees shall meet at least once every two months. All standing committee chairmen shall *be* appointed by the executive committee for terms of one year the duties of the committees shall be in the "program of activities".

Section B.

Temporary committees- temporary cobs may be set up for specific purpose and their method of selecting the chairmen and members shall be stated in the motion.

Section C.

The executive committee- the members of the executive committee shall be the officers of the chapter and the advisors. The vice president of the chapter shall be the presiding officer of the executive committee. The executive committee shall be empowered to act in the name of the chapter between meetings of the chapter the members of the executive committee under the supervision of their advisor shall develop the program of activities at the beginning of their term.

Section D.

The governing committee- the members of the governing committee shall be the president, vice president, and secretary. The governing committee shall be empowered to act in the name of the chapter when school is not in session and it would be impractical to call a meeting of the executive committee.

Article III - Amendments

Section A.

Amendments to this constitution may be adopted at any regular chapter meeting providing the proposal has been submitted to the executive committee two weeks prior to the above mentioned meeting.

Section B.

In order to pass an amendment a vote of 2/3 of the quorum must be met.

Article IV - Insignia and uniforms

Section A -

Insignia- the insignia of tile Gregori Chapter of FFA shall be the emblem which is adopted and approved by the national FFA organization.

Section B.

Dress uniform- the official FFA dress for males shall be the official FFA jacket, zipped to the top, worn with a collared dress shirt, official FFA necktie, black slacks, black socks, and black dress shoes. The official dress for females shall be the official FFA jacket, zipped to the top, worn with a white, collared dress blouse, an official FFA scarf, black skirt (of appropriate length), and black dress shoes. Black jeans may be worn only with prior approval from the advisor.

Section C.

Show uniform- the official FFA show uniform shall be worn by all FFA exhibitors and by helpers in individual and chapter group while showing at fairs and livestock shows. The uniform shall. Consist of white pants, white dress shirt or blouse with the FFA emblem attached to the left pocket, and the official FFA blue necktie for males or the FFA scarf for the females. The official FFA jacket is optional; if worn, the shirt emblem is not required.

A. General Rules Governing Gregori FFA Members at Chapters Activities and While Wearing the Official FFA Jacket

I. Procedure

A. Prior to entering an FFA activity governed by the rules or the acquisition of the official FFA jacket, each FFA member will read a copy of the rules and sign a statement indication their intent to follow the prescribed rules.

B. An instructor or chaperon must accompany each student entering a chapter activity, and this person must be with his student during the night, prevent noise and other disturbances that may interfere with the welfare of other individuals. Every effort must be made to maintain orderly, quiet, and proper conduct at all times. Any violations will be considered cause for disciplinary action determined by the Chapter Executive Committee.

C. The activities that the Gregori FFA members will be allowed to participate in are outlined in the Chapter Program of Activities.

Article V - General Rules

A. Members are prohibited from smoking, *chewing tobacco* and drinking alcoholic beverages while wearing the FFA jacket, officially representing the organization, and taking part in any official activity.

B. The use of, or possession of, firecrackers or bullwhips will be grounds for immediate expulsion from the show or activity.

C. Lariats or other pieces of equipment subjecting anyone to injury are forbidden.

D. No member is to leave the grounds without the permission of his instructor. No cars are to be used at any time without the approval of the instructor in charge.

E. Lady-like and gentlemanly conduct is expected at all times. Obscene language and roughhousing will not be tolerated at any time.

F. Card playing and gambling in any form is strictly forbidden.

G. Students who are reported to the committee for neglect of stock will be brought before the committee for appropriate action.

H. Appropriate dress will be required at activities participated in by Future Farmers of America. All members shall be expected to use good judgment in dress and shall wear the recognized uniform for members when applicable. Shirts without sleeves, shirts or t-shirts with insignia other than the FFA or acceptable names are forbidden.

I. Advisors shall discourage any display of overly affectionate attention between boy and girl members. Persistent abuse of this rule shall be cause for suspension from the show.

J. Hair shall be clean, cut and neat in appearance to be decided by advisors and officers of the FFA Chapter.

K. It is highly recommended that any items that are valuable or will be a problem to lockup, or be left at home; such as - large radios, rings, more money than needed for the week, cowboy hats, expensive cowboy boots, etc.

Article VI -Official FFA Jackets

A. Persons who are members in good standing of the chapter should only wear the jacket.

B. It should always be kept clean and neat at all times.

C. The jacket should have only a large emblem on the back and a small emblem on the front; the name of the State Association and the name of the local chapter on the back; and the name of the individual.

D. Officers and members should wear it on official FFA occasions, as well as other occasions, where the chapter is represented. It may be worn to school and other appropriate places.

E. The jacket should be worn only to places that are appropriate for members to visit.

F. School letters and insignia of other organizations should not be attached to or worn on the jacket.

G. The jacket should not be worn with garments bearing the insignia of other organizations.

H. When the jacket becomes too faded and worn to wear in public, it should be discarded or the emblems and lettering removed.

I. The emblems and lettering should be removed if the jacket is given or sold to a nonmember.

J. When members wear jackets they should conduct themselves in a gentlemanly or ladylike fashion.

K. Members are prohibited from smoking and drinking alcoholic beverages while wearing the FFA jacket, officially representing the organization and taking part in any official activity.

L. All chapter degree, officer, and award medals should be worn beneath the name on the right side of the jacket, with the exception that a single State FFA charm and the American FFA Key should be worn above the name or attached to a standard key chain.

M. Violation of the above rules governing the use of the official FFA jacket will warrant the Executive Committee to revoke the member's ownership of the jacket

Article VII - Fair Exhibits & Exhibitors

A. You, your animal and your chapter are on exhibit during the entire show. You will be expected to keep our exhibit area and adjacent aisles dean at all times.
B. Stalls must be cleaned, with old bedding put into the designated time set by the agriculture instructors. Keep the aisles clean at all times. This is a safety and health factor as well as a feature of your exhibit.
C. Each exhibitor is responsible for his or her own animals at all times. If he cannot be present he must have prior approval of his instructor to leave. The person designated to care for the animals must then be present at the fair.

D. Destruction of property, not cooperating with employees of the shove or cooperating groups all add up to a bad image of a Future Farmer; thus, you will be expected to cooperate at all times. Exhibitors will be held responsible for damage to any facilities or equipment.

Section A. - Dormitory

A. Each fair has written dormitory rules as to the time each member is to be check in. It is the member's responsibility to familiarize himself/herself with these rules and abide by them.

B. You are expected to keep your dormitory area clean of refuse, your bed made, and the bunk area policed.

Article VIII - Disciplinary Action

A. Individuals who have been found to violate any of these rules will be subject to disciplinary action by the Chapter Executive Committee and the advisors of the chapter.

B. If the violation warrants it, this committee has the authority to immediately bar the individual or individuals involved from any further FFA activities, ownership of official FFA jacket, and membership of the organization.

Article VIIII - Members in Good Standing

A. (The following policy is being implemented to protect the rights and opportunities of FFA students in the Vo-Ag program. Due to some very serious violations by students in the past, our chapter and department found it necessary to outline the proper procedure for a member to be in good standing.)

B. Every member will start out in good standing. Only by their actions will their standing become unsatisfactory. We hope this statement will provide a clear understanding of acceptable conduct, attitude and procedure on the part of the members.

Criteria Three: Practical application of Agricultural Skills

Criteria 3 A: SAE Grading

3A SAE Grading

See course syllabus located in section 2c participation grade or the SAE policy statements included in this section.

Gregori High School Agriculture Department

Supervised Occupational Experience Project (SOEP) Guidelines

1. The SOEP shall be described in the student career plan.
2. Students enrolled in their first year in Agricultural Education shall be engaged in their S.O.E.P activities during each year of their enrollment.
3. Continuing students or advanced students in Agricultural Education courses must conduct S.O.E.P activities during each year of their enrollment.
4. Each student must maintain a California Agriculture Record Book and keep current information. The record book is part of the S.O.E.P. Grade.
5. The S.O.E.P. will account for 10% of the student's grade. The project grade will be decided based on the objectivity of the instructor. Students will be encouraged to enter local project competition or make a class presentation on their project for a grade.
6. A student S.O.E. must increase in scope and/or become more diverse from one year to the next.
7. Each student's records are evaluated and graded each quarter and visited/observed at least twice per year by the supervising teacher.
   & Students may use school facilities to include animal units, green/shade houses with instructor approval and by completing the required GHS Agriculture Department forms.
8. The Agriculture instructor and the facilities are covered by district insurance. However, the students S.O.E.P.'s are not covered by district insurance. Livestock insurance is available for students to purchase for a nominal fee; This insurance is provided by the California FFA Livestock Insurance and not affiliated with Modesto City Schools.

Description and Role of SOEP

The SOEP stands for Supervised Occupational Experience Program. Gregori FFA is very involved in the SOEP, ranging from work experience to ownership enterprises.

The students in this Agriculture Department are involved in many different kinds of projects. The projects include market and breeding sheep, market beef, market and breeding swine, poultry, Dairy, Ag Mechanics, rabbits, ornamental horticulture, and landscape projects. The major work experience programs are in the fields of Landscaping and Maintenance, agriculture sales and service. The teachers encourage students to concentrate on projects that relate to their future career goals. During this first year, the students work with the agriculture instructor to develop a four-year program plan that integrates SOEP, course work, and FFA Activities. The teachers plan to expand the diversity of the SOEP projects as well as continue their efforts to involve students. Students are graded on their SOEP projects. Their projects are worth 10% of the student's grade. SOEP's provide students with "HANDS ON EXPERIENCE" exercises in management, responsibility, growth, money management and much more. Most projects are kept at the school farm, which is fully equipped for the projects.

Student Leadership Participation

Our policy concerning FFA Participation is that a student must participate in a minimum of five local FFA events per semester. This requirement is directly correlated to their semester grade. At the beginning of the school year each student is given a copy of the Grading Policy. We also have sign-up lists whenever an activity nears in order to determine who will be participating. About 90% of our members participate in the required activities each year. We have very few members who do not participate fully. Most of our students actually participate in more than the required amount of activities.

Participation in FFA activities is included as a part of each student's semester grade. The breakdown of semester grade is as follows:

70%-Class work, activities, homework, assignments, etc.
10%- SAE
20%- FFA Activities

California Agricultural Teacher's Association

Program Policy Statement
On
Supervised
Occupational
Experience
Programs

CALIFORNIA AGRICULTURAL ASSOCIATION
PROGRAM POLICY NCIMBER 1 -
SUPERVISED OCCUPATIONAL EXPERIENCE PROGRAM (SOEP)

Since its very beginning in 1917 as a federally supported component of the public secondary school system Vocational Agriculture has incorporated sane form of experiential education as a teaching strategy.
In the earliest days when all students came from farms and ranches and were destined to return there upon completing their high school education, this experiential education usually took the form of a production enterprise in livestock, poultry, crops, etc., conducted on the home place.

There was a three-fold purpose for these "projects": (I) to provide the student with an opportunity to develop, through experience and under the supervision of his Vo-Ag teacher, skills and knowledge required to conduct financially rewarding agricultural production enterprises; (2) to provide a demonstration to the community of modern practices in agriculture; (3) to *provide a* means for the Vo-Ag student—Future Farmer—to begin his actual establishment in farming.

All Vo-Ag students were required to engage in one or more "projects" as a condition of enrollment in Vo-Ag classes. There is abundant testimony that the early day Vo-Ag program served those purposes well.

In the early post-World War II years it became generally recognized that "Agriculture is More Than Farming"—a slogan adopted by Agricultural Educators at all levels throughout the United States.

In attempting to establish a definition for this broadened concept of agriculture, several agricultural categories or classifications were proposes. One was offered by the United States Office of Education. It made sense to us in California and was adopted for our use. This system identifies six Agricultural occupational clusters in addition to Production (Farming and Ranching). They are Agricultural Supplies and Services, Agricultural Mechanics, Agricultural Products and Processing, Ornamental Horticulture, Agricultural Resources, and Forestry.

Under this broadened concept of agriculture, Agricultural Education's responsibility was similarly expanded. Whereas before, Vo-Ag's function was limited to preparing persons for work an the farm or ranch, now had the task of preparing persons for gainful employment in occupations found in all seven of the occupational clusters associated with the broadened perspective of agriculture.

It soon became obvious that the original three fold purpose cited earlier for the "Vo-Ag Projects" was no longer relevant to the expanded, modernized Vo-Ag program.

In addition tithe expanded occupational scope of the Vo-Ag program other changes were occurring that affected the validity of the "project requirement":

- ✓ Fewer students were coming from farms or ranches or with any previous agriculture experience.
- ✓ Fewer career opportunities in agriculture were found in entrepreneurship -- cysts were as employees in someone else's business -- usually not on the farm or ranch.
- ✓ Agricultural jobs became more technical, often requiring advanced training and education--fewer students were going directly fry high school to employment.
- ✓ Unionization, governmental regulations and insurance company requirements made it increasingly difficult for school age persons to become employed in many agricultural occupations.
- ✓ The costs of acquiring land, equipment, livestock, supplies, financing, became prohibitive for most students--they are seldom able or inspired to invest heavily (financially or effort) in an enterprise.
- ✓ The increased pace of life and multiplicity of recreational opportunities divert many students from early engagement in long-term work or career oriented activities.
- ✓ All these changes affecting the Vo-Ag program and its student population have brought, or at least

- contributes to, sane *major* shifts in the nature of the "project" component of the program.

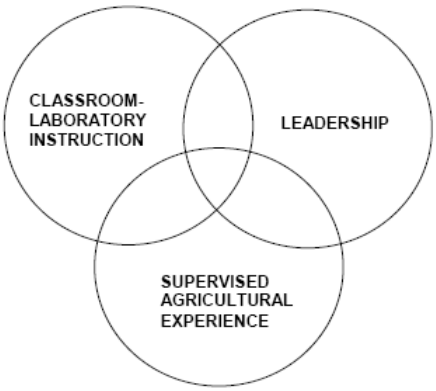
✓ For one thing, in order to recognize sane of the other changes that had occurred a new title was devised for this component of the total Vo--Ag program. It is now formally known as a student's Supervised Occupational Experience Program. The title is intended to infer certain things:

✓ The word Supervised indicates that the student's Vo-Ag teacher oversees this part of his agricultural education just as he does all other aspects.

✓ The term Occupational Experience is to describe the nature a purpose of the activity to provide the student with experience in an (Agricultural) occupation.

✓ The word Program suggests that this activity has more than aye part. In fact, a student's SOEP may consist of several, separately identified activities each of which frequently is called a 'project".

The relationship of SOEP to the other major components of a total Vo-Ag program often is illustrated as one of three inter- linking, overlapping, equal circles.



It is intended that this should describe the inseparability, equality, and interdependence of each of these components. Same observed changes in the characteristics of Vo-Ag's brand of experiential education as it has evolved from projects to SO EP are as follows:

◊ In earlier days all Vo-Ag students had one or more hone projects whereas today less than one-half conduct any form of SOEP outside of class-time.

◊ In earlier days most home projects were directly related to students' intended life work whereas today a few Vo-Ag students conduct SOEP which is directly related to their career goals.

◊ In earlier days most home projects grew in scope and quality from one year to the next whereas today few SOEP's gray from one year to the next.

◊ In earlier years most Vo-Ag students conducted projects that would form the nucleus of a herd, flock, farm, etc., for their establishment in farming upon graduating from high school whereas today it is rare that an SOEP reaches a scope and quality which would make that possible or which would convince a financier to back the graduated Vo-Ag student in such an enterprise.

◊ In earlier days a major part (as much as 50%) of the Vo-Ag teacher's time was given to on-site supervision of students' home projects whereas today it is unusual for a Vo-Ag teacher to consign even an average of 8 hours per week to the supervision of students' occupational experience.

It is only natural that the Vo-Ag program changes to accommodate the changes occurring in agriculture. Changes in the Vo-Ag program must include changes in *its* SOEP component.

The question, then, is "are the changes which have already occurred in SOEP the result of planned, pro-active action and are they appropriate and adequate to meet the needs of today's Vo-Ag program?' Or, "are they changes which are adversely affect the effectiveness of the program in accomplishing its purposes?" This issue became the topic for consideration by CAT-A's Secondary Division at its meeting during the 1982 Annual Scanner Conference of the Association.

Vice-President Bill Kellogg of San Jacinto High School offered the members' 26 questions pertaining to SOEP which he felt would stimulate their thinking on the topic. A "White House Conference" style session was conducted during which the several table groups discussed whichever of the 26 questions seemed especially significant to then. The input from these table groups has been combined and summarized in the balance of this paper which comprises CATA's Statement of Policy Regarding Supervised occupational Experience Programs for students enrolled in Vocational Agriculture.

What is a
Supervised Occupational Experience Program?

A student's supervised occupational Experience Program SOEP is one of his teacher's ways of extending instruction beyond the walls of the classroom, shop or other school facility. Through this medium, the teacher is able to provide planned learning experiences for the student that would not otherwise exist.

The application of knowledge gained through directed learning in the school classroom, shop or field lab often can occur only in a "real" situation which does not; perhaps cannot, exist in the school. Action taken by the teacher to place students in "real" situations and supervise their experience in that situation is an essential part of their teaching assignment in Vo-Ag.

SOEP has the following characteristics:

1. It is an activity which is identified with a specific agricultural enterprise or occupation and involves the student in hands-on experiences which are directly associated with that enterprise or occupation.
2. The student may be self-employed in the enterprise/occupation or may be employed by another, either paid or unpaid.
3. The student's involvement in this experience occurs outside of his school's usual class hours.
4. Under score circumstances the student's project(s) may be located on school facilities.
5. The student plans SOEP with the assistance of the V6-Ag teacher and conducts it under the regular supervision of that instructor.
6. The Vo-Ag teacher allocates a significant portion of his work hours to the supervision of students' SOEP.
7. Students keep records pertaining to their SOEP as prescribed by the teacher and those records are periodically reviewed by the teacher.
8. Students may be individually engaged in 501W or cooperatively with other students.
9. The student's plan for SOFT includes goal; and provisions for growth in scope and Complexity.

What are the Purposes of
Supervised Occupational Experience Programs
as a Part of Contemporary
Vocational Education in Agriculture?

As seen by the Vo-Ag teacher, whose main function is to serve as a manager, coordinator or consultant of learning for his students as they seek careers in agriculture, the specific purposes of SOEP are:

1. To provide opportunities for hands-on experience in skills and practices required for successful employment in agriculture.
2. To provide opportunities to gain documented experience in agriculture which can provide references for future employment?
3. To provide opportunities for students to identify, develop and demonstrate personal characteristics required for successful employment in agriculture. Sane examples are initiative, responsibility, dependability, self-reliance, etc.
4. To provide opportunities for students to observe and participate and select a place in the "world of work.
5. To capture, retain and focus student interest in agriculture.
6. To provide an opportunity for students to discover and deal with the financial realities of agricultural production and/or employment.

Though modern SOEP certainly can lead to establishment in farming this is no longer a goal for it. In fact, the opportunities for young persons to become fully established as entrepreneurs in any agricultural enterprise are remote. Most Vo-Ag students should not be encouraged to think of SOAP as direct preparation for becoming established in an agricultural enterprise as an owner/operator nor as an employee.

Rather, they should expect their individual SOEP's to benefit than in ways suggested by the specific purposes stated here earlier.

Except for beginning Vo-Ag students, the selection of SOEP enterprises should have a 3irect career goal relationship. Many of today's beginning Vo-Ag students are seeking to establish their occupational goals. The SOEP can be an exploratory experience for then. The personal characteristics developed through successful SOEP are relevant to most occupations (even out of agriculture). Therefore, the SOEP experience will be beneficial in preparing one for work even if it is not directly related to the job or jobs a person eventually takes.

Is SOEP a Necessary Component of Contemporary Vo-Ag Programs?

In spite of the changes in the Vo-Ag program over the years and of the changes that may need to occur in SOEP itself, it still is a necessary and effective component of Vo-Ag programs.

There are same areas of agricultural knowledge that are of little use unless they can be applied to real situations.

There are skills that cannot be learned except by practice. SOEP provides the means for applying knowledge and practicing skills.

In same ways the need for SOEP can be reduced if the school were to provide extensive laboratory facilities (shop, school farm, greenhouse, etc.) where students could engage in learn-by-doing activities as part of their in-school instruction.

However, this type of experience would probably not serve to develop those necessary, personal characteristics mentioned earlier since there would not be the same incentives to be responsible, dependable, self-reliant, etc. At best, the school can provide only a 'semi-real" situation.

Should SOEP be a Required Activity for Every Student Enrolled in Vocational Agriculture?

Every Vocational Agriculture student should be required to conduct SOEP. Those in their first year of Vo-Ag may post-pope the beginning of their SOEP until the end of that year to permit time for selection and planning.

Individually owned and operated enterprises or individual employment in an agricultural job probably are the "best" forms of SOEP in terms of benefits to the student. It is recognized, though, that it may not be possible for every student to arrange this kind of experience.

Group or cooperatively owned and operated enterprises may often be a suitable alternative to the individual approach.

Students cannot be required to commit personal funds to SOEP as a condition of enrolling in a Vocational Agriculture class. If involvement in SOEP is a condition for satisfactory participation in a Vo-Ag class (as is recommended), the school must provide a means for students to have that experience without personal cost to

them. Some ways for accomplishing this are:

- Arrange for the student's employment in an appropriate agricultural job.
- Provide financing for individual or group enterprises, either by the school or from other, non-school, sources in the community.
- Provide facilities on the school's farm laboratory for raising animals and growing crops.

Since SOEP is a "tailor made" experience for each student, design to suit the individual's needs and circumstances, standardization of SEEP throughout the state is not feasible.

However, each teacher should have "clearly" deemed criteria for evaluating student performance and growth in the SOEP. Students should be informed about these criteria.

Students may be aided in planning SOEP it they have sane guidelines or examples of successful SOEP as models.

Since SOEP can be said to be the "homework" required of Vo-Ag students, students' performance in it should be graded and that grade should be incorporated in the evaluation of the students' overall performance in Vocational Agriculture.

Under sane circumstances, students can earn additional school credit toward graduation for conduction satisfactory SOEP. That option should be considered by each school offering Vocational Agriculture Programs.

What is the Teacher's Role
and Responsibility in
Supervised Occupational Experience Program?

Perhaps the Vo-Ag teacher's major responsibility pertaining to SOFA is to assure that it is an essential, effective component of the school's over-all Vo-Ag Program--that all Vo-Ag students are aware of its values, purposes, characteristics, opportunities, etc., and that they participate in it.

The most obvious requirement of the teacher is that tine be allocated and utilized for out-of-class supervision of students at the site of their SOEP activities. The "5" of SOEP is "Supervised." The intention is that the teacher has the same involvement with the student in this individualized instruction part of the Vo-Ag Program as he or she does in the classroom, shop or farm lab group instruction part.

The teacher should have scheduled, organized, purposeful visits, to observe the student activity in SOEP and to assist in causing that to a quality experience for the student.

In mast cases one teacher cannot effectively supervise the occupational experience of more than 60 individual Vo-Ag students and that only if a period of the school day is set aside for that purpose. If several students are participating in group or cooperative projects or if they individually conduct their SOEP activities at a single site, such as a school farm lab, the teacher may be able to slightly increase the number of students supervised.

The frequency of supervision visits by the teacher will vary among students according to the complexity of their SOEP. However, a minimum of 4 visits per year spaced throughout the duration of the activity should be the goal.

In the case of students who are employed in an agricultural job for SOEP purposes the teacher should look to the employer as a co-supervisor. They should work together to make that occupational experience count Ca— the student's career preparation.

Many students will conduct their SOEP activities at home. When such is the case, the teacher has an opportunity to incorporate a parental visit with the task of observing the student's SOEP activity. This opportunity should be utilized.

In fact, even for those students who do not maintain SOEP activities at home, the teacher should incorporate in the visitation schedule at least one parental-home visitation per year.

The purposes of this parental contact are:

- Demonstrate to parents that the teacher is interested in the development of their child.
- Form an alliance with parents for the career and personal guidance of their child.
- Acquaint the teacher with hone conditions which may have a bearing on the student's performance.
- Inform the parents of program purposes, expectations and activities and of their chill's performance, etc.

In addition to the scheduled visits, the Vo-Ag teacher must also be "on-call" for students who have an immediate new for assistance with their SOEP. Animals get sick, equipment breaks, employers become crotchety at unexpected and sometimes inconvenient times. The student frequently panics in these crises and desperately needs the assistance of the advisor.

Because SOEP is an activity unique to Vocational Agriculture 3's a program requirement, students will not usually understand it well enough to assume the initiative in establishing themselves in it. Nor will they always know how or where to get started. This situation places other demands on the Vo-Ag teacher. First the teacher has a responsibility for the development of SOEP opportunities. The teacher should locate agricultural work stations (jobs) in the community which are available to Vo-Ag students. The operators of Earns, ranches and agribusinesses in the community should be encouraged to provide work opportunity (not necessarily paid) for Vo-Ag students referred to than by the Vo-Ag teacher.
In addition to arranging for job stations, the Vo-Ag teacher should establish a reservoir of ideas and opportunities for individual *and group* conducted *agricultural* projects *for* students to draw from when they are unable to identify prospective activities by themselves.

Teachers should actively assist in help students to locate, purchase and transport project materials, equipment and livestock. Teaches should expect to spend time in searching" for these items.

The teacher is responsible for assuring that every Vo-Ag student incorporates record keeping as an important segment of their SOEP. The teacher must be certain that the students know haw to keep appropriate records related to that experience and that they do it.

When students are permitted to maintain SOEP activities in school facilities, the teacher is responsible for maintaining a safe environment in that facility and for assuring that students conduct themselves safely and that their performance of SOEP tasks is a positive learning experience.

Teachers should not hesitate to spend "classroom time" on student sharing and discussion of SOEP experiences. After all, those experiences are partially intended to be a Field extension of classroom instruction.

The teacher should incorporate an orientation unit on SOEP in beginning level Vo-Ag courses as reasons of informing all beginning students of the SOEP requirement, how it works, and what a student gains from it. The relationship of SOEP and FEA can be described at this time too.

The teacher should maintain SOEP records which describe the following:

- Dates of visitation and major observations at time of visit.

- Individual student SOEP plans.
- School-wide summarization of student SOEP by kind, scope.
- Individual student SOEP records of kind, scope, growth and performance.

Probably Vo-Ag teachers cannot realistically expect to be financially compensated for all the time they devote to the supervision of students' occupational experience. 'Ibis is not to say that school districts should not provide school time and other resources to this instructional activity by the teacher. Quite the contrary! Nevertheless, the profession of Vocational Agriculture Teacher, as do many other professions, will require the contribution of time for "the cause." Most teachers realize this and accept it as part of a job to which they are devoted. There is no reluctance to make this contribution as long as there is evidence that the school district also is tangibly supporting the work by supplying time and/or financial compensation, transportation, and other personal expenses which may accrue to the teacher in fulfilling this part of the job.

It should be noted that the teacher responsibilities and other SOEP requirements noted in this paper are not to apply only to the *Vo-Ag* teacher in a traditional; district/federal sponsored Vo-Ag Program. They apply equally to teachers of ROP/C Vo-Ag courses offered to high school students.

In fact it should be stated that the SOEP requirement itself applies equally to ROP/C Vo-Ag courses.

What Resources Must be Provided
by the School District for Conducting
Supervised Occupational Experience Programs?

The district's major responsibility for the SOEP secant of the Vo-Ag program is to provide the services of the teacher for supervising students in their occupational experience. The teacher should be allocated adequate compensated time for on-site visitation. Normally, during the spool year, one school period a day should be assigned to this task for each 60 students being supervised.
If students' SOEP continues into the summer months, at least one full-time equivalent Vo-Ag teacher should be maintained on the district payroll on a full-time basis, If there are more than 60 students engaged in SOEP during the summer months, there should be an additional full-time equivalent teacher employed for each additional *50* students or portion there-of.

Students' SOEP activities are usually located throughout the community. The Vo-Ag teacher is required to travel about to provide on-site supervision. The district should provide the transportation, either by providing a district-owned vehicle and fuel or by compensating the teacher for using his or her own vehicle.'

Since a part of the teacher's role in SOEP is to assist students obtain livestock, feed, fertilizer, seed, equipment, etc., which is to be used in their enterprises, the teacher will often need to have ready access to a pickup.

Probably, the usual arrangement will be to provide a pickup truck for the sole use of each Vo-Ag teacher in a school--to be used for SOSP supervision and other purposes related to the Vo-Ag program.

The district should provide certain specialized equipment and facilities required for successfully operated SOS that might not be available to the students from other sources in the community and whiff may not be feasible for them to purchase themselves. Some examples are: portable scales, greenhouse, land, livestock pens, etc.

Often the district can augment its funds available for providing these resources through non-traditional funding sources such as boosters clubs, local service clubs, private donations, etc.

What Are Same Practices Which
Enhance the Quality of
Supervised Occupational Experience Programs?

Vocational Agriculture has 65 years of experience utilizing SOEP as an instructional strategy. During that time many proven practices' have emerged. Sane of those practices not already mentioned in this paper are listed here and recommended for utilization by schools wishing to assure quality in their students SOEP.

1. Prepare and distribute to students an SOEP Handbook which describes the schools requirements for it, lists the kinds of projects which can be included in an SOEP, explains has SOEP is evaluated, give examples of good quality SOEP showing programs from year to year.
2. The tern Supervised Occupational Experience Program" intimidates sane students. The teacher may wish to use something simpler such as the old standby term 'project' even though that term has limited meaning in the strictest sense.
3. Every student should have a written plan for SOEP. That plan should be reviewed annually by the student, advisor, and if possible, the parents.
4. Utilize National FFA proficiency and achievement award systems.
5. Incorporate SOEP accomplishment in FFA Chanter Point Award System.
6. Emphasize honor of F'FA State and American Farmer 'degrees recognize ("glorify'") chapter members who earn these degrees.
7. Encourage participation in "Project Competition" programs C® local and sectional.
8. Solicit local organization to provide livestock "chains" as with former Sears Breeding projects.
9. Develop local sources for project financing, i.e. banks and credit institutions, boosters club loan fund, etc.
10. Provide school facilities for first year students' SOEP.
11. Encourage cooperative projects for "timid" students or for those with limited resources.
12. Maintain regular written and oral communication with students' parents.
13. Provide project tour for parents and other interested adults.
14. Adjust home visitation hours to coincide with times when parents are at home.
15. Involve parents in school farm work days and improvement projects.
16. Maintain a visible record of teacher supervision visits as a means of keeping SOEP in the minds of students and visitors to the Ag. Department.
17. Plan visitation schedule to assure equitable supervision of all students' SOEP.
18. Take beginning students on tour of successful projects.
19. Utilize summer months to contact all first-year students and their parents to discuss SOEP plans.
20. Take steps to assure the success of student's first project.
21. Use third and fourth year students as advisors to beginning students.
22. Utilize the assistance and experience of other teachers whose students have successful SOEP.
23. Provide the school board with special presentations.
24. Invite board members and administrators to serve as local judges for Project Competition.

Criteria 3 B: SAE Participation

3B SAE Participation

SAE participation is tracked through the AET management system and reports are generated as need to assess and issue points for student's participation in FFA activities. The use of this system has helped to keep the students more up to date on their progress toward collecting there 5 FFA points per semester as outlined in our course syllabuses. Students can now log in and check and update their records at any time.

Modesto - Gregori
Student Retention Report

Graduation Class of 201700.00% Freshman Retention Rate: **45.00%**

	Grad Year	Years of Ag
	2017	2
	2017	4
	2017	2
	2017	1
	2017	3
	2017	2
	2017	3
	2017	2
	2017	3
	2017	2
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	2017	2
	2017	3

Criteria 3 C: SAE Continuing Students

3C SAE Continuing Students

All students enrolled in an Ag class will track there SAE experiences through AET. Due to our schools block schedule and the recent switch to one to one devices for all students this has given us the ability to dedicate one day a week to teaching and helping students update their record books. Each student tracks and maintains there project records via AET and we can now easily asses students' progress through AET's online portal.

Criteria 3 D: SAE Visits

3D SAE Visits

SAE visits are conducted by the instructors at various intervals trough out the year depending on the type and scope of student project. We are Transitioning this year to using the AET system to track and maintain our visitation reports.

Criteria 3 E: School Vehicles

Gregori Ag Dept:

Ag truck – Ag 10 – [redacted]

Ag Van – Ag 17 – [redacted]

Ag Van – Ag 19 – [redacted]

Stock Trailer 1 – AT 1 - [redacted]

Stock Trailer 2 – T-98 - [redacted]

Flatbed Trailer – AgT-2 – [redacted]

Kubota Tractor – F245

RTV – F242

Fork Lift – FL -2

Criteria Four: Qualified & Professional Personnel

Criteria 4 A: Appropriate Credentials

California Commission on Teacher Credentialing

By virtue of the authority vested in the Commission on Teacher Credentialing and in recognition of preparation for service in California Public schools

[redacted]

is hereby awarded the

Crosscultural, Language and Academic Development Certificate

together with all the rights, privileges, and responsibilities appertaining thereto

valid: 01/10/2008 to

Linda Darling-Hammond
Chair, Commission on Teacher Credentialing

Mary Vixie Sandy
Executive Director, Commission on Teacher Credentialing

California Commission on Teacher Credentialing

By virtue of the authority vested in the Commission on Teacher Credentialing and in recognition of preparation for service in California Public schools

[redacted]

is hereby awarded the

Single Subject Teaching Credential

together with all the rights, privileges, and responsibilities appertaining thereto

valid: 08/01/2015 to 08/01/2020

Linda Darling-Hammond
Chair, Commission on Teacher Credentialing

Mary Vixie Sandy
Executive Director, Commission on Teacher Credentialing

California Commission on Teacher Credentialing

By virtue of the authority vested in the Commission on Teacher Credentialing and in recognition of preparation for service in California Public schools

[redacted]

is hereby awarded the

Specialist Instruction Credential (Agriculture)

together with all the rights, privileges, and responsibilities appertaining thereto

valid: 08/01/2015 to 08/01/2020

Linda Darling-Hammond
Chair, Commission on Teacher Credentialing

Mary Vixie Sandy
Executive Director, Commission on Teacher Credentialing

California Commission on Teacher Credentialing

By virtue of the authority vested in the Commission on Teacher Credentialing and in recognition of preparation for service in California Public schools

[redacted]

is hereby awarded the

Crosscultural, Language and Academic Development Certificate

together with all the rights, privileges, and responsibilities appertaining thereto

valid: 05/01/2013 to

Linda Darling-Hammond
Chair, Commission on Teacher Credentialing

Mary Vixie Sandy
Executive Director, Commission on Teacher Credentialing

California Commission on Teacher Credentialing

By virtue of the authority vested in the Commission on Teacher Credentialing and in recognition of preparation for service in California Public schools

[redacted]

is hereby awarded the

Single Subject Teaching Credential

together with all the rights, privileges, and responsibilities appertaining thereto

valid: 09/02/2013 to 10/01/2018

Linda Darling-Hammond
Chair, Commission on Teacher Credentialing

Mary Vixie Sandy
Executive Director, Commission on Teacher Credentialing

California Commission on Teacher Credentialing

By virtue of the authority vested in the Commission on Teacher Credentialing and in recognition of preparation for service in California Public schools

[redacted]

is hereby awarded the

Specialist Instruction Credential (Agriculture)

together with all the rights, privileges, and responsibilities appertaining thereto

valid: 07/01/2016 to 10/01/2018

Linda Darling-Hammond
Chair, Commission on Teacher Credentialing

Mary Vixie Sandy
Executive Director, Commission on Teacher Credentialing

California Commission on Teacher Credentialing

By virtue of the authority vested in the Commission on Teacher Credentialing and in recognition of preparation for service in California Public schools

[redacted]

is hereby awarded the

Specialist Instruction Credential (Agriculture)

together with all the rights, privileges, and responsibilities appertaining thereto

valid: 05/01/2013 to 05/01/2018

Linda Darling-Hammond
Chair, Commission on Teacher Credentialing

Mary Vixie Sandy
Executive Director, Commission on Teacher Credentialing

California Commission on Teacher Credentialing

By virtue of the authority vested in the Commission on Teacher Credentialing and in recognition of preparation for service in California Public schools

[redacted]

is hereby awarded the

Single Subject Teaching Credential

together with all the rights, privileges, and responsibilities appertaining thereto

valid: 05/01/2013 to 05/01/2018

Linda Darling-Hammond
Chair, Commission on Teacher Credentialing

Mary Vixie Sandy
Executive Director, Commission on Teacher Credentialing

California Commission on Teacher Credentialing

By virtue of the authority vested in the Commission on Teacher Credentialing and in recognition of preparation for service in California Public schools

[redacted]

is hereby awarded the

Crosscultural, Language and Academic Development Certificate

together with all the rights, privileges, and responsibilities appertaining thereto

valid: 01/11/2008 to

Linda Darling-Hammond
Chair, Commission on Teacher Credentialing

Mary Vixie Sandy
Executive Director, Commission on Teacher Credentialing

California Commission on Teacher Credentialing

By virtue of the authority vested in the Commission on Teacher Credentialing and in recognition of preparation for service in California Public schools

[redacted]

is hereby awarded the

Single Subject Teaching Credential

together with all the rights, privileges, and responsibilities appertaining thereto

valid: 02/02/2015 to 03/01/2020

Linda Darling-Hammond
Chair, Commission on Teacher Credentialing

Mary Vixie Sandy
Executive Director, Commission on Teacher Credentialing

California Commission on Teacher Credentialing

By virtue of the authority vested in the Commission on Teacher Credentialing and in recognition of preparation for service in California Public schools

[redacted]

is hereby awarded the

Specialist Instruction Credential (Agriculture)

together with all the rights, privileges, and responsibilities appertaining thereto

valid: 02/02/2015 to 03/01/2020

Linda Darling-Hammond
Chair, Commission on Teacher Credentialing

Mary Vixie Sandy
Executive Director, Commission on Teacher Credentialing

Criteria 4 B: Professional Development

INCENTIVE GRANT IN-SERVICE ACTIVITIES DOCUMENTATION

CRITERIA 4.B **School Year** 2016/17 **School** **Modesto-Gregori**

Based on the previous year's record, every agriculture teacher, teaching at least ½ time agriculture, attends a minimum of four of the following professional development activities:

Qualified and Competent Personnel

ACTIVITIES	TEACHERS NAMES							
	Nower	Delnero	Beeman	Hamrick				
Fall Region Meeting	X		X	X				
Region In-service Day	X		X	X				
Spring Region Meeting	X		X	X				
Section In-service*	X		X	X				
Section In-service*								
Section In-service*								
Section In-service*								
Summer Conference	X	X	X	X				
University AgEd Skills Week				X				
Professional Development **	X							

* Four Section In-service Meetings equals one Professional Development Activity

** Can utilize a *maximum* of two other *"Agriculturally Related"* Professional Development activities than those listed above. Explain the Professional Development:

1 14. Record Book/Prof. Scoring

2 15. Young Teacher Conf

3 20. AET Training

4

5

Criteria 4 C: Department Meeting Schedule

Section 4C
Department Meeting Schedule

Department meetings are held at least once a week on Thursdays @ 7:20AM. We share the same lunch period so we often will discuss various issues that come up throughout the day during lunch. Thursdays are reserved for agenda planning, vehicle needs, practice schedules, paperwork, etc. Throughout the week time is spent catching up on new daily items or concerns as they arise.

Criteria 4 D: Department Meetings

August 17th Department Meeting minutes

First week of school, first dept meeting

Aug 22nd Greendhand conference is coming up quick, Nower will be taking 30 freshmen to the greenhand conf.

Aug 23rd- Greenhand Social, the officers want to recognize our new FFA members by honoring them at lunch with an ice cream social/meet the officers social.

New year has started, we have a student teacher from Fresno State, Josh Aguilar.

-We have decided to have weekly department meetings after school in Nower's room, with no student interruptions. They will start promptly at 2:30pm, to allow time for JD to commute from Davis HS.

August 24th Department Meeting Minutes

- Aug29th – Our first FFA meeting of the year is coming up, this is one of our biggest meetings.

    - It will be held after school @ 6pm in the Rainforest café.

    - The Ag Boosters will be holding a joint meeting at the same time. Parents are invited, if students being their parents, they get a extra FFA credit for the evening.

    - Booster shirts will be sold for $5

Aug 29th- Chapter FFA shirts and sweatshirts have been created, the signing template will be at the first FFA meeting for studetns to sign.

    - Also pre-order sheets will be available for students and parents to pick u during first meeting.

August 31st Department Meeting Minutes

Sept 1st – During summer the MCS ag teachers decided to hold a monthly meeting on the first Friday of the month.

- The meetings will be held at 6am at the Perkos on the corner of Sylan and Oakdale.
- One representative from each school should be present

Sept 4th- No School

Department Meeting October 19

Items of business/discussion

1. Every short Wednesday we all need to be updating recordbooks in our classes
2. Next 2 weeks we have two students going to national convention
3. May get more dates for crab feeds to work at because he liked our students work tonight
4. November 8th Stanislaus Tuolumne bowling night at mchenry bowl, $8 for games & shoes, $5 if you bring two canned foods. (have officers make fylers for that)
5. Jill will be here November 13th
    a. Get AET updated, project visits, etc.
6. Cousenlors night is Novemeber 14th @ MJC @ 6pm
7. Wednesday November 15th @ 6pm chapter degree meeting
8. Novemebr 16th Ag Advisory mtg @ Davis @6pm
9. November 17th & 18th Regional Roadshow
10. Gridley Field and CRC are both April 14th.

October 26th Department Meeting Mintues

Oct 26- FFA meeting tonight

Oct 26 – Beeman taking 2 students to look at steers in Delhi

Nov 8th – Sectional Bowling @ mchenry bowl @ 4pm – Nower & Aguilar & Nelms

Nov 13th- Jill will be here

Nov 14th - Stan/T Cousenlor's Night

Nov 15th – Degree ceremony

Nov 16th – Davis HS @ 5:30pm

Nov 17th - Regional Roadshow

Nov 18th - Regional Roadshow

Dec 7th – Speech Contest

Dec 13th – Early release for SLC – Tenative Feed Faculty Lunch.

September 7th Department Meeting Minutes

Sept 3rd – Chapter Shirts and sweatshirt pre-order forms are being passed out to all classes, as well as the template to sign names.

Sept 7th- Back to school night

- Officers will have a welcome table set up outside the ag department to welcome and meet parents and new members as they walk up.

- Snacks and cookies will be handed out to parents and students

- Booster T Shirts will be sold for $5

Sept 9th- Farm to Fork

- Our student teacher, Mr. Aguilar will be taking the 7 officers to the farm to fork community activity.

Sept 13th – AIG Review Visit

September 14th- Department Meeting Minutes

Sept 15th- Harvest luncheon

- Nower will be taking five students to the harvest luncheon event downtown at Graceda park

Sept 16th- Salida Festival

- Nower, Nelms and Aguilar will be attending the salida festival. Our ag dept is walking in the parade. The officers will be sitting on the float and the other FFA members will be walking and handing out candy

Sept 18th- Faculty meeting after school

Sept 29th- FFA Meeting @ lunch.

- 7 Door Prize winner gets gift cards

Sept 19th- Sectional FFA Meeting

- Nower is taking Thomas and Morgan as the two delegates to the Sectional meeting to vote on some very important items of business.

Sept 19th- Ag Booster Meeting

- Nelms will be attending this ag boosters meeting. The officer speaking at this meeting is Kyla Sartin

September 21st department meeting minutes

Sept 21st – Stan/T CATA Fall meeting

- All five ag teachers will attend this meeting at Johnasen HS at 4pm

Sept 21st- JNN Interview

- JNN wants to interview all of the ag teachers about our new farm that is being built.

Sept 25th- Sheep Pick-up

- Nelms and Aguilar will be driving to pick-up 7 sheep from the breeders in Oakdale.

September 28th Department Meeting Minutes

Sept 29th- Senior Day

- Kyle and Meghan will be the two representatives for MCS at MJC for senior day

Oct 5th – Pork Loin BBQ

- We have sold about 250 tickets for the upcoming bbq, we will need all ag teachers to help that day. Nelms and aguilar will run the Line up front and JD and beeman will run the bbq in the back and Nower will be transferring items back and forth as needed/

Oct 11th – OCC

- Gregori will be hosting the OCC competition at 4pm. All teachers need to help with this activity. Jd will be running the snack bar, Beeman in charge of Intermediate, Nelms in charge of advance, Aguilar in charge of novice and Nower transferring through out

Criteria 4 E: Teacher Reimbursement

Section 4E
Teacher Reimbursement

As teachers we are able to seek reimbursement for expenses incurred for FFA, SAE, and CATA events. Reimbursement of FFA materials, such as awards, banquet supplies, etc. is taken from the Student Body FFA account and is handled through the High School Office. For this type of reimbursement we simply fill out a Student Body Purchase Order and gather the appropriate signatures. We usually receive our check within the week of submittal. In terms of SAE, CATA, and departmental supplies, the reimbursement is taken from district funds and handled through the district office. Reimbursement of district funds requires some extra paperwork and is encouraged to be pre-approved. A District Purchase Order must be completed prior to the initial purchase and then followed up with a Conference Reimbursement Form upon the return of the faculty member. Checks are usually received within 2-3 weeks depending on the backlog of paperwork.

Criteria Five: Facilities, Equipment, & Materials

Criteria 5 A: Analysis Special Population

The MCS Agriculture Advisory Board reviewed the following Specific areas outlined in the Program Certification.

Facilities, Equipment & Materials

Quality Criteria

Facilities, equipment, instructional materials and supplies comply with health and safety standards, reflect and/or simulate current and emerging technologies and applications, and are of sufficient quantity and quality to most the instructional objectives and individual needs of all the students.

Quality Indicators

Facilitates and equipment, and materials are comparable to and/or simulate those currently used by business and Industry and are of a quantity and quality needed to accomplish Stated instructional objectives, as verified by program advisory committee.

Gregori High School

- Utilize campus computer lab.
- Work Close with Science Department In usage of equipment.
- Facilities and equipment are purchased and/or modified to accommodate the reeds of special populations.
- Adequate and secure storage space is provided for materials, suppliers, records and equipment.
- School Agriculture Department has adequate storage space for materials, records, equipment and supplies. The entire Dept. is alarmed with 24 hour surveillance cameras.

Community, Business and Industry involvement

Quality Criteria

Individual who represent the community, business, industry, students, parents, districts, staff, post-secondary agencies, and labor serve on a subject area advisory committee in the design development, operations, evaluation and support of the program area.

Agriculture Action Plan
Special populations

The action was developed by the agriculture staff and approved at the ag advisory meeting last spring (2011).

A. Ag Program available to all students

- Agriculture courses are available to all students regardless of their gender, creed or color. Students with an interest in an Ag career are encouraged to enroll in agriculture; however they must follow the course sequence consistent with their selected Ag career pathway.

  A. Gender
  Forty-three (63.2%) percent of our total enrollment in agriculture are male. We have nine FFA officers which four are female and five are male. We feel e are doing are excellent job in gender equity when we take into account that females were not involved in FFA or agricultural education until forty-two years ago.

  B. Language Barriers
  About Forty-Seven percent (47.8%), of our high school enrollment is Hispanic. There are about Fifty-Four percent (54.3%) Hispanic in our total agriculture enrollment. We have been able to pair up the Hispanics fluent in English with those that are not bilingual.

  C. Handicapped Youth
  All entrances, rest rooms, buildings, etc. have been modified with ramps or other devices to make them handicapped accessible.

  D. Financially- Disadvantaged Students

  - About forty-nine percent (49.9%) of our enrollment in agriculture are students who are financially disadvantaged.
  - Since a SOEP is required for all Ag students, we have made arrangements at our local bank to provide for project loans for these needy students. Once the project is purchased all students with loans must insure their projects through the FFA insurance Program.
  - Projects may be kept or raised at the school farm at a very reasonable fee. This fee may be waived until the project is sold.
  - In order to meet the needs of our severely handicapped students we have established a projects class.
  - We pair up six to eight of our outstanding upper division agriculture students to act as brothers and sisters to assist their handicapped partners.

  E. General Techniques of an Agriculture Teacher that Naturally Benefit Special Population Students

  Many of the techniques we do in agriculture are naturally beneficial to special students. The following teaching methods have been proven to not only assist, motivate and encourage special population students, but also all students.

  - Hands on Learning - Leaning by Doing

- Learning in Teams (livestock teams, parliamentary procedure learns, etc.)
- Learning through the Project Method (SOP, lab experiments, etc.)
- Learning through individual attention. The Ag teacher visits students at home on a one to one basis.
- Learning by involving pants in the educational process. (Parent member dinners, farm clean up day, money making event parents coaching judging learns.)
- Earning because teachers truly care for their students and the students recognize this.

F. General Techniques of an Agriculture Teacher that Naturally Benefit Special Population Students

G. Many of the techniques vote do in agriculture are naturally beneficial to special students. The following teaching methods have been proven to, assist, motivate and encourage special population students, but also all students.

   a. Hands on Learn by Doing
   b. Learning to Teams (livestock teams, parliamentary procedure teams, etc.)
   c. Learning through the Project Method {SOE, tab experiments, etc.)
   d. Learning through individual attention. The Ag teacher visits students at home on a one to one basis.
   e. A warning by involving parents in the educational process. (Parent member dinners, farm clean up day, money making events, parents, and coaching judging teams.)
   f. Learning because teachers truly care for their students and the students recognize this.

This agriculture plan for Special Populations list developed by the Ag staff in coordination with the Advisory Committee and Administration is now in use. It has been approved by the School Board and is in full compliance and agreement with the school policy on Special Populations.

Economically Disadvantaged

Student Id	Last Name	First Name	GR	MF	Ethnicitydesc	Disadv
819175	[redacted]	[redacted]	09	F	White	
818526	[redacted]	[redacted]	09	F	Hispanic or Latino of Any Race	
817679	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	
817829	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	
819051	[redacted]	[redacted]	09	M	White	
819085	[redacted]	[redacted]	09	M	Filipino	
817665	[redacted]	[redacted]	09	F	White	
819676	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	
817831	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
817681	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	
379092	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	
819702	[redacted]	[redacted]	09	M	White	
819701	[redacted]	[redacted]	09	F	White	
819543	[redacted]	[redacted]	09	M	White	
386043	[redacted]	[redacted]	09	M	White	Y
819760	[redacted]	[redacted]	09	F	White	
819054	[redacted]	[redacted]	09	F	Two or more Races	
819104	[redacted]	[redacted]	09	M	Intentionally Left Blank	Y
817948	[redacted]	[redacted]	09	M	White	
817684	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	
818930	[redacted]	[redacted]	09	F	Hispanic or Latino of Any Race	Y
817726	[redacted]	[redacted]	09	F	Hispanic or Latino of Any Race	Y
817914	[redacted]	[redacted]	09	M	White	
817727	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
819046	[redacted]	[redacted]	09	F	White	
817691	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
817692	[redacted]	[redacted]	09	M	White	
503698	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
817693	[redacted]	[redacted]	09	M	White	
817694	[redacted]	[redacted]	09	F	Intentionally Left Blank	
817769	[redacted]	[redacted]	09	F	Two or more Races	Y
817752	[redacted]	[redacted]	09	F	Hispanic or Latino of Any Race	Y
817827	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
817838	[redacted]	[redacted]	09	F	Hispanic or Latino of Any Race	Y
817699	[redacted]	[redacted]	09	F	Hispanic or Latino of Any Race	
817837	[redacted]	[redacted]	09	F	Hispanic or Latino of Any Race	Y
817891	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
819839	[redacted]	[redacted]	09	M	White	
817908	[redacted]	[redacted]	09	F	Two or more Races	Y
819800	[redacted]	[redacted]	09	M	White	Y
819073	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
819530	[redacted]	[redacted]	09	F	Hispanic or Latino of Any Race	Y
817700	[redacted]	[redacted]	09	F	Hispanic or Latino of Any Race	Y
817756	[redacted]	[redacted]	09	F	Two or more Races	Y
819113	[redacted]	[redacted]	09	M	White	Y
817815	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	

387276	[redacted]	[redacted]	09	F	Hispanic or Latino of Any Race	Y
817791	[redacted]	[redacted]	09	M	White	
819205	[redacted]	[redacted]	09	M	White	Y
819102	[redacted]	[redacted]	09	F	White	
817793	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
817853	[redacted]	[redacted]	09	M	White	Y
817954	[redacted]	[redacted]	09	F	White	
817955	[redacted]	[redacted]	09	M	White	
819029	[redacted]	[redacted]	09	F	Other Pacific Islander	
818955	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	
817731	[redacted]	[redacted]	09	M	Intentionally Left Blank	
819572	[redacted]	[redacted]	09	F	White	
817765	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
817796	[redacted]	[redacted]	09	M	White	
817842	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
817893	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
817822	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
402980	[redacted]	[redacted]	09	F	Hispanic or Latino of Any Race	Y
819574	[redacted]	[redacted]	09	F	Intentionally Left Blank	
817678	[redacted]	[redacted]	09	F	Hispanic or Latino of Any Race	Y
817706	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	
817961	[redacted]	[redacted]	09	M	White	
819759	[redacted]	[redacted]	09	M	White	
817708	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
818917	[redacted]	[redacted]	09	F	Two or more Races	
819014	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
817776	[redacted]	[redacted]	09	M	White	Y
817801	[redacted]	[redacted]	09	F	Hispanic or Latino of Any Race	Y
387795	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
817858	[redacted]	[redacted]	09	M	Intentionally Left Blank	Y
819034	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
817734	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
818963	[redacted]	[redacted]	09	M	White	
386920	[redacted]	[redacted]	09	F	White	Y
818995	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	
818966	[redacted]	[redacted]	09	M	White	
387181	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
817857	[redacted]	[redacted]	09	F	Hispanic or Latino of Any Race	Y
817804	[redacted]	[redacted]	09	F	White	
819100	[redacted]	[redacted]	09	F	White	Y
817790	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
817991	[redacted]	[redacted]	09	M	White	
819078	[redacted]	[redacted]	09	M	Other Asian	
817723	[redacted]	[redacted]	09	M	Asian Indian	
819157	[redacted]	[redacted]	09	M	White	
390198	[redacted]	[redacted]	09	F	Hispanic or Latino of Any Race	Y
381426	[redacted]	[redacted]	09	F	Hispanic or Latino of Any Race	Y
818973	[redacted]	[redacted]	09	M	Intentionally Left Blank	
820415	[redacted]	[redacted]	09	M	Two or more Races	

817807	[redacted]	[redacted]	09	M	Two or more Races	
817724	[redacted]	[redacted]	09	F	White	
818924	[redacted]	[redacted]	09	M	Two or more Races	
817808	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
818895	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
817736	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
817786	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	Y
817862	[redacted]	[redacted]	09	F	Hispanic or Latino of Any Race	Y
501141	[redacted]	[redacted]	09	F	Hispanic or Latino of Any Race	Y
820144	[redacted]	[redacted]	09	F	White	
387075	[redacted]	[redacted]	09	F	White	Y
817972	[redacted]	[redacted]	09	M	White	
818512	[redacted]	[redacted]	09	M	White	
387078	[redacted]	[redacted]	09	M	Hispanic or Latino of Any Race	
817787	[redacted]	[redacted]	09	M	White	
819709	[redacted]	[redacted]	09	F	White	
817823	[redacted]	[redacted]	09	M	Chinese	Y
814978	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
815085	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	Y
815082	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
815196	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	Y
815241	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
380837	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
814954	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
815091	[redacted]	[redacted]	10	M	White	
505942	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
815126	[redacted]	[redacted]	10	M	White	Y
507928	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
814985	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	
815184	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
815051	[redacted]	[redacted]	10	F	White	
815063	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
815144	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	Y
816794	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
814956	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
379437	[redacted]	[redacted]	10	F	Two or more Races	
815114	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	
815174	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	
814953	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
815263	[redacted]	[redacted]	10	F	Intentionally Left Blank	Y
815394	[redacted]	[redacted]	10	M	White	Y
378085	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	Y
815108	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
815029	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
815086	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
815131	[redacted]	[redacted]	10	M	White	Y
816783	[redacted]	[redacted]	10	F	White	
816793	[redacted]	[redacted]	10	F	White	
820023	[redacted]	[redacted]	10	M	White	

815250	[redacted]	[redacted]	10	M	White	
814959	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
379381	[redacted]	[redacted]	10	F	Filipino	
379573	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
814962	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
815032	[redacted]	[redacted]	10	M	White	
814963	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
814964	[redacted]	[redacted]	10	M	White	
820437	[redacted]	[redacted]	10	M	Black or African American	
396417	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
815001	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	Y
814945	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
814967	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
815033	[redacted]	[redacted]	10	M	White	
815104	[redacted]	[redacted]	10	F	White	
815297	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	Y
506843	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	Y
381041	[redacted]	[redacted]	10	M	White	
815110	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
388910	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	Y
817043	[redacted]	[redacted]	10	M	White	Y
815123	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
814969	[redacted]	[redacted]	10	M	White	
814970	[redacted]	[redacted]	10	M	White	Y
377808	[redacted]	[redacted]	10	F	Two or more Races	
815415	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
814972	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
815421	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	Y
815180	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
815162	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
815118	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
815068	[redacted]	[redacted]	10	M	Cambodian	Y
815009	[redacted]	[redacted]	10	M	White	
815106	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
814885	[redacted]	[redacted]	10	F	White	
815010	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
815042	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
816816	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	
815165	[redacted]	[redacted]	10	M	White	Y
390280	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	Y
378732	[redacted]	[redacted]	10	M	White	
816530	[redacted]	[redacted]	10	F	White	
815047	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
815069	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
379065	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
814976	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
815048	[redacted]	[redacted]	10	M	White	Y
815011	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
815017	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	Y

815012	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
815014	[redacted]	[redacted]	10	M	Other Pacific Islander	
815659	[redacted]	[redacted]	10	F	Black or African American	
511220	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
815431	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
815094	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	
817157	[redacted]	[redacted]	10	F	White	Y
815150	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
815096	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	
815100	[redacted]	[redacted]	10	F	White	Y
379766	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	Y
815071	[redacted]	[redacted]	10	M	White	Y
815116	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
815056	[redacted]	[redacted]	10	F	White	
814919	[redacted]	[redacted]	10	F	White	Y
816934	[redacted]	[redacted]	10	M	White	
819957	[redacted]	[redacted]	10	F	White	
820339	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	
815329	[redacted]	[redacted]	10	M	Other Pacific Islander	Y
815177	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
815153	[redacted]	[redacted]	10	F	White	
814996	[redacted]	[redacted]	10	F	White	
815025	[redacted]	[redacted]	10	F	White	
815253	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	
814995	[redacted]	[redacted]	10	F	White	Y
815027	[redacted]	[redacted]	10	F	Two or more Races	
817320	[redacted]	[redacted]	10	F	Black or African American	Y
815317	[redacted]	[redacted]	10	F	Two or more Races	
815061	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	
814940	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	Y
815028	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
815107	[redacted]	[redacted]	10	M	Hispanic or Latino of Any Race	Y
815740	[redacted]	[redacted]	10	F	Hispanic or Latino of Any Race	Y
811781	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	Y
811945	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
811914	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
811764	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	Y
811760	[redacted]	[redacted]	11	M	Intentionally Left Blank	Y
397866	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	Y
811979	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
811980	[redacted]	[redacted]	11	F	White	
515431	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
820359	[redacted]	[redacted]	11	F	White	
811808	[redacted]	[redacted]	11	F	White	Y
813825	[redacted]	[redacted]	11	F	White	
811786	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
812027	[redacted]	[redacted]	11	F	White	Y
811900	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	
813823	[redacted]	[redacted]	11	F	White	

811991	[redacted]	[redacted]	11	M	Intentionally Left Blank	Y
817013	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
370938	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	Y
811778	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	
380266	[redacted]	[redacted]	11	M	White	
811819	[redacted]	[redacted]	11	M	White	
517207	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	Y
811968	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	
811929	[redacted]	[redacted]	11	M	White	
816728	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
811779	[redacted]	[redacted]	11	M	White	
371779	[redacted]	[redacted]	11	M	Intentionally Left Blank	Y
813383	[redacted]	[redacted]	11	F	Intentionally Left Blank	
812009	[redacted]	[redacted]	11	F	Two or more Races	
811831	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	
813432	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
380761	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
373549	[redacted]	[redacted]	11	F	Intentionally Left Blank	Y
349898	[redacted]	[redacted]	11	M	Intentionally Left Blank	Y
811913	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
813395	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	
811933	[redacted]	[redacted]	11	F	White	
816886	[redacted]	[redacted]	11	M	White	
370520	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	Y
812013	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	
811970	[redacted]	[redacted]	11	F	Black or African American	
811844	[redacted]	[redacted]	11	M	White	
814614	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
381801	[redacted]	[redacted]	11	F	White	Y
811825	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
811908	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
811790	[redacted]	[redacted]	11	F	Other Asian	
811961	[redacted]	[redacted]	11	M	Asian Indian	
811922	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	Y
813458	[redacted]	[redacted]	11	M	White	
811828	[redacted]	[redacted]	11	F	White	
373647	[redacted]	[redacted]	11	M	Two or more Races	Y
812330	[redacted]	[redacted]	11	M	White	
812996	[redacted]	[redacted]	11	M	White	
811761	[redacted]	[redacted]	11	F	White	
820065	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	Y
813817	[redacted]	[redacted]	11	M	White	
811921	[redacted]	[redacted]	11	M	White	Y
811924	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
813613	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
811837	[redacted]	[redacted]	11	F	Two or more Races	Y
813929	[redacted]	[redacted]	11	F	White	
811951	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
366555	[redacted]	[redacted]	11	M	White	Y

811841	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	
812313	[redacted]	[redacted]	11	F	White	Y
813426	[redacted]	[redacted]	11	M	Black or African American	
811803	[redacted]	[redacted]	11	F	White	Y
813591	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	Y
811805	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	Y
812005	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
811807	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
813820	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
811766	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	Y
811767	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
811852	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
817429	[redacted]	[redacted]	11	F	White	Y
813431	[redacted]	[redacted]	11	M	Black or African American	Y
813470	[redacted]	[redacted]	11	M	White	
814076	[redacted]	[redacted]	11	F	White	
812783	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	
811891	[redacted]	[redacted]	11	F	White	Y
811768	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
811909	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	
813566	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
811892	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	Y
811859	[redacted]	[redacted]	11	M	White	Y
811903	[redacted]	[redacted]	11	M	White	
811998	[redacted]	[redacted]	11	M	Black or African American	
811977	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	Y
514988	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	Y
813464	[redacted]	[redacted]	11	F	White	
811996	[redacted]	[redacted]	11	M	White	Y
811763	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	
811814	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
813477	[redacted]	[redacted]	11	M	White	Y
811936	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
819848	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	Y
811992	[redacted]	[redacted]	11	F	White	
814653	[redacted]	[redacted]	11	M	White	
813599	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	Y
504783	[redacted]	[redacted]	11	M	Hispanic or Latino of Any Race	
813465	[redacted]	[redacted]	11	F	Intentionally Left Blank	
813425	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	Y
339592	[redacted]	[redacted]	11	M	Two or more Races	Y
370346	[redacted]	[redacted]	11	F	Hispanic or Latino of Any Race	Y
816693	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
809339	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
809671	[redacted]	[redacted]	12	F	White	
813734	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
809419	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
812263	[redacted]	[redacted]	12	F	White	Y
809663	[redacted]	[redacted]	12	M	White	

809242	[redacted]	[redacted]	12	F	White	
809602	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
809627	[redacted]	[redacted]	12	F	White	Y
807437	[redacted]	[redacted]	12	M	Two or more Races	Y
810999	[redacted]	[redacted]	12	M	White	
809222	[redacted]	[redacted]	12	M	Black or African American	
809652	[redacted]	[redacted]	12	M	Two or more Races	
809341	[redacted]	[redacted]	12	M	Two or more Races	Y
809413	[redacted]	[redacted]	12	F	White	
809136	[redacted]	[redacted]	12	F	White	
809641	[redacted]	[redacted]	12	M	White	Y
809410	[redacted]	[redacted]	12	F	White	Y
809436	[redacted]	[redacted]	12	M	White	
809330	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
809189	[redacted]	[redacted]	12	M	White	
809677	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
809298	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	Y
372435	[redacted]	[redacted]	12	M	Intentionally Left Blank	Y
809381	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	
809494	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	Y
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809394	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
809250	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
809503	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	
809346	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	Y
809325	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
382632	[redacted]	[redacted]	12	M	Black or African American	
809231	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
809251	[redacted]	[redacted]	12	M	Two or more Races	Y
809622	[redacted]	[redacted]	12	F	White	Y
809403	[redacted]	[redacted]	12	M	White	Y
354092	[redacted]	[redacted]	12	M	White	
809306	[redacted]	[redacted]	12	F	White	Y
811096	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
809650	[redacted]	[redacted]	12	M	Filipino	
809335	[redacted]	[redacted]	12	M	White	
809233	[redacted]	[redacted]	12	F	Two or more Races	
810767	[redacted]	[redacted]	12	M	White	
809450	[redacted]	[redacted]	12	M	Black or African American	
809451	[redacted]	[redacted]	12	M	Black or African American	
364173	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
820292	[redacted]	[redacted]	12	M	White	Y
809348	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	
809420	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	Y
809667	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
809431	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
349932	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	Y
809512	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y

809612	[redacted]	[redacted]	12	F	White	Y
809553	[redacted]	[redacted]	12	F	White	Y
809265	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
362615	[redacted]	[redacted]	12	M	White	
809267	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
372085	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
390369	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
809270	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	
809271	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
809352	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
809272	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	Y
809273	[redacted]	[redacted]	12	F	White	Y
816888	[redacted]	[redacted]	12	M	White	
811130	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
814280	[redacted]	[redacted]	12	M	White	Y
809696	[redacted]	[redacted]	12	M	White	
808164	[redacted]	[redacted]	12	M	White	
809275	[redacted]	[redacted]	12	M	Two or more Races	
809237	[redacted]	[redacted]	12	F	White	
809701	[redacted]	[redacted]	12	F	Two or more Races	
809238	[redacted]	[redacted]	12	F	Other Pacific Islander	Y
809389	[redacted]	[redacted]	12	F	Black or African American	
809277	[redacted]	[redacted]	12	M	White	
809498	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	Y
809278	[redacted]	[redacted]	12	F	Vietnamese	Y
810780	[redacted]	[redacted]	12	M	White	
811083	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
809355	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	
809722	[redacted]	[redacted]	12	M	Black or African American	Y
362954	[redacted]	[redacted]	12	M	Two or more Races	
809253	[redacted]	[redacted]	12	F	White	Y
396318	[redacted]	[redacted]	12	M	White	Y
809556	[redacted]	[redacted]	12	M	White	
809285	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	
809557	[redacted]	[redacted]	12	M	Other Asian	
809281	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	Y
809517	[redacted]	[redacted]	12	F	White	
809333	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	Y
809286	[redacted]	[redacted]	12	F	White	
809447	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
810857	[redacted]	[redacted]	12	F	White	
810974	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
809480	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
809404	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
809241	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	Y
809301	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	Y
362516	[redacted]	[redacted]	12	F	White	
809700	[redacted]	[redacted]	12	F	Two or more Races	
809605	[redacted]	[redacted]	12	F	White	

809194	[redacted]	[redacted]	12	M	White	
357704	[redacted]	[redacted]	12	M	Two or more Races	Y
809390	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
354579	[redacted]	[redacted]	12	M	Black or African American	Y
809337	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
809638	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	Y
809290	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
810078	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
809397	[redacted]	[redacted]	12	M	White	
810875	[redacted]	[redacted]	12	F	Two or more Races	
809210	[redacted]	[redacted]	12	M	Other Pacific Islander	Y
811037	[redacted]	[redacted]	12	M	White	
809466	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
809386	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
809523	[redacted]	[redacted]	12	F	White	
811017	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	
809509	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
809243	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
809455	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
809320	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	Y
809434	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	Y
348477	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
372378	[redacted]	[redacted]	12	F	Other Pacific Islander	Y
809369	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
814130	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	Y
348655	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
809303	[redacted]	[redacted]	12	M	Asian Indian	
809314	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
809372	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	
809256	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
809259	[redacted]	[redacted]	12	M	White	
385994	[redacted]	[redacted]	12	M	White	
809579	[redacted]	[redacted]	12	F	White	
809396	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	
810775	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
810840	[redacted]	[redacted]	12	F	Two or more Races	
809316	[redacted]	[redacted]	12	F	Two or more Races	
809589	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
809388	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	Y
810963	[redacted]	[redacted]	12	M	White	Y
364336	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
814785	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
363785	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
809288	[redacted]	[redacted]	12	F	White	
809213	[redacted]	[redacted]	12	F	Hispanic or Latino of Any Race	
809482	[redacted]	[redacted]	12	F	Laotian	Y
355186	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	
811204	[redacted]	[redacted]	12	F	White	
809164	[redacted]	[redacted]	12	F	White	

362524	[redacted]	[redacted]	12	F	White	Y
817322	[redacted]	[redacted]	12	F	American Indian	Y
817080	[redacted]	[redacted]	12	M	White	
809327	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
811020	[redacted]	[redacted]	12	F	White	Y
809425	[redacted]	[redacted]	12	F	White	Y
363502	[redacted]	[redacted]	12	M	Hispanic or Latino of Any Race	Y
811079	[redacted]	[redacted]	12	M	Intentionally Left Blank	
Totals:	Students: 495	Not Dis: 240			Disadvantaged: 255	

Codes For Ethnicity for Modesto City Schools

Ethnicity Code Table Display

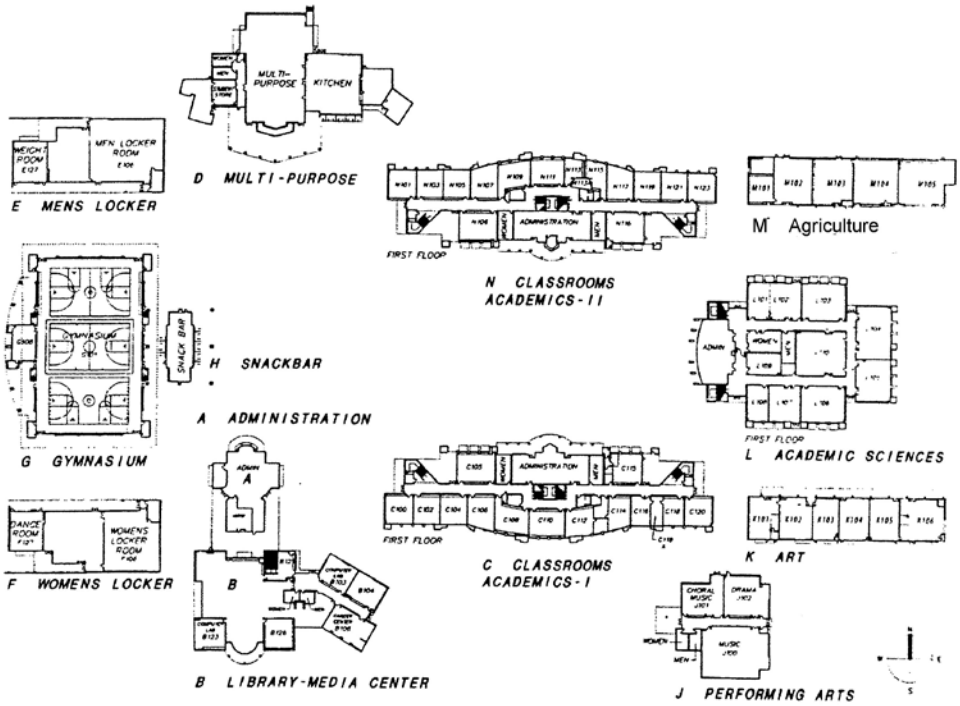
Code	Description	Alternate Code	User Code	Refreshed	Source
100	American Indian			7/30/2010 4:50:53 PM	MCS
201	Chinese			7/30/2010 4:50:53 PM	MCS
202	Japanese			7/30/2010 4:50:53 PM	MCS
203	Korean			7/30/2010 4:50:53 PM	MCS
204	Vietnamese			7/30/2010 4:50:53 PM	MCS
205	Asian Indian			7/30/2010 4:50:53 PM	MCS
206	Laotian			7/30/2010 4:50:53 PM	MCS
207	Cambodian			7/30/2010 4:50:53 PM	MCS
208	Hmong			7/30/2010 4:50:53 PM	MCS
299	Other Asian			7/30/2010 4:50:53 PM	MCS
301	Hawaiian			7/30/2010 4:50:53 PM	MCS
302	Guamanian			7/30/2010 4:50:53 PM	MCS
303	Samoan			7/30/2010 4:50:53 PM	MCS
304	Tahitian			7/30/2010 4:50:53 PM	MCS
399	Other Pacific Islander			7/30/2010 4:50:53 PM	MCS
400	Filipino			7/30/2010 4:50:53 PM	MCS
500	Hispanic or Latino of Any Race			7/30/2010 4:50:53 PM	MCS
600	Black or African American			7/30/2010 4:50:53 PM	MCS
700	White			7/30/2010 4:50:53 PM	MCS
800	Intentionally Left Blank			7/30/2010 4:50:53 PM	MCS
900	Intentionally Left Blank			7/30/2010 4:50:53 PM	MCS
999	Intentionally Left Blank			7/30/2010 4:50:53 PM	MCS
A	Asian			7/30/2010 4:50:53 PM	MCS
B	Black or African American			7/30/2010 4:50:53 PM	MCS
F	Filipino			7/30/2010 4:50:53 PM	MCS
H	Hispanic or Latino			7/30/2010 4:50:53 PM	MCS
I	Alaskan Native or American Indian			7/30/2010 4:50:53 PM	MCS
P	Pacific Islander			7/30/2010 4:50:53 PM	MCS
TWO	Two or more Races			7/30/2010 4:50:53 PM	MCS
W	White			7/30/2010 4:50:53 PM	MCS

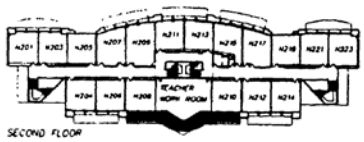
Criteria 5 B: Storage

Section 5B
Adequate Storage

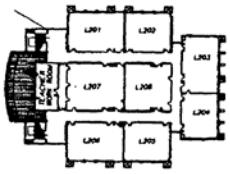
Our Agriculture Department has an abundance of storage capabilities. In Room M102 we have an officer room that stores all of our chapter jackets and opening closing supplies. M104 has a side room with which to keep all floral equipment and floral supplies along with most of our catering supplies. We keep our curriculum in our classrooms which each have a teaching station with storage behind the white boards and in the adjoining cabinets. In the science classroom L-105 we have a prep room available for storage of lab equipment along with all of the lab table cabinets. The shops are booth equipped with tool cabinets and storage rooms along with outside cargo containers for material and larger equipment. All classrooms and the shop have filing cabinets and storage cabinets. Ornamental horticulture, floral, welding and fair equipment are also stored in large storage containers located in the agriculture compound.

JOSEPH GREGORI HIGH SCHOOL

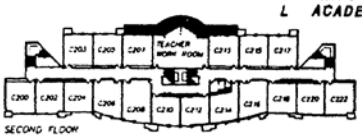




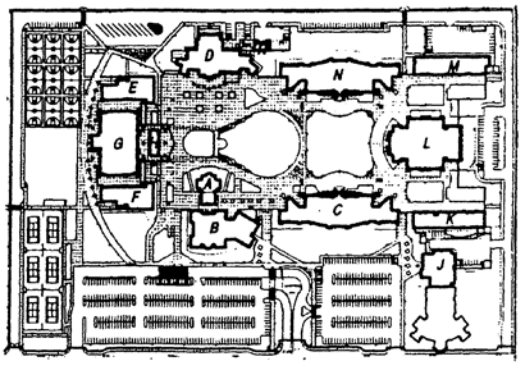
N CLASSROOMS ACADEMICS-II



L ACADEMIC SCIENCES

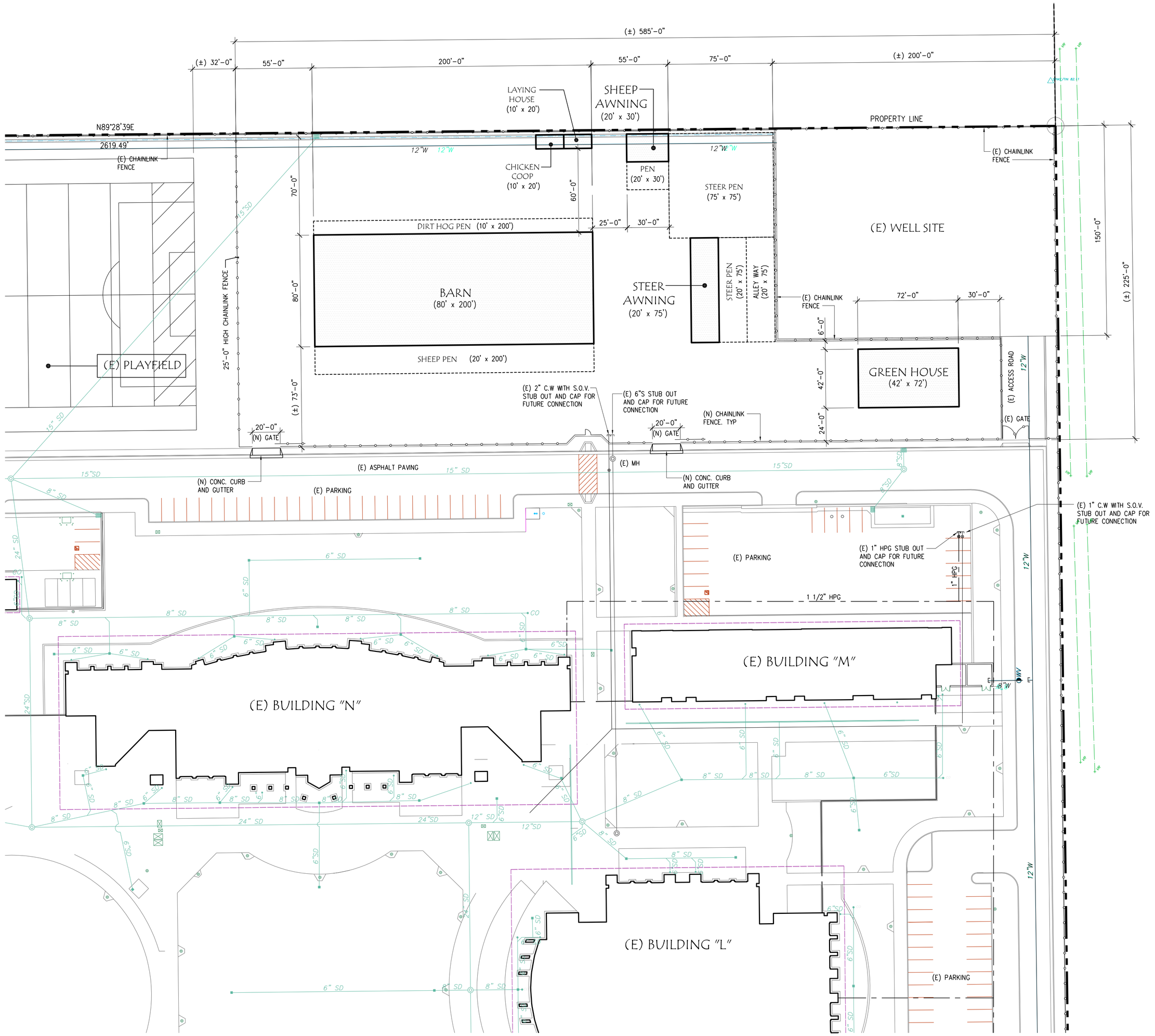


C CLASSROOMS ACADEMICS-I



JOSEPH GREGORI HIGH SCHOOL

A ADMINISTRATION
B LIBRARY-MEDIA CENTER
C CLASSROOMS ACADEMICS - I
D MULTI-PURPOSE
E MENS LOCKER
F WOMENS LOCKER
G GYMNASIUM
H SNACKBAR
J PERFORMING ARTS
K ART
L ACADEMIC SCIENCES
M Agriculture
N CLASSROOMS ACADEMIC - II



skw & associates
architecture ◦ engineering ◦ surveying
2257 scenic drive, modesto, ca 95355 p: 209-526-8525 f: 209-529-7804

donald t. kan
civil engineer
rce 56676

henry wong
civil engineer
rce 51008

david j. starck
architect
c-22903

allan v. stevenson
civil engineer
rce 61758

LICENSED ARCHITECT
DAVID J. STARCK
C-22903
REN. 12•31•17
STATE OF CALIFORNIA

PROJECT TITLE :
AG FARM
MODESTO CITY SCHOOLS
GREGORI HIGH SCHOOL
3701 PIRRONE ROAD
MODESTO, CA 95356

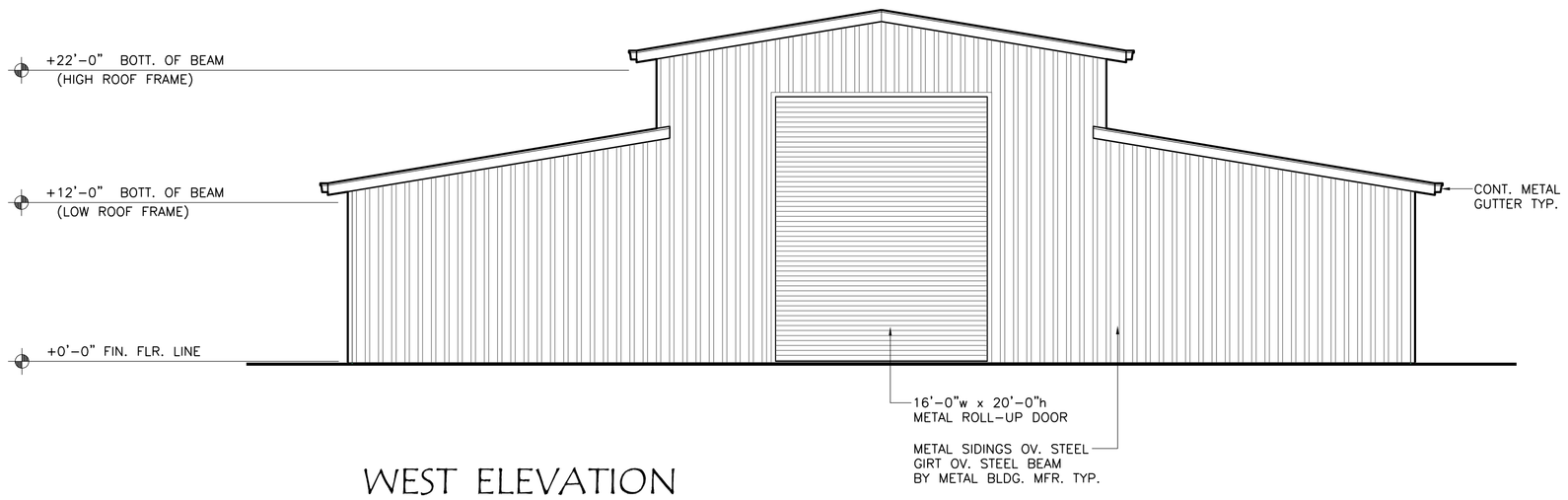
DRAWING TITLE :
SITE PLAN

REVISIONS :

BY :	GO / JG
LIST :	Gregori
DATE :	May 25, 2016
JOB :	16M002

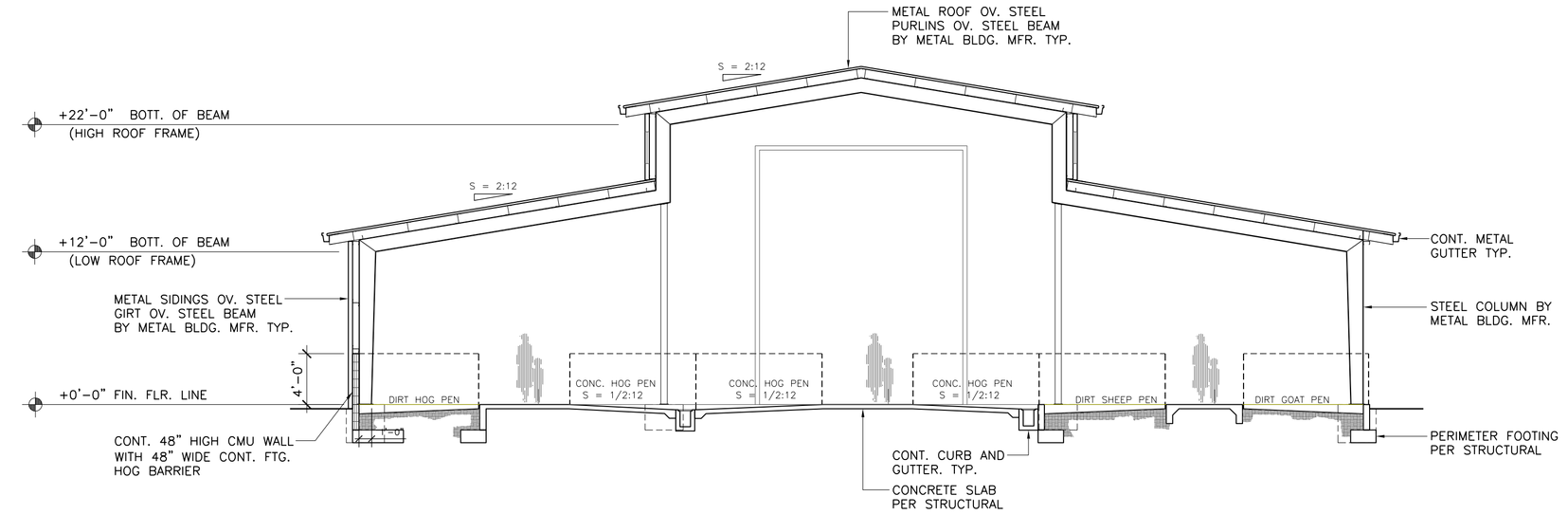
SHEET :
AS-1

SCALE: 1" = 40'-0"



WEST ELEVATION

EAST ELEVATION (SIM.)



4 BUILDING SECTION

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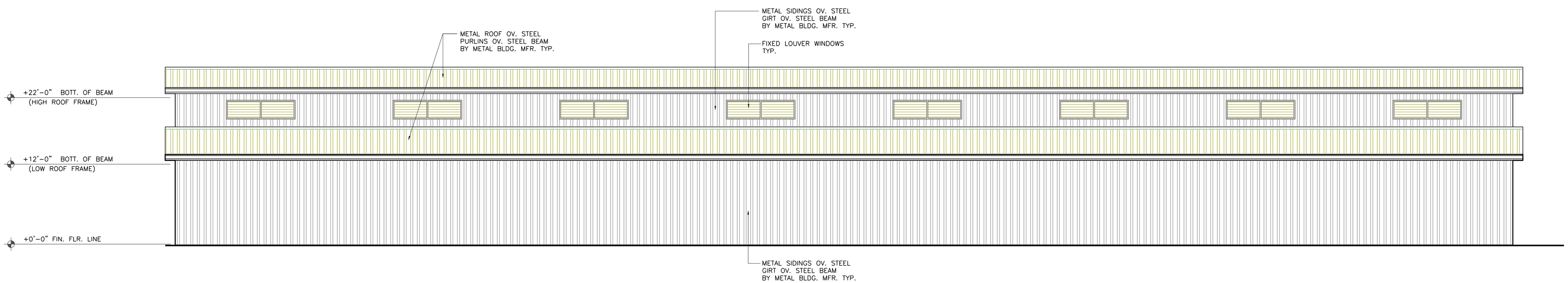
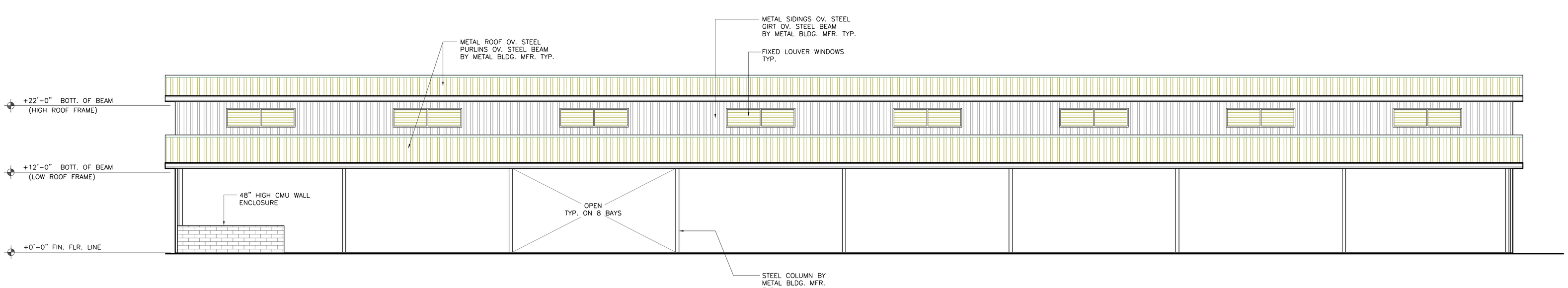


NORTH ELEVATION



SOUTH ELEVATION

12 EXTERIOR ELEVATIONS

SCALE: 1/8" = 1'-0"

skw & associates
architecture ◦ engineering ◦ surveying
2257 scenic drive, modesto, ca 95355 p. 209-523-8523 f. 209-529-7804

- donald t. kan
civil engineer
rce 38676
- henry wong
civil engineer
rce 810038
- david j. starck
architect
c 22903
- allan v. stevenson
civil engineer
rce 61758

LICENSED ARCHITECT
DAVID J. STARCK
C-22903
REN. 12-31-17
STATE OF CALIFORNIA

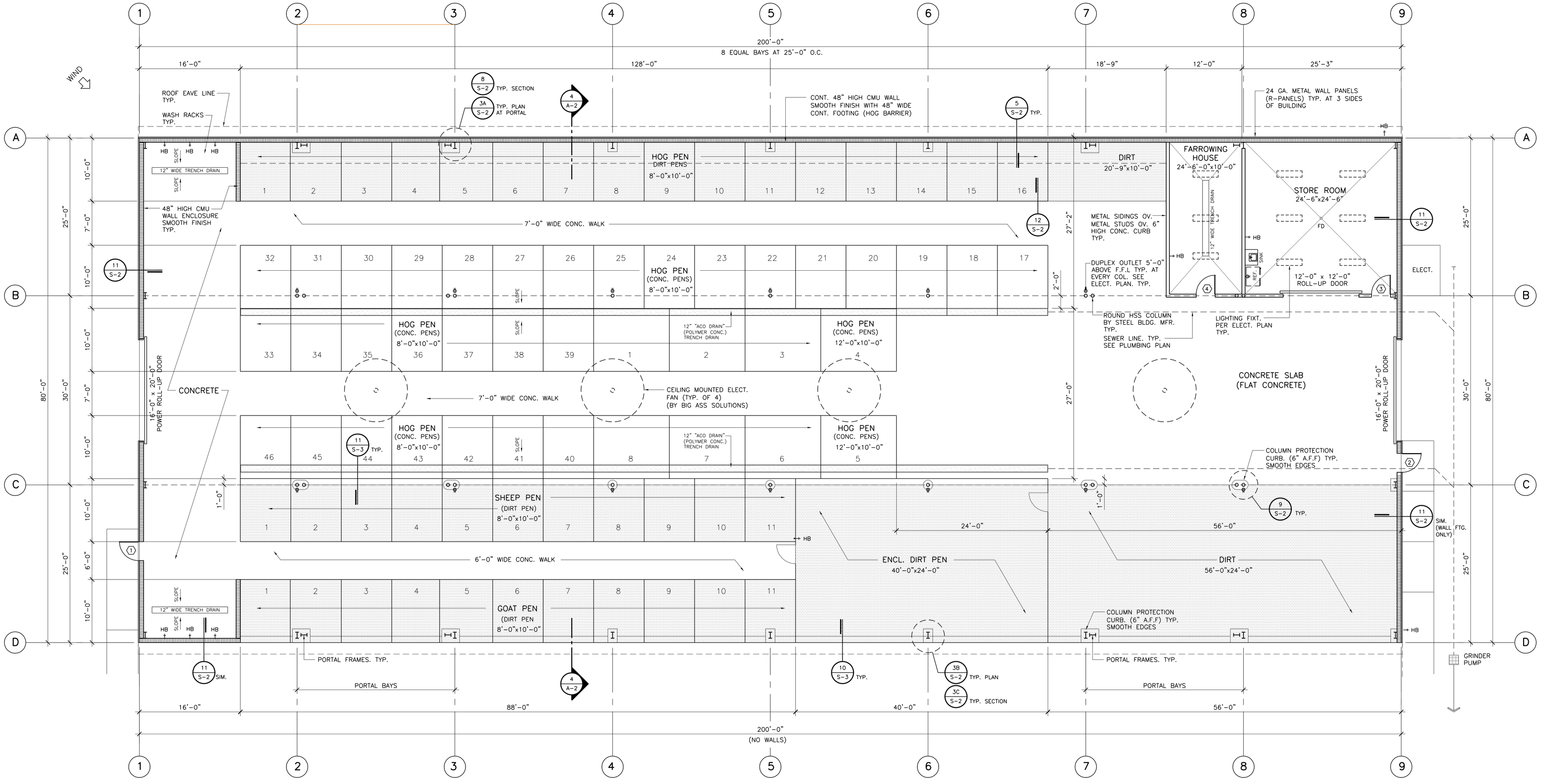
PROJECT TITLE :
AG FARM
MODESTO CITY SCHOOLS
GREGORI HIGH SCHOOL
5701 PIRBONE ROAD
MODESTO, CA 95356

DRAWING TITLE :
BUILDING SECTION &
EXTERIOR ELEVATIONS

REVISIONS :

BY :	GO / JG
LIST :	Gregori
DATE :	May 25, 2016
JOB :	16M002

SHEET :
A-2



PROJECT DATA:

OCCUPANCY: U (BARN)

CONSTRUCTION TYPE: IIB (NOT SPRINKLERED)

BASIC ALLOWABLE AREA: 8,500 SF

ALLOWABLE INCREASE DUE TO FRONTAGE: 10,625 SF

TOTAL BASIC ALLOWABLE AREA = 8,500 SF + 10, 625
= 19,125 SF > 16,000 SF ∴ OKAY

NOTE: METAL BUILDING AND FOUNDATION / SLAB = "DESIGN BUILD"

NORTH

12 FLOOR PLAN LAYOUT

SCALE: 1/8" = 1'-0"

NOTE : THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AT THE JOB AND SHALL BE RESPONSIBLE FOR ALL DISCREPANCIES BETWEEN DIMENSIONS OF THE ACTUAL WORK AND THOSE SHOWN IN THE DOCUMENTS OR ARCHITECT'S APPROVED SHOP DRAWINGS.

THE CONTRACTOR SHALL ALSO BE SOLELY RESPONSIBLE FOR ALL QUANTITIES OF MATERIAL OR EQUIPMENT CALLED FOR TO PROPERLY COMPLETE THE WORK.

GREGORI HIGH SCHOOL - AG FARM

skw & associates
architecture ◦ engineering ◦ Surveying
2257 Scenic drive, modesto, ca 95355 p: 209-523-8523 f: 209-523-7804

donald t. kan
civil engineer
rce 36676

henry wong
civil engineer
rce 51008

david j. starck
architect
c 22903

allan v. stevenson
civil engineer
rce 61758

LICENSED ARCHITECT
DAVID J. STARCK
C-22903
REN. 12-31-17
STATE OF CALIFORNIA

PROJECT TITLE :
AG FARM
MODESTO CITY SCHOOLS
GREGORI HIGH SCHOOL
3701 PIRRONE ROAD
MODESTO, CA 95356

DRAWING TITLE :
FLOOR PLAN LAYOUT

REVISIONS :

BY : GO / JG
LIST : Gregori
DATE : Aug. 23, 2017
JOB : 16M002

SHEET :
A-1R

Criteria 5 C: Laboratory Facilities

Section 5C
Laboratory Facilities

Currently, the Gregori High School Agriculture Facilities consist of five agricultural classrooms, two shops, one science lab room and three storage containers. We also have a school farm on campus.

Our shop is well equipped with the necessary equipment and tools for our students to achieve success in their projects. Each year we have worked hard in the area of purchasing newer equipment, such as: MIG welders, TIG Welders, and a plasma cutter.

Our proposed greenhouse will be built inside the school farm compound.

Criteria 5 D: Email Capabilities

Section 5D
E-Mail Capabilities

Every teacher/staff member within Modesto City Schools has access to e-mail. Each teacher is issued a Microsoft surface pro for their daily use and they are allowed to also use the device at home for school related purposes. Giving use the ability to check our e-mail from our home or anywhere with internet connection.

Criteria 5 E: Facility Neatness

Section 5E
Facility Neatness

We believe in the importance of keeping the department neat and clean of debris. The shop is routinely cleaned, as well as the outside facilities. We place a great deal of importance on our outside appearance. As community members drive by the department we want to reflect a well-organized and efficient program.

We also keep department records in a common filling cabinet making the process of verifying travels or PO's much easier. Student records are also keep in the same way, each student has a master file where we keep items like medical releases and safety test for easy reference by any instructor.

Criteria 5 F: Facility Maintenance

Section 5F
Facility Maintenance

If we have a maintenance or computer issue that needs to be resolved we simply submit a maintenance request form detailing the issue. The head of maintenance reviews the request and sets the priority of the issue depending on urgency of the matter.

The Agriculture Department attempts to be self-sufficient in terms of maintenance and upkeep. If at all possible, we will resolve the issue within the department. Minor repairs, such as a blown electrical outlet that we feel confident in fixing, we will take care of in-house. We tend to rely on our Maintenance Crew only in times of emergency and dire need.

Criteria Six: Community, Business and Industry Involvement

Criteria 6 A: Advisory Committee

Agriculture Advisory Committee Members
2016-17

NAME	ADDRESS	CSZ	AFFILIATION	PHONE
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
			MID-Retired	
		Modesto, CA 95355	Lyons Investments	
		Modesto, CA 95355	Morris Nursery	
		Modesto, CA 95355	Sylvan Vet Clinic	
		Modesto, CA 95355		
		Modesto, CA 95356		
		Modesto, CA 95357	Sylvan Vet Clinic	
		Modesto, CA 95357		
		Modesto, CA 95358	Duarte Nursery	
		Modesto, CA 95358	Garton Tractor	
		Modesto, CA 95358	Western Farm Supply	
		Modesto, CA 95358		
		Modesto, CA 95358		
		Modesto, CA 95358		
		Oakdale, CA 95361	Nurseryman	
		Turlock, CA 95381		
			California Poultry Federation	
			Chair	
			CSUS	
			Deere Point, Technical Operations	
			Durrer Dairy	
			Flory Industries	545-0551
			Genasci Dairy	
			Hailey Poultry	
			MCS/Staff	
			MCS/Staff	
			MCS/Staff	
			MCS/Staff	
			MCS/Staff	
			MCS/Staff	
			MCS/Staff	209-492-5201
			MCS/Staff	550-3400x5133
			MCS/Staff	550-3400x5053
			MCS/Staff	
			MCS/Staff	576-4247
			MCS/Staff	550-3400x5117
			MCS/Staff	550-3458
			MCS/Staff	
			MCS/Staff	
			MCS/Staff	576-4247
			MCS/Staff	
			MCS/Staff	

[redacted]

	MCS/Staff	
	MCS/Staff	
	MCS/Staff	
	MCS/Staff, Princi[al	550-3421
	MCS/Staff, Principal	569-2801
	MCS/Staff, Principal	550-3401
	MCS/Staff, Principal	576-4405
	MCS/Staff, Director	576-4163
	MCS/Staff, Principal	576-4960
	MCS/Staff, Principal	576-4503
	MCS/Staff, Principal	576-4213
	MCS/Staff, Superintendent	
	MJC	
	MJC	
	Morris Nursery	
	Nurseryman	

Compatibility Report for AdvisoryMembers Ag 2014.15.All.xls
Run on 9/30/2014 12:31

The following features in this workbook are not supported by earlier versions of Excel. These features may be lost or degraded when opening this workbook in an earlier version of Excel or if you save this workbook in an earlier file format.

Minor loss of fidelity	# of occurrences	Version
This workbook contains worksheets that have even page or first page headers and footers. These page headers and footers cannot be displayed in earlier versions of Excel.	1	Excel 97-2003

Last name	First name	Company name	Street address	City, ST ZIP Code
[redacted]	[redacted]		PO Box 1627	Oakdale, CA 95361
[redacted]	[redacted]	Hilmar Cheeze	PO Box 910	Hilmar, CA 95324
[redacted]	[redacted]	Alves Farms	5036 Mesa Dr.	Riverbank, CA 95367
[redacted]	[redacted]	Modesto Junior College	435 College Ave.	Modesto, CA 95350
[redacted]	[redacted]	Bambacigno Steel Co	4930 McHenry Ave.	Modesto, CA 95356
[redacted]	[redacted]	Harris Moran Seed Co.	555 Codoni Ave.	Modesto, CA 95357
[redacted]	[redacted]	Cal State Univ. Stanislaus	801 W. Monte Vista	Turlock, CA 95382
[redacted]	[redacted]	Stanislaus Farm Supply	624 E. Service Rd	Modesto, CA 95358
[redacted]	[redacted]		1199 Escalon Ave.	Escalon, CA 95320
[redacted]	[redacted]	Burchell Nursery	12000 Hiway 120	Oakdale, CA 95361
[redacted]	[redacted]	Durrer Dairy	3731 Dunn Rd.	Modesto, CA 95358
[redacted]	[redacted]	Fisher Nut Company	137 N. Hart Rd	Modesto, CA 95358
[redacted]	[redacted]	Fisher Nursery	21080 S. Austin Rd	Ripon, CA 95366
[redacted]	[redacted]	Villiage Oak Vet Hospital	3924 Oakdale Rd.	Modesto, CA 95357
[redacted]	[redacted]	E & J Gallo Winery	600 Yosemite Blvd	Modesto, CA 95353
[redacted]	[redacted]	Yosemite Farm Credit	800 West Monte Vista	Turlock, CA 95382
[redacted]	[redacted]	Modesto Irrigation District	1081 Hazeldean Rd.	Waterford, CA 95386
[redacted]	[redacted]	Riverbank Veterinary Inc.	2369 Patterson Rd.	Riverbank, CA 95367
[redacted]	[redacted]	College Veterinary Clinic	2104 College Ave.	Modesto, CA 95350
[redacted]	[redacted]	Leventini Club Lambs	624 S. Indiana	Modesto, CA 95357
[redacted]	[redacted]	Mapes Ranch	10555 Maze Rd	Modesto, CA 95358
[redacted]	[redacted]	Sylvan Veterinary Clinic	3500 Roselle Ave.	Modesto, CA 95357
[redacted]	[redacted]	Sylvan Veterinary Clinic	3500 Roselle Ave.	Modesto, CA 95357
[redacted]	[redacted]	Morris Wholesale Nursery	1837 Patterson Rd	Riverbank, CA 95367
[redacted]	[redacted]	Advisory Chair	5825 Skittone Rd.	Modesto, CA 95356
[redacted]	[redacted]	Ratto Bros. Inc	6312 Beckwith Rd	Modesto, CA 95358
[redacted]	[redacted]	Rumble Tree Pest Mgmt	1320 Amy Ave	Modesto, CA 95357
[redacted]	[redacted]	Duarte Nursery Inc.	1555 Baldwin Rd	Hughson, CA 95326
[redacted]	[redacted]	Veterinary Services Inc.	4100 Bangs Ave.	Modesto, CA 95356
[redacted]	[redacted]	Howk Irrigation Systems	1825 Yosemite Blvd.	Modesto, CA 95351
[redacted]	[redacted]	Vans Nursery		Modesto, CA 95350
[redacted]	[redacted]	AMSA Seed	PO Box 5301	Modesto, CA 95352
[redacted]	[redacted]	Wenger Farms	4267 Beckwith Rd.	Modesto, CA 95358

Criteria 6 B: Advisory Minutes

Modesto City Schools
Fall Agriculture Advisory

Thursday, November 16, 2017
5:30 p.m.
Davis High School Ag Department

AGENDA

1. **Welcome and call to order by Advisory Chair, Kim Hernandez.**

2. **Approval of Minutes, Spring 2017 (Hernandez)**

3. **Agriculture Courses – Updates (Nower)**

   - Integrated Ag Science 1-2, 3-4

4. **School Farm Updates (Brecht/Nower)**

   - Church Street
   - Gregori

5. **Approval of the CTE Facilities Program Grant Application, Modesto High School (Albritton)**

6. **Adjourn**

Modesto City Schools
Fall 2016 Agriculture Advisory Meeting
Johansen High School Ag Dept.
Tuesday, November 1, 2016
6:00- 7:30 p.m.

MINUTES

1. Call to order by Advisory Chair, Kim Hernandez

Kim Hernandez took the floor at 6:00 welcoming Dan Iverson, Johansen High School Associate Principal, who gave a brief opening and thanked the agriculture programs for all they do for the students and school sites in Modesto City Schools. Kim Hernandez then asked for introductions from everyone.

2. Approval of Minutes, Spring 2016 (Hernandez)

Kim Hernandez called for motion to approve minutes of spring, 2016 advisory meeting.

- ✓ ***Motion made for approval by Mike Leventini, 2nd Don Borges. Minutes approved by unanimous vote of advisory.***

3. Ag Science Courses Submitted 2015—Status (Nower)

Mark Nower has kept in close contact with Ed. Services regarding the two remaining Ag courses (Agriculture and Soil Chemistry, Sustainable Agriculture - A Biological Approach to Industry Practices) that were submitted for approval in 2015. The courses have been on hold pending the district's updating of general science courses and there doesn't appear to be a change in their status in the near future. The courses waiting for approval are to be part of the Agriscience Pathway for Modesto City Schools and are two of the three courses in the pathway with UCCI approval. A long discussion took place with input from Mr. Iverson, Mr. Albritton, instructors and members regarding district science courses and CTE agriculture courses.

4. Central Region Consortium Grant/CTE Incentive Grant Reports (various sites)

Staff from each site discussed how they have been utilizing the funds from both grants; updating shops, farms, greenhouses, floral rooms, purchasing storage and other equipment, purchasing walk in coolers, tractors, trailers and vehicles. The grants have created an amazing opportunity for the agriculture programs in Modesto City Schools.

- Central Region Agricultural Education Career Pathways Consortium (CRAECPC).
  Four Modesto City high schools received funding; Davis, Downey, Gregori and Johansen. The major grant objectives were:

  - To improve the quality of high school and community college Agricultural Mechanics, Agriscience and Ornamental Horticulture pathway programs,
  - To increase the successful transition of students into aligned postsecondary programs in the Agricultural Mechanics, Agriscience and Ornamental Horticulture pathways, and
  - To build upon existing partnerships with regional employers to successfully transition students to careers in the Agricultural Mechanics, Agriscience and Ornamental Horticulture pathways.

- **CTE Incentive Grant**

  - On October 27, 2015, the California Department of Education announced the availability of funds for the California Career Technical Education Incentive Grant (CTEIG), established as a state education, economic, and workforce development initiative with the goal of providing pupils in kindergarten through grade twelve, with the knowledge and skills necessary to transition to employment and postsecondary education. Funds are allocated over three fiscal years, 2015-16, 2016-17 and 2017-18. MCS agriculture programs as well as other CTE programs received approval. The grant award notification effective July 1, 2015 is $3,112,844 and must be spent by June 30, 2019.

5. **Program/Academy Updates (all sites)**

   - Program Representatives from each site reported enrollment and upcoming activities for 2016-17 as well as summer 2016 fair accomplishments. Fair projects included floral, beef, dairy, swine, sheep, dairy goats, meat goats, rabbits, poultry and horses, with many champion and grand champion awards received. Activities for the year include conferences, competitions, fundraisers, judging team events, such as livestock evaluation, agronomy, welding, floriculture, and fruit and land judging.

   - Gary Gerhardt, Johansen Ag Instructor gave update of the Johansen Ag Academy. The academy is in its sixth year of existence. Funding for the 2016-17 program is $72,450. The Academy includes three career pathways; Animal Science, Ag Mechanics, and Plant Science. Motivational activities such as field trips, college visits and industry speakers are included along with work place learning opportunities such as internships, job shadowing, industry mentors and work experience. The academy received the "Distinguished Academy" award, academy students received a special invitation to "Academy Day at the Capital" were Fruit Tree Judging State Champions for 2016 and the welding team placed 4th in the state. Currently, 188 students enrolled.

6. **Other**

   - **Drought Resistant Landscape Project**

     In the fall of 2015, Modesto City Schools, in an effort to support water conservation, challenged each high school Ag department to create a drought tolerant plot on their campus. Students and instructors, as well as some community participation, have been hard at work preparing their plots and are making a big statement at the sites.

   - **FFA National Convention Trip**

     Mark Nower reported on the National FFA Convention Trip to Indianapolis, Indiana in October. Fourteen students attended from Modesto City Schools.

7. **Adjourn 7:30 p.m.**

Modesto City Schools
Spring 2017 Ag Advisory

Tuesday, April 11, 2017
Modesto High School Ag Department
18 H Street

6:00 - 7:00 p.m.

Minutes

1. Call to order by Advisory Chair, Kim Hernandez

   Kim Hernandez took the floor at 6:17 p.m. thanking MHS for hosting and asking for introductions. Jeff then took floor and introduced Rebecca Bettencourt from E&J Gallo Winery.

2. Approval of Minutes, Fall, 2016 (Hernandez)

   Kim Hernandez called for motion to approve minutes of fall, 2016 advisory meeting.

   - ✓ ***Motion made for approval by Andrew McCormick, 2nd Bill Morris. Minutes approved by unanimous vote of advisory.***

3. Gallo Agriculture Partnership (Rebecca Bettencourt)

   Presenting Education Partnerships, E&J Gallo Winery and Local Education –

   Rebecca provided an overview of the current partnership between E&J Gallo Winery and local education agencies. In 2016 & 2017, the partnership involved student site tours, faculty tours and practicum groups with summer internships. The current MCS practicum group of 24 is in its 7th week of a 10 week program. Gallo plans to link with MJC in the future with three pathways; Ag Mechanics, Vineyard Management and Irrigation.

4. Gregori Ag Farm (Nower)

   Construction on the Gregori Ag Farm is scheduled to begin May 1, 2017. $1.2 million project, includes barn structure, should be completed by October 31, 2017.

5. New Ag Science Courses for Freshman and Sophomore Students (Nower)

   Mark has kept in close contact with the Ed. Services department in regard to the Ag science courses for Modesto City Schools. The district has approved the use of the ag science classes submitted in the fall of 2015. One received a title

change in the process. The three are; AgriScience (originally submitted as Agriculture and Soil Chemistry), Sustainable Agriculture - A Biological Approach to Industry Practices and Agriscience Systems Management.

6. **Program/Academy Updates (all sites)**

- Jeff discussed the enormous support to the Modesto City Schools career technical education programs from the Career Technical Education Incentive Grant (CTEIG) provided by the California Department of Education. The grant is designed to expand and enhance our CTE programs. The first of the CTEIG funds were awarded in spring 2016. We are expecting the next award in a few months to be an estimated $1.5 million.

- Program representatives from each site gave program updates and outline of activities for 2016-17 including preparing for fair projects, judging teams, fundraisers, farm projects, highlights of the year, new agriculture courses being developed for Davis high, ag mechanics projects, State conference and other FFA events. Sites have also been working hard to make the best use of CTEIG funds.

- Gary Gerhardt, Johansen Ag Instructor gave update of the Johansen Ag Academy. The academy is in its sixth year of existence. Future funding has been cut from the Governor's budget. We would appreciate it if advisory members would contact the Governor's office and ask that funding be reinstated for this valuable program. The Academy includes three career pathways; Animal Science, Ag Mechanics, and Plant Science. Motivational activities such as field trips, college visits and industry speakers are included along with work place learning opportunities such as internships, job shadowing, industry mentors and work experience. The academy has made a special effort this year to visit local businesses including, Hilmar Cheese, Turlock Livestock Auction, Burchell Nursery and BelKorp Ag. The academy is always looking for mentors. Contact Gary Gerhardt if you are interested.

Adjourned: 7:30 p.m.

Addition to minutes: July 6, 2017 – the following sent by e-mail to advisory members:

"Davis High School's Ag department has completed the attached courses to be added to Modesto City Schools' Ag opportunities in the Ag Mechanics Pathway. Since we won't have another advisory until fall, I need you to review the courses and let me know if you approve them for submission to the Board of Education. I will consider the first two members approving as the motion for approval and the 2nd. Thank you."

- ✓ ***Motion for approval made by Andrew Genasci, 2nd – Louise Alberti, approved by unanimous vote of members.***

Criteria 6 C: Advisory Committee Plan

N. Advisory Committee

Individuals, who represent the community, business, FFA officers, parents, post secondary agencies, and labor, save on the Advisory Board to provide guidance to the department. The staff uses the advice of the advisory committee n the design, development, operation, evaluation, and support of each program area.

In order to ensure relevant instruction, the Gregori School established an Ag Advisory committee to serve Gregori High School.

Minimum Agricultural Advisory Committee Responsibilities

1. Must meet at least twice par year and record the minutes of the meeting while forwarding copies to the Regional Supervisor.
2. Review the following:

    a. Validate the need for Agriculture Education at Gregori High School.

        i. 1. Agriculture job opportunities
        ii. Entry level job skills
        iii. Student interests and needs
        iv. Graduate follow-up survey results reviewed
        v. Assist at the development and implementation of short and long-range plans ensuring that the program remains current and relevant.

    b. Review the Program Plan

        i. Job market description
        ii. Targeted occupations
        iii. Department goals and objectives
        iv. Program descriptions
        v. Course Outline
        vi. Description of facilities and equipment
        vii. Five year plan
        viii. Staff assignments
        ix. FFA Program of Activities
        x. District School Department Policy

            a. Student eligibility
            b. Integration of the FFA
            c. Integration of SOEP's.

        xi. Proficiency standards for program completers
        xii. Teacher Data Sheets
        xiii. Agriculture Advisory Roster
        xiv. Review current gear budget

Advisory Committee

The use of advisory committees is well established in the public school system. These committees were conceived in the beginning to implement the development and improvement of educational programs. This manual is written for those planning to form new advisory committees, wishing to improve those already in existence; and for newly appointed members. Advisory committees will play a vital role in the Pathway programs in the future.

This manual will help prevent unnecessary errors in the development of advisory committees. These guidelines have proven successful, and may be added to and modified for local and present conditions.

Even though mandated, advisory committees are useless unless they are properly developed with practical working groups. They must be based on the needs of the people and industry for which they serve. Advisory committees are established systems for using lay persons to assist professional educators.

With the increased need for rapid change in this technological age, there is a growing appreciation of the help provided by industry representatives serving on local advisory committees. Business is a complex highly scientific and technological industry. Employment opportunities in business are constantly changing. New technologies are continually being developed and incorporated into business and educational industries.

Students must be trained for today's jobs as well as new opportunities that become available. There will be an increased need for businessmen trained in specialized technical occupations. Advisory committees help teachers of business education stay abreast of these changing employment trends and opportunities. Increased interest in Pathway programs that include internships, job shadowing, work-study, and other types of on-the job training will require close coordination with business industry representatives.

Increased attention needs to be given to the education of at risk, disadvantaged, and other special needs individuals. Advisory committees can provide valuable assistance that is necessary for the success of these interrelated programs.

We must remember that lay advisory groups have no administrative or legislative authority. They can not establish policy or take the place of the administration or the board of education. Their function is to provide understanding between the school and the community it serves. Advisory committees provide balanced judgment to local problems and help give continuity and support to programs.

The purpose of this manual is to provide information for Business Education Pathway coordinators, school administrators, boards of trustees, teachers of business and Pathway committee members. Included is information on the formation, functions, duties, and operation of advisory committees. An outline format is being used to make the information easier to find and use.

Finally, a sample of opening session instructions, a sample agenda, and a sample set of minutes are offered for the benefit of those unfamiliar with these procedures.

Forming an Advisory Committee

Much of the success of an advisory committee is determined by the manner in which it is formed.

Based on the experiences of many communities throughout the country, the following steps are suggested:

1. **Determine and Verify the Need**

   1.1. There must be a feeling of need and understanding of opportunity if an advisory committee is to succeed.
   1.2. If with its help, the advisory committee can make the Agriculture Department, serves a usable function.
   1.3. It can provide continuity of a quality program should teachers or administrative changes take place.
   1.4. It is important that the school administration, business education staff, parents, and other patrons of the school thoroughly understand the character and purpose of the committee.

2. **Nomination of Committee Members**

   2.1. Once approval of the formation of an advisory committee by the board members is received nominations should be made jointly by the principal of superintendent, the head of the department, and the chairperson of the school board.
   2.2. Each should have an equal voice in the selections.
   2.3. Avoid nomination of friends, as they may be less candid and honest in their advice.
   2.4. The advisory committee should be truly representative of the district. Members:

      2.4.1. Should be successful businessmen and/or individual/s engages in a significant related occupation.
      2.4.2. Must have recent, successful, firsthand, and practical experience in business.
      2.4.3. Should exhibit substantial interest in the Agriculture/Pathway program.
      2.4.4. Should be representative of different important business commodities, parts of district, age groups, business organizations, and ethnic or religious groups.
      2.4.5. Should be sought as public-spirited individuals who understand a specialized area and are willing to contribute their knowledge and advice as a member of a cooperative, constructive group.
      2.4.6. From the general school staff and/or the board should only be used when special circumstances
      warrant their appointment.
      2.4.7. Should not have frequent dealings with the department in order to minimize conflict of interest
      problems.
      2.4.8. Should include representatives of the service areas of business.
      2.4.9. Should recognize the time required and express a willingness to serve on the committee.

3. How Many Committee Members?

3.1. No fixed number will satisfy all situations.
3.2. The group needs to be large enough to be representative of the district and to provide a quorum if several members are absent.
3.3. Should not be so large that it is unwieldy or difficult to call together.
3.4. Seven to eleven persons are suggested with nine being a workable medium.
3.5. Present only the number of names previously decided upon by the local governing board for confirmation. (When more names are presented personalities become involved yielding undesirable results.)

4. How are Committee Members Notified of their selection?

4.1. 4.1 Notification is usually done in writing, by the principal or superintendent, on behalf of the school board.
4.2. The letter should:
4.2.1 Indicate that the Agriculture teacher's are supportive.
4.2.2 Indicate that the committee serves in an advisory capacity to him or her, the department, the principal, and to the school board.
4.2.3 Include a request that the member indicate whether or not he or she will accept.
4.2.4 Urge speed of acceptance to gain an orderly efficient start.

5. Understanding of Responsibility

5.1. Of greatest importance is that the committee is only advisory in character.
5.2. The advice is to the teacher, school administrator, or school board as appropriate to accept or reject.
5.3. It has no administrative or policy forming power.
5.4. It will make suggestions on policy and procedure, but the **source of** its influence is in the voluntary acceptance of this advice by the proper governing authority.

Experience has shown where all of the steps up to this point have been properly taken, a high percentage of acceptance may he expected.

Functions and Duties of Advisory Committees

1. Help to determine what type of Agriculture Science Pathway program is offered.
2. Assist the teacher(s) in finding suitable work stations (internships, job shadowing, work-study, cooperative learning, and partnerships) for students in both sales and service business occupations.
3. Help the instructor establish curriculum that has a hands-on, technological approach.
4. Help attract and encourage qualified/capable students into the Agriculture Science Pathway program.
5. Help in recruiting and providing opportunities for special-needs students.
6. Help to evaluate the effectiveness of the Agriculture Pathway program. Guidelines for evaluation should be developed cooperatively with the advisory committee, administration, school board, and the Agricultural Education Unit of the California Department of Education and/or Chancellors Office California Community Colleges. (Assessment and certification tools will be made available.)

7. Help gain support for legislation and appropriations.
8. Help the teacher(s) develop a list of capable resource persons for use as speakers, and/or judges for both in-school and out-of-school portfolios and contests.
9. Help obtain sponsors for appropriating funds for awards, scholarships, or needed equipment and supplies that are useful in carrying out classroom activities and or other youth programs.
10. Help unify the activities of the Agriculture Science Pathway program with those of other groups and agencies interested in business.
11. Assist the teacher in determining skills needed for particular jobs at entry, technical and professional levels so that he/she may be included in the instructional program.
12. When appropriate, serve as resource person to instructor visiting work place learning sites of students and participating in classroom instruction or demonstrations and accompanying or hosting field trips.
13. Study and make recommendations on problems presented to it by the school board on which further information is needed.
14. Provide the teacher with technical assistance and keep him/her aware of new developments in the business industry.
15. Provide current resources to develop and maintain a Agriculture library of visual aids, magazines, and books concerning business and business occupations.
16. Serve as speakers at civic clubs, open houses, and career days to tell the story of school-industry cooperation.
17. Identify current standards for new equipment.
18. Assist in procuring opportunities to upgrade the teacher's technical skills and knowledge.

Operation

It is important that correct procedures and rules be established and clearly understood by committee members, school administrative staffs, and the board of education. These rules should be decided upon by the committee with assistance from the school. All correspondence should be sent to administrators and advisory committee members. Items to be considered are:

1. Number of meetings

1.1. Must meet regularly and often enough to carry out their assignment.
1.2. Monthly or bi-monthly meetings are usually the most desirable.
1.3. Minimum number is two per year.
1.4. Practical number is between three and eight per year.
1.5. Necessity should always determine the exact number.
1.6. Often the most valuable advice comes from busy individuals.
1.7. Better to have fewer well planned, well attended meetings.

2. Selection of Officers

2.1 Generally a chairperson, vice chairperson, and recorder are sufficient.
2.2 Chairperson should be a lay person elected by the committee.

2.3 It is usually best that the Business teacher serves as recorder and general consultant.

3. Length of Service by Committee Members

3.1 Three-year terms are recommended
3.2 At formation meeting members draw for one, two or three year terms to provide for continuity of membership.
3.3 Individual preferences in length of service need to be considered.
3.4 Limitation should be placed on reappointments.
3.5 Nominees should be submitted to board of trustees for approval.

4. Length and Place of Meetings

4.1 For efficient and effective use of time, the agenda for each meeting must be well planned.

4.2 Ample meeting notice of 10 days to 2 weeks is recommended.

4.3 Copy of agenda, minutes from previous meeting, and any reading material requiring action should be sent in advance of meeting date.

4.4 Two-hour meetings, held at a time and date chosen by the committee, are recommended.

4.5 The meeting place should provide a conference table in a quiet environment.

4.6 Usually the business department of the school provides the best meeting site, allowing members to become familiar with facilities of the department.

5. **Filling Committee Vacancies**

5.1 Vacancies which occur because of term completion or other reasons should be filled by nomination from the advisory committee, teacher, superintendent, department head, or principal, and approved by the board of education.
5.2 The committee may be asked for suggestions.
5.3 A committee should not be permitted to choose its own replacements.
5.4 Rules of procedure should indicate that if a committee member misses meetings repeatedly without reason, the position is declared vacant by the chairperson, and the school board so notified.

6. **Distribution of Minutes:** All committee members the vocational education director, the principal/president, and the regional supervisor.

7. **Making Decisions**: Currently many organizations operate by consensus approval of agenda items. When consensus cannot be reached or decorum is in question, refer to Robert's Rules of Order.

Opening Session Instructions for Business Education Pathway Advisory Committees

Instructions to Your New Advisory Committee

1. You constitute an advisory committee for the Gregori High School Agriculture Department
2. I welcome you on behalf of the board and administration.
3. You are agents of and appointed by the Modesto City Schools Board of trustees
4. While you are not a policy making body, you are advisory to the Gregori High School Agriculture department, and through channels, to the principal, superintendent, and board. We need your expertise in this area.
5. Modesto City Schools is interested in the best possible Ag Technology Pathway program. We need to know what is ideal for this program from the standpoint of the community. Bear in mind that what we eventually can do, while we want the ideal if possible, must be compatible with available funds and state rules and regulations.
6. You will be a working committee and students and school staff expects to benefit from your work.
   a. We need help to: Review existing programs, courses of study, facilities, equipment.
   b. Propose new programs and/or courses when needed based on solid data for this community. Evaluate existing programs and proposed new programs.
   c. Revise existing programs, suggest changes or deletions, and develop educational specifications for the programs, (For use in building the program and planning for equipment and facilities.)
   d. Help develop building plans; review architects plans, etc., where new buildings are being proposed.
   e. Help point out changes needed for the future in your area of interest - Keep the program up to date.
   f. Help in placement and in evaluating performance of our Agriculture Technology Pathway students at Gregori High School
   g. You will be a "helping group" (as well as advisory) to the instructor, as the program is implemented and progresses.
   h. This committee serves at the pleasure of the school board and may be dissolved at any time by board action.

7. **Getting Started:**

   1. Review present course offerings and majors catalogs, studies, data, classrooms, labs, and other facilities.
   2. Conduct studies, if needed, to get community data on which to base your decisions.
   3. Decide areas to study or review (both geographic and educational areas) and determine how to do this (formal study, informal, follow-up studies).
   4. Your findings and decisions will be in the committee minutes which will be distributed to the instructors, administration, and the board.

8. **<u>Here's What You Need To Do To Get Started:</u>**

1. Elect a chairperson.
2. The recorder will be an instructor, or department chairperson, and he or she will also be a resource person for you to help interpret educational language and concepts, provide materials, and are the liaison person with the administration.
3. Determine rotation (1-2-or 3 years?). You will also decide length and term and who serves what term. (Subsequent appointments will be 3 years each.)
4. Decide if more than one committee is needed. Large departments may have subcommittees.
5. Announce that any member, who cannot continue serving for any reason, should notify the chairperson so that a replacement appointment can be made.
6. Note: Be sure to start and end on time!

WE NEED YOUR HELP. WE APPRECIATE YOUR WILLINGNESS TO GIVE IT AND BE OF SERVICE TO YOUR SCHOOL.

Appendix A
(SAMPLE)
Advisory Committee Meeting Agenda

TO: List committee members here
FROM: Chairperson
DATE: Date agenda is published
RE: Next Advisory Committee Meeting

DATE: Date of next meeting

TIME: Time of next meeting

PLACE: Place where meeting is being held

AGENDA

1. Review and approve minutes of the previous meeting.
2. Call for additional agenda items to be added to this meeting's agenda.
3. Committee and progress reports.
4. Consideration of recommendations for a new class or activity.
5. Review of revised course of study.
6. Report and review of F.B.L.A. and/or other youth organization activities.
7. Set date, time, and place for next meeting.
8. Adjournment.

Appendix B
(SAMPLE)
Set of Minutes

The meeting was called to order by chairperson, Joe Smith at 3:00p.m., January 21, 1994, in room 122 at Pathway High School.

The minutes of the previous meeting were read, amended, by changing the word shall to should in topic #8, and approved.

The call for additional agenda items was made.

Mr. X reported that the Field Day Committee met on January 14, 1994. It was decided that the best day for the annual field day is May 5th. It was moved, seconded, and passed that our annual field day will be held on May 5, 1994.

Mrs. Y reported on ticket sales of the coming Parent and Student Banquet. So far, 310 tickets have been sold. This is already 20 more than last year's attendance.

It was moved and seconded that a class on virtual enterprise be added to the Business Education curriculum. After a lengthy discussion, this was referred to a committee of five made up of Mrs. A, Mrs. B, Mr. C, Mr. D, and Mr. E. They are to report to the advisory committee on March 15th. Mrs. A will be the chairperson.

Mr. Z reported on the suggested revision for the Employable Skills class. Added topics being considered are: job shadowing and use of fax machines.

F.B.L.A. President, Bill G. reported on this year's calendar of events of the chapter. He was commended by the Chair for his leadership and hard work.

The next meeting is scheduled for 3:00p.m., February 15th, in room 122 at Beyer High School.

The meeting was adjourned at 5:00p.m; by chairperson Joe Smith.

Respectfully Submitted,

Mr. **Q,** Recorder

Criteria Seven: Career Guidance

Criteria 7 A: Student Counseling

Central Region Agricultural Education Career Pathway Consortium

Industry Sector ***AGRICULTURE***

Pathway ***Ag Mechanics***

Sub-Sector:

Level	Grade	English/ Language Arts	Math	Fine Arts/Elec	Social Studies	Science	CTE Courses	Other Required Courses or Recommended Electives		
Middle										
School										
Secondary	9	English 9	**Secondary Math I**	PE	Health/Wd Relgions	Int. Ag Science 1-2	Ag Mech 1-2/Sm Eng		For Lang	Ag 1
	10	English 10	Secondary Math 2	PE	World History	Int. Ag Science 3-4	Ag Mech 3-4/Sm Eng II		For Lang	Ag 2
	11	English 11	Secondary Math 3	Floral	U.S. History	Agriscience Systems M Management	Ag Mech 5-6/Ag Power	Welding 1	For Lang	Ag 3
	12	English 12	Finite Math		Econ/ Government	Animal Sci /Vet Sci/Food Sci	Struc Welding/Diesel Mech	Welding ROP	For Lang	Ag 4
Articulated dual credit courses must be taken/moved to the secondary level for articulation/dual credit										
Post-Secondary	13				CRC, MJC, MCC	CRC, MJC, MCC	CRC, MJC, MCC	CRC, MJC, MCC	CRC, MJC, MCC	
	14									
	15									
	16									

District:	
Middle School:	
High School	
Com. College	
University	
Author:	Contact:

Color Key As Follws	
Required Courses	
Career Technical Education Courses	
Other Required Courses or Electives	
Dual/Concurrent Enrollment - Articulated Courses	
Administrator;	Date:

Sample Occupations Relating to this pathway

Occupations Requiring a HS Diploma

Shop Assistant
Fabricator
Operator
Plumber

Occupations Requiring Some Post Secondary Training

Sales Assistant
Power System Mechanic
Refrigeration Specialist
Greenhouse Maintenance Tech

Occupations Requiring an Associates 2 year Degree

Diesel Tech
Irrigation System installer
Welding inspector
Hydraulic Technician

Occupations Requiring a BA/BS Degree

Ag & Biomedical Engineer
GIS/GPS Engineer
Soil Scientist
Ag Teacher

Certifications, Licenses, Credentials or Apprenticeships

Welding Certification
Smog Check Certification
Class A License
Teaching Credential

Central Region Agricultural Education Career Pathway Consortium

Industry Sector *AGRICULURE*

Pathway *OH*

Sub-Sector:

Level	Grade	English/ Language Arts	Math	Fine Arts/Elec	Social Studies	Science	CTE Courses	Other Required Courses or Recommended Electives		
Middle										
School										
Secondary	9	English 9	Secondary Math I	PE	Health/Wd Relgions	Int. Ag Science 1-2	Beg OH		For Lang	Ag 1
	10	English 10	Secondary Math 2	PE	World History	Int. Ag Science 3-4	Landscape		For Lang	Ag 2
	11	English 11	Secondary Math 3		U.S. History	Agriscience Systems M Management	Floral	Ag Mech	For Lang	Ag 3
	12	English 12	Finite Math		Econ/ Government	Ag Computers	Floral II	Food Sci	For Lang	Ag 4
Articulated dual credit courses must be taken/moved to the secondary level for articulation/dual credit										
Post Secondary	13				CRC, MJC, MCC	CRC, MJC, MCC	CRC, MJC, MCC	CRC, MJC, MCC	CRC, MJC, MCC	
	14									
	15									
	16									

District:		Color Key As Follws	
Middle School:		Required Courses	
High School		Career Technical Education Courses	
Com. College		Other Required Courses or Electives	
University		Dual/Concurrent Enrollment - Articulated Courses	
Author:		Contact:	
Administrator;		Date:	

Sample Occupations Relating to this pathway

Occupations Requiring a HS Diploma

Nursery Worker
Landscaper
Floral Shop Assisstant

Occupations Requiring Some Post Secondary Training

Florist
Landscape Irrigation Technician
Small Engine Mechanic
Greenhouse Technician

Occupations Requiring an Associates 2 year Degree

Landscape Designer
Arborist
Turf Manager
Refrigeration Specailist

Occupations Requiring a BA/BS Degree

Certified CropAdvisor/Agronomist
Ag Research Station Manager
Water Research Manger
Ag Teacher

Certifications, Licenses, Credentials or Apprenticeships

CA Certified Florist
Irrigation Designer
CANGC
Teaching Credential

Central Region Agricultural Education Career Pathway Consortium

Industry Sector *AGRICULTURE*

Pathway *Ag Science*

Sub-Sector:

Level	Grade	English/ Language Arts		Fine Arts/Elec	Social Studies	Science	CTE Courses	Other Required Courses or Recommended Electives		
Middle										
School										
Secondary	9	English 9	Secondary Math I	PE	Health/Wd Relgions	Int. Ag Science 1-2	Int. Ag Science 1-2	Ag Mech	For Lang	Ag 1
	10	English 10	Secondary Math 2	PE	World History	Int. Ag Science 3-4	Int. Ag Science 3-4	Ag Computers	For Lang	Ag 2
	11	English 11	Secondary Math 3	Floral	U.S. History	Agriscience Systems M Management	Agriscience Systems M Management	Food Sci	For Lang	Ag 3
	12	English 12	Finite Math		Econ/ Government	Animal Sci /Vet Sci	Animal Sci /Vet Sci	Ag Elec	Ag Elec	Ag 4
Articulated dual credit courses must be taken/moved to the secondary level for articulation/dual credit										
Post-Secondary	13				CRC, MJC, MCC	CRC, MJC, MCC	CRC, MJC, MCC	CRC, MJC, MCC	CRC, MJC, MCC	
	14									
	15									
	16									

District:		Color Key As Follws	
Middle School:		Required Courses	
High School		Career Technical Education Courses	
Com. College		Other Required Courses or Electives	
University		Dual/Concurrent Enrollment - Articulated Courses	
Author:	Contact:	Administrator;	Date:

Sample Occupations Relating to this pathway

Occupations Requiring a HS Diploma

Kennel Tech
Animal Caretaker
Livestock Showperson

Occupations Requiring Some Post Secondary Training

Feedstore Sales
Refrigeration Specialist
Butcher
Biotech Lab Tech

Occupations Requiring an Associates 2 year Degree

Veterinary Technician
Food Service
Biotech Lab Technician

Occupations Requiring a BA/BS Degree

Veterinarian
Food Service Manager
Geneticist
Ag Teacher

Certifications, Licenses, Credentials or Apprenticeships

Butcher
USDA Inspector
Serve-SAFE Food Handlers Certification
Teaching Credential

Criteria 7 B: Student Data Sheet

7B Student Data Sheet

Previously the student data sheet was completed in the R-2 reporting system however that system no longer is in use. Currently all student information is gathered and reported through the AET online system in conjunction with calagedu.org. Records are stored electronically and can be accessed through those systems.

Criteria 7 C: Articulation Agreement

Q. Articulation Agreements

- ✓ **At the present time Gregori has articulation agreements with MJC in the following areas:**

ANSC 55	3	Introduction to Veterinary Technology	Mark Nower	2017
ANSC 55*	3	Introduction to Veterinary Technology	Mark Nower	2017
AG 100A*	1	Leadership in Agriculture	Mark Nower	2017
AG 349B*	2	Work Experience Agriculture - Supervised Practice	Mark Nower	2017
AGEC 55 or		Preparatory Agriculture Computer Applications	Mark Nower	2017
AGEC 225	3	Agriculture Computer Applications	Mark Nower	2017
AGM 241	3	Diesel Engine Principals	Kyle Beeman	2017
AGM 289	3	Principals of Power Mechanics/ SM Engines	Kyle Beeman	2017
AGM 50*	3	Preparation for Mechanical Technology	Kyle Beeman	2017
AGM 210*	3	Agriculture Welding	Kyle Beeman	2017
AP 50	3	Elementary Human Anatomy-Physiology	Ethan Duewall	2015
AGM 50	3	Preparation for Mechanical Technology	Kyle Beeman	2017
EHS 280	3	Beginning Floral Design	Natalie Stevano	2017

MODESTO JUNIOR COLLEGE
435 College Avenue • Modesto, California 95350-5808 mjc.edu

September 12, 2017

Gregori High School
Kyle Beeman, Instructor
Derek Pendley, Principal
3701 Pirrone Rd.
Modesto, CA 95356

Articulation Approved

Greetings,

The attached articulation agreements with Gregori High School and Modesto Junior College have been approved and will be valid through summer 2020, once we receive the signed agreement back from you. Please obtain all the appropriate signatures and return to:

Modesto Junior College
Attn: Early College
435 College Avenue
Modesto, CA 95350

Thank you for your interest and assistance.

If you have any questions, please do not hesitate to call the office at, 575-7858.

Sincerely,

Nichole Loera

Nichole Loera
loeran@yosemite.edu

MODESTO JUNIOR COLLEGE

2+2 ARTICULATION / EARLY COLLEGE

435 College Avenue, Modesto, CA 95350 • (209) 575-7858

SECONDARY-POST SECONDARY ARTICULATION
Early College/ Tech Prep 2+2 AGREEMENT

STATEMENT OF INTENT

This agreement enables students to receive college credit and/or a prerequisite waiver for course work completed at the secondary level. The granting of college credit is based on the achievement of competencies through a course or sequence of courses as defined below.

TERMS OF AGREEMENT

This agreement shall remain in force for three years but shall be reviewed at the completion of each academic year or if there is a change in teaching faculty, course outlines, or final examination. College faculty may require a discussion of current teaching methodologies. Either party may terminate this agreement at the close of any academic year by written notice to the MJC Early College Director or the principal/ROP Director of the high school.

SECONDARY INSTITUTION

Gregori High School

School/District or ROP

agrees to certify those students who have successfully completed

Agriculture Mechanics 3-4

with a letter grade of B or better.

COLLEGE DATA

Upon receipt of the Student Request to Participate form from the students and final grades from the high school teacher or transcripts from the high school, Modesto Junior College will allow the student to earn 6 college credits for the below-listed MJC course. All students must complete the online application, 12th graders apply for MJC *summer* term, 9th – 11th graders apply for MJC *spring* term and also fill out a Special Part-Time Petition for Advanced Admissions. ***Transfer level credit requires the student to pass an appropriate skill level examination to be administered by MJC, the appropriate MJC Agriculture faculty member will award course credit upon completion and review.**

AGM 50 – Preparation for Mechanical Technology (3)

AGM 210 – Agriculture Welding (3)

Maximum Articulated Agriculture Units Per Student: 6 units

Contract Date: FALL 2017 – SUMMER 2020

Modesto Junior College

9/8/17

Steve Amador, Instructor *Date*

Don Borges, Dean of Ag *Date*

Flerida Arias, Director *Date*
Early College/Tech Prep 2+2

Gregori High School

Kyle Beeman, Instructor *Date*

Mark Nower 9-22-17

Mark Nower, Instructor *Date*

9/26/17

Derek Pendley, Principal *Date*

MODESTO JUNIOR COLLEGE

2+2 ARTICULATION / EARLY COLLEGE

435 College Avenue, Modesto, CA 95350 • (209) 575-7858

SECONDARY-POST SECONDARY ARTICULATION
Early College/ Tech Prep 2+2 AGREEMENT

STATEMENT OF INTENT

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TERMS OF AGREEMENT

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SECONDARY INSTITUTION

Gregori High School

School/District or ROP

agrees to certify those students who have successfully completed

Agriculture Mechanics 5-6

with a letter grade of B or better.

COLLEGE DATA

Upon receipt of the Student Request to Participate form from the students and final grades from the high school teacher or transcripts from the high school, Modesto Junior College will allow the student to earn 3 college credits for the below-listed MJC course. All students must complete the online application, 12th graders apply for MJC *summer* term, 9th – 11th graders apply for MJC *spring* term and also fill out a Special Part-Time Petition for Advanced Admissions.

AGM 50 – Preparation for Mechanical Technology (3)

Maximum Articulated Agriculture Units Per Student: 3 units

Contract Date: FALL 2017 – SUMMER 2020

Modesto Junior College

9/8/17

Steve Amador, Instructor *Date*

Don Borges, Dean of Agriculture *Date*

Flerida Arias, Director *Date*
Early College/Tech Prep 2+2

Gregori High School

Kyle Beeman, Instructor *Date*

Mark Nower 9-22-17

Mark Nower, Instructor *Date*

9/26/17

Derek Pendley, Principal *Date*

MODESTO JUNIOR COLLEGE

2+2 ARTICULATION / EARLY COLLEGE

435 College Avenue, Modesto, CA 95350 • (209) 575-7858

SECONDARY-POST SECONDARY ARTICULATION
Early College AGREEMENT

STATEMENT OF INTENT

This agreement enables students to receive college credit and/or a prerequisite waiver for course work completed at the secondary level. The granting of college credit is based on the achievement of competencies through a course or sequence of courses as defined below.

TERMS OF AGREEMENT

This agreement shall remain in force for three years but shall be reviewed at the completion of each academic year or if there is a change in teaching faculty, course outlines, or final examination. College faculty may require a discussion of current teaching methodologies. Either party may terminate this agreement at the close of any academic year by written notice to the MJC Early College Director or the principal/ROP Director of the high school.

SECONDARY INSTITUTION

Gregori High School

School/District or ROP

agrees to certify those students who have successfully completed
Agriculture Small Engine Technology
with a letter grade of B or better.

COLLEGE DATA

Upon receipt of the Request to Participate form from the students and final grades from the high school teacher, Modesto Junior College will allow the student to earn 3 college credits for the below-listed MJC course. All students must complete the online application for summer term to MJC Admissions and Request a high school transcript to be sent to MJC and 9th-11th grades must fill out a High School Petition for Advanced Placement.

AGM 289 - Principles of Power Mechanics/Small Engines

Maximum Articulated Agriculture Units Per Student: 3 units

Contract Date:	**FALL 2017 – SUMMER 2020**

Modesto Junior College

Todd Conrado 8/24/2017
Todd Conrado, Instructor *Date*

8/24
Don Borges, Dean of Agriculture *Date*

Flerida Arias, Director *Date*
Early College/Tech Prep 2 + 2

Gregori High School

Kyle Beeman, Faculty *Date*

9/26/17
Derek Pendley Principal *Date*

MODESTO JUNIOR COLLEGE

2+2 ARTICULATION / EARLY COLLEGE

435 College Avenue, Modesto, CA 95350 • (209) 575-7858

SECONDARY-POST SECONDARY ARTICULATION
Tech Prep 2+2 AGREEMENT

STATEMENT OF INTENT

This agreement enables students to receive college credit and/or a prerequisite waiver for course work completed at the secondary level. The granting of college credit is based on the achievement of competencies through a course or sequence of courses as defined below.

TERMS OF AGREEMENT

This agreement shall remain in force for three years but shall be reviewed at the completion of each academic year or if there is a change in teaching faculty, course outlines, or final examination. College faculty may require a discussion of current teaching methodologies. Either party may terminate this agreement at the close of any academic year by written notice to the MJC Early College Director or the principal/ROP Director of the high school.

SECONDARY INSTITUTION

Gregori High School

School/District or ROP

agrees to certify those students who have successfully completed

Ag Diesel Engine Technology

with a letter grade of B or better.

COLLEGE DATA

Upon receipt of the Student Request to Participate form from the students and transcripts from the high school, Modesto Junior College will allow the student to earn 3 college credits for the below-listed MJC course. Students must also pass a course in Agriculture within two years following high school graduation at MJC. ***Transfer level credit requires the student to pass an appropriate skill level examination to be administered by MJC, the appropriate MJC Agriculture faculty member will award course credit upon completion and review.*** Student can take and pass the final for AGM 241 or take and pass AGM 242 Diesel Engine Repair at MJC. Students will then receive credits for AGM 241.

AGM 241 - Diesel Engine Principles (3)

Maximum Articulated Agriculture Units Per Student: 3 units

Contract Date:	**FALL 2017 – SUMMER 2020**

Modesto Junior College

Todd Conrado 9/7/17

Todd Conrado, MJC Faculty *Date*

9/8/17

Don Borges, Dean of Ag *Date*

Gregori High School

Kyle Beeman, Faculty *Date*

9/26/17

Derek Pendley, Principal *Date*

Flerida Arias, Director *Date*

Early College/Tech Prep 2+2

MODESTO JUNIOR COLLEGE
435 College Avenue • Modesto, California 95350-5808 mjc.edu

September 8, 2017

Gregori High School
Kyle Beeman, Instructor
Mark Nower, Instructor
Brittany Hamrick, Instructor
Derek Pendley, Principal
3701 Pirrone Rd.
Modesto, CA 95356

Articulation Approved

Greetings,

The attached articulation agreements have been approved and will be valid through summer 2020, once we receive the signed agreement back from you. Please obtain all the appropriate signatures and return to the Early College/ Tech Prep 2+2 office:

Modesto Junior College
Early College
435 College Avenue
Modesto, CA 95350

Thank you for your interest and assistance.

If you have any questions, please do not hesitate to call the office at, 575-7858.

Sincerely,

Nichole Loera

Nichole Loera
loeran@yosemite.edu

MODESTO JUNIOR COLLEGE
435 College Avenue • Modesto, California 95350-5808 mjc.edu

September 8, 2017

Gregori High School
Mark Nower, Instructor
Derek Pendley, Principal
3701 Pirrone Rd.
Modesto, CA 95356

Articulation Approved

Greetings,

The attached articulation agreements have been approved and will be valid through summer 2020, once we receive the signed agreement back from you. Please obtain all the appropriate signatures and return to the Early College/ Tech Prep 2+2 office:

Modesto Junior College
Early College
435 College Avenue
Modesto, CA 95350

Thank you for your interest and assistance.

If you have any questions, please do not hesitate to call the office at, 575-7858.

Sincerely,

Nichole Loera

Nichole Loera
loeran@yosemite.edu

MODESTO JUNIOR COLLEGE

2+2 ARTICULATION / EARLY COLLEGE

435 College Avenue, Modesto, CA 95350 • (209) 575-7858

SECONDARY-POST SECONDARY ARTICULATION
Early College AGREEMENT

STATEMENT OF INTENT

This agreement enables students to receive college credit and/or a prerequisite waiver for course work completed at the secondary level. The granting of college credit is based on the achievement of competencies through a course or sequence of courses as defined below.

TERMS OF AGREEMENT

This agreement shall remain in force for three years but shall be reviewed at the completion of each academic year or if there is a change in teaching faculty, course outlines, or final examination. College faculty may require a discussion of current teaching methodologies. Either party may terminate this agreement at the close of any academic year by written notice to the MJC Early College Director or the principal/ROP Director of the high school.

SECONDARY INSTITUTION

Gregori High School

School/District or ROP

agrees to certify those students who have successfully completed

Veterinary Science

with a letter grade of B or better.

COLLEGE DATA

Upon receipt of the *Student Request to Participate* from the students and final grades from the high school/ instructor, Modesto Junior College will allow the student to earn 3 college credits for the below-listed MJC course. All students must complete the online application, 12th graders apply for MJC summer term, 9th – 11th graders apply for MJC spring term and also fill out a Special Part-Time Petition for Advanced Admissions. Student must pass the class with an A or B grade.

ANSC 55 - Introduction to Veterinary Technology (3)

Maximum Articulated Agriculture Units Per Student: 3 units

Contract Date:	**FALL 2017 – SUMMER 2020**

Modesto Junior College

Julie Haynes 8/21/2017
Julie Haynes, MJC Faculty *Date*

8/22/17
Don Borges, Dean of Agriculture *Date*

Flerida Arias, Director *Date*
Early College/Tech Prep 2+2

Gregori High School

Mark Nower 9-22-17
Mark Nower, Instructor *Date*

Brittany Helms 9/25/17
Brittany Helms, Instructor *Date*

9/26/17
Derek Pendley, Principal *Date*

MODESTO JUNIOR COLLEGE

2+2 ARTICULATION / EARLY COLLEGE

435 College Avenue, Modesto, CA 95350 • (209) 575-7858

SECONDARY-POST SECONDARY ARTICULATION
2+2 AGREEMENT

STATEMENT OF INTENT

This agreement enables students to receive college credit and/or a prerequisite waiver for course work completed at the secondary level. The granting of college credit is based on the achievement of competencies through a course or sequence of courses as defined below.

TERMS OF AGREEMENT

This agreement shall remain in force for three years but shall be reviewed at the completion of each academic year or if there is a change in teaching faculty, course outlines, or final examination. College faculty may require a discussion of current teaching methodologies. Either party may terminate this agreement at the close of any academic year by written notice to the MJC Early College Director or the principal/ROP Director of the high school.

SECONDARY INSTITUTION

Gregori High School

School/District or ROP

agrees to certify those students who have successfully completed

Animal Science ROP

with a letter grade of B or better.

COLLEGE DATA

Upon receipt of the Student Request to Participate form from the students and transcripts from the high school, Modesto Junior College will allow the student to earn 6 college credits for the below-listed MJC course. Students must also pass a course in Agriculture within two years following high school graduation at MJC.

ANSC 55 – Introduction to Veterinary Technology (3)
AG 349B – Work Experience Agriculture (2)
AG 100A – Leadership in Agriculture (1)

Contract Date: **FALL 2017 – SUMMER 2020**

Modesto Junior College

8/28/17
Julie Haynes, MJC Faculty *Date*

8/28/17
Don Borges, Dean of Agriculture *Date*

Flerida Arias *Date*
Director, Early College/Tech Prep 2+2

Gregori High School

9-22-17
Mark Nower, Instructor *Date*

9/25/17
Brittany Nelms, Instructor *Date*

9-22-17
Kyle Beeman, Instructor *Date*

9/26/17
Derek Pendley, Principal *Date*

MODESTO JUNIOR COLLEGE

2+2 ARTICULATION / EARLY COLLEGE

435 College Avenue, Modesto, CA 95350 • (209) 575-7858

SECONDARY-POST SECONDARY ARTICULATION
Tech Prep 2+2 AGREEMENT

STATEMENT OF INTENT: This agreement enables students to receive college credit and/or a prerequisite waiver for course work completed at the secondary level. The granting of college credit is based on the achievement of competencies through a course or sequence of courses as defined below.

TERMS OF AGREEMENT: This agreement shall remain in force for three years but shall be reviewed at the completion of each academic year or if there is a change in teaching faculty, course outlines, or final examination. College faculty may require a discussion of current teaching methodologies. Either party may terminate this agreement at the close of any academic year by written notice to the MJC Early College Director or the principal/ROP Director of the high school.

SECONDARY INSTITUTION

Gregori High School

School/District or ROP

agrees to certify those students who have successfully completed

FFA

with a letter grade of B or better.

COLLEGE DATA

Upon receipt of the Student Request to Participate form from the students and final grades from the teacher or transcripts from the high school, Modesto Junior College will allow the student to earn 3 college credits for the below-listed MJC course when he/she attends MJC within two years of taking the course or two years following high school graduation and passing a course in Agriculture. ***The appropriate MJC Agriculture faculty member will award course credit upon completion and review.***

AG 100A – Leadership in Agriculture (1)

Maximum Articulated Agriculture Units Per Student: 1 units

Contract Date: FALL 2017 – SUMMER 2020

Modesto Junior College

Don Borges, Dean of Agriculture — Date

Flerida Arias, Director — Date
Early College/Tech Prep 2+2

Gregori High School

Mark Nower 9-22-17
Mark Nower, Instructor — Date

Brittany Nelms 9/25/17
Brittany Nelms, Instructor — Date

Kyle Beeman, Instructor — Date

9/26/17
Derek Pendley, Principal — Date

MODESTO JUNIOR COLLEGE

2+2 ARTICULATION / EARLY COLLEGE

435 College Avenue, Modesto, CA 95350 • (209) 575-7858

SECONDARY-POST SECONDARY ARTICULATION
2+2 AGREEMENT

STATEMENT OF INTENT

This agreement enables students to receive college credit and/or a prerequisite waiver for course work completed at the secondary level. The granting of college credit is based on the achievement of competencies through a course or sequence of courses as defined below.

TERMS OF AGREEMENT

This agreement shall remain in force for three years but shall be reviewed at the completion of each academic year or if there is a change in teaching faculty, course outlines, or final examination. College faculty may require a discussion of current teaching methodologies. Either party may terminate this agreement at the close of any academic year by written notice to the MJC Early College Director or the principal/ROP Director of the high school.

SECONDARY INSTITUTION

Gregori High School

School/District or ROP

agrees to certify those students who have successfully completed

Leadership/ Work Experience

with a letter grade of B or better.

COLLEGE DATA

Upon receipt of the Student Request to Participate form from the students and transcripts from the high school, Modesto Junior College will allow the student to earn 2 college credits for the below-listed MJC course. Students must also pass a course in Agriculture within two years following high school graduation at MJC.

AG 349B – Work Experience Agriculture- Supervised Practice (2)

Contract Date: **FALL 2017 – SUMMER 2020**

Modesto Junior College

8/22/17

Julie Haynes, MJC Faculty *Date*

8/28

Don Borges, Dean of Agriculture *Date*

Flerida Arias *Date*
Director, Early College/Tech Prep 2+2

Gregori High School

9-22-17

Mark Nower, Instructor *Date*

9/25/17

Brittany Nelms, Instructor *Date*

9-22-17

Kyle Beeman, Instructor *Date*

9/26/17

Derek Pendley, Principal *Date*

MODESTO JUNIOR COLLEGE
435 College Avenue • Modesto, California 95350-5808 mjc.edu

September 12, 2017

Gregori High School
Brittany Nelms, Instructor
Jennifer Delnero, Instructor
Derek Pendley, Principal
3701 Pirrone Rd.
Modesto, CA 95356

Articulation Approved

Greetings,

The articulation of EHS 280 – Principles of Floral Art and Design with Gregori High School and Modesto Junior College has been approved and will be valid through summer 2020, once we receive the signed agreement back from you. Please obtain all the appropriate signatures and return to:

Modesto Junior College
Attn: Early College
435 College Avenue
Modesto, CA 95350

Thank you for your interest and assistance.

If you have any questions, please do not hesitate to call the office at, 575-7858.

Sincerely,

Nichole Loera

Nichole Loera
loeran@yosemite.edu

2+2 ARTICULATION / EARLY COLLEGE

435 College Avenue, Modesto, CA 95350 • (209) 575-7858

SECONDARY-POST SECONDARY ARTICULATION
Tech Prep 2+2 AGREEMENT

STATEMENT OF INTENT

This agreement enables students to receive college credit and/or a prerequisite waiver for course work completed at the secondary level. The granting of college credit is based on the achievement of competencies through a course or sequence of courses as defined below.

TERMS OF AGREEMENT

This agreement shall remain in force for three years but shall be reviewed at the completion of each academic year or if there is a change in teaching faculty, course outlines, or final examination. College faculty may require a discussion of current teaching methodologies. Either party may terminate this agreement at the close of any academic year by written notice to the MJC Early College Director or the principal/ROP Director of the high school.

SECONDARY INSTITUTION

Gregori High School

School/District or ROP

agrees to certify those students who have successfully completed

History & Art of Floral Design

with a letter grade of B or better.

COLLEGE DATA

Upon receipt of the Student Request to Participate form from the students and transcripts from the instructor/ high school, Modesto Junior College will allow the student to earn 3 college credits for the below-listed MJC course. Students must also pass a course in Agriculture within two years following high school graduation at MJC. ***Transfer level credit requires the student to pass an appropriate skill level examination to be administered by MJC, the appropriate MJC Agriculture faculty member will award course credit upon completion and review. Students may take EHS 281 - Advanced Floral Design and after passing the class and receive credit for EHS 280 or pass both practical and written final for EHS 280 at MJC.**

EHS 280 – Principles of Floral Art and Design (3)

Maximum Articulated Agriculture Units Per Student: 3 units

Contract Date: FALL 2017 – SUMMER 2020

Modesto Junior College

[illegible]rim, MJC Instructor *Date*

[illegible]anent, MJC Instructor *Date*

Don Borges, Dean of Agriculture *Date*

Flerida Arias, Director *Date*
Early College/ Tech Prep 2+2

Gregori High School

Brittany Helms 9/25/17
Brittany Helms, Instructor *Date*

J. Delnero 9/26/17
Jennifer Delnero, Instructor *Date*

9/26/17
Derek Pendley, Principal *Date*

Criteria Eight: Program Promotion

Criteria 8 A: Recruitment Brochure

Agriculture Mechanics 1-2

At Joseph A. Gregori High School

Interested in taking Ag mechanics 1-2? See the back for more information!

What is Ag Mechanics 1-2?

Course Description:
Students will use a classroom and laboratory-type situation to cover the principles and applications of topics. Work habits and attitudes will be stressed with emphasis on careers in agriculture. Areas of instruction will include: safety, tools, measurement, drawing, woods, welding, concrete, metalwork/sheet metal, electricity, rope, and plumbing

Other Information

RECOMMENDED FOR- 9TH & 10TH GRADE- NOT LIMITED
DURATION: 2 SEMESTERS-
FIRST SEMESTER AG MECHANICS 1
SECOND SEMESTER- AG MECHANICS 2
GRADUATION REQUIREMENTS- PRACTICAL ARTS
DOES THIS CLASS COUNT AS AN ELECTIVE COURSE? YES
MEETS STATE COLLEGE ENTRANCE REQUIREMENTS: YES
RECOMMENDED PREREQUISITES: NONE

GHS

Still interested?

SIGN UP WITH YOUR COUNSELOR

History and Art of Floral Design 1-2

At Joseph A. Gregori

Want to learn how to make a corsage?

Want to learn about the Floral Industry and much much more!?

Take a look at the back for more info!

What is History of Floral Design 1-2?

Course Description

History and Art of Floral Design provides an introduction to the artistic and creative approach to Floral Design. This includes aesthetic valuing through a series of projects in various media including tempera, paint, flowers, glass, and tile. Students will be introduced to the elements and principles of visual art such as line, shape, form, color, balance, and an emphasis using floral based projects to explore the connections, relations and application of Floral Design. Assignments will be based on abstract two and three dimensional designs, color theory, and an analytical critique of various Floral Art work using design vocabulary while developing technical skills in Floral Art.

Just so you know.....

Taking History of Floral Design 1-2 helps you.....

Fulfills your High School Requirements for Visual & Performing Arts/Practical Arts!

Satisfies your 'G' requirements for UC and CSU requirements!

Gives you experience working in the floral design industry!

Interested in taking this class? Sign up with your counselor today!!

Integrated Agriculture Science 1-2

At Joseph A. Gregori

What is the FFA?

Want to learn more about Agriculture?

Want to learn more about livestock animals?

Take a look at the back for more information!!

Want to learn all of this and more?

What is Integrated Agriculture Science 1-2?

COURSE DESCRIPTION

Agriculture Education is organized instruction which prepares individuals for employment in agriculture and may also prepare them for advanced training, leading to an agricultural career requiring education at a post-secondary level. It is recommended that a student be involved in a Supervised Occupational Program and in FFA activities that deal with plants and/or animal science. This course will emphasize the Modesto City Schools requirement for Physical Science.(This course uses extensive laboratory work to emphasize observation and hypothesis techniques). Physical Science credit/units will only be awarded upon completion of Integrated Ag. Science 3-4.

Just so you know.....

Taking Integrated Ag Science 1-2 helps you.....

- Fulfill your High School graduation requirements for Physical Science!
- Satisfies your "G" requirements for UC and CSU requirements!
- Begin your journey in the FFA organization!
- Get started with your very own Supervised Agriculture Experience!

Interested in taking this class? Sign up with your counselor today!!

Criteria 8 B: Financial Alternatives

Section 8B
Financial Alternatives

We have the philosophy that no student should be turned away from an event due to a money problem. The FFA Chapter shoulders many costs to alleviate the financial burden to our members.

The department has also referred students to F&M Bank, American Ag Credit and/or Yosemite Farm Credit for various youth loans that can be used to maintain an SAE project.

Students wanting to participate in an event that lack the monetary means to do so, have a great deal of options. We promote involvement within the program and try hard to meet the needs of every student.

Criteria 8 C: Recruitment Activates

Recruitment and Retainment Schedule

Recruitment Activities & Activities

September:

- ✓ Administrator Fall Greetings *Staff* and FFA Officers

  • FFA Officers and staff meet with administration to explain what happened during the summer and any special need taking care of the following school year

Dec. – Jan.

- ✓ Spring Program

  - o Meet with counselors to determine spring semester course schedule

- ✓ Junior High School visits:

  - o Visit Prescott and Salida MS
  - o Incoming students given a tour of the campus; including the Agriculture Department.
  - o K-5 class and student tours are available - Teachers call and reserve school farm tour dates.

Feb-March

- ✓ Administrators and Staff— Travel to feeder elementary schools and talk about our school and programs.

May - June

- ✓ Annual Banquet - All staff. Anyone is invited to participate in the evening's activities.

Student Retainment

1. Course offerings - curriculum will be challenging, rewarding and filled with several opportunities for success and personal growth.
2. Career plan - Students will develop and update their career plan while working towards program completion.
3. Student of the Month - Students gain Monthly recognition.
4. Student Participation - Students shall be encouraged to participate in:

   > FFA Activities
   > Fairs and Shows
   > FFA Banquet
   > SOEP Projects
   > Student of the Month

Promoting the Gregori Agriculture Education and The FFA Program

Commandments of developing a positive image while promoting your Program

1. Your FFA officers are your image! Spend time in perfecting/polishing them early, teaching appropriate vs. inappropriate behavior, actions, dress etc. These are your future recruiters!
2. If you promise to get or give something to another party, you must make certain that you deliver in a timely - fashion. Don't agree to a task if you cannot deliver! Be able to say no!
3. Maintain all letters/information on computer utilizing the best equipment possible to ensure a quality- finished product in all publications, letters, etc. Don't reinvent the wheel
4. Make students proud and proud of other students. Promote all FFA and non-FFA student accomplishments on a bulletin board. Remove old news and keep area "fresh."
5. Always turn recognition into student recognition. We (teachers) do not need to inflate our egos. Give credit where credit is due. (The students compete and grow, the teachers don't.)
6. Parents deserve and want their children to be visible/gain positive, public media recognition.
7. Be honest in your promotion of the program, activity, applications, awards etc. Credibility will be lost with students if what you are making known is not the truth. False recognition will crumble your credibility with your students, parents and administration.
8. Gear your FFA activities to the clientele of your program keeping student costs to a minimal expense
9. Develop and make known student and parent expectations for fairs, shows and hotels/trips.
10. Ensure that all FFA activities are quality and students want to come back for more!

WITHIN THE PROGRAM

Students/Members

- When students achieve awards, send quick single paragraph letters home congratulating the student on their achievements. Place heavy emphasis on first year students. Save this letter on computer for future activities, years, etc
- Conduct an effective Officer Retreat prior to the opening of the school year to organize, plan and develop a working understanding of their role in the management and image of the program.
- Conduct monthly officer dinner meetings allowing enough time to plan and discuss activities.
- Maintain FFA Officer Mail boxes - keep officers informed of all correspondence that comes into the department relating to the FFA chapter. Communicate upcoming dates and times!
- Students of the Month - select and photograph students in each subject area, post them on a bulletin board designated" Students of the Month" and keep up all year. Develop role models! Officers should not be eligible for this recognition.

Parents -

- Always keep parents informed! Mail department expectations/calendar in September outlining the program and educating them on what occurs within the program. As a result they have the chapter calendar and can plan accordingly. Obtain student address labels from the office. In addition, regarding parent meetings or SOEP information, always get materials to parents a minimum of two weeks in advance.
- When students achieve awards, send quick single paragraph letters home congratulating the parents on their child's achievements. Place heavy emphasis on first year students. Save this letter on computer for future activities, years, etc
- Officer parents should also receive copies of the Officer Retreat Proceedings.
- Those parents who attend Back to School Night should receive letters" commending them for support to their children." No other department will send them out and it is quick and easy.

Facility

- Keep facility modern, up-to date, clean with manicured grounds professional in
- Appearance. Perception of viewer, not involved in the program, will be organized, the site
- Has their act together; something good is happening ...maybe should consider being a part of it!
- Host a sectional or regional FFA activity and do it with a "class."
- Keep up-to date calendars, crisp and clean bulletin boards! Out with the old and in with the new!

Criteria Nine: Program Accountability & Planning

Criteria 9 A: Comprehensive Program Plan

Section 9A
Program Plan on File

Our department maintains a program plan on file in the agriculture classroom. It is up dated and maintained every year.

Criteria 9 B: Updates to Comp Plan

Criteria 9 C: Follow-Up System

9C Follow-up System

Our Graduate Follow-Up is completed in the fall. We wait until this time in order to allow our graduates time to get settled after graduation. During spring finals of their senior year all seniors complete a Graduate-Follow-Up form for what their plans are after graduation. This form gives us a starting point to work from when completing the actual follow-up in the fall.

Modesto City Schools
Vocational Agriculture Education

Graduate Follow-Up Study

November 1, 2009

Dear Vocational FFA Agriculture Alumni:

Under current State Legislation, Vo Ag Programs are utilizing graduate input to assist local programs in maintaining and insuring quality agriculture education in the comprehensive high school. Our hope is that you will take part in this vital study. Graduate opinion is long overdue and should be an essential component in developing curriculum in Vocational Agriculture Education.

Attached you will find a questionnaire/ opinion survey that will assist us in our commitment toward excellence in our local Agriculture programs. Please respond at your earliest convenience to the questionnaire and return no later than November 29, 2009.

Thank You,

Modesto City Schools
Vocational Agriculture Staff

… Alumni assisting toward a commitment to excellence…

Criteria 9 D: R-2 FFA Roster

Gregori FFA 2017-2018 Membership

	FullStudentName	ChapterName	Gender	DOB	FFAID	GradYear	FFAStatus	YearsInAg
1	[redacted]	Modesto - Gregori	Male	5/4/2002	602436200	2020	FFA Member	2
2	[redacted]	Modesto - Gregori	Female	7/14/2002		2021	FFA Member	1
3	[redacted]	Modesto - Gregori	Female	7/8/2003		2021	FFA Member	1
4	[redacted]	Modesto - Gregori	Female	4/18/2001	602429986	2019	FFA Member	3
5	[redacted]	Modesto - Gregori	Male	11/14/2000	602429677	2019	FFA Member	3
6	[redacted]	Modesto - Gregori	Female	11/2/2001		2020	FFA Member	1
7	[redacted]	Modesto - Gregori	Male	11/11/2001		2019	FFA Member	1
8	[redacted]	Modesto - Gregori	Male	10/15/2001	602436261	2020	FFA Member	2
9	[redacted]	Modesto - Gregori	Male	7/16/2000		2018	FFA Member	1
10	[redacted]	Modesto - Gregori	Male	12/9/1999	602430236	2018	FFA Member	3
11	[redacted]	Modesto - Gregori	Female	9/29/2000	602436641	2018	FFA Member	2
12	[redacted]	Modesto - Gregori	Female	2/23/2002	602436289	2020	FFA Member	2
13	[redacted]	Modesto - Gregori	Male	4/24/2003		2021	FFA Member	1
14	[redacted]	Modesto - Gregori	Male	3/29/2002		2020	FFA Member	1
15	[redacted]	Modesto - Gregori	Male	4/15/2003		2021	FFA Member	1
16	[redacted]	Modesto - Gregori	Male	12/9/1999	602430391	2018	FFA Member	3
17	[redacted]	Modesto - Gregori	Male	9/30/2002	602436208	2020	FFA Member	2
18	[redacted]	Modesto - Gregori	Female	9/16/2000	602430213	2019	FFA Member	3
19	[redacted]	Modesto - Gregori	Male	12/5/2001	602436221	2020	FFA Member	2
20	[redacted]	Modesto - Gregori	Male	11/14/2000	602436313	2017	FFA Member	2
21	[redacted]	Modesto - Gregori	Male	9/19/2003		2021	FFA Member	1
22	[redacted]	Modesto - Gregori	Male	4/13/2002	602436217	2020	FFA Member	2
23	[redacted]	Modesto - Gregori	Female	4/17/2000	602430234	2018	FFA Member	3
24	[redacted]	Modesto - Gregori	Female	9/10/2002		2021	FFA Member	1
25	[redacted]	Modesto - Gregori	Male	5/6/2000	601124326	2018	FFA Member	4
26	[redacted]	Modesto - Gregori	Female	5/10/2000	601124327	2018	FFA Member	4
27	[redacted]	Modesto - Gregori	Male	1/1/2000		2018	FFA Member	1
28	[redacted]	Modesto - Gregori	Male	5/28/2002	602436278	2020	FFA Member	2
29	[redacted]	Modesto - Gregori	Male	4/30/2000	602436305	2019	FFA Member	2
30	[redacted]	Modesto - Gregori	Male	2/12/2003		2021	FFA Member	1
31	[redacted]	Modesto - Gregori	Male	8/17/2003		2021	FFA Member	1
32	[redacted]	Modesto - Gregori	Male	1/4/2002		2020	FFA Member	1
33	[redacted]	Modesto - Gregori	Male	10/18/2001	602436193	2020	FFA Member	2
34	[redacted]	Modesto - Gregori	Female	10/4/2000		2019	FFA Member	1
35	[redacted]	Modesto - Gregori	Male	12/30/2002		2021	FFA Member	1
36	[redacted]	Modesto - Gregori	Male	10/29/2001	602429987	2019	FFA Member	3
37	[redacted]	Modesto - Gregori	Male	7/19/2002		2021	FFA Member	1
38	[redacted]	Modesto - Gregori	Female	2/21/2002	602436150	2020	FFA Member	2
39	[redacted]	Modesto - Gregori	Male	11/3/2001	602436255	2020	FFA Member	2
40	[redacted]	Modesto - Gregori	Female	8/21/1999		2018	FFA Member	1
41	[redacted]	Modesto - Gregori	Female	2/20/2002	602436286	2020	FFA Member	2
42	[redacted]	Modesto - Gregori	Male	10/26/2001	602436259	2020	FFA Member	2

43	[redacted]	Modesto - Gregori	Female	10/18/2001		2019	FFA Member	1
44	[redacted]	Modesto - Gregori	Male	6/18/1999	602429949	2018	FFA Member	3
45	[redacted]	Modesto - Gregori	Male	10/17/1999	601123553	2018	FFA Member	4
46	[redacted]	Modesto - Gregori	Male	5/19/2003		2021	FFA Member	1
47	[redacted]	Modesto - Gregori	Female	5/19/2003		2021	FFA Member	1
48	[redacted]	Modesto - Gregori	Male	7/4/2001		2019	FFA Member	1
49	[redacted]	Modesto - Gregori	Male	10/28/2002		2021	FFA Member	1
50	[redacted]	Modesto - Gregori	Female	12/5/2001	602436198	2020	FFA Member	2
51	[redacted]	Modesto - Gregori	Male	8/2/2000	602638779	2018	FFA Member	2
52	[redacted]	Modesto - Gregori	Male	1/21/1999	601123555	2018	FFA Member	4
53	[redacted]	Modesto - Gregori	Male	3/8/2003		2021	FFA Member	1
54	[redacted]	Modesto - Gregori	Male	2/14/2000		2018	FFA Member	1
55	[redacted]	Modesto - Gregori	Female	8/8/2001	601610066	2019	FFA Member	3
56	[redacted]	Modesto - Gregori	Female	2/12/2000		2018	FFA Member	1
57	[redacted]	Modesto - Gregori	Female	3/14/2003		2021	FFA Member	1
58	[redacted]	Modesto - Gregori	Female	12/18/2000	602429989	2019	FFA Member	3
59	[redacted]	Modesto - Gregori	Female	11/15/2002		2021	FFA Member	1
60	[redacted]	- Gregori	Male	9/27/2001	602430003	2019	FFA Member	3
61	[redacted]	Modesto - Gregori	Male	4/3/2002	602436235	2020	FFA Member	2
62	[redacted]	Modesto - Gregori	Male	12/13/2001	602436262	2020	FFA Member	2
63	[redacted]	Modesto - Gregori	Male	1/21/2017		2021	FFA Member	1
64	[redacted]	Modesto - Gregori	Female	7/29/2002		2020	FFA Member	1
65	[redacted]	Modesto - Gregori	Female	3/25/2000		2018	FFA Member	1
66	[redacted]	Modesto - Gregori	Male	3/27/2003		2021	FFA Member	1
67	[redacted]	Modesto - Gregori	Female	11/10/2000		2019	FFA Member	1
68	[redacted]	Modesto - Gregori	Male	3/9/1999	601123561	2018	FFA Member	4
69	[redacted]	Modesto - Gregori	Female	1/19/2000		2018	FFA Member	1
70	[redacted]	Modesto - Gregori	Male	4/14/2000	601123563	2018	FFA Member	4
71	[redacted]	Modesto - Gregori	Female	3/27/2002	602436225	2020	FFA Member	2
72	[redacted]	- Gregori	Male	7/7/2000		2018	FFA Member	1
73	[redacted]	Modesto - Gregori	Male	2/25/2000		2018	FFA Member	1
74	[redacted]	Modesto - Gregori	Female	3/6/2002	602436205	2020	FFA Member	2
75	[redacted]	Modesto - Gregori	Male	3/19/2000	601610073	2018	FFA Member	2
76	[redacted]	Modesto - Gregori	Male	8/27/2000	601123568	2018	FFA Member	3
77	[redacted]	Modesto - Gregori	Male	11/10/2000		2019	FFA Member	1
78	[redacted]	Modesto - Gregori	Withheld	2/15/2002	602436237	2020	FFA Member	2
79	[redacted]	Modesto - Gregori	Male	6/8/2003		2021	FFA Member	1
80	[redacted]	Modesto - Gregori	Female	8/22/2000		2018	FFA Member	1
81	[redacted]	Modesto - Gregori	Male	3/24/2000	601123570	2018	FFA Member	3
82	[redacted]	Modesto - Gregori	Female	10/7/1999	601124026	2018	FFA Member	4
83	[redacted]	Modesto - Gregori	Female	7/4/2002	602436249	2020	FFA Member	2
84	[redacted]	Modesto - Gregori	Female	5/18/2000		2018	FFA Member	1
85	[redacted]	Modesto - Gregori	Female	10/19/2003		2021	FFA Member	1
86	[redacted]	Modesto - Gregori	Female	5/2/2003		2021	FFA Member	1
87	[redacted]	Modesto - Gregori	Male	1/17/2000	601124027	2018	FFA Member	2
88	[redacted]	Modesto - Gregori	Male	12/17/2001	602436245	2020	FFA Member	2
89	[redacted]	Modesto - Gregori	Female	7/14/2001	602429669	2019	FFA Member	3

90	[redacted]	Modesto - Gregori	Female	3/13/2002	602436213	2020	FFA Member	2
91	[redacted]	Modesto - Gregori	Male	6/9/2000	602429992	2019	FFA Member	3
92	[redacted]	Modesto - Gregori	Male	4/18/2000		2020	FFA Member	1
93	[redacted]	Modesto - Gregori	Male	2/5/2000	601610077	2018	FFA Member	2
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341	[redacted]	Modesto - Gregori	Male	2/9/2001	602429668	2019	FFA Member	3
342	[redacted]	Modesto - Gregori	Male	3/23/2003		2021	FFA Member	1
343	[redacted]	Modesto - Gregori	Male	1/20/2002	602436207	2020	FFA Member	2
344	[redacted]	Modesto - Gregori	Male	7/25/2001	602430363	2019	FFA Member	3
345	[redacted]	Modesto - Gregori	Female	1/26/2000		2018	FFA Member	1
346	[redacted]	Modesto - Gregori	Female	8/3/1999	600902926	2017	FFA Member	5
347	[redacted]	Modesto - Gregori	Male	8/28/2003		2021	FFA Member	1
348	[redacted]	Modesto - Gregori	Female	12/14/2002		2021	FFA Member	1
349	[redacted]	Modesto - Gregori	Female	6/25/2000	602429688	2019	FFA Member	3
350	[redacted]	Modesto - Gregori	Male	6/25/2000	602430346	2019	FFA Member	3
351	[redacted]	Modesto - Gregori	Female	10/4/1999	602430176	2017	FFA Member	3
352	[redacted]	Modesto - Gregori	Male	6/29/2000		2017	FFA Member	1
353	[redacted]	Modesto - Gregori	Male	8/11/2002	602436236	2020	FFA Member	2
354	[redacted]	Modesto - Gregori	Male	4/7/2000	602436488	2018	FFA Member	2
355	[redacted]	Modesto - Gregori	Male	7/20/2003		2021	FFA Member	1
356	[redacted]	Modesto - Gregori	Male	2/25/2017	602436301	2020	FFA Member	2
357	[redacted]	Modesto - Gregori	Male	2/28/2000		2017	FFA Member	1
358	[redacted]	Modesto - Gregori	Male	4/3/2003		2021	FFA Member	1
359	[redacted]	Modesto - Gregori	Female	11/7/2001		2019	FFA Member	1
360	[redacted]	Modesto - Gregori	Male	5/5/2002	602436274	2020	FFA Member	2
361	[redacted]	Modesto - Gregori	Male	7/5/2000		2018	FFA Member	1
362	[redacted]	Modesto - Gregori	Male	8/1/1999	601123619	2018	FFA Member	4
363	[redacted]	Modesto - Gregori	Female	4/14/2002	602436257	2020	FFA Member	2
364	[redacted]	Modesto - Gregori	Male	4/12/2003		2021	FFA Member	1
365	[redacted]	Modesto - Gregori	Male	1/17/2004	601123622	2018	FFA Member	4
366	[redacted]	Modesto - Gregori	Male	2/7/2000		2018	FFA Member	1
367	[redacted]	Modesto - Gregori	Male	12/15/2000	601123623	2018	FFA Member	4
368	[redacted]	Modesto - Gregori	Female	9/2/2000		2018	FFA Member	1
369	[redacted]	Modesto - Gregori	Female	12/16/1999		2018	FFA Member	1
370	[redacted]	Modesto - Gregori	Male	12/15/2000	602429981	2019	FFA Member	3
371	[redacted]	Modesto - Gregori	Male	12/30/1999		2018	FFA Member	1

372	[redacted]	Modesto - Gregori	Male	1/25/2000	602638772	2018	FFA Member	2
373	[redacted]	Modesto - Gregori	Male	9/19/2000	601123627	2018	FFA Member	4
374	[redacted]	Modesto - Gregori	Male	8/19/2030	602436272	2020	FFA Member	2
375	[redacted]	Modesto - Gregori	Female	7/15/2002		2021	FFA Member	1
376	[redacted]	Modesto - Gregori	Male	7/26/2002	602436248	2020	FFA Member	2
377	[redacted]	Modesto - Gregori	Female	12/23/2000	602638770	2019	FFA Member	2
378	[redacted]	Modesto - Gregori	Female	6/3/2000		2018	FFA Member	1
379	[redacted]	Modesto - Gregori	Female	1/16/2001		2020	FFA Member	1
380	[redacted]	Modesto - Gregori	Female	5/20/2000		2018	FFA Member	1
381	[redacted]	Modesto - Gregori	Female	12/9/2002		2021	FFA Member	1
382	[redacted]	Modesto - Gregori	Male	11/3/2001	602436309	2019	FFA Member	2
383	[redacted]	Modesto - Gregori	Female	2/21/2003		2021	FFA Member	1
384	[redacted]	Modesto - Gregori	Female	3/8/2001		2019	FFA Member	1
385	[redacted]	Modesto - Gregori	Male	2/19/2002		2021	FFA Member	1
386	[redacted]	Modesto - Gregori	Male	7/19/2001		2019	FFA Member	1
387	[redacted]	Modesto - Gregori	Female	10/22/1998	600903927	2017	FFA Member	5
388	[redacted]	Modesto - Gregori	Male	12/2/2000	601123638	2018	FFA Member	4
389	[redacted]	Modesto - Gregori	Female	4/9/2001		2019	FFA Member	1
390	[redacted]	Modesto - Gregori	Male	6/9/2000	602436501	2019	FFA Member	2
391	[redacted]	Modesto - Gregori	Female	9/22/2000		2018	FFA Member	1
392	[redacted]	Modesto - Gregori	Male	9/27/2002		2021	FFA Member	1
393	[redacted]	Modesto - Gregori	Male	5/22/2003		2021	FFA Member	1
394	[redacted]	Modesto - Gregori	Male	8/5/2000	602430393	2019	FFA Member	3
395	[redacted]	Modesto - Gregori	Male	3/8/2002	602436214	2020	FFA Member	2
396	[redacted]	Modesto - Gregori	Male	12/23/1999		2018	FFA Member	1
397	[redacted]	Modesto - Gregori	Female	1/20/2002	602436267	2020	FFA Member	2
398	[redacted]	Modesto - Gregori	Female	5/21/2001		2019	FFA Member	1
399	[redacted]	Modesto - Gregori	Female	9/17/2000		2018	FFA Member	1
400	[redacted]	Modesto - Gregori	Male	8/23/2001	602429685	2019	FFA Member	3
401	[redacted]	Modesto - Gregori	Male	6/24/1999	602436507	2018	FFA Member	2
402	[redacted]	Modesto - Gregori	Female	8/16/2001	602436285	2020	FFA Member	2
403	[redacted]	Modesto - Gregori	Male	10/26/2000	602436539	2018	FFA Member	2
404	[redacted]	Modesto - Gregori	Male	8/21/2003		2021	FFA Member	1
405	[redacted]	Modesto - Gregori	Male	2/27/2002	602436279	2020	FFA Member	2
406	[redacted]	Modesto - Gregori	Male	4/26/1997	601123645	2018	FFA Member	4
407	[redacted]	Modesto - Gregori	Female	4/17/2002	602436206	2020	FFA Member	2
408	[redacted]	Modesto - Gregori	Female	3/11/2002	602436161	2020	FFA Member	2
409	[redacted]	Modesto - Gregori	Male	1/29/2003		2021	FFA Member	1
410	[redacted]	Modesto - Gregori	Male	8/24/2000		2019	FFA Member	1
411	[redacted]	Modesto - Gregori	Male	9/15/2001	602429665	2019	FFA Member	3
412	[redacted]	Modesto - Gregori	Female	5/8/2003		2021	FFA Member	1
413	[redacted]	Modesto - Gregori	Female	12/2/1999	602436529	2018	FFA Member	2
414	[redacted]	Modesto - Gregori	Female	10/17/2002		2021	FFA Member	1
415	[redacted]	Modesto - Gregori	Female	6/6/2002	602436256	2020	FFA Member	2
416	[redacted]	Modesto - Gregori	Male	8/23/2001	602436283	2020	FFA Member	2
417	[redacted]	odesto - Gregori	Male	11/30/2002		2021	FFA Member	1
418	[redacted]	Modesto - Gregori	Male	9/12/2002	602436270	2020	FFA Member	2

419	[redacted]	Modesto - Gregori	Male	3/24/2000	601123681	2018	FFA Member	3
420	[redacted]	Modesto - Gregori	Withheld	7/19/2001		2019	FFA Member	1
421	[redacted]	Modesto - Gregori	Female	2/16/2002	602436273	2020	FFA Member	2
422	[redacted]	Modesto - Gregori	Male	12/12/2002		2021	FFA Member	1
423	[redacted]	Modesto - Gregori	Male	9/4/2000		2018	FFA Member	1
424	[redacted]	Modesto - Gregori	Female	4/3/2002	602436253	2020	FFA Member	2
425	[redacted]	Modesto - Gregori	Male	3/21/1999	601123687	2017	FFA Member	4
426	[redacted]	Modesto - Gregori	Female	2/11/2001		2019	FFA Member	1
427	[redacted]	Modesto - Gregori	Female	10/10/2001		2019	FFA Member	1
428	[redacted]	Modesto - Gregori	Female	7/2/2003		2021	FFA Member	1
429	[redacted]	Modesto - Gregori	Male	10/6/1999		2018	FFA Member	1
430	[redacted]	Modesto - Gregori	Male	1/25/2002	602436312	2020	FFA Member	2
431	[redacted]	Modesto - Gregori	Male	1/23/2000	601123761	2018	FFA Member	4
432	[redacted]	Modesto - Gregori	Female	6/27/2001	602429654	2019	FFA Member	3
433	[redacted]	Modesto - Gregori	Female	9/7/1999	601123691	2018	FFA Member	4
434	[redacted]	Modesto - Gregori	Female	9/6/2002		2020	FFA Member	1
435	[redacted]	Modesto - Gregori	Female	12/29/1999		2018	FFA Member	1
436	[redacted]	Modesto - Gregori	Female	2/19/1999	600903946	2017	FFA Member	3
437	[redacted]	Modesto - Gregori	Male	5/17/2003		2021	FFA Member	1
438	[redacted]	Modesto - Gregori	Male	2/5/2000	601123694	2018	FFA Member	2
439	[redacted]	Modesto - Gregori	Female	6/6/2002		2020	FFA Member	1
440	[redacted]	Modesto - Gregori	Male	7/7/2000	602429686	2019	FFA Member	3
441	[redacted]	Modesto - Gregori	Female	12/1/2000		2018	FFA Member	1
442	[redacted]	Modesto - Gregori	Male	5/23/2002		2020	FFA Member	1
443	[redacted]	Modesto - Gregori	Male	11/13/2003		2021	FFA Member	1
444	[redacted]	- Gregori	Male	7/30/2001	602645251	2019	FFA Member	2
445	[redacted]	Modesto - Gregori	Female	4/15/2000	601123697	2018	FFA Member	4
446	[redacted]	Modesto - Gregori	Male	5/30/2000	601123698	2018	FFA Member	2
447	[redacted]	Modesto - Gregori	Male	11/29/2002		2021	FFA Member	1
448	[redacted]	Modesto - Gregori	Female	7/1/2000		2018	FFA Member	1
449	[redacted]	- Gregori	Male	10/18/2000	602429998	2019	FFA Member	3
450	[redacted]	Modesto - Gregori	Male	3/3/2001	602429983	2019	FFA Member	3
451	[redacted]	Modesto - Gregori	Male	7/13/2000	602645250	2018	FFA Member	2
452	[redacted]	Modesto - Gregori	Male	6/8/2001		2019	FFA Member	1
453	[redacted]	Modesto - Gregori	Male	8/6/2001	602436210	2020	FFA Member	2
454	[redacted]	Modesto - Gregori	Male	5/7/2000		2018	FFA Member	1
455	[redacted]	Modesto - Gregori	Male	2/20/2001	602429681	2019	FFA Member	3
456	[redacted]	Modesto - Gregori	Male	4/23/2001		2017	FFA Member	1
457	[redacted]	Modesto - Gregori	Male	1/30/2003		2021	FFA Member	1
458	[redacted]	Modesto - Gregori	Male	4/3/2000	602436188	2018	FFA Member	2
459	[redacted]	- Gregori	Male	11/20/2000		2018	FFA Member	1
460	[redacted]	Modesto - Gregori	Male	2/25/2003		2021	FFA Member	1
461	[redacted]	Modesto - Gregori	Female	6/27/2001	602430362	2019	FFA Member	3
462	[redacted]	Modesto - Gregori	Female	12/14/1999	601609533	2018	FFA Member	2
463	[redacted]	Modesto - Gregori	Female	9/25/2002		2020	FFA Member	1
464	[redacted]	Modesto - Gregori	Female	9/27/2002	602436254	2020	FFA Member	2
465	[redacted]	Modesto - Gregori	Female	11/23/1999		2018	FFA Member	1

466	[redacted]	Modesto - Gregori	Female	6/26/2001		2019	FFA Member	1
467	[redacted]	Modesto - Gregori	Male	10/5/2001	602429674	2019	FFA Member	3
468	[redacted]	- Gregori	Female	6/28/2003		2021	FFA Member	1
469	[redacted]	Modesto - Gregori	Female	12/18/2000	602429672	2019	FFA Member	3
470	[redacted]	Modesto - Gregori	Female	4/6/2003		2021	FFA Member	1
471	[redacted]	- Gregori	Male	11/1/1999	602436189	2018	FFA Member	2
472	[redacted]	Modesto - Gregori	Female	5/10/2002	602436192	2020	FFA Member	2
473	[redacted]	Modesto - Gregori	Female	10/4/2002	602436240	2020	FFA Member	2
474	[redacted]	Modesto - Gregori	Female	6/27/2000		2018	FFA Member	1
475	[redacted]	Modesto - Gregori	Male	2/13/2003		2021	FFA Member	1
476	[redacted]	Modesto - Gregori	Female	5/25/2000		2017	FFA Member	1
477	[redacted]	Modesto - Gregori	Female	12/5/2001	602436231	2020	FFA Member	2
478	[redacted]	Modesto - Gregori	Male	3/3/2037		2021	FFA Member	1
479	[redacted]	Modesto - Gregori	Female	7/16/2000	601123717	2018	FFA Member	4
480	[redacted]	Modesto - Gregori	Male	6/6/2003		2021	FFA Member	1
481	[redacted]	Modesto - Gregori	Male	10/13/2003		2021	FFA Member	1
482	[redacted]	Modesto - Gregori	Female	3/12/2000	602638774	2018	FFA Member	2
483	[redacted]	Modesto - Gregori	Female	6/25/2002	602436195	2020	FFA Member	2
484	[redacted]	Modesto - Gregori	Female	9/20/2001	602436491	2020	FFA Member	2
485	[redacted]	Modesto - Gregori	Female	8/10/2003		2021	FFA Member	1
486	[redacted]	Modesto - Gregori	Male	6/27/2000		2018	FFA Member	1
487	[redacted]	Modesto - Gregori	Male	1/10/1995		2019	FFA Member	1
488	[redacted]	Modesto - Gregori	Female	4/1/2002	602436204	2020	FFA Member	2
489	[redacted]	Modesto - Gregori	Male	6/24/2002	602436215	2020	FFA Member	2
490	[redacted]	Modesto - Gregori	Male	1/5/2000	602436533	2018	FFA Member	2
491	[redacted]	Modesto - Gregori	Female	10/29/2001	602436222	2020	FFA Member	2
492	[redacted]	Modesto - Gregori	Male	6/14/2002	602436226	2020	FFA Member	2
493	[redacted]	Modesto - Gregori	Male	4/20/2002	602436212	2020	FFA Member	2
494	[redacted]	Modesto - Gregori	Female	10/27/2000		2018	FFA Member	1
495	[redacted]	Modesto - Gregori	Female	3/5/2000		2018	FFA Member	1
496	[redacted]	Modesto - Gregori	Female	3/19/2002	602436232	2020	FFA Member	2
497	[redacted]	- Gregori	Male	6/6/2000		2018	FFA Member	1
498	[redacted]	Modesto - Gregori	Male	6/27/2003		2021	FFA Member	1
499	[redacted]	Modesto - Gregori	Female	8/10/2001	602429680	2019	FFA Member	3
500	[redacted]	Modesto - Gregori	Male	12/17/1999	602430237	2018	FFA Member	3

Criteria 9 E: Retention

Section 9E
Strategies for Retention

Our program has seen an increasing our retention numbers since the implantation of the Central Region consortium grant. Through the revision of our course sequences we were able to create clear pathways. Thanks to the reporting requirements we were able to educate counselors and administration on the importance of helping to guide students to becoming program completers.

Within the department we are continuously counseling students to maintain their enrollment in our program. We encourage students to utilize the high school science credits and History and Art of Floral Design, which falls under the visual and performing arts requirement, available to them through our Agriculture classes. We are always cautious of counseling our students to maintain grade eligibility. We stay in frequent contact with parents through emails, phone calls, and grade sheets sent home.

We work with the administration and counselors to help improve their ability to recognize the important skills that our classes can offer our students. We also work hand-in hand with our administration in developing courses that will meet the graduation requirements. We feel the future development of such courses is vital to our retention process.

Modesto - Gregori
Student Retention Report

Graduation Class of 201700.00% Freshman Retention Rate: **45.00%**

	Grad Year	Years of Ag
	2017	2
	2017	4
	2017	2
	2017	1
	2017	3
	2017	2
	2017	3
	2017	2
	2017	3
	2017	2
	2017	3
	2017	2
	2017	2
	2017	1
	2017	2
	2017	1
	2017	4
	2017	4
	2017	1
	2017	3
	2017	4
	2017	3
	2017	1
	2017	2
	2017	1
	2017	1
	2017	1
	2017	3
	2017	3
	2017	1
	2017	2
	2017	3
	2017	3
	2017	4
	2017	3
	2017	1
	2017	1
	2017	3
	2017	3
	2017	3

	2017	1
	2017	2
	2017	4
	2017	2
	2017	2
	2017	4
	2017	4
	2017	3
	2017	1
	2017	2
	2017	1
	2017	3
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	2017	2
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	2017	3
	2017	4
	2017	3
	2017	2
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	2017	3
	2017	3
	2017	2
	2017	3
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	2017	3
	2017	3
	2017	3

	2017	2
	2017	4
	2017	1
	2017	4
	2017	3
	2017	4
	2017	2
	2017	1
	2017	2
	2017	3
	2017	3
	2017	1
	2017	4
	2017	2
	2017	1
	2017	3
	2017	4
	2017	1
	2017	4
	2017	1
	2017	2
	2017	4
	2017	2
	2017	3
	2017	1
	2017	1
	2017	2
	2017	4
	2017	2
	2017	3

Criteria 9 F: Reports

CALIFORNIA DEPARTMENT OF EDUCATION

AGRICULTURAL EDUCATION INCENTIVE GRANT CHECKLIST

SCHOOL Modesto-Gregori DATE 8/27/2017

AG DEPARTMENT CHAIR Mark Nower

QUALITY CRITERIA 1 - 9

Failure to meet any part of a Quality Criteria may result in the loss of 10% of the incentive funds up to a maximum of 25%.

Loss of funds can be avoided with an approved variance request which may be granted for one year on any Quality Criteria 1-9.

QUALITY CRITERIA 10, 11 or 12

Failure to meet either Quality Criteria 10, 11 or 12(when applied for) will result in the loss of the funds applied for in that criteria.

Department Head Signature _____

Advisory Committee Chairperson Signature _____
(for programs conducting Advisory Committee Reviews)

Regional Supervisor Signature _____

Advisory Committee Chair Contact information

Name Kim Hernandez
Address
City Zip 95356
Phone 209-649-4579

Revised 1/10

INCENTIVE GRANT CHECKLIST

1. CURRICULUM & INSTRUCTION

Yes	No		
X		1A.	The curriculum includes the components required under Section 52454 of the Education Code: organized classes in the study of agriculture science and technology; student supervised agricultural experience; and a program of leadership, organization and personal development.
		1B.	The Career Technical Education Model Curriculum Standards for the Agriculture and Natural Resources Industry Sector are the basis for content of courses offered. Curriculum addresses "Foundation" and "Pathway" standards within the program pathway(s) and course sequences.
X		1C.	Career paths in agriculture have been identified and can be found on a chart or diagram in the Program Plan. (Foundation Standard 3.0)
X		1D.	The school master schedule allows students to follow the recommended sequence of agriculture courses to complete the selected career path(s).
X		1E.	Agriculture Career Awareness information is included in every course. (FS 3.1, 3.2)
X		1F.	The agriculture department utilizes computer hardware and software as an instructional tool. (FS 4.2, 4.6)
X		1G.	The agriculture curriculum includes the use of computer aided instruction by utilizing at least one of the following: (FS 4.2, 4.6) * Computerized Record Book * Agriscience Fair Report * Agriculture Term Paper * Agriculture/FFA Speech Manuscript * Job Resume * Job Cover Letter * Portfolio Letter of Introduction * Other Agriculture Related Project
X		1H.	Recordkeeping is taught in all agriculture classes. Every student maintains and completes (closes out) either an actual SAE Project or Mock Problem. (FS 10.3, 11.0)
X		1I.	Record books of all students are maintained in the Department files until one year following graduation.
X		1J.	Agriculture courses have been submitted to meet high school graduation requirements and/or University of California a-g credit.

2. LEADERSHIP & CITIZENSHIP DEVELOPMENT

Yes	No		
X		2A.	An FFA Chapter has been chartered by the State Association or has been applied for.
X		2B.	A Chapter Program of Work is developed annually and a copy is furnished to the Regional Supervisor by December 15th.
X		2C.	Every student is given a grade based upon participation in leadership activities.
X		2D.	All students enrolled in agriculture classes are affiliated with the State FFA Association.
X		2E.	Based on previous year's records, the department participated in a minimum of 12 activities as listed on the FFA Activities Check Sheet. (Attached)

X		2F.	A minimum of 80% of the students participate in at least three leadership development activities annually as verified by department records. Activities could include any three of the following intra-curricular activities: (FS 7.0, 9.1, 9.2, 9.3, 9.6, 10.1) * Local Best Informed Greenhand Contest * Local Creed Speaking Contest * Local Opening & Closing Contest * Local COOP Quiz Contest * Local Program of Work Committee(s) * Local Demonstration Fair * Local Agriscience Fair Exhibition * Local Public Speaking Contest * Local Parliamentary Procedure Contest * Chapter Meeting or Activity * Any Section, Region, or State Activity * Other Local Activities

3. PRACTICAL APPLICATION OF AGRICULTURAL SKILLS

Yes	No		
X		3A.	Student participation in Supervised Agricultural Experience (SAE) is part of the grading criteria for every agriculture student in the program. (FS 10.2)
X		3B.	First year students have either been engaged in a SAE project(s) or have a plan in place for a SAE, as verified by the Student Data-Career Plan (FS 10.2, 10.3)
X		3C.	A minimum of 80% of continuing students are engaged in SAE project(s) as verified by Department records. (FS 4.0, 5.0, 6.0, 7.0, 8.0, 9.0,10.0, 11.0)
X		3D.	Students with SAE projects are visited by their agriculture teacher at least twice per year as documented by Department records.
X		3E.	A school vehicle is readily available to each agriculture teacher for all SAE activities associated with the program, or each teacher is adequately compensated for using their own personal vehicle.

4. QUALIFIED & PROFESSIONAL PERSONNEL

Yes	No		
X		4A.	Every agriculture teacher has the appropriate credential for teaching the subject(s) assigned. Copy of authorizing credential(s) is in the Comprehensive Program Plan.
X		4B.	Based on the previous year's records, every agriculture teacher, teaching at least ½ time agriculture, attends a minimum of four professional development activities: (Complete attachment).
X		4C.	The agriculture staff meets a minimum of twice a month. (This criteria does not apply to single person departments - mark column N/A = Not Applicable)
X		4D.	A written record of minutes is kept of action taken during agriculture staff meetings and is kept in Department files or the Comprehensive Program Plan. (This criteria does not apply to single person departments - mark column N/A = Not Applicable)
X		4E.	Teachers are reimbursed for personal expenses they incur while participating in all approved integral activities associated with FFA, SAE, and professional CATA in-service activities.

5. FACILITIES, EQUIPMENT & MATERIALS

Yes	No		
X		5A.	Modification of facilities and equipment has occurred when necessary, based on the needs of students, including special populations.
X		5B.	There is adequate storage space for materials, records, equipment and supplies.
X		5C.	At least one of the below listed community or school-based laboratory facilities has been provided to accommodate students who have no place for their SAE project(s):

			* School Farm Laboratory * Growing Area * Greenhouse * Agriculture Shop
X		5D.	The Agriculture Department has E-Mail capabilities.
X		5E.	The reviewer verifies by visual observation that the agriculture facilities are neat, clean, and orderly.
X		5F.	Facilities and equipment are regularly maintained, repaired, or replaced.

6. COMMUNITY, BUSINESS AND INDUSTRY INVOLVEMENT

Yes	No		
X		6A.	The Advisory Committee is operational and reflects the committee membership as outlined in the "Agricultural Education Advisory Committee Manual".
X		6B.	The Agricultural Advisory Committee meets at least twice each year. (Minutes are available to verify meetings.)
X		6C.	The Agricultural Advisory Committee has assisted in the development or revision of the following components of the Comprehensive Program Plan, as evidenced in the Ag. Advisory Committee minutes * Job Market Description * Total Program Goals & Objectives * Course Subject Matter Outlines * 5 Year Facility & Equipment Acquisition * Graduate Follow Up * Targeted Occupations * Program Description - Courses, SAE, FFA * Program Completion Standards * Current Year Budget * List of Active placement Sites
x		6D.	The contact information of the Advisory Committee Chair has been provided on the cover of this checklist

7. CAREER GUIDANCE

Yes	No		
X		7A.	Students are counseled regarding: (FS 3.0) * Career opportunities in Agriculture and Agribusiness * Agriculture and academic courses necessary to complete career pathway offerings * Post-secondary education and training options.
X		7B.	All students have a completed career plan (Student Data Sheet) and it is updated annually. (FS 3.3)
X		7C.	Efforts have been made, or completed, to articulate with Community Colleges and/or Universities (i.e., 2+2+2 articulation agreements).

8. PROGRAM PROMOTION

Yes	No		
X		8A.	An Agricultural Education program recruitment brochure or similar document is used to promote the program.
X		8B.	Students have alternative means of overcoming financial barriers to participate in program activities. (Includes FFA, SAE, Leadership Activities.)
X		8C.	The Agriculture Department conducts recruitment activities with local feeder schools.

9. PROGRAM ACCOUNTABILITY & PLANNING

Yes	No		
X		9A.	A Comprehensive Program Plan is on file with the Regional Supervisor and a copy is retained in the local department files.
X		9B.	Updates of the Program Plan are sent to the Regional Supervisor by November 15th. These updates include: (1) Five Year Equipment Acquisition Schedule; (2) Chart of Staff Responsibilities; (3) FFA Program of Work; (4) Advisory Committee Roster; and (5) Advisory Committee Minutes.
X		9C.	A follow-up system is used which gathers the following information from program * Status of employment or school enrolled within * Opinion regarding the value and relevance of the agriculture program * Suggestions for improving the agriculture program
X		9D.	The Graduate Follow Up data collected was entered with the On-line R2/FFA Roster Data Entry *by October 15th* .
X		9E.	The Agriculture Department analyzes their student retention numbers each year and develops strategies to help increase retention within the program.
X		9F.	The R-2, AIG Expenditure Reports, and FFA Roster have been received by the Regional Supervisor and/or State FFA Financial Coordinator on or before October 15th.

QUALITY CRITERIA 10, 11and 12 MUST BE SCORED DURING THE REVIEW PROCESS. HOWEVER, SCORES WILL ONLY COUNT IF THESE CRITERIA HAVE BEEN APPLIED FOR VIA THE AGRICULTURE INCENTIVE GRANT APPLICATION.

Yes	No		
	X	10A.	Shop and laboratory-based classes have no more than 20 students enrolled. Classroom-based classes have no more than 25 students enrolled.
	X	10B.	The total number of students enrolled in agriculture classes does not exceed 75 students per teacher. First year students enrolled in agriculture courses will be counted as .5 for purpose of determining the total count only. (This does not pertain to class size.)

11. FULL YEAR EMPLOYMENT

Yes	No		
X		11A.	A full-time equivalent teacher is employed year-round for each 75 students enrolled in the agriculture program and is compensated no less than $2000.
X		11B.	During the school year, one teaching period for Supervision is assigned to each agriculture teacher. This project supervision period is in addition to the preparation period normally assigned to all teachers in the school. This requirement may also be met if a period is not available by financially compensating the agriculture teacher(s) at the equivalent cost of providing one period for supervision.

12. PROGRAM ACHIEVEMENT

Yes	No		
	X	12A.	The Agriculture Program meets the requirements of Program Achievement (attach checklist)

ANNUAL FFA CHAPTER ACTIVITIES CHECK SHEET

Criteria 2e **Year** **2017-18** **School** **Modesto-Gregori**

Must meet at least 12 areas

LEADERSHIP ACTIVITY	YES	NO
Attended State Leadership Conference	x	
Attended Regional Meeting	x	
Attended Regional Leadership Conference	x	
Attended Greenhand Conference	x	
Attended Made for Excellence Conference	x	
Attended Advanced Leadership Academy	x	
Attended Sacramento Experience		
Participated in Opening-Closing Contest - Sectional	x	
Participated in Best Informed Contest - Sectional		
Participated in Parliamentary Pro Contests - Sectional		
Participated in Prepared Public Speaking - Sectional		
Participated in Extemporaneous Speaking - Sectional		
Participated in Creed Recitation - Sectional	x	
Participated in Job Interview Contest - Sectional	x	
Participated in Agricultural COOP Quiz Contest - Sectional		
Submitted State FFA Degree Application	x	
Submitted American FFA Degree Application	x	
Submitted Proficiency Application - Sectional or Regional	x	
Submitted Chapter Award Application - Sectional or Regional		
Participated in Project Competition - Sectional	x	
Participated in any FFA Judging Activity (other than above)	x	
Participated in any other FFA Sectional Activity	x	
Participated in Local Leadership Activities (3 maximum - list below)		
Salida 7th Grade Ag Day	x	
Modesto Farm to Fork	x	
TOTAL AREAS MET	17	

INCENTIVE GRANT IN-SERVICE ACTIVITIES DOCUMENTATION

CRITERIA 4.B **School Year** 2016/17 **School** **Modesto-Gregori**

Based on the previous year's record, every agriculture teacher, teaching at least ½ time agriculture, attends a minimum of four of the following professional development activities:

Qualified and Competent Personnel

ACTIVITIES	TEACHERS NAMES							
	Nower	Delnero	Beeman	Hamrick				
Fall Region Meeting	X		X	X				
Region In-service Day	X		X	X				
Spring Region Meeting	X		X	X				
Section In-service*	X		X	X				
Section In-service*								
Section In-service*								
Section In-service*								
Summer Conference	X	X	X	X				
University AgEd Skills Week				X				
Professional Development **	X							

* Four Section In-service Meetings equals one Professional Development Activity

** Can utilize a *maximum* of two other *"Agriculturally Related"* Professional Development activities than those listed above. Explain the Professional Development:

1 14. Record Book/Prof. Scoring

2 15. Young Teacher Conf

3 20. AET Training

4

5

CALIFORNIA DEPARTMENT OF EDUCATION
AGRICULTURAL VOCATIONAL EDUCATION INCENTIVE GRANT

QUALITY CRITERIA 12

422 Number of Students on Last Year's R-2 Form

12A. Curriculum and Instruction

8 Number of UC Approved Agriculture Courses (must be at least one)

12B. Leadership and Citizenship Development

Number of activities on the approved FFA activity list which the local chapter participated in (must participate in at least 80% of the activities).

12C Practical Application of Occupational Skills

Number of students who received the State FFA Degree (must be at least 5% of the R-2 number)

12D Qualified and Professional Activities

Number of teachers who attended a minimum of 5 professional inservice activities (must attach approved Inservice Activities Verification Page)

12E Community, Business and Industry Involvement

Number of meetings held by the local Agriculture Advisory Committee (must meet at least 3 times with minutes attached)

Name of Agriculture Advisory Committee Chair

Phone Number of Ag. Advisory Committee Chair

12F Retention

Number of students who were in their 3rd and 4th year of agriculture instruction (must be at least 25% of the R-2 number)

12G Graduate Follow-Up

Number of program completers graduating last year.

Number of those who graduated who are employed in agriculture, in the military, or continuing their education (must be at least 75% of the program completers) Attach graduate follow-up

Form No. IG - 1

Updated July 2015

California Department of Education

AGRICULTURAL CAREER TECHNICAL EDUCATION INCENTIVE GRANT

REPORT OF EXPENDITURES

(Due Date: To be received in Regional Supervisor's Office by October 15)

Funding Year: 2016-2017

Gregori
(School Site)

Modesto City Schools
(District)

Mark Nower
Signature of Agriculture Teacher Responsible for the Program

Mark Nower - Gregori Dept. Head
Name/Title of Person Preparing Report

Telephone Number: 209-492-5201

PART A Account No. 4000 does not require matching of each item but subtotal on Column C must at least equal the subtotal Column B unless a waiver of matching has been approved. Accounts 5000 and 6000 require matching for each line item unless a waiver of matching has been approved.

			A	B	C
Line	Acct. No.	Classification	Description of Item for Which Funds Were Expended	Incentive Grant Funds	Matching Funds
1	4000	Books & Supplies		17,926.16	21,084.52
2			Subtotal for 4000	**17,926.16**	**21,084.52**
3	5000	Services and Other Operating Expenses such as: Services of Consultants, Staff Travel, and Conference; Rentals, Leases, and Repairs; Bus Transportation	1.	1,812.84	7,832.58
4			2.		
5			3.		
6			4.		
7			5.		
8			Subtotal for 5000	**1,812.84**	**7,832.58**
9	6000	Capital Outlay: Includes Sites and Improvements of Sites; Buildings and Improvement of Buildings; Equipment	1.		
10			2.		
11			3.		
12			4.		
13			Subtotal for 6000	-	-
14			Total for 4000–6000 Lines 2,8,13	**19,739.00**	**28,917.10**

TOTAL Incentive Grant Allocation: $19,739.00

PART B Complete this portion if a waiver of the matching requirement was granted.

Form No. IG - 1

			A	B	C
Line	Acct No.	Classification	Description of Item for Which Funds Were Expended	Incentive Grant Funds	Amount of Salary and Benefits
15	1000	Salaries	Teacher's Summer Service Salaries		
16	1000	Salaries	Teachers Salaries for Project Supervison Period		
17	3000	Benefits	Benefits for the Above Items (1000)		
18			TOTAL		-

PART C Certification of Expenditures

I certify that the amounts entered on this final report are a true record of Incentive Grant funds and Non-Incentive Grant matching funds actually expended on the categories and items listed on the report.

Date: _____

_____
Signature - District Superintendent or Designee

Gregori High School Agriculture Department
2017 Chart of Responsibilities

Fiscal

	Mark	Jennifer	Kyle	Brittany
Ag Incentive Grant	X			
Department Budget	X	X	X	X
FFA Budget	X			X

Fairs and Shows

	Mark	Jennifer	Kyle	Brittany
County Fair	X	X	X	X

Fair Assignments

	Mark	Jennifer	Kyle	Brittany
Ag Mech			X	
Beef			X	
Dairy			X	
Floriculture		X		
Goats				X
Horse		X		
Horticulture		X		
Landscape				
Poultry	X			
Sheep		X		
Small Animals		X		X
Swine	X			

Judging Teams

	Mark	Jennifer	Kyle	Brittany
Agronomy	X			
Best Informed Greenhand				X
Creed Speaking	X			
Dairy Cattle			X	
Dairy Products				X
Extemp Public Speaking				
Floriculture		X		
Vet Science				
Farm Power			X	
Light Horse				
Job Interview		X		
Opening and Closing (Adv.)				
Opening and Closing (*Int.* .)		X		X
Opening & Closing (Novice)	X			
Poultry	X			
Prepared Public Speaking	X		X	X
Welding			X	
Vegetabales	X			

Building and Equipment

	Mark	Jennifer	Kyle	Brittany
Ag Sciences	X	X	X	X
Ag Shop	X		X	
Garden			X	X
Hort/Floriculture lab		X	X	
O.H. Unit/Greenhouse			X	X
Office	X			
School Farm	X	X	X	X
Store Room	X	X	X	X

Field Days

	Mark	Jennifer	Kyle	Brittany
Cal Poly, SLO	X	X	X	X
Chico State	X	X	X	X
Fresno	X	X	X	X
Merced JC	X	X	X	X
Modesto JC	X	X	X	X
CRC	X	X	X	X
Reedley	X	X	X	X
Arbuckle	X	X	X	X
UC Davis	X	X	X	X

Special Assignments

	Mark	Jennifer	Kyle	Brittany
Ag in the Classroom				
Ag Boosters Committee			X	
CATA Meetings	X	X	X	X
FFA Achievement Trip	X	X	X	X
FFA Fundrasiers	X	X	X	X
FFA Greenhand Officers	X			X
FFA Officer Retreat		X	X	X
FFA Officers/Mtgs				X
Graduate Follow-up	X	X	X	X
Harvest Lunch-in	X			
Hometown Heros		X		
National FFA Week	X	X	X	X
National FFA Conv	X			
National Safety Week				
Occupational Olympics		X	X	X
Plant and Floral Shop		X		X
Project Competition	X	X	X	X
Recruitment	X	X	X	X
Prescott	X			
Salida	X			X
8th Grade Parent night	X	X	X	X
Star Reporter				X
State FFA Conv			X	X

Department Activities

	Mark	Jennifer	Kyle	Brittany
Board Meetings	X			
Dept. Chair	X			
Dept Correspondence	X			
Dept Curriculum	X	X	X	X
Dept. Promotion	X	X	X	X
FFA News				X

Department Reports

	Mark	Jennifer	Kyle	Brittany
Bureau R-2	X			
Scholarships	X	X	X	X
State Farmer	X	X	X	X
American FFA Degree	X			X
Proficiency Awards	X			X
Star Administrator		X		
FFA Membership Roster	X			
Program of Activities	X			
Student Data Sheet	X	X	X	X
Superior Chapter Award	X			X
National Safety Award				
Three in One Award	X			
School In service	X			
S.O.E.P. Report	X	X	X	X

Curriculum

	Mark	Jennifer	Kyle	Brittany
Ag Mech/Project Const.	X		X	
Ag Science 1-2	X	X		
Ag Science 3-4		X	X	X
Ag Computers	X			
Floriculture		X		X
Adv. Floriculture		X		
Horticulture		X		X
Ad An Science	X			X
Vet Science	X			X

Activities

	Mark	Jennifer	Kyle	Brittany
COLC Leadership	X	X	X	X
Canned Food Drive	X	X	X	X
Career Exploration	X	X	X	X
Christmas Party				X
FFA Banquet	X	X	X	X
Greenband Conference	X			
Greenhand/Chapter Farmer	X	X	X	X
Made for Excellence/ALA			X	X
Participation Award	X	X	X	X
Recycling Poster Contest				
Scrapbook			X	X
Section Leadership Conf	X	X	X	X
Section Activities	X	X	X	X
Tech Prep	X			
Articulations - MJC	X	X	X	X

5 year Plan Gregori High School

2017	2018	2019	2020	2021
Poultry Grow House Greenhouse Shade House Poultry Lay House Dairy/Steer Facilities On-Site School Farm 2nd Ag Truck Set-up on-site School Farm	Set-up Greenhouse/ Hort on site labs Remodel lab Table in the Floral Room Poultry Lay House Dairy/Steer Facilities Poultry Grow House	Improvments in Ag Dept Cargo Container for school Farm	Improvments on School Farm Site	Replace Ag Truck

Criteria Ten: Student-Teacher Ratio

Criteria 10 A: Shop and Lab Size

10A Shop and Lab Size

The agricultural program at Gregori exceeds the maximum enrolment number in every course offered. With rare exception in order for a section to run in Modesto City School there must be a minimum of 30 students enrolled in the course this makes virtually imposable to ever meet this criteria.

Criteria Eleven: Full Year Employment

Criteria 11 A: Compensation for Full Time

Section 11A
Compensation for Full Time Employees

All full-time teachers in our department are given an extended contract and an FFA stipend. It includes 30 days beyond the traditional 180 day contract and a $1500 FFA stipend.

MODESTO CITY SCHOOLS

Job Description

JC# 0608

AGRICULTURE EDUCATION CLASSROOM TEACHER, 9-12

OVERALL RESPONSIBILITY

Under general direction, provide an instructional program that is fully integrated into the school's curriculum and is central to the learning process.

SPECIFIC RESPONSIBILITIES

1. Structure a physical classroom/agriculture facility environment conducive to learning, including instructing pupils in the use, care, and safe operation of tools, machines, and equipment.

2. Establish efficient classroom management and agriculture facility management procedures.

3. Establish and maintain expected standards of student behavior – with administrative support – necessary to provide an orderly, safe and productive learning environment.

4. Establish a system of student evaluation within the guidelines prescribed in State law or adopted by the District.

5. Continually evaluate and record various aspects of students' progress, including Supervised Agriculture Experience (SAE) and Future Farmers of America (FFA), and report to parents as needed and required.

6. Teach within the course of study for subject area or at grade level as prescribed in State law or adopted by the District.

7. Plan and implement standards-based lessons, SAE projects, and FFA activities.

8. Provide planned learning experiences using a variety of instructional methods and strategies in order to motivate students and adapt the curriculum to the needs of students.

9. Assist with curriculum development, selection of course materials appropriate to course content, and maintaining an inventory of department and FFA equipment.

10. Identify students' needs and cooperate with other professional staff members in assessing and assisting students.

11. Assist students in personal career development by providing career instruction and opportunities to promote informed decision-making regarding students' occupational goals.

12. Perform basic attendance accounting tasks as required.

13. Observe professional working hours as designated by the Collective Bargaining Agreement.

14. Attend school and District meetings as designated by the Collective Bargaining Agreement.

15. Supervise students in out-of-classroom activities as required by the Collective Bargaining Agreement.

16. Perform adjunct duties as designated by the Collective Bargaining Agreement.

17. Share the responsibility of communicating the educational program to the community through such activities as open house and back-to-school nights, and participate in program promotion through feeder school outreach, community events/projects, etc.

18. Develop and maintain partnerships within the agriculture community to stay attuned to industry needs and maintain positive public relations for the program.

AGRICULTURE EDUCATION CLASSROOM TEACHER, 9-12 (continued)

SPECIFIC RESPONSIBILITIES (continued)

19. Seek to improve competency by periodically participating in professional growth activities and agriculture development activities appropriate to agriculture education (e.g., CATA conference, local and regional meetings, etc.).

20. Provide emergency lesson plans for substitutes.

21. Plan and coordinate the work of aides and other paraprofessionals and student teachers (when applicable).

22. Coordinate and supervise students in out-of-class SAE/FFA activities throughout the year.

23. Supervise student SAEs through school-based facilities, work sites, and project sites.

24. Ensure completion of enrollment procedures, attendance accounting, and documentation of student hours for SAE projects.

25. Participate in advisory committee meetings and sectional, regional. Participate in state and national leadership events applicable to assignment and as funding allows.

26. Complete and submit annual work calendar and report to the site and School-to-Career Office as required.

27. Manage specialized budgets (e.g., Ag Incentive Grant, District-based local funding, etc.), if awarded, consistent with District accounting procedures.

28. Complete and submit related accountability reports including, but not limited to, program participation, FFA activities, expenditure reports, SAE outcomes/results, graduate follow-up lists, and student/program data, as needed.

29. Ability to effectively communicate and maintain cooperative relationships with those contacted in the course of work.

SALARY

Agriculture Education Teacher, 9-12, Salary Schedule

WORK YEAR

Basic Teacher Work Year plus 30 days (e.g., 185 + 30 = 215 days)

QUALIFICATIONS

Knowledge/Ability

Minimum Requirements:

Knowledge of principles, theories, practices, methods and techniques used in curriculum development and classroom instruction.

Knowledge of classroom procedures which promote appropriate student conduct and motivation for student learning.

Knowledge of applicable sections of the State Education Code and other applicable laws.

Ability to adapt plans to meet different needs of students.

Ability to create an instructional program and a class environment favorable to learning and personal growth.

Ability to establish effective rapport with students.

AGRICULTURE EDUCATION CLASSROOM TEACHER, 9-12 (continued)

QUALIFICATIONS (continued)

Knowledge/Ability (continued)

Minimum Requirements:

Ability to motivate students to develop skills, attitudes, and knowledge needed to provide a good foundation for education, in accordance with each student's ability.

Ability to monitor students in classrooms.

Ability to display the use of good judgment in making decisions.

Ability to maintain professional relationships with students, parents, colleagues and supervising staff members.

Experience

Minimum Requirement:

Successful student teaching or teaching experience.

Education/Credential

Minimum Requirement:

Appropriate credential issued related to specific assignment/grade level

Physical Characteristics

With or without the use of aids:

Sufficient vision to read small print.

Sufficient hearing to hear and understand speech at normal classroom levels, outdoors, and on the telephone.

Ability to speak in a voice that can be clearly heard and understood at normal classroom levels, outdoors, and on the telephone.

Sufficient dexterity to use hands and fingers to operate a telephone, to enter data into a computer, and to perform classroom tasks using both hands.

Sufficient physical ability, strength, balance, mobility, and stamina to sit or stand for extended periods of time.

Sufficient lower body strength, stamina, and mobility to kneel, walk, stoop, bend, and extend legs for prolonged periods of time.

REPORTS TO

Site Administrator

Cabinet Approved: 9/16/14
Unit Approved: 10/3/14
Board Approved: 10/20/14

MODESTO CITY SCHOOLS

2016-2017

CERTIFICATED SALARY SCHEDULE

CERTIFICATED SALARY SCHEDULES

2016-2017

TABLE OF CONTENTS

PLACEMENT ON THE SALARY SCHEDULE FOR EMPLOYEES IS BASED UPON EDUCATIONAL TRAINING AND PRIOR TEACHING EXPERIENCE IN ACCORDANCE WITH THE FOLLOWING:

FOR EMPLOYEES NEW TO THE DISTRICT:

TEACHING EXPERIENCE is granted on the basis of one step for each year of verified prior certificated teaching experience to a maximum of seven (7) years. Actual initial placement is not to exceed a total of eight (8) steps. A year of experience shall represent no less than seventy-five percent (75%) of the days of required service for one given year. EXPERIENCE SHALL BE WITHIN THE LAST TEN (10) YEARS. (e.g. Employee with three years' experience is placed at step four, seven years at step eight)

(If a teaching credential could have been obtained prior to the date the credential was actually granted, the date the credential could have been obtained shall be used to determine teaching experience placement on the salary schedule. The burden of proof shall be on the employee to establish that the academic requirements were met to obtain a teaching credential.)

Maximum placement for provisional credentialed personnel is step 6.

Upon application, prior experience related closely to the local teaching assignment, when fully verified, shall be credited on the basis of one step for each two years within the past ten years. Experience credit cannot exceed three steps. The BA Degree or equivalent or a regular credential shall have been earned before the related work experience.

UNITS
Credit is granted toward salary advancement for units earned after receiving the Bachelor's Degree including post-graduate units received prior to Bachelor's Degree, as shown on an official transcript from a college or university only if they are:

1. Earned at accredited colleges or universities with at least a "C" grade or equivalent or earned at non-accredited colleges or universities with at least a "C" grade or equivalent and are accepted for credit on the official transcripts of accredited colleges or universities.

2. Clearly and substantially supportive of the employee's assignment or the employee's district approved goal.

With prior District approval, credit may be granted toward salary schedule advancement for lower division units and upper division or graduate units not covered under the above, earned with at least a "C" grade or equivalent after the date of receiving the Bachelor's Degree as shown on an official transcript from a college or university.

FILING OF UNITS – Official transcripts received in the Human Resources Office no later than October 1 shall count toward reclassification beginning January 1 of the current school year. Official transcripts received in the Human Resources Office after October 1 but no later than April 1 shall count toward reclassification for the following school year. All step (years of service) changes will occur at the beginning of the school year. The regular school year is the first work day through the last day of school. Transcripts shall not be returned to the employee and become the property of the Modesto City Schools as a part of the employee's personnel file. For employees new to the District, transcripts must be received in the Human Resources Office within 30 days of acceptance of the position.

ANNUAL INCREMENT – Seventy-five percent (75%) of the annual required days of service shall be served to qualify for the annual increment.

Employees placed on Column 1 cannot advance beyond step 6 unless they have submitted official transcripts reflecting 12 approved upper division graduate units beyond the B.A. Degree, until qualifying time would advance the employee to Step 18.

MODESTO CITY SCHOOLS
CERTIFICATED SALARY SCHEDULE
2016-2017

SCHEDULE A - ANNUAL SALARY

STEP	BA + 12 Column 1	BA + 24 Column 2	BA + 36 Column 3	BA + 48 Column 4	BA + 60 Column 5	BA + 72 Column 6	STEP	W/MA BA + 24 Column 2	W/MA BA +36 Column 3	W/MA BA + 48 Column 4	W/MA BA + 60 Column 5	W/MA BA + 72 Column 6
1	56,836	56,838	57,063	---	---	---	1	56,838	57,777	---	---	---
2	56,838	56,838	58,955	62,165	---	---	2	56,889	59,678	62,883	---	---
3	56,838	58,069	60,853	64,057	67,684	---	3	58,788	61,571	64,783	68,402	---
4	57,612	59,968	62,746	65,952	69,837	73,646	4	60,689	63,471	66,671	70,308	74,370
5	59,511	61,863	64,647	67,847	71,481	75,545	5	62,583	65,368	68,574	72,199	76,265
6	61,412	63,763	66,541	69,743	73,373	77,451	6	64,473	67,263	70,468	74,098	78,172
7	63,301	65,656	68,440	71,637	75,275	79,344	7	66,378	69,164	72,367	75,996	80,060
8	65,196	67,556	70,327	73,538	77,163	81,231	8	68,274	71,057	74,270	77,900	81,955
9	---	69,453	72,232	75,427	79,060	83,135	9	70,172	72,956	76,151	79,790	83,855
10	---	71,345	74,125	77,325	80,960	85,021	10	72,072	74,847	78,047	81,686	85,753
11	---	---	76,022	79,226	82,855	86,925	11	---	76,746	79,949	83,572	87,648
12	---	---	77,921	81,124	84,746	88,819	12	---	78,634	81,846	85,475	89,541
13	---	---	---	83,022	86,655	90,718	13	---	---	83,738	87,375	91,443
14	---	---	---	---	88,551	92,615	14	---	---	---	89,983	94,045
18	67,070	73,219	79,795	84,895	90,425	94,489	18	73,945	80,509	85,611	91,857	95,919
21	68,944	75,092	81,667	86,768	92,298	96,362	21	75,819	82,381	87,484	93,730	97,791
24	71,534	77,681	84,257	89,357	94,888	98,952	24	78,408	84,971	90,073	96,320	100,381
27	74,712	80,859	87,435	92,535	98,066	102,131	27	81,587	88,149	93,251	99,498	103,561
31	76,514	82,663	89,238	94,338	99,868	103,933	31	83,389	89,952	95,054	101,300	105,363

DOCTORATE DEGREE STIPEND -- MA PLACEMENT + 1,973

Board Approved: 02/29/2016
This schedule represents a 0% change over the 2015-16 schedule.

MODESTO CITY SCHOOLS
CERTIFICATED SALARY SCHEDULE
2016-2017

SCHEDULE A1 - DAILY RATE

STEP	BA + 12 Column 1	BA + 24 Column 2	BA + 36 Column 3	BA + 48 Column 4	BA + 60 Column 5	BA + 72 Column 6	STEP	W/MA BA + 24 Column 2	W/MA BA +36 Column 3	W/MA BA + 48 Column 4	W/MA BA + 60 Column 5	W/MA BA + 72 Column 6
1	307.22	307.23	308.45	---	---	---	1	307.23	312.31	---	---	---
2	307.23	307.23	318.68	336.03	---	---	2	307.51	322.58	339.91	---	---
3	307.23	313.89	328.94	346.25	365.86	---	3	317.77	332.82	350.18	369.74	---
4	311.42	324.15	339.17	356.50	377.50	398.09	4	328.05	343.09	360.38	380.04	402.00
5	321.68	334.39	349.44	366.74	386.38	408.35	5	338.29	353.34	370.67	390.26	412.24
6	331.96	344.66	359.68	376.99	396.61	418.65	6	348.50	363.58	380.91	400.53	422.55
7	342.17	354.90	369.95	387.23	406.89	428.89	7	358.80	373.86	391.17	410.79	432.76
8	352.41	365.17	380.15	397.50	417.10	439.09	8	369.05	384.09	401.46	421.08	443.00
9	---	375.42	390.44	407.71	427.35	449.38	9	379.31	394.36	411.63	431.30	453.27
10	---	385.65	400.68	417.97	437.62	459.57	10	389.58	404.58	421.88	441.55	463.53
11	---	---	410.93	428.25	447.86	469.86	11	---	414.84	432.16	451.74	473.77
12	---	---	421.19	438.51	458.09	480.10	12	---	425.05	442.41	462.03	484.01
13	---	---	---	448.77	468.41	490.37	13	---	---	452.64	472.30	494.29
14	---	---	---	---	478.65	500.62	14	---	---	---	486.39	508.35
18	362.54	395.78	431.32	458.89	488.78	510.75	18	399.70	435.18	462.76	496.52	518.48
21	372.67	405.90	441.44	469.02	498.91	520.88	21	409.83	445.30	472.89	506.65	528.60
24	386.67	419.90	455.44	483.01	512.91	534.88	24	423.83	459.30	486.88	520.65	542.60
27	403.85	437.08	472.62	500.19	530.09	552.06	27	441.01	476.48	504.06	537.83	559.79
31	413.59	446.83	482.37	509.94	539.83	561.80	31	450.75	486.23	513.81	547.57	569.53

Board Approved: 02/29/2016
This schedule represents a 0% change over the 2015-16 schedule.

MODESTO CITY SCHOOLS
CERTIFICATED SALARY SCHEDULE
2016-2017

SCHEDULE A2 - HOURLY RATE

STEP	BA + 12 Column 1	BA + 24 Column 2	BA + 36 Column 3	BA + 48 Column 4	BA + 60 Column 5	BA + 72 Column 6	STEP	W/MA BA + 24 Column 2	W/MA BA +36 Column 3	W/MA BA + 48 Column 4	W/MA BA + 60 Column 5	W/MA BA + 72 Column 6
1	51.20	51.21	51.41	---	---	---	1	51.21	52.05	---	---	---
2	51.21	51.21	53.11	56.01	---	---	2	51.25	53.76	56.65	---	---
3	51.21	52.32	54.82	57.71	60.98	---	3	52.96	55.47	58.36	61.62	---
4	51.90	54.03	56.53	59.42	62.92	66.35	4	54.68	57.18	60.06	63.34	67.00
5	53.61	55.73	58.24	61.12	64.40	68.06	5	56.38	58.89	61.78	65.04	68.71
6	55.33	57.44	59.95	62.83	66.10	69.78	6	58.08	60.60	63.49	66.76	70.43
7	57.03	59.15	61.66	64.54	67.82	71.48	7	59.80	62.31	65.20	68.47	72.13
8	58.74	60.86	63.36	66.25	69.52	73.18	8	61.51	64.02	66.91	70.18	73.83
9	---	62.57	65.07	67.95	71.23	74.90	9	63.22	65.73	68.61	71.88	75.55
10	---	64.28	66.78	69.66	72.94	76.60	10	64.93	67.43	70.31	73.59	77.26
11	---	---	68.49	71.38	74.64	78.31	11	---	69.14	72.03	75.29	78.96
12	---	---	70.20	73.09	76.35	80.02	12	---	70.84	73.74	77.01	80.67
13	---	---	---	74.80	78.07	81.73	13	---	---	75.44	78.72	82.38
14	---	---	---	---	79.78	83.44	14	---	---	---	81.07	84.73
18	60.42	65.96	71.89	76.48	81.46	85.13	18	66.62	72.53	77.13	82.75	86.41
21	62.11	67.65	73.57	78.17	83.15	86.81	21	68.31	74.22	78.82	84.44	88.10
24	64.45	69.98	75.91	80.50	85.49	89.15	24	70.64	76.55	81.15	86.78	90.43
27	67.31	72.85	78.77	83.37	88.35	92.01	27	73.50	79.41	84.01	89.64	93.30
31	68.93	74.47	80.40	84.99	89.97	93.63	31	75.13	81.04	85.64	91.26	94.92

Board Approved: 02/29/2016
This schedule represents a 0% change over the 2015-16 schedule.

MODESTO CITY SCHOOLS
CHILD DEVELOPMENT - STATE PRESCHOOL SALARY SCHEDULE
2016-2017

STEP	30-59 Units	60-89 Units	90+ Units	BA Degree	MA Degree
Step 1	18.61	20.30	22.17	24.21	26.46
Step 2	19.43	21.22	23.16	25.31	27.66
Step 3	20.30	22.17	24.21	26.46	28.87
Step 4	21.22	23.16	25.31	27.65	30.24
Step 5	22.17	24.21	26.46	28.91	31.61
Step 6	23.16	25.31	27.65	30.24	33.04

STIPENDS:

$ 520 = Completion of 11 Years of Service
$ 2,188 = Completion of 15 Years of Service
$ 4,210 = Completion of 20 Years of Service

$ 1,750 = Site Liaison

ANNUAL SALARY:

Example: (183 days, 6-hour employee) 183 x 6 x $18.61 = $20,434

SUBSTITUTES:

Pay for Child Development State Preschool substitute teachers shall be based on Column 1, Step 1 of current salary schedule.

Board Approved: 2/29/2016
This schedule represents a 0% change over the 2015-16 schedule.

MODESTO CITY SCHOOLS
CHILD DEVELOPMENT - HEAD START SALARY SCHEDULE
2016-2017

STEP	30-59 Units	60-89 Units	90+ Units	BA Degree	MA Degree
Step 1	19.65	21.43	23.40	25.56	27.92
Step 2	20.51	22.39	24.45	26.71	29.20
Step 3	21.43	23.40	25.56	27.93	30.47
Step 4	22.39	24.45	26.71	29.19	31.91
Step 5	23.40	25.56	27.93	30.53	33.37
Step 6	24.45	26.71	29.19	31.91	34.87

STIPENDS:

$ 514 = Completion of 11 Years of Service
$ 2,164 = Completion of 15 Years of Service
$ 4,164 = Completion of 20 Years of Service

$ 1,750 = Site Liaison

ANNUAL SALARY:

Example: (183 days, 7-hour employee) 183 x 7 x $19.65 = $25,172

SUBSTITUTES:

Pay for Child Development Head Start substitute teachers shall be based on Column 1, Step 1 of current salary schedule.

Board Approved: 2/29/2016
This schedule represents a 0% change over the 2015-16 schedule.

MODESTO CITY SCHOOLS
CHILD DEVELOPMENT - STATE SPECIALIST SALARY SCHEDULE
2016-2017

STEP	Range 1	MA Degree
Step 1	28.78	31.45
Step 2	30.09	32.88
Step 3	31.45	34.37
Step 4	32.88	35.94
Step 5	34.37	37.59
Step 6	35.94	39.31

STIPENDS:

$ 520 = Completion of 11 Years of Service
$ 2,188 = Completion of 15 Years of Service
$ 4,210 = Completion of 20 Years of Service

ANNUAL SALARY:

Example: (183 days, 7-hour employee) 183 x 7 x $28.78 = $36,867

SUBSTITUTES:

Pay for Child Development - State Specialist substitutes shall be based on Range 1, Step 1 of current salary schedule.

Board Approved: 2/29/2016
This schedule represents a 0% change over the 2015-16 schedule.

MODESTO CITY SCHOOLS
CHILD DEVELOPMENT - HEAD START SPECIALIST SALARY SCHEDULE
2016-2017

STEP	Range 1	MA Degree
Step 1	28.47	31.11
Step 2	29.76	32.52
Step 3	31.11	34.00
Step 4	32.52	35.55
Step 5	34.00	37.18
Step 6	35.55	38.88

STIPENDS:

$ 514 = Completion of 11 Years of Service
$ 2,164 = Completion of 15 Years of Service
$ 4,164 = Completion of 20 Years of Service

ANNUAL SALARY:

Example: (183 days, 7-hour employee) 183 x 7 x $28.47 = $36,470

SUBSTITUTES:

Pay for Child Development - Head Start Specialist substitutes shall be based on Range 1, Step 1 of current salary schedule.

Board Approved: 2/29/2016
This schedule represents a 0% change over the 2015-16 schedule.

MODESTO CITY SCHOOLS
BTSA COORDINATOR SALARY SCHEDULE
2016-2017

STEP	BA + 12 Column 1	BA + 24 Column 2	BA + 36 Column 3	BA + 48 Column 4	BA + 60 Column 5	BA + 72 Column 6	STEP	W/MA BA + 24 Column 2	W/MA BA +36 Column 3	W/MA BA + 48 Column 4	W/MA BA + 60 Column 5	W/MA BA + 72 Column 6
1	59,910	59,912	60,147	---	---	---	1	59,912	60,900	---	---	---
2	59,912	59,912	62,141	65,526	---	---	2	59,966	62,905	66,283	---	---
3	59,912	61,207	64,143	67,520	71,343	---	3	61,966	64,899	68,285	72,100	---
4	60,727	63,208	66,138	69,516	73,612	77,627	4	63,970	66,902	70,275	74,108	78,390
5	62,727	65,208	68,140	71,514	75,345	79,629	5	65,966	68,902	72,279	76,103	80,388
6	64,731	67,209	70,137	73,512	77,339	81,638	6	67,959	70,899	74,278	78,102	82,397
7	66,723	69,206	72,138	75,509	79,344	83,633	7	69,965	72,902	76,278	80,103	84,387
8	68,721	71,208	74,129	77,513	81,334	85,622	8	71,966	74,899	78,285	82,111	86,385
9	---	73,206	76,136	79,505	83,334	87,628	9	73,965	76,899	80,269	84,101	88,388
10	---	75,203	78,131	81,505	85,336	89,616	10	75,969	78,893	82,267	86,102	90,387
11	---	---	80,129	83,509	87,332	91,625	11	---	80,893	84,269	88,090	92,387
12	---	---	82,132	85,508	89,327	93,619	12	---	82,885	86,270	90,096	94,381
13	---	---	---	87,509	91,339	95,622	13	---	---	88,264	92,099	96,386
14	---	---	---	---	93,338	97,621	14	---	---	---	94,847	99,130
18	70,695	77,176	84,107	89,484	95,313	99,598	18	77,941	84,861	90,239	96,821	101,102
21	72,670	79,152	86,083	91,459	97,286	101,571	21	79,916	86,834	92,212	98,796	103,078
24	75,400	81,879	88,811	94,188	100,016	104,301	24	82,647	89,564	94,943	101,527	105,808
27	78,750	85,231	92,162	97,536	103,367	107,652	27	85,998	92,914	98,291	104,876	109,158
31	80,651	87,132	94,061	99,438	105,267	109,551	31	87,896	94,814	100,193	106,775	111,060

DOCTORATE DEGREE STIPEND -- MA PLACEMENT + 1,973

BTSA Coordinator (195 responsibility days)

Board Approved: 02/29/2016
This schedule represents a 0% change over the 2015-16 schedule.

MODESTO CITY SCHOOLS
G230 ACADEMY - ELEMENTARY AND HIGH SCHOOL TEACHERS' SALARY SCHEDULE
2016-2017

STEP	BA + 12 Column 1	BA + 24 Column 2	BA + 36 Column 3	BA + 48 Column 4	BA + 60 Column 5	BA + 72 Column 6	STEP	W/MA BA + 24 Column 2	W/MA BA +36 Column 3	W/MA BA + 48 Column 4	W/MA BA + 60 Column 5	W/MA BA + 72 Column 6
1	66,329	66,332	66,592	---	---	---	1	66,332	67,424	---	---	---
2	66,332	66,332	68,799	72,548	---	---	2	66,390	69,645	73,384	---	---
3	66,332	67,766	71,014	74,755	78,987	---	3	68,605	71,853	75,600	79,825	---
4	67,233	69,984	73,224	76,965	81,204	85,944	4	70,827	74,070	77,806	82,051	86,791
5	69,450	72,194	75,441	79,179	83,418	88,161	5	73,034	76,283	80,025	84,256	89,002
6	71,666	74,413	77,654	81,389	85,627	90,384	6	75,240	78,497	82,236	86,474	91,226
7	73,872	76,619	79,870	83,599	87,845	92,594	7	77,462	80,713	84,451	88,687	93,430
8	76,086	78,838	82,071	85,819	90,050	94,795	8	79,676	82,924	86,671	90,912	95,640
9	---	81,051	84,295	88,023	92,263	97,018	9	81,892	85,138	88,869	93,113	97,859
10	---	83,261	86,505	90,238	94,481	99,218	10	84,109	87,347	91,081	95,328	100,072
11	---	---	88,717	92,457	96,693	101,441	11	---	89,562	93,299	97,530	103,360
12	---	---	90,934	94,672	98,903	103,651	12	---	91,765	95,515	99,750	104,495
13	---	---	---	96,886	101,127	105,867	13	---	---	97,721	101,968	106,714
14	---	---	---	---	103,339	108,083	14	---	---	---	105,011	109,751
18	77,960	85,133	92,808	98,759	105,212	109,956	18	85,982	93,640	99,594	106,884	111,625
21	79,832	87,007	94,680	100,633	107,086	111,830	21	87,856	95,514	101,469	108,758	113,498
24	82,422	89,596	97,270	103,222	109,676	114,419	24	90,444	98,103	104,058	111,347	116,087
27	85,601	92,774	100,449	106,400	112,853	117,597	27	93,623	101,281	107,237	114,525	119,267
31	87,404	94,577	102,251	108,203	114,655	119,399	31	95,425	103,083	109,039	116,328	121,069

DOCTORATE DEGREE STIPEND -- MA PLACEMENT + 1,973

G230 Academy Teachers (185 responsibility days, 8 hrs/day)

Board Approved: 02/29/2016
This schedule represents a 0% change over the 2015-16 schedule.

MODESTO CITY SCHOOLS
AGRICULTURE EDUCATION 9-12 TEACHERS' SALARY SCHEDULE
2016-2017

STEP	BA + 12 Column 1	BA + 24 Column 2	BA + 36 Column 3	BA + 48 Column 4	BA + 60 Column 5	BA + 72 Column 6	STEP	W/MA BA + 24 Column 2	W/MA BA +36 Column 3	W/MA BA + 48 Column 4	W/MA BA + 60 Column 5	W/MA BA + 72 Column 6
1	66,054	66,056	66,317	---	---	---	1	66,056	67,147	---	---	---
2	66,056	66,056	68,515	72,247	---	---	2	66,115	69,357	73,081	---	---
3	66,056	67,484	70,721	74,445	78,659	---	3	68,321	71,555	75,289	79,495	---
4	66,956	69,693	72,922	76,646	81,161	85,588	4	70,532	73,762	77,483	81,709	86,430
5	69,161	71,895	75,129	78,849	83,073	87,797	5	72,733	75,969	79,693	83,908	88,633
6	71,370	74,103	77,330	81,052	85,271	90,011	6	74,928	78,172	81,896	86,114	90,848
7	73,566	76,303	79,538	83,252	87,482	92,210	7	77,141	80,379	84,101	88,319	93,041
8	75,770	78,511	81,732	85,464	89,675	94,404	8	79,347	82,580	86,314	90,533	95,245
9	---	80,716	83,944	87,659	91,882	96,615	9	81,552	84,785	88,501	92,728	97,453
10	---	82,916	86,145	89,865	94,089	98,807	10	83,759	86,985	90,705	94,933	99,658
11	---	---	88,348	92,075	96,290	101,022	11	---	89,190	92,912	97,124	101,861
12	---	---	90,557	94,279	98,488	103,221	12	---	91,386	95,118	99,337	104,060
13	---	---	---	96,484	100,707	105,428	13	---	---	97,316	101,544	106,272
14	---	---	---	---	102,910	107,634	14	---	---	---	104,576	109,296
18	77,945	85,091	92,734	98,662	105,090	109,812	18	85,935	93,565	99,495	106,751	111,472
21	80,124	87,270	94,912	100,839	107,265	111,988	21	88,114	95,740	101,671	108,929	113,650
24	83,135	90,277	97,920	103,848	110,275	114,998	24	91,124	98,751	104,681	111,940	116,659
27	86,828	93,972	101,615	107,541	113,968	118,693	27	94,818	102,444	108,373	115,632	120,354
31	88,923	96,068	103,710	109,637	116,063	120,787	31	96,912	104,539	110,468	117,726	122,449

DOCTORATE DEGREE STIPEND -- MA PLACEMENT + 1,973

Agriculture Education Classroom Teacher, 9-12 (basic teacher work year plus 30 days, e.g., 185 + 30 = 215 days)

Board Approved: 02/29/2016
This schedule represents a 0% change over the 2015-16 schedule.

MODESTO CITY SCHOOLS
CAL-SAFE TEACHERS' SALARY SCHEDULE
2016-2017

STEP	Range 1	Range 2	Range 3	Range 4	MA Degree
Step 1	19.83	21.62	23.61	25.79	28.17
Step 2	20.70	22.59	24.66	26.96	29.46
Step 3	21.62	23.61	25.79	28.17	30.75
Step 4	22.59	24.66	26.96	29.45	32.20
Step 5	23.61	25.79	28.17	30.79	33.67
Step 6	24.66	26.96	29.45	32.20	35.19

DOCTORATE DEGREE STIPEND -- MA PLACEMENT + 1,973 ANNUAL

STIPENDS:

$ 514 = Completion of 11 Years of Service
$ 2,164 = Completion of 15 Years of Service
$ 4,164 = Completion of 20 Years of Service

ANNUAL SALARY:

Example: (182 days, 7.5-hour employee) 182 x 7.5 x $19.83 = $27,068

SUBSTITUTES:

Pay for Cal-Safe substitute teachers shall be based on Range 1, Step 1 of current salary schedule.

Board Approved: 2/29/2016
This schedule represents a 0% change over the 2015-16 schedule.

MODESTO CITY SCHOOLS
SCHOOL PSYCHOLOGISTS' SALARY SCHEDULE
2016-2017

Step 1	87,519
Step 2	89,628
Step 3	91,805
Step 4	94,056
Step 5	96,271
Step 18	98,144
Step 21	100,017
Step 24	102,607
Step 27	105,786
Step 31	107,589

DOCTORATE DEGREE STIPEND = + 1,973

School Psychologist (190 responsibility days, 8 hr/day)

SUBSTITUTES: Per diem rate based on Step 1 of current School Psychologist Salary Schedule.

Board Approved: 2/29/2016
This schedule represents a 0% change over the 2015-16 schedule.

MODESTO CITY SCHOOLS
SPEECH LANGUAGE PATHOLOGISTS' SALARY SCHEDULE
2016-2017

STEP	BA + 24 Column 2	BA + 36 Column 3	BA + 48 Column 4	BA + 60 Column 5	BA + 72 Column 6	STEP	W/MA BA + 24 Column 2	W/MA BA +36 Column 3	W/MA BA + 48 Column 4	W/MA BA + 60 Column 5	W/MA BA + 72 Column 6
1	62,403	62,626	67,730	---	---	1	62,454	65,242	68,448	---	---
2	63,631	64,519	69,621	73,247	---	2	64,350	67,134	70,346	73,965	---
3	65,533	66,416	71,516	75,149	79,209	3	66,254	69,035	72,235	75,873	79,934
4	67,425	68,310	73,411	77,044	81,109	4	68,146	70,931	74,138	77,762	81,831
5	69,328	70,209	75,307	78,938	83,015	5	70,038	72,828	76,032	79,663	83,735
6	71,218	72,106	77,201	80,838	84,909	6	71,941	74,727	77,931	81,558	85,625
7	73,121	74,003	79,102	82,727	86,794	7	73,839	76,621	79,832	83,466	87,518
8	75,017	75,891	80,991	84,624	88,700	8	75,736	78,520	81,715	85,352	89,420
9	76,908	77,795	82,889	86,524	90,585	9	77,635	80,411	83,611	87,251	91,316
10	---	79,690	84,791	88,420	92,487	10	---	82,310	85,512	89,137	93,212
11	---	81,585	86,688	90,308	94,384	11	---	84,199	87,410	91,038	95,106
12	---	83,485	88,585	92,219	96,280	12	---	---	89,301	92,940	97,006
13	---	---	---	94,114	98,356	13	---	---	---	95,546	99,792
18	78,783	85,359	90,459	95,987	100,228	18	79,509	86,073	91,175	97,419	101,665
21	80,655	87,231	92,332	97,861	102,102	21	81,383	87,945	93,048	99,293	103,538
24	83,245	89,821	94,921	100,451	104,693	24	83,972	90,535	95,637	101,883	106,129
27	86,424	93,001	98,101	103,630	107,871	27	87,150	93,715	98,817	105,062	109,307
31	88,226	94,803	99,903	105,432	109,672	31	88,952	95,517	100,619	106,864	111,110

DOCTORATE DEGREE STIPEND -- MA PLACEMENT + 1,973

Speech Language Pathologists (185 responsibility days)

SUBSTITUTES: Per diem rate based on Step 1 of current Speech Language Pathologists' Salary Schedule.

Board Approved: 02/29/2016
This schedule represents a 0% change over the 2015-16 schedule.

MODESTO CITY SCHOOLS
HOURLY DIRECT INSTRUCTIONAL PROGRAMS SCHEDULE
2016-2017

STEP	BA + 12 Column 1	BA + 24 Column 2	W/MA BA + 24 Column 2M	BA + 36 Column 3	W/MA BA + 36 Column 3M	BA + 48 Column 4	W/MA BA + 48 Column 4M	BA + 60 Column 5	W/MA BA + 60 Column 5M	BA + 72 Column 6	W/MA BA + 72 Column 6M
1	25.03	26.37	26.78	27.96	28.35	29.76	30.19	31.83	32.25	34.17	34.56
2	26.11	27.43	27.83	29.02	29.44	30.84	31.23	32.91	33.34	35.25	35.64
3	27.20	28.56	28.95	30.09	30.49	31.92	32.33	33.97	34.36	36.26	36.74
4	28.30	29.59	30.03	31.17	31.58	33.01	33.43	35.05	35.46	37.36	37.74
5	29.31	30.68	31.07	32.25	32.64	34.08	34.50	36.12	36.56	38.45	38.86

PROVISIONS OF THE SCHEDULE:

1. The schedule applies to Adult Education, Adult Education-Summer School, Extended Summer School, 7-12, Home & Hospital-Regular Ed, Home & Hospital-Special Ed, Independent Study, Academic Intervention, ROP Evening School, Summer School and Tutoring/Peer Assistance Program.
2. Seventy-five percent of a particular period of instruction for all hourly direct instructional programs during a school year, represents a full service period for credit toward step advancement.
3. Experience in each of the hourly direct instructional programs is a separate entity. Experience in one program cannot be transferred to program (with the exception of experience within Extended Summer School, Summer School). Full credit shall be given for completion of a session regardless of number of hours served.
4. An employee shall advance one step at successful completion of each year.
5. At the initiation of the new schedule, current experience to a maximum of Step 5 shall be given for previous experience in hourly direct instructional programs. Experience shall be with Modesto City Schools.
6. Experience in hourly direct instructional programs shall be within the last ten years.
7. Substitutes are paid at Column 1, Step 1.

Board Approved: 02/29/2016
This schedule represents a 0% change over the 2015-16 schedule.

MODESTO CITY SCHOOLS
INTERN SALARY SCHEDULE
2016-2017

ANNUAL	$	52,289
DAILY	$	282.64

Intern salary based on 92% of Step 1, Column 1 of Schedule A.

Board Approved: 2/29/2016
This schedule represents a 0% change over the 2015-16 schedule.

MODESTO CITY SCHOOLS
SUBSTITUTE SALARY SCHEDULE
2016-2017

	30 Day Credential		Regular Credential	
REGULAR PROGRAM	Daily	*Hourly	Daily	*Hourly
Day to Day Substitute Service *(First 20 Days)*	$ 125.00	$ 25.00	$ 125.00	$ 25.00
Day to Day Substitute Service *(After 20 Days)*	$ 140.00	$ 28.00	$ 140.00	$ 28.00
Long Term Substitute Service *(31+ consecutive days in same position, not retroactive)*	N/A	N/A	$ 180.00	$ 36.00

*Substitute hourly rate is 1/5 of the daily rate.

G230 Substitutes are paid the applicable rate x 1.20.
Longer day Block Schedule days are paid the applicable rate x 1.20.

	*Hourly
****CELDT**	
******(Certificated subs working through State and Federal Programs Dept. conducting CELDT testing, per July 2016 LOA)*	$ 28.00

	Regular Credential	
COUNSELOR SUBSTITUTES	Daily	*Hourly
One (1) to nine (9) days in same assignment	$ 125.13	$ 25.03
***Day ten (10) through end of same assignment *******Daily rate, Schedule A1, Step 1, Column 1 (per September 2015 LOA)*	$ 307.22	$ 61.44

*Substitute hourly rate is 1/5 of the daily rate.

Board Approved: 2/29/2016

Regular Program Substitutes: This schedule revised through T.A. approved February 12, 2016.

Counselor Substitutes: This schedule represents 0% change over the 2015-16 schedule.

MODESTO CITY SCHOOLS
MISCELLANEOUS HOURLY SALARY SCHEDULE
2016-2017

Position	Rate
Accompanist	$18.12
Accompanist - Performances (*rate is per performance*)	$90.71
Crowd Control (*does not handle money) paid at 85% of rate*	$13.34
Crowd Control (*money handler)*	$15.69
Curriculum Development	$26.24
*Eighth Period Assignment (*Eighth Period Assignment/180*)	$49.11
GATE Psychologist Testing	$45.93
In-Service Participant	$19.81
Peer Assistance and Review Committee Member *(Not to exceed $1,500/year)*	$56.20
Pre Peer Assistance and Review (*Not to exceed 48 hours*)	$47.99
Saturday School Teacher	$25.11

Board Approved: 2/29/2016
* "Eighth Period Assignment" rate revised through T.A. approved February 12, 2016.

MODESTO CITY SCHOOLS
FLAT RATE EXTRA DUTY STIPEND SALARY SCHEDULE
2016-2017

		Base Rate
		$54,000.00

K-6	Percent	Base $
Asst. to Principal 19 or less employees	2.250%	$ 1,215.00
Asst. to Principal 20 or more employees	2.500%	$ 1,350.00
Leadership Team Member (1 per 100 students)	2.500%	$ 1,350.00
Open Plan Coordinator (1)	7.500%	$ 4,050.00
Outdoor Ed - Bus Supervision (round trip)	Flat Amount	$ 100.00
Outdoor Ed - Participant (per night)	Flat Amount	$ 200.00
Web Page Design/Maintenance K-6	2.250%	$ 1,215.00

7-8	Percent	Base $
Counselor (.5 FTE+ = 100% / .5 FTE- = 50%)	7.000%	$ 3,780.00
Dept/Instructional Chairperson - 2 Teachers	1.250%	$ 675.00
Dept/Instructional Chairperson - 3 Teachers	2.000%	$ 1,080.00
Dept/Instructional Chairperson - 4 Teachers	2.500%	$ 1,350.00
Dept/Instructional Chairperson - 5 Teachers	3.000%	$ 1,620.00
Dept/Instructional Chairperson - 6 Teachers	3.750%	$ 2,025.00
Dept/Instructional Chairperson - 7 Teachers	4.250%	$ 2,295.00
Dept/Instructional Chairperson - 8 Teachers	5.000%	$ 2,700.00
PHAST	Flat Amount	$ 650.00
Web Page Design/Maintenance 7-8	2.250%	$ 1,215.00

9-12	Percent	Base $
Academic Decathlon	10.500%	$ 5,670.00
Counselor (.5 FTE+ = 100% / .5 FTE- = 50%)	7.000%	$ 3,780.00
Dept/Instructional Chairperson - 5 or less teachers	3.500%	$ 1,890.00
Dept/Instructional Chairperson - 6 to 10 teachers	4.000%	$ 2,160.00
Dept/Instructional Chairperson - 11 or more teachers	5.000%	$ 2,700.00
Mock Trial	10.250%	$ 5,535.00
TUPE	Flat Amount	$ 2,000.00
Vocational Student Organization	3.000%	$ 1,620.00
WASC Coordinator (2 Semesters for full visit)	16.500%	$ 8,910.00
Web Page Design/Maintenance 9-12	2.250%	$ 1,215.00
Work Experience	4.500%	$ 2,430.00

MODESTO CITY SCHOOLS
FLAT RATE EXTRA DUTY STIPEND SALARY SCHEDULE
2016-2017

		Base Rate
		$54,000.00
Various Grade Levels	**Percent**	**Base $**
AVID Site Coordinator	3.500%	$ 1,890.00
BTSA Support Provider	4.250%	$ 2,295.00
Dual Site Assignment	4.500%	$ 2,430.00
Eighth Period Assignment	16.500%	$ 8,910.00
Intern Support Provider	4.250%	$ 2,295.00
PAR Consulting Teacher	6.000%	$ 3,240.00
Teacher / Special Project	4.500%	$ 2,430.00

District Chairperson Stipends *(not applicable if on full-time release)*	**Percent**	**Base $**
Athletic Director	20.000%	$ 10,800.00
District Chairperson, Instrumental Music, Gr. K-6	6.500%	$ 3,510.00
District Chairperson, Instrumental Music, Gr. 7-12	6.500%	$ 3,510.00
District Chairperson, Library Services	6.500%	$ 3,510.00
District Chairperson, Nursing	6.500%	$ 3,510.00
District Chairperson, Vocal Music, Gr. K-6	6.500%	$ 3,510.00

Academic Extended Competition Compensation			
Qualifier	**Percent**	**Base**	**Per**
Competitions such as Academic Decathlon and Science Olympiad extending beyond the local level	0.375%	$ 202.50	Week

Board Approved: 2/29/2016
This schedule revised through T.A. approved February 12, 2016.

MODESTO CITY SCHOOLS
EXTRA DUTY STIPEND SALARY SCHEDULE
2016-2017

Base Rate	Longevity		
	#1	#2	#3
$ 54,000.00	5-8 Years	9-12 Years	13 + Years
	0.625%	1.250%	1.875%

K-6	Percent	Base $	Longevity #1	Longevity #2	Longevity #3
Chorus	2.750%	$ 1,485.00	$ 1,822.50	$ 2,160.00	$ 2,497.50
Orchestra	2.750%	$ 1,485.00	$ 1,822.50	$ 2,160.00	$ 2,497.50
Safety Patrol	2.750%	$ 1,485.00	$ 1,822.50	$ 2,160.00	$ 2,497.50
Science Olympiad	1.250%	$ 675.00	$ 1,012.50	$ 1,350.00	$ 1,687.50
Student Council	2.000%	$ 1,080.00	$ 1,417.50	$ 1,755.00	$ 2,092.50

7-8	Percent	Base $	Longevity #1	Longevity #2	Longevity #3
Awards Night	0.250%	$ 135.00	$ 472.50	$ 810.00	$ 1,147.50
Instrumental Music	1.750%	$ 945.00	$ 1,282.50	$ 1,620.00	$ 1,957.50
Recognition Programs	0.750%	$ 405.00	$ 742.50	$ 1,080.00	$ 1,417.50
Student Council	2.500%	$ 1,350.00	$ 1,687.50	$ 2,025.00	$ 2,362.50
Vocal Music	1.750%	$ 945.00	$ 1,282.50	$ 1,620.00	$ 1,957.50
Yearbook	2.000%	$ 1,080.00	$ 1,417.50	$ 1,755.00	$ 2,092.50

9-12	Percent	Base $	Longevity #1	Longevity #2	Longevity #3
Assistant Band Director	2.000%	$ 1,080.00	$ 1,417.50	$ 1,755.00	$ 2,092.50
Dance	2.500%	$ 1,350.00	$ 1,687.50	$ 2,025.00	$ 2,362.50
Dramatics	5.000%	$ 2,700.00	$ 3,037.50	$ 3,375.00	$ 3,712.50
High Transitions Coordinator	2.000%	$ 1,080.00	$ 1,417.50	$ 1,755.00	$ 2,092.50
Instrumental Music	4.500%	$ 2,430.00	$ 2,767.50	$ 3,105.00	$ 3,442.50
Leadership/Student Council	1.500%	$ 810.00	$ 1,147.50	$ 1,485.00	$ 1,822.50
Newspaper	2.250%	$ 1,215.00	$ 1,552.50	$ 1,890.00	$ 2,227.50
Science Olympiad	4.000%	$ 2,160.00	$ 2,497.50	$ 2,835.00	$ 3,172.50
Speech	5.000%	$ 2,700.00	$ 3,037.50	$ 3,375.00	$ 3,712.50
Vocal Music	6.000%	$ 3,240.00	$ 3,577.50	$ 3,915.00	$ 4,252.50
Yearbook	2.250%	$ 1,215.00	$ 1,552.50	$ 1,890.00	$ 2,227.50

Board Approved: 2/29/2016
This schedule revised through T.A. approved February 12, 2016.

MODESTO CITY SCHOOLS
7-8 ATHLETIC STIPEND SALARY SCHEDULE
2016-2017

Base Rate	Longevity		
	#1	#2	#3
$ 54,000.00	5-8 Years	9-12 Years	13 + Years
	0.625%	1.250%	1.875%

Sport	Percent	Base $	Longevity #1	Longevity #2	Longevity #3
Athletic Directors After School Recreation 7-8	1.250%	$ 675.00	$ 1,012.50	$ 1,350.00	$ 1,687.50
Basketball, Boys 7-8	3.000%	$ 1,620.00	$ 1,957.50	$ 2,295.00	$ 2,632.50
Basketball, Girls 7-8	3.000%	$ 1,620.00	$ 1,957.50	$ 2,295.00	$ 2,632.50
Co-Ed Track	2.000%	$ 1,080.00	$ 1,417.50	$ 1,755.00	$ 2,092.50
Soccer or Flag Football 7-8	2.500%	$ 1,350.00	$ 1,687.50	$ 2,025.00	$ 2,362.50
Volleyball, Girls 7-8	2.500%	$ 1,350.00	$ 1,687.50	$ 2,025.00	$ 2,362.50

Board Approved: 2/29/2016
This schedule revised through T.A. approved February 12, 2016.

MODESTO CITY SCHOOLS
9-12 ATHLETIC STIPEND SALARY SCHEDULE
2016-2017

Position Level Breakdown	Base Rate	Longevity		
	$ 54,000.00	#1 5-8 Years 0.625%	#2 9-12 Years 1.250%	#3 13 + Years 1.875%
Base %	6.500%	7.125%	7.750%	8.375%
Base % - Head Coach	7.600%	8.225%	8.850%	9.475%
Base % - Varsity Head Coach	8.250%	8.875%	9.500%	10.125%
Varsity Football Head	9.250%	9.875%	10.500%	11.125%
Varsity Wrestling Head	8.800%	9.425%	10.050%	10.675%
Spirit Leading Coordinator	8.500%	9.125%	9.750%	10.375%
Spirit Leading Coach	6.700%	7.325%	7.950%	8.575%
Site Athletic Director	10.000%	10.625%	11.250%	11.875%

Sport	Level	Percent	Base $	Longevity #1	Longevity #2	Longevity #3
Alternative Education	Basketball	2.000%	$ 1,080.00	$ 1,417.50	$ 1,755.00	$ 2,092.50
	Softball	1.100%	$ 594.00	$ 931.50	$ 1,269.00	$ 1,606.50
Cross Country	Head (Boys)	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
	Head (Girls)	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
Baseball	Varsity Head	8.250%	$ 4,455.00	$ 4,792.50	$ 5,130.00	$ 5,467.50
	Varsity Asst	6.500%	$ 3,510.00	$ 3,847.50	$ 4,185.00	$ 4,522.50
	JV Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
	Frosh Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
Basketball (Boys)	Varsity Head	8.250%	$ 4,455.00	$ 4,792.50	$ 5,130.00	$ 5,467.50
	Varsity Asst	6.500%	$ 3,510.00	$ 3,847.50	$ 4,185.00	$ 4,522.50
	JV Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
	Frosh Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
Basketball (Girls)	Varsity Head	8.250%	$ 4,455.00	$ 4,792.50	$ 5,130.00	$ 5,467.50
	Varsity Asst	6.500%	$ 3,510.00	$ 3,847.50	$ 4,185.00	$ 4,522.50
	JV Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
	Frosh Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
Football	Varsity Head	9.250%	$ 4,995.00	$ 5,332.50	$ 5,670.00	$ 6,007.50
	Varsity Asst	6.500%	$ 3,510.00	$ 3,847.50	$ 4,185.00	$ 4,522.50
	Varsity Asst	6.500%	$ 3,510.00	$ 3,847.50	$ 4,185.00	$ 4,522.50
	Varsity Asst	6.500%	$ 3,510.00	$ 3,847.50	$ 4,185.00	$ 4,522.50
	JV Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
	JV Asst	6.500%	$ 3,510.00	$ 3,847.50	$ 4,185.00	$ 4,522.50
	JV Asst	6.500%	$ 3,510.00	$ 3,847.50	$ 4,185.00	$ 4,522.50
	Frosh Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
	Frosh Asst	6.500%	$ 3,510.00	$ 3,847.50	$ 4,185.00	$ 4,522.50
	Frosh Asst	6.500%	$ 3,510.00	$ 3,847.50	$ 4,185.00	$ 4,522.50
Golf (Boys)	Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
Golf (Girls)	Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50

MODESTO CITY SCHOOLS
9-12 ATHLETIC STIPEND SALARY SCHEDULE
2016-2017

Sport	Level	Percent	Base $	Longevity #1	Longevity #2	Longevity #3
Soccer (Boys)	Varsity Head	8.250%	$ 4,455.00	$ 4,792.50	$ 5,130.00	$ 5,467.50
	JV Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
Soccer (Girls)	Varsity Head	8.250%	$ 4,455.00	$ 4,792.50	$ 5,130.00	$ 5,467.50
	JV Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
Softball	Varsity Head	8.250%	$ 4,455.00	$ 4,792.50	$ 5,130.00	$ 5,467.50
	Varsity Asst	6.500%	$ 3,510.00	$ 3,847.50	$ 4,185.00	$ 4,522.50
	JV Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
	Frosh Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
Swim/Dive (Boys)	Varsity Head	8.250%	$ 4,455.00	$ 4,792.50	$ 5,130.00	$ 5,467.50
	JV Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
Swim/Dive (Girls)	Varsity Head	8.250%	$ 4,455.00	$ 4,792.50	$ 5,130.00	$ 5,467.50
	JV Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
Tennis (Boys)	Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
Tennis (Girls)	Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
Track	Varsity Head	8.250%	$ 4,455.00	$ 4,792.50	$ 5,130.00	$ 5,467.50
	Asst	6.500%	$ 3,510.00	$ 3,847.50	$ 4,185.00	$ 4,522.50
	Asst	6.500%	$ 3,510.00	$ 3,847.50	$ 4,185.00	$ 4,522.50
	Asst	6.500%	$ 3,510.00	$ 3,847.50	$ 4,185.00	$ 4,522.50
Volleyball	Varsity Head	8.250%	$ 4,455.00	$ 4,792.50	$ 5,130.00	$ 5,467.50
	Varsity Asst	6.500%	$ 3,510.00	$ 3,847.50	$ 4,185.00	$ 4,522.50
	JV Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
	Frosh Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
Water Polo (Boys)	Varsity Head	8.250%	$ 4,455.00	$ 4,792.50	$ 5,130.00	$ 5,467.50
	JV Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
Water Polo (Girls)	Varsity Head	8.250%	$ 4,455.00	$ 4,792.50	$ 5,130.00	$ 5,467.50
	JV Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
Wrestling	Varsity Head	8.800%	$ 4,752.00	$ 5,089.50	$ 5,427.00	$ 5,764.50
	JV Head	7.600%	$ 4,104.00	$ 4,441.50	$ 4,779.00	$ 5,116.50
Spirit Leading	Coordinator	8.500%	$ 4,590.00	$ 4,927.50	$ 5,265.00	$ 5,602.50
	Coach	6.700%	$ 3,618.00	$ 3,955.50	$ 4,293.00	$ 4,630.50
Site Athletic Director	AD	10.000%	$ 5,400.00	$ 5,737.50	$ 6,075.00	$ 6,412.50

Athletic Play-Off Compensation			
Qualifier	Percent	Base	Per
All coaches of CIF sanctioned teams which make it to the playoffs	0.500%	$ 270.00	Week
Advisors and Directors who provide supervision in support of such programs	0.250%	$ 135.00	Week in which there is extended season competition

Board Approved: 2/29/2016
This schedule revised through T.A. approved February 12, 2016.

Criteria 11 B: Supervision Period

Section 11B
Supervision Period

Each Agriculture teacher is allotted a project supervision period. These are either paid for through the Regional Occupation Program (Yosemite ROP), or through the Modesto City School District.

MODESTO CITY SCHOOLS

Human Resources

426 Locust Street, Modesto, California 95351-2699
(209) 576-4136 • www.monet.k12.ca.us

TO: 9-12 Principals DATE: 8/18/09

FROM: Karl Modgling, Director, Human Resources

SUBJECT: Ag Supervision Periods – 09/10

The information below is a confirmation of the 2009-10 supervision periods. As you know, the District funds a 20% Ag supervision period for all high schools. In addition, Scott Kuykendall funds an 8th period Ag supervision period for each full-time Ag teacher over and above the District's 20% Ag supervision period. It is critical that the assigning of the Ag supervision period is accurate for funding reasons. The following is what we have as the respective Ag supervision and optional period assignments for this school year:

Beyer
Richard Wolfe 20% Ag Supervision (District)
Kristy White Optional Period Ag Supervision (Kuykendall)

Davis
Mark Nower 20% Ag Supervision (District)
Natalie Stevano Optional Period Ag Supervision (Kuykendall)

Downey
Michael Schilperoort Optional Period Ag Supervision (Kuykendall)
Susan Beatty 20% Ag Supervision (District)

Enochs
Michele Larsen 20% Ag Supervision (District)
Mike Brecht Optional Period Ag Supervision (Kuykendall)
Nancy Miguel Optional Period Ag Supervision (Kuykendall)

Johansen
Tammy Burris ~~20% Ag Supervision (District)~~ Kuykendall
Gary Gerhardt Optional Period Ag Supervision (Kuykendall)

Modesto
Victoria Van Lieshout 20% Ag Supervision (District)
Scott Layne Optional Period Ag Supervision (Kuykendall)

It should be noted that the District-funded Ag supervision period has to be 20% of the Ag teachers' assignment and should not be noted on the master schedule as an optional period. The Ag teacher who has the 20% Ag supervision assignment **MAY NOT** teach a 6th period class.

Ag Supervision Periods

Period	Nower	Beeman	Delnero	Nelms
Period 0			Project Supervisoin	
Period 1	Veterinary Science ROP	Prep	History & Art of Floral Desgin	Intergrated Ag Biology 3-4
Period 2	Intergrated Ag Biology 1-2	Ag Mechanics 3-4	Advanced Floral ROP	Prep
Period 3	Intergrated Ag Biology 1-2	Ag Mechanics 3-4	History & Art of Floral Desgin	Intergrated Ag Biology 3-4
Period 4	Intergrated Ag Biology 1-2	Landscape Design and Maintence	Prep	Agricultural Systems Management
Period 5	Lunch	Lunch	Lunch	Lunch
Period 6	Prep	Ag Mechanics 1-2		Intergrated Ag Biology 3-4
Period 7	Project Supervision	Ag Mechanics 1-2		History & Art of Floral Desgin
Period 8		Project Supervision		Project Supervision

INCENTIVE GRANT IN-SERVICE ACTIVITIES DOCUMENTATION

CRITERIA 4.B **School Year** 2016/17 **School** **Modesto-Gregori**

Based on the previous year's record, every agriculture teacher, teaching at least ½ time agriculture, attends a minimum of four of the following professional development activities:

Qualified and Competent Personnel

ACTIVITIES	TEACHERS NAMES							
	Nower	Delnero	Beeman	Hamrick				
Fall Region Meeting	X		X	X				
Region In-service Day	X		X	X				
Spring Region Meeting	X		X	X				
Section In-service*	X		X	X				
Section In-service*								
Section In-service*								
Section In-service*								
Summer Conference	X	X	X	X				
University AgEd Skills Week				X				
Professional Development **	X							

* Four Section In-service Meetings equals one Professional Development Activity

** Can utilize a *maximum* of two other *"Agriculturally Related"* Professional Development activities than those listed above. Explain the Professional Development:

1 14. Record Book/Prof. Scoring

2 15. Young Teacher Conf

3 20. AET Training

4

5

Criteria 12 A: UC Approved Classes

UNIVERSITY OF CALIFORNIA A-G Course List (/list/search)

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UC/CSU - Approved Course List

Joseph A. Gregori High School

College Board Code: 052031

Modesto City School District

Location: Modesto, CA

Website: https://gregori.mcs4kids.com (https://gregori.mcs4kids.com)

Course List Manager: Mary Lomax
Course List Manager Phone: (209) 574-1746

School Governance: Public
School Type: Comprehensive High School
School Subtype(s): Site-Based/Traditional

Note: New School 2012

School accredited through June 30, 2020

Course list for 2017-18

Updated as of Apr 20th, 2017

History / Social Science ("a") 2 years required

Two units (equivalent to two years) of history/social science required, including: one year of world history, cultures or historical geography and one year of U.S. history; or one-half year of U.S. history and one-half year of civics or American government.

Title/Discipline	Transcript Abbreviation(s)	Course Details
American Government MVA Civics / American Government	American Government MVA S1 American Government MVA S2	Classroom-based Half Year
AP European History *Adopted from: The College Board Advanced Placement Program* World History / Cultures / Historical Geography	AP Eur Hist AP European History S1 AP European History S2 h ap eur hist	★ UC Honors Classroom-based Full Year
AP Government and Politics United States *Adopted from: The College Board Advanced Placement Program* Civics / American Government	AP Government and Politics United Sta S1 AP Government and Politics United Sta S2 h ap us govt	★ UC Honors Classroom-based Half Year
AP Human Geography *Adopted from: The College Board Advanced Placement Program* World History / Cultures / Historical Geography	AP Hum Geo AP Human Geography S1 AP Human Geography S2	★ UC Honors Classroom-based Full Year
AP United States History *Adopted from: The College Board Advanced Placement Program* U.S. History	AP U.S. History AP United States History S1 AP United States History S2 ap us history h ap us hist H AP US History	★ UC Honors Classroom-based Full Year
Government/Economics CP Civics / American Government	US Government and Economics S1 US Government and Economics S2	Classroom-based Half Year
U.S. Government and Politics *Adopted from: APEX Learning* Civics / American Government	US Government and Politics S1 US Government and Politics S2	Online-based (UC approved through **2018-19**) Half Year
U.S. History (Core) *Adopted from: APEX Learning* U.S. History	U. S. History Core S1 U. S. History Core S2	Online-based (UC approved through **2020-21**) Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
U.S. History CP U.S. History	CP US HIST CP US HISTORY CP US History S1 CP US History S2 US HISTORY	Classroom-based Full Year
World History *Adopted from: APEX Learning* World History / Cultures / Historical Geography	World History A S1 World History B S2	Online-based (UC approved through **2019-20**) Full Year
World History CP World History / Cultures / Historical Geography	CP WORLD HIST CP World History S1 CP World History S2 WORLD HIST	Classroom-based Full Year

English ("b") 4 years required

Four units (equivalent to four years) of college preparatory English composition and literature required, integrating extensive reading, frequent writing, and practice listening and speaking with different audiences. Students may only use 1 year of ESL/ELD English.

Title/Discipline	Transcript Abbreviation(s)	Course Details
AP English Language and Composition *Adopted from: The College Board Advanced Placement Program* English	AP English Language and Composition S1 AP English Language and Composition S2	★ UC Honors Classroom-based Full Year
AP English Literature and Composition *Adopted from: The College Board Advanced Placement Program* English	AP English Literature and Composition S1 AP English Literature and Composition S2	★ UC Honors Classroom-based Full Year
English 10 *Adopted from: APEX Learning* English	English 10 S1 English 10 S2	Online-based (UC approved through **2018-19**) Full Year
English 11 *Adopted from: APEX Learning* English	English 11 S1 English 11 S2	Online-based (UC approved through **2018-19**) Full Year
English 12 *Adopted from: APEX Learning* English	English 12 S1 English 12 S2	Online-based (UC approved through **2018-19**) Full Year
English 1-2 CP English	CP ENGLISH 1 CP ENGLISH 2 ENGLISH 1 ENGLISH 2	Classroom-based Full Year
English 3-4 CP English	CP ENGLISH 3 CP ENGLISH 3-4 CP English 4 ENGLISH 3-4	Classroom-based Full Year
English 5-6 CP English	CP English 5 CP ENGLISH 5-6 CP English 6 ENGLISH 5-6	Classroom-based Full Year
English 7-8 CP English	CP English 7 CP ENGLISH 7-8 CP English 8	Classroom-based Full Year
English 9 *Adopted from: APEX Learning* English	English 9 S1 English 9 S2	Online-based (UC approved through **2018-19**) Full Year
English I *Adopted from: APEX Learning* English	English 1A Freshman S1 English 1A Freshman S2	Online-based (UC approved through **2018-19**) Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
English III *Adopted from: APEX Learning* English	English 3A Junior S1 English 3A Junior S2	Online-based (UC approved through **2018-19**) Full Year
English IV *Adopted from: APEX Learning* English	English 4A Senior S1 English 4A Senior S2	Online-based (UC approved through **2018-19**) Full Year
Expository Reading and Writing Course English	Expository Reading and Writing Course S1 Expository Reading and Writing Course S2	Classroom-based Full Year
Pre AP/GATE English 1-2 (H) English	H PRE-AP/GATE ENG 1 H PRE-AP/GATE ENG 2 Pre AP GATE English 1 Pre AP GATE English 2 PRE-AP/GATE ENG 1 PRE-AP/GATE ENG 2	Classroom-based Full Year
Pre AP/GATE English 3-4 (H) English	H PRE-AP/GATE ENG 3 H PRE-AP/GATE ENG 3- Pre AP GATE English 3 Pre AP GATE English 4 PRE-AP/GATE ENG 3-	Classroom-based Full Year

Mathematics ("c") 3 years required, 4 years recommended

Three units (equivalent to three years) of college-preparatory mathematics (four units are strongly recommended), including or integrating topics covered in elementary algebra, advanced algebra, and two-and three-dimensional geometry.

Title/Discipline	Transcript Abbreviation(s)	Course Details
Adv. Algebra Algebra II	ADV ALGEBRA Advanced Algebra S1 Advanced Algebra S2	Classroom-based Full Year
Algebra Algebra I	ALGEBRA ALGEBRA A SHELT ALGEBRA II Algebra S1 Algebra S2	Classroom-based Full Year
Algebra B Algebra I	ALGEBRA B	Classroom-based Full Year
Algebra II *Adopted from: APEX Learning* Algebra II	Algebra 2A S1 Algebra 2B S2	Online-based (UC approved through **2020-21**) Full Year
Algebra SDAIE Algebra I	ALGEBRA A SHELT ALGEBRA B SHELT Algebra SDAIE S1 Algebra SDAIE S2 algebra shelt	Classroom-based Full Year
AP Calculus AB *Adopted from: The College Board Advanced Placement Program* Calculus	AP Calculus AB S1 AP Calculus AB S2	★ UC Honors Classroom-based Full Year
AP Calculus BC *Adopted from: The College Board Advanced Placement Program* Calculus	AP Calculus (BC) AP Calculus S1 AP Calculus S2	★ UC Honors Classroom-based Full Year
AP Statistics *Adopted from: The College Board Advanced Placement Program* Statistics	AP Statistics S1 AP Statistics S2	★ UC Honors Classroom-based Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
Finite Math: College Entrance Math Prep Advanced Mathematics	Finite Math College Entran Math Prep S1 Finite Math College Entran Math Prep S2 Finite Math: College Entrance Math Prep	Classroom-based Full Year
Geometry Geometry	GEOMETRY Geometry S1 Geometry S2	Classroom-based Full Year
Geometry SDAIE Geometry	Geometry SDAIE Geometry SDAIE S1 Geometry SDAIE S2 Geometry Sheltered	Classroom-based Full Year
Integrated 1 Math Mathematics I	Integrated 1 Math S1 Integrated 1 Math S2 Mathematics Integrated 1 Secondary Math I S1 Secondary Math I S2	Classroom-based Full Year
Mathematics I *Adopted from: APEX Learning* Mathematics I	Mathematics I S1 Mathematics I S2	Online-based (UC approved through **2020-21**) Full Year
Mathematics II *Adopted from: APEX Learning* Mathematics II	Mathematics II S1 Mathematics II S2	Online-based (UC approved through **2020-21**) Full Year
Mathematics III *Adopted from: APEX Learning* Mathematics III	Mathematics III S1 Mathematics III S2	Online-based (UC approved through **2020-21**) Full Year
Pre AP Secondary Math I Mathematics I	Pre AP Secondary Math I S1 Pre AP Secondary Math I S2	Classroom-based Full Year
Pre AP Secondary Math II Mathematics II	Pre AP Secondary Math II S1 Pre AP Secondary Math II S2	Classroom-based Full Year
Pre AP Secondary Math III Mathematics III	Pre AP Secondary Math III S1 Pre AP Secondary Math III S2	Classroom-based Full Year
Pre AP/GATE Adv. Algebra (H) Algebra II	H PRE-AP GATE ADVALG Pre AP GATE Adv Algebra S1 Pre AP GATE Adv Algebra S2 PRE-AP GATE ADVALG	Classroom-based Full Year
Pre AP/GATE Geometry (H) Geometry	Pre AP GATE Geometry S1 Pre AP GATE Geometry S2	Classroom-based Full Year
Pre AP/GATE Pre-Calculus (H) Advanced Mathematics	H PRE-AP/HG PRE-CALC Pre AP GATE Pre Calculus S1 Pre AP GATE Pre Calculus S2 PRE-AP/HG PER-CALC PRE-AP/HG PRE-CALC	★ UC Honors Classroom-based Full Year
Precalculus *Adopted from: APEX Learning* Advanced Mathematics	Precalculus S1 Precalculus S2	Online-based (UC approved through **2020-21**) Full Year
Pre-Calculus Advanced Mathematics	Pre Calculus S1 Pre Calculus S2 PRE-CALCULUS	Classroom-based Full Year
Secondary Math II Mathematics II	Secondary Math II S1 Secondary Math II S2	Classroom-based Full Year
Secondary Math III Mathematics III	Secondary Math III S1 Secondary Math III S2	Classroom-based Full Year
Statistics Statistics	Statistics S1 Statistics S2	Classroom-based Full Year

Laboratory Science ("d") 2 years required, 3 years recommended

Two units (equivalent to two years) of laboratory science are required (three units are strongly recommended), providing fundamental knowledge in two of the following: biology, chemistry, or physics. A yearlong interdisciplinary, **or** integrated, **or** earth and space science course can meet one year of this requirement.

Title/Discipline	Transcript Abbreviation(s)	Course Details
Advanced Biology Biology / Life Sciences	Advanced Biology S1 Advanced Biology S2	Classroom-based Full Year
Advanced Interdiscplinary Science for Sustainable Agriculture *Adopted from: University of California Curriculum Integration (UCCI)* Interdisciplinary Sciences	Agriscience Systems Management S1 Agriscience Systems Management S2	★ UC Honors Classroom-based Full Year
AP Biology *Adopted from: The College Board Advanced Placement Program* Biology / Life Sciences	AP BIOLOGY AP Biology S1 AP Biology S2	★ UC Honors Classroom-based Full Year
AP Chemistry *Adopted from: The College Board Advanced Placement Program* Chemistry	AP CHEM AP Chemistry S1 AP Chemistry S2 H AP CHEM	★ UC Honors Classroom-based Full Year
AP Environmental Science *Adopted from: The College Board Advanced Placement Program* Interdisciplinary Sciences	AP Environmental Science S1 AP Environmental Science S2 h ap env science	★ UC Honors Classroom-based Full Year
AP Physics C: Electricity and Magnetism *Adopted from: The College Board Advanced Placement Program* Physics	AP Phys C: EM	★ UC Honors Classroom-based Half Year
AP Physics C: Mechanics *Adopted from: The College Board Advanced Placement Program* Physics	AP Phys C: M	★ UC Honors Classroom-based Half Year
Biology Core *Adopted from: APEX Learning* Biology / Life Sciences	Biology A S1 Biology B S2	Online-based (UC approved through **2020-21**) Full Year
Biology CP Biology / Life Sciences	BIOLOGY CP BIOLOGY CP Biology S1 CP Biology S2	Classroom-based Full Year
Chemistry Core *Adopted from: APEX Learning* Chemistry	Chemistry A S1 Chemistry B S2	Online-based (UC approved through **2020-21**) Full Year
Chemistry CP Chemistry	CP CHEMISTRY CP Chemistry S1 CP Chemistry S2	Classroom-based Full Year
Chemistry in the Community Chemistry	Chemistry in the Community S1 Chemistry in the Community S2	Classroom-based Full Year
Human Anatomy and Physiology Biology / Life Sciences	Anatomy Physiology Human Anatomy and Physiology S1 Human Anatomy and Physiology S2 Human Anatomy Physiology	Classroom-based Full Year
Integrated Ag Science 3-4 Integrated Science	int ag sci 3 int ag sci 4 Integrated Agriculture Sci 3 CP Integrated Agriculture Sci 4 CP	Classroom-based Full Year
Integrated Agricultural Biology Biology / Life Sciences	Integrated Agricultural Biology S1 Integrated Agricultural Biology S2	Classroom-based Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
Physics Physics	Physics S1 Physics S2	Classroom-based Full Year
Pre AP/Gate Biology (H) Biology / Life Sciences	H PRE-AP BIOLOGY Pre AP Biology S1 Pre AP Biology S2 PRE-AP BIOLOGY	★ UC Honors Classroom-based Full Year
Pre AP/GATE Chemistry (H) Chemistry	H PRE-AP CHEM Pre AP Chemistry S1 Pre AP Chemistry S2 PRE-AP CHEM	★ UC Honors Classroom-based Full Year

Language Other than English ("e") 2 years required, 3 years recommended

Two units (equivalent to two years, or through the second level of high school instruction) of the same language other than English (three units recommended). LOTE levels are defined by the number of years of high school instruction; e.g. LOTE 1= 1 yr.; LOTE 2 = 2 years, etc.

Title/Discipline	Transcript Abbreviation(s)	Course Details
American Sign Language I LOTE Level 1	American Sign Language I American Sign Language I S1 American Sign Language I S2	Classroom-based Full Year
American Sign Language II LOTE Level 2	American Sign Language II American Sign Language II S1 American Sign Language II S2	Classroom-based Full Year
AP Spanish Language and Culture *Adopted from: The College Board Advanced Placement Program* LOTE Level 4+	AP SPANISH AP Spanish Language S1 AP Spanish Language S2 AP Spanish Language Sp for Sp Spks 5 S1 AP Spanish Language Sp for Sp Spks 5 S2	★ UC Honors Classroom-based Full Year
AP Spanish Literature and Culture *Adopted from: The College Board Advanced Placement Program* LOTE Level 4+	AP Spanish Literature Sp for Sp Spk 6 S1 AP Spanish Literature Sp for Sp Spk 6 S2 span speak 6/AP Span Lit	★ UC Honors Classroom-based Full Year
Chinese I LOTE Level 1	Chinese I S1 Chinese I S2	Classroom-based Full Year
French I LOTE Level 1	FRENCH I French I S1 French I S2	Classroom-based Full Year
French II LOTE Level 2	FRENCH II French II S1 French II S2	Classroom-based Full Year
French III LOTE Level 3	FRENCH III French III S1 French III S2	Classroom-based Full Year
French IV LOTE Level 4+	French IV S1 French IV S2	Classroom-based Full Year
Pre-AP Spanish III LOTE Level 3	Pre AP Spanish III S1 Pre AP Spanish III S2 Pre-AP Spanish III	Classroom-based Full Year
Pre-AP Spanish Literature LOTE Level 3	Pre AP Spanish Lit Spanish Spk III S1 Pre AP Spanish Lit Spanish Spk III S2 Pre-AP Spanish Literature	Classroom-based Full Year
Spanish for Spanish Speakers 3 LOTE Level 3	span speak 3 Spanish for Spanish Speakers 3 S1 Spanish for Spanish Speakers 3 S2	Classroom-based Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
Spanish for Spanish Speakers 4 LOTE Level 4+	span speak 4 Spanish for Spanish Speakers 4 S1 Spanish for Spanish Speakers 4 S2	Classroom-based Full Year
Spanish for Spanish Speakers 5 (3rd Year) LOTE Level 3	Sp/Sp Spkrs 5 Spanish for Spanish Speakers 5 3rd Yr S1 Spanish for Spanish Speakers 5 3rd Yr S2	Classroom-based Full Year
Spanish for Spanish Speakers 6 (4th Year) LOTE Level 4+	Sp/Sp Spkrs 6 Spanish for Spanish Speakers 6 4th Yr S1 Spanish for Spanish Speakers 6 4th Yr S2	Classroom-based Full Year
Spanish for Spanish Speakers I LOTE Level 1	Spanish for Spanish Speakers I Spanish for Spanish Speakers I S1 Spanish for Spanish Speakers I S2	Classroom-based Full Year
Spanish I LOTE Level 1	SPANISH I Spanish I S1 Spanish I S2	Classroom-based Full Year
Spanish II LOTE Level 2	SPANISH II Spanish II S1 Spanish II S2	Classroom-based Full Year
Spanish III LOTE Level 3	SPANISH III Spanish III S1 Spanish III S2	Classroom-based Full Year
Spanish IV LOTE Level 4+	Spanish IV S1 Spanish IV S2	Classroom-based Full Year

Visual & Performing Arts ("f") 1 year required

One unit (equivalent to one year) required, chosen from one of the following categories: dance, music, theater, interdisciplinary arts, or visual arts (e.g., painting, web/graphic design, film/video, inter/multimedia arts).Two one-semester courses from the same discipline is also acceptable.

Title/Discipline	Transcript Abbreviation(s)	Course Details
Advanced Ceramics Visual Arts	Advanced Ceramics 1 Advanced Ceramics 2	Classroom-based Full Year
Advanced Kinesiology Course 3 Dance Dance	Adv Kinesiology 3 Dance QF Adv Kinesiology 3 Dance QS Adv Kinesiology 3 Dance S1 Adv Kinesiology 3 Dance S2	Classroom-based Full Year
Advanced Kinesiology Course 3 Dance Production Dance	Adv Kinesiology 3 Dance Production QF Adv Kinesiology 3 Dance Production QS Adv Kinesiology 3 Dance Production S1 Adv Kinesiology 3 Dance Production S2	Classroom-based Full Year
Advanced Photography 1-2 Visual Arts	Advanced Photography Advanced Photography 1 Advanced Photography 2	Classroom-based Full Year
Advanced Treble Clef Choir 3-4 Music	Adv Treble Clef Choir 3-4 Advanced Treble Clef Choir 3 Advanced Treble Clef Choir 4	Classroom-based Half Year
Advanced Treble Clef Choir 5-6 Music	Adv Treble Clef Choir 5-6 Advanced Treble Clef Choir 5 Advanced Treble Clef Choir 6	Classroom-based Half Year
Advanced Treble Clef Choir 7-8 Music	Adv Treble Clef Choir 7-8 Advanced Treble Clef Choir 7 Advanced Treble Clef Choir 8	Classroom-based Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
AP Art History *Adopted from: The College Board Advanced Placement Program* Visual Arts	AP Art History S1 AP Art History S2	★ UC Honors Classroom-based Full Year
AP Music Theory *Adopted from: The College Board Advanced Placement Program* Music	AP Music Theory S1 AP Music Theory S2	★ UC Honors Classroom-based Full Year
AP Studio Art: 2-D Design *Adopted from: The College Board Advanced Placement Program* Visual Arts	AP Art 2D	★ UC Honors Classroom-based Full Year
AP Studio Art: 3-D Design *Adopted from: The College Board Advanced Placement Program* Visual Arts	AP Art 3D	★ UC Honors Classroom-based Full Year
AP Studio Art: Drawing *Adopted from: The College Board Advanced Placement Program* Visual Arts	AP Studio Art S1 AP Studio Art S2	★ UC Honors Classroom-based Full Year
Art 1,2 Visual Arts	Art 1 ART 1-2 Art 2	Classroom-based Full Year
Band 1,2 Music	Band 1 Marching Band 1 PE Marching BAND 1-8 BAND 1-8 (PE) BAND 1-8(MARCHING) BAND 1-8(PE) Band 2 Marching Band 2 PE Marching Band 3 Marching Band 3 PE Marching Band 4 Marching Band 4 PE Marching Band 5 Marching Band 5 PE Marching Band 6 Marching Band 6 PE Marching Band 7 Marching Band 7 PE Marching Band 8 Marching Band 8 PE Marching	Classroom-based Full Year
Band 3-4 Music	Band 3 Band 4	Classroom-based Full Year
Band 5-6 Music	Band 5 Band 6	Classroom-based Full Year
Band 7-8 Music	Band 7 Band 8	Classroom-based Full Year
Bass Clef Choir Music	Bass Clef Choir 1 Bass Clef Choir 1-8 Bass Clef Choir 2 Bass Clef Choir 3 Bass Clef Choir 4 Bass Clef Choir 5 Bass Clef Choir 6 Bass Clef Choir 7 Bass Clef Choir 8	Classroom-based Full Year
Beginning Band 1,2 Music	Beginning Band 1 Beginning Band 2	Classroom-based Full Year
Ceramics 1,2 Visual Arts	Ceramics 1 Ceramics 2	Classroom-based Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
Choir 1-2 Music	Choir 1 CHOIR 1-8 Choir 2	Classroom-based Full Year
Choir 3-4 Music	Choir 3 Choir 4	Classroom-based Full Year
Choir 5-6 Music	Choir 5 Choir 6	Classroom-based Full Year
Choir 7-8 Music	Choir 7 Choir 8	Classroom-based Full Year
Concert Choir 1,2 Music	Concert Choir 1 CONCERT CHOIR 1-8 Concert Choir 2	Classroom-based Full Year
Concert Choir 3-4 Music	Concert Choir 3 Concert Choir 4	Classroom-based Full Year
Concert Choir 5-6 Music	Concert Choir 5 Concert Choir 6	Classroom-based Full Year
Concert Choir 7-8 Music	Concert Choir 7 Concert Choir 8	Classroom-based Full Year
Dance 1,2 Dance	Dance 1 Dance 2	Classroom-based Full Year
Dance 3,4 Dance	Dance 3 Dance 4	Classroom-based Full Year
Dance Production Dance	DANCE PROD Dance Production S1 Dance Production S2	Classroom-based Full Year
Drama 1,2 Theater	Drama 1 DRAMA 1-2 Drama 2	Classroom-based Full Year
Drama 3-4 Theater	Drama 3 Drama 4	Classroom-based Full Year
Drama 5-6 Theater	Drama 5 Drama 6	Classroom-based Full Year
Drama 7-8 Theater	Drama 3-8 Drama 7 Drama 8	Classroom-based Full Year
Drawing & Painting Water Col & Acry Visual Arts	DRAW/PAINT Water Colors and Acrylics S1 Water Colors and Acrylics S2	Classroom-based Full Year
Drawing and Painting Visual Arts	Drawing and Painting S1 Drawing and Painting S2 Drawing/Painting	Classroom-based Full Year
DSLR Photography 1-2 Visual Arts	DSLR Photography 1 DSLR Photography 2	Classroom-based Full Year
Graphic Design 1-2 Visual Arts	Graphic Design 1 Graphic Design 1-2 Graphic Design 2	Classroom-based Full Year
Guitar 1,2 Music	Guitar 1 Guitar 2	Classroom-based Full Year
Guitar 3,4 Music	Guitar 3 Guitar 4	Classroom-based Full Year
History and Art of Floral Design I Visual Arts	History & Art of Floral Design History and Art of Floral Design S1 History and Art of Floral Design S2	Classroom-based Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
Intermediate Treble Clef Choir 1-8 Music	Interm Treble Clef Choir 1-8 Intermediate Treble Clef Choir 1 Intermediate Treble Clef Choir 2 Intermediate Treble Clef Choir 3 Intermediate Treble Clef Choir 4 Intermediate Treble Clef Choir 5 Intermediate Treble Clef Choir 6 Intermediate Treble Clef Choir 7 Intermediate Treble Clef Choir 8	Classroom-based Full Year
Introduction to Fine Arts Visual Arts	Intro to Fine Arts Introduction to Fine Arts S1 Introduction to Fine Arts S2	Classroom-based Full Year
Introduction to Kinesiology Dance Dance	Introduction to Kinesiology Dance QF Introduction to Kinesiology Dance QS Introduction to Kinesiology Dance S1 Introduction to Kinesiology Dance S2	Classroom-based Full Year
Jazz Band 1,2 Music	Jazz Band 1 Jazz Band 1-8 Jazz Band 2 Jazz Band 3 Jazz Band 4 Jazz Band 5 Jazz Band 6 Jazz Band 7 Jazz Band 8	Classroom-based Full Year
Music of the 20th Century Music	MUS 20TH CEN Music of the Twentieth Century S1 Music of the Twentieth Century S2	Classroom-based Full Year
Music Theory 1-2 Music	Music Theory 1 Music Theory 1-2 Music Theory 2	Classroom-based Full Year
Music Theory 3-4 Music	Music Theory 3 Music Theory 3-4 Music Theory 4	Classroom-based Full Year
Music Theory 5,6 Music	Music 5 Music 6 Music Theory 5 Music Theory 6	Classroom-based Full Year
Oral Interpretation/Performing Arts Theater	Oral Interpretation and Perform Arts S1 Oral Interpretation and Perform Arts S2 Oral Interpretation/Performing Arts	Classroom-based Full Year
Orchestra 1-2 Music	ORCH 1-8 1HR Orchestra 1 Orchestra 2	Classroom-based Full Year
Orchestra 3-4 Music	Orchestra 3 Orchestra 4	Classroom-based Full Year
Orchestra 5-6 Music	Orchestra 5 Orchestra 6	Classroom-based Full Year
Orchestra 7-8 Music	Orchestra 7 Orchestra 8	Classroom-based Full Year
Photo Capture and Manipulation Visual Arts	Photo Cap Manip Photo Capture and Manipulation S1 Photo Capture and Manipulation S2	Classroom-based Full Year
Photography 1, 2 Visual Arts	Photography 1 Photography 1, 2 Photography 2	Classroom-based Full Year
Piano 1,2 Music	Piano 1 Piano 2	Classroom-based Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
Piano 3-4 Music	Piano 3 Piano 3-8 Piano 4	Classroom-based Full Year
Piano 5-6 Music	Piano 3-8 Piano 5 Piano 6	Classroom-based Full Year
Piano 7-8 Music	Piano 3-8 Piano 7 Piano 8	Classroom-based Full Year
Sculptural Design Visual Arts	Sculptural Design Sculptural Design S1 Sculptural Design S2	Classroom-based Full Year
Technical Theatre *Adopted from: California Partnership Academies (CPA)* Theater	Technical Theatre (CPA) S1 Technical Theatre (CPA) S2	Classroom-based Full Year
The History and Art of Floral Design *Adopted from: Yosemite ROP* Visual Arts	History and Art of Floral Design ROP S1 History and Art of Floral Design ROP S2	Classroom-based Full Year
Theater Stagecraft 1-2 Theater	Theater Stagecraft 1 Theater Stagecraft 1-2 Theater Stagecraft 2	Classroom-based Full Year
Video Arts and Production 1-2 Visual Arts	Video Arts and Production 1 Video Arts and Production 2	Classroom-based Full Year

College-Preparatory Elective ("g") 1 year required

One unit (equivalent to one year) chosen from the "a-f" courses beyond those used to satisfy the requirements of the "a-f" subjects, or courses that have been approved solely in the elective area.

Title/Discipline	Transcript Abbreviation(s)	Course Details
Adv. Environmental Systems Laboratory Science – Physical Sciences	Advanced Environmental Systems S1 Advanced Environmental Systems S2	Classroom-based Full Year
Adv. Speech English	ADV SPEECH Advanced Speech S1 Advanced Speech S2	Classroom-based Full Year
Animal Science 3/4 Laboratory Science – Biology / Life Sciences	Animal Science 3 Animal Science 4	Classroom-based Full Year
AP Computer Science A *Adopted from: The College Board Advanced Placement Program* Mathematics - Computer Science	AP Computer Science A S1 AP Computer Science A S2	★ UC Honors Classroom-based Full Year
AP Computer Science Principles *Adopted from: The College Board Advanced Placement Program* Mathematics - Computer Science	AP Computer Science Principles S1 AP Computer Science Principles S2	★ UC Honors Classroom-based Full Year
AVID 10 *Adopted from: AVID - Advancement Via Individual Determination* Interdisciplinary	AVID 10 S1 AVID 10 S2 AVID 10th Grade S1 AVID 10th Grade S2	Classroom-based Full Year
AVID 11 *Adopted from: AVID - Advancement Via Individual Determination* Interdisciplinary	AVID 11 S1 AVID 11 S2 AVID 11th Grade S1 AVID 11th Grade S2	Classroom-based Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
AVID 12 *Adopted from: AVID - Advancement Via Individual Determination* Interdisciplinary	AVID 12th Grade S1 AVID 12th Grade S2 AVID Senior Seminar A S1 AVID Senior Seminar A S2 AVID Senior Seminar B S1 AVID Senior Seminar B S2 AVID Senior Seminar S1 AVID Senior Seminar S2	Classroom-based Full Year
AVID 9 *Adopted from: AVID - Advancement Via Individual Determination* Interdisciplinary	AVID 9 S1 AVID 9 S2 AVID 9th Grade S1 AVID 9th Grade S2	Classroom-based Full Year
Computer Programming I Mathematics - Computer Science	Computer Programming I 1 Hr S1 Computer Programming I 1 Hr S2 Computer Programming I 2 Hrs S1 Computer Programming I 2 Hrs S2	Classroom-based Full Year
Computer Technology Mathematics - Computer Science	Computer Technology 1 Hr S1 Computer Technology 1 Hr S2 Computer Technology 2 Hrs S1 Computer Technology 2 Hrs S2	Classroom-based Full Year
CP Earth Science Laboratory Science – Physical Sciences	CP Earth Science S1 CP Earth Science S2	Classroom-based Full Year
Creative Writing English	Creative Writing S1 Creative Writing S2	Classroom-based Full Year
Economics CP History / Social Science	Economics S1 Economics S2	Classroom-based Half Year
Entrepreneurship *Adopted from: San Joaquin County Office of Education - Career Techncal Education (formerly San Joaquin County ROP)* History / Social Science	NFTE Entrepreneur Owning Your Future S1 NFTE Entrepreneur Owning Your Future S2 NFTE Entrepreneurship: Owning Your Future S1 NFTE: Entrepreneurship: Owning Your Future S2	Classroom-based Full Year
Foods and Nutrition 1-2 Interdisciplinary	Foods and Nutrition 1 Foods and Nutrition 2	Classroom-based Full Year
Foods and Nutrition 3-4 Interdisciplinary	Foods and Nutrition 3 Foods and Nutrition 4	Classroom-based Full Year
Humanities Interdisciplinary	Humanities S1 Humanities S2	Classroom-based Half Year
Integrated Ag Science 1-2 Laboratory Science – Integrated Science	Integrated Agriculture Sci 1 CP Integrated Agriculture Sci 2 CP	Classroom-based Full Year
Interpretative Dramatic Arts Visual & Performing Arts	interpretative arts Interpretive Arts S1 Interpretive Arts S2	Classroom-based Full Year
Introduction to Engineering Design *Adopted from: Project Lead the Way (PLTW)* Interdisciplinary	Introduction to Engineering Design S1 Introduction to Engineering Design S2	Classroom-based Full Year
Journalism 1-2 English	Journalism 1 Journalism 2	Classroom-based Full Year
Pre APPhysics Laboratory Science – Physical Sciences	H PRE-AP PHY SCI H PRE-AP/HG PHY SCI Pre AP Physics 1 Pre AP Physics 2 PRE-AP PHY SCI Pre-AP Physics PRE-AP/HG PHY SCI	Classroom-based Full Year
Pre-Engineering Programming in C/C++ & Mathematics *Adopted from: Yosemite ROP* Interdisciplinary	Pre Engineer Prog in C C++ and Math ROP S1 Pre Engineer Prog in C C++ and Math ROP S2	Classroom-based Full Year

Title/Discipline	Transcript Abbreviation(s)	Course Details
Principles of Engineering *Adopted from: Project Lead the Way (PLTW)* Interdisciplinary	Principles of Engineering I S1 Principles of Engineering I S2 Principles of Engineering S1 Principles of Engineering S2	Classroom-based Full Year
Programming and Game Design Mathematics - Computer Science	Programming and Game Design S1 Programming and Game Design S2	Classroom-based Full Year
Psychology I History / Social Science	Psychology I S1 Psychology I S2	Classroom-based Full Year
Robotics Engineering I *Adopted from: Yosemite ROP* Interdisciplinary	Robotics Engineering I S1 Robotics Engineering I S2	Classroom-based Full Year
Robotics Engineering II Interdisciplinary	Robotics Engineering II S1 Robotics Engineering II S2	Classroom-based Full Year
Robotics Engineering III Interdisciplinary	Robotics Engineering III S1 Robotics Engineering III S2	Classroom-based Full Year
Speech English	SPEECH Speech S1 Speech S2	Classroom-based Full Year
U.S. History since the Civil War *Adopted from: APEX Learning* History / Social Science	U. S. History A S1 U. S. History B S2	Online-based (UC approved through **2018-19**) Full Year
Veterinary Science Laboratory Science – Biology / Life Sciences	Veterinary Science Veterinary Science 1 Veterinary Science 2 Veterinary Science ROP Veterinary Science ROP S1 Veterinary Science ROP S2	Classroom-based Full Year

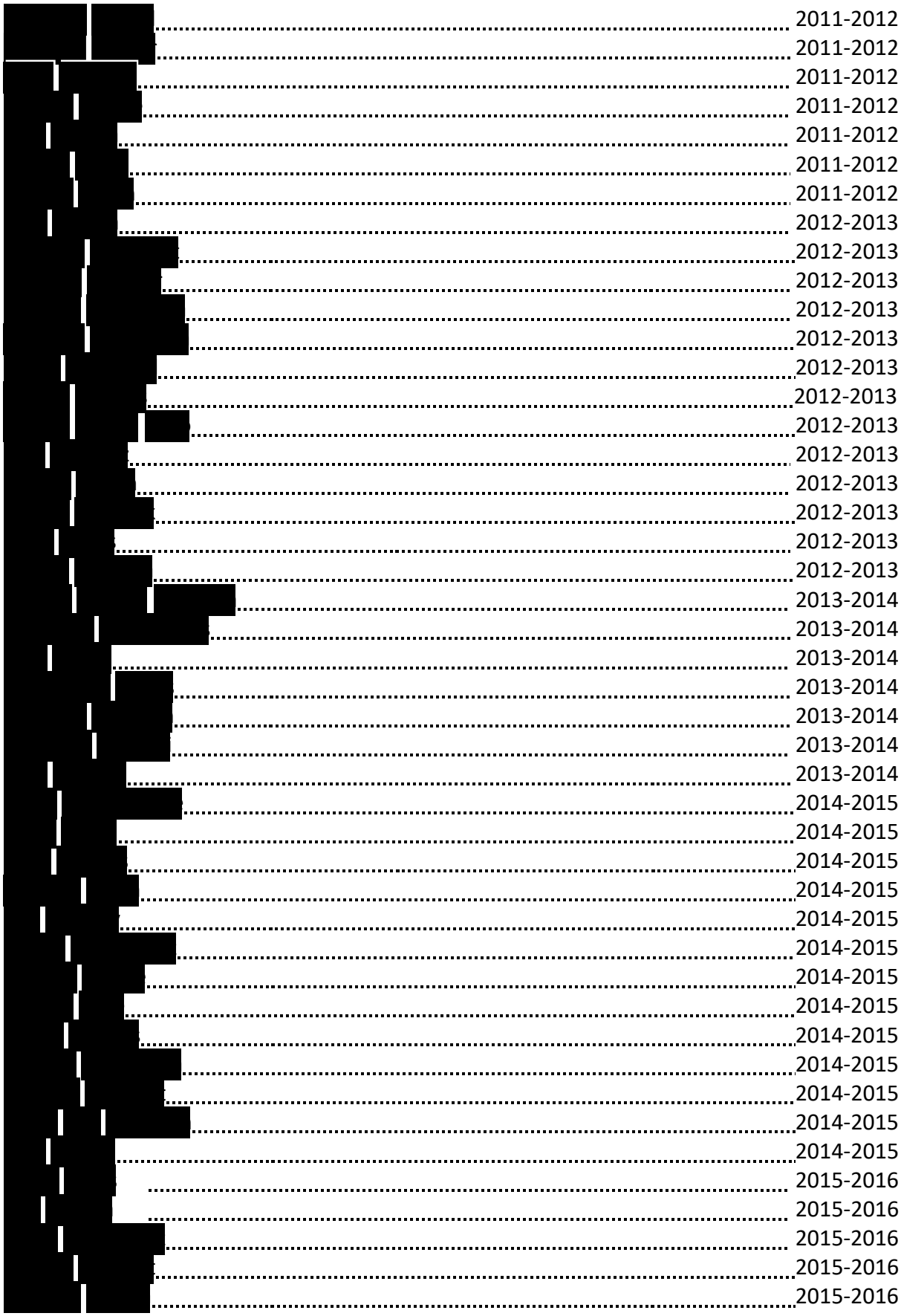
Criteria 12 B: Leadership

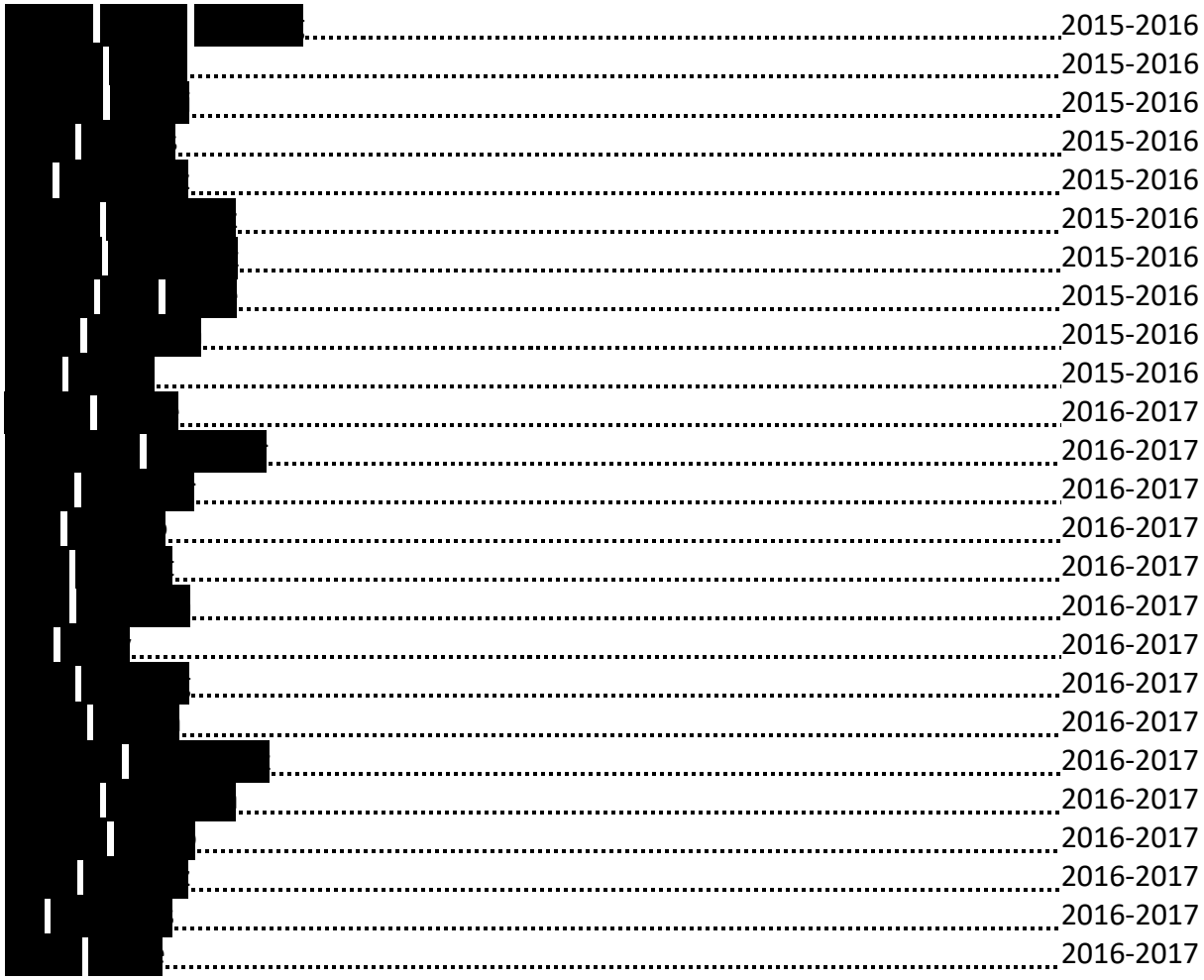
Section 12B
Leadership and Citizenship Development

As evidenced by our extensive Program of Activities and the FFA Activities Checklist, it is obvious that Gregori FFA gets and stays involved in various activities throughout the year. Over the past years we have remained involved in many aspects of FFA local, sectional, regional, state, and national levels. Our students look forward to upcoming events and believe that staying involved will help them be successful in the future.

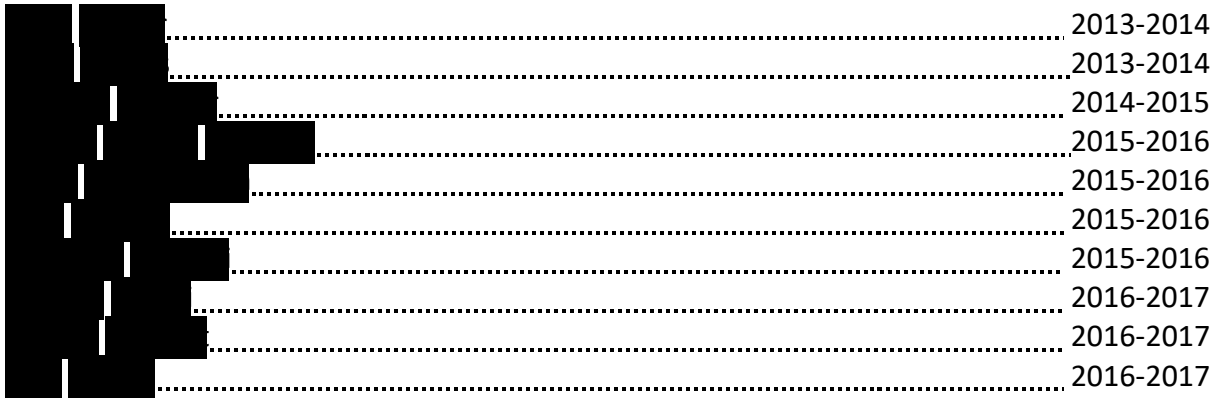
Criteria 12 C: State Farmers

Gregori State Farmers





Gregori American Farmers



Gregori Proficiency Winners

[redacted] Wildlife Production & Management; Section and Regional 2010-2011
[redacted] Wildlife Production & Management; Section, Regional & State 2011-2012
[redacted] Diversified Crop Production; Section, Regional 2012-2013
[redacted] Wildlife Production & Management; Section and Regional 2012-2013
[redacted] Diversified Crop Production; Section, Regional 2013-2014
[redacted] Nursery Production; Section and Regional & State
National - Silver 2013-2014
[redacted] Ag Mechanics Repair; Section, Regional 2014-2015
[redacted] Pomology; Section, ... 2014-2015
[redacted] Landscape Management; Section 2015-2016
[redacted] Beef Production; Section 2016-2017

Gregori Star Winners

[redacted] Star Placement; Section, ... 2014-2015

Gregori Star Greenhand Winners

[redacted] 2010-2011
[redacted] 2011-2012
[redacted] 2012-2013
[redacted] 2013-2014
[redacted] 2013-2014
[redacted] 2014-2015
[redacted] 2014-2015
[redacted] 2015-2016
[redacted] 2015-2016
[redacted] 2016-2017

Gregori Star Chapter Farmer Winners

[redacted] 2010-2011
[redacted] 2011-2012
[redacted] 2012-2013
[redacted] 2013-2014
[redacted] 2014-2015
[redacted] 2015-2016
[redacted] 2016-2017

Criteria 12 D: Qualified CATA Activites

CALIFORNIA DEPARTMENT OF EDUCATION

AGRICULTURAL EDUCATION INCENTIVE GRANT CHECKLIST

SCHOOL Modesto-Gregori DATE 8/27/2017

AG DEPARTMENT CHAIR Mark Nower

QUALITY CRITERIA 1 - 9

Failure to meet any part of a Quality Criteria may result in the loss of 10% of the incentive funds up to a maximum of 25%.

Loss of funds can be avoided with an approved variance request which may be granted for one year on any Quality Criteria 1-9.

QUALITY CRITERIA 10, 11 or 12

Failure to meet either Quality Criteria 10, 11 or 12(when applied for) will result in the loss of the funds applied for in that criteria.

Department Head Signature _____

Advisory Committee Chairperson Signature _____
(for programs conducting Advisory Committee Reviews)

Regional Supervisor Signature _____

Advisory Committee Chair Contact information

Name Kim Hernandez
Address
City Zip 95356
Phone 209-649-4579

Revised 1/10

INCENTIVE GRANT CHECKLIST

1. CURRICULUM & INSTRUCTION

Yes	No		
X		1A.	The curriculum includes the components required under Section 52454 of the Education Code: organized classes in the study of agriculture science and technology; student supervised agricultural experience; and a program of leadership, organization and personal development.
		1B.	The Career Technical Education Model Curriculum Standards for the Agriculture and Natural Resources Industry Sector are the basis for content of courses offered. Curriculum addresses "Foundation" and "Pathway" standards within the program pathway(s) and course sequences.
X		1C.	Career paths in agriculture have been identified and can be found on a chart or diagram in the Program Plan. (Foundation Standard 3.0)
X		1D.	The school master schedule allows students to follow the recommended sequence of agriculture courses to complete the selected career path(s).
X		1E.	Agriculture Career Awareness information is included in every course. (FS 3.1, 3.2)
X		1F.	The agriculture department utilizes computer hardware and software as an instructional tool. (FS 4.2, 4.6)
X		1G.	The agriculture curriculum includes the use of computer aided instruction by utilizing at least one of the following: (FS 4.2, 4.6) * Computerized Record Book * Agriscience Fair Report * Agriculture Term Paper * Agriculture/FFA Speech Manuscript * Job Resume * Job Cover Letter * Portfolio Letter of Introduction * Other Agriculture Related Project
X		1H.	Recordkeeping is taught in all agriculture classes. Every student maintains and completes (closes out) either an actual SAE Project or Mock Problem. (FS 10.3, 11.0)
X		1I.	Record books of all students are maintained in the Department files until one year following graduation.
X		1J.	Agriculture courses have been submitted to meet high school graduation requirements and/or University of California a-g credit.

2. LEADERSHIP & CITIZENSHIP DEVELOPMENT

Yes	No		
X		2A.	An FFA Chapter has been chartered by the State Association or has been applied for.
X		2B.	A Chapter Program of Work is developed annually and a copy is furnished to the Regional Supervisor by December 15th.
X		2C.	Every student is given a grade based upon participation in leadership activities.
X		2D.	All students enrolled in agriculture classes are affiliated with the State FFA Association.
X		2E.	Based on previous year's records, the department participated in a minimum of 12 activities as listed on the FFA Activities Check Sheet. (Attached)

X		2F.	A minimum of 80% of the students participate in at least three leadership development activities annually as verified by department records. Activities could include any three of the following intra-curricular activities: (FS 7.0, 9.1, 9.2, 9.3, 9.6, 10.1) * Local Best Informed Greenhand Contest * Local Creed Speaking Contest * Local Opening & Closing Contest * Local COOP Quiz Contest * Local Program of Work Committee(s) * Local Demonstration Fair * Local Agriscience Fair Exhibition * Local Public Speaking Contest * Local Parliamentary Procedure Contest * Chapter Meeting or Activity * Any Section, Region, or State Activity * Other Local Activities

3. PRACTICAL APPLICATION OF AGRICULTURAL SKILLS

Yes	No		
X		3A.	Student participation in Supervised Agricultural Experience (SAE) is part of the grading criteria for every agriculture student in the program. (FS 10.2)
X		3B.	First year students have either been engaged in a SAE project(s) or have a plan in place for a SAE, as verified by the Student Data-Career Plan (FS 10.2, 10.3)
X		3C.	A minimum of 80% of continuing students are engaged in SAE project(s) as verified by Department records. (FS 4.0, 5.0, 6.0, 7.0, 8.0, 9.0,10.0, 11.0)
X		3D.	Students with SAE projects are visited by their agriculture teacher at least twice per year as documented by Department records.
X		3E.	A school vehicle is readily available to each agriculture teacher for all SAE activities associated with the program, or each teacher is adequately compensated for using their own personal vehicle.

4. QUALIFIED & PROFESSIONAL PERSONNEL

Yes	No		
X		4A.	Every agriculture teacher has the appropriate credential for teaching the subject(s) assigned. Copy of authorizing credential(s) is in the Comprehensive Program Plan.
X		4B.	Based on the previous year's records, every agriculture teacher, teaching at least ½ time agriculture, attends a minimum of four professional development activities: (Complete attachment).
X		4C.	The agriculture staff meets a minimum of twice a month. (This criteria does not apply to single person departments - mark column N/A = Not Applicable)
X		4D.	A written record of minutes is kept of action taken during agriculture staff meetings and is kept in Department files or the Comprehensive Program Plan. (This criteria does not apply to single person departments - mark column N/A = Not Applicable)
X		4E.	Teachers are reimbursed for personal expenses they incur while participating in all approved integral activities associated with FFA, SAE, and professional CATA in-service activities.

5. FACILITIES, EQUIPMENT & MATERIALS

Yes	No		
X		5A.	Modification of facilities and equipment has occurred when necessary, based on the needs of students, including special populations.
X		5B.	There is adequate storage space for materials, records, equipment and supplies.
X		5C.	At least one of the below listed community or school-based laboratory facilities has been provided to accommodate students who have no place for their SAE project(s):

			* School Farm Laboratory * Growing Area * Greenhouse * Agriculture Shop
X		5D.	The Agriculture Department has E-Mail capabilities.
X		5E.	The reviewer verifies by visual observation that the agriculture facilities are neat, clean, and orderly.
X		5F.	Facilities and equipment are regularly maintained, repaired, or replaced.

6. COMMUNITY, BUSINESS AND INDUSTRY INVOLVEMENT

Yes	No		
X		6A.	The Advisory Committee is operational and reflects the committee membership as outlined in the "Agricultural Education Advisory Committee Manual".
X		6B.	The Agricultural Advisory Committee meets at least twice each year. (Minutes are available to verify meetings.)
X		6C.	The Agricultural Advisory Committee has assisted in the development or revision of the following components of the Comprehensive Program Plan, as evidenced in the Ag. Advisory Committee minutes * Job Market Description * Total Program Goals & Objectives * Course Subject Matter Outlines * 5 Year Facility & Equipment Acquisition * Graduate Follow Up * Targeted Occupations * Program Description - Courses, SAE, FFA * Program Completion Standards * Current Year Budget * List of Active placement Sites
x		6D.	The contact information of the Advisory Committee Chair has been provided on the cover of this checklist

7. CAREER GUIDANCE

Yes	No		
X		7A.	Students are counseled regarding: (FS 3.0) * Career opportunities in Agriculture and Agribusiness * Agriculture and academic courses necessary to complete career pathway offerings * Post-secondary education and training options.
X		7B.	All students have a completed career plan (Student Data Sheet) and it is updated annually. (FS 3.3)
X		7C.	Efforts have been made, or completed, to articulate with Community Colleges and/or Universities (i.e., 2+2+2 articulation agreements).

8. PROGRAM PROMOTION

Yes	No		
X		8A.	An Agricultural Education program recruitment brochure or similar document is used to promote the program.
X		8B.	Students have alternative means of overcoming financial barriers to participate in program activities. (Includes FFA, SAE, Leadership Activities.)
X		8C.	The Agriculture Department conducts recruitment activities with local feeder schools.

9. PROGRAM ACCOUNTABILITY & PLANNING

Yes	No		
X		9A.	A Comprehensive Program Plan is on file with the Regional Supervisor and a copy is retained in the local department files.
X		9B.	Updates of the Program Plan are sent to the Regional Supervisor by November 15th. These updates include: (1) Five Year Equipment Acquisition Schedule; (2) Chart of Staff Responsibilities; (3) FFA Program of Work; (4) Advisory Committee Roster; and (5) Advisory Committee Minutes.
X		9C.	A follow-up system is used which gathers the following information from program * Status of employment or school enrolled within * Opinion regarding the value and relevance of the agriculture program * Suggestions for improving the agriculture program
X		9D.	The Graduate Follow Up data collected was entered with the On-line R2/FFA Roster Data Entry *by October 15th* .
X		9E.	The Agriculture Department analyzes their student retention numbers each year and develops strategies to help increase retention within the program.
X		9F.	The R-2, AIG Expenditure Reports, and FFA Roster have been received by the Regional Supervisor and/or State FFA Financial Coordinator on or before October 15th.

QUALITY CRITERIA 10, 11and 12 MUST BE SCORED DURING THE REVIEW PROCESS. HOWEVER, SCORES WILL ONLY COUNT IF THESE CRITERIA HAVE BEEN APPLIED FOR VIA THE AGRICULTURE INCENTIVE GRANT APPLICATION.

Yes	No		
	X	10A.	Shop and laboratory-based classes have no more than 20 students enrolled. Classroom-based classes have no more than 25 students enrolled.
	X	10B.	The total number of students enrolled in agriculture classes does not exceed 75 students per teacher. First year students enrolled in agriculture courses will be counted as .5 for purpose of determining the total count only. (This does not pertain to class size.)

11. FULL YEAR EMPLOYMENT

Yes	No		
X		11A.	A full-time equivalent teacher is employed year-round for each 75 students enrolled in the agriculture program and is compensated no less than $2000.
X		11B.	During the school year, one teaching period for Supervision is assigned to each agriculture teacher. This project supervision period is in addition to the preparation period normally assigned to all teachers in the school. This requirement may also be met if a period is not available by financially compensating the agriculture teacher(s) at the equivalent cost of providing one period for supervision.

12. PROGRAM ACHIEVEMENT

Yes	No		
	X	12A.	The Agriculture Program meets the requirements of Program Achievement (attach checklist)

ANNUAL FFA CHAPTER ACTIVITIES CHECK SHEET

Criteria 2e **Year** **2017-18** **School** **Modesto-Gregori**

Must meet at least 12 areas

LEADERSHIP ACTIVITY	YES	NO
Attended State Leadership Conference	x	
Attended Regional Meeting	x	
Attended Regional Leadership Conference	x	
Attended Greenhand Conference	x	
Attended Made for Excellence Conference	x	
Attended Advanced Leadership Academy	x	
Attended Sacramento Experience		
Participated in Opening-Closing Contest - Sectional	x	
Participated in Best Informed Contest - Sectional		
Participated in Parliamentary Pro Contests - Sectional		
Participated in Prepared Public Speaking - Sectional		
Participated in Extemporaneous Speaking - Sectional		
Participated in Creed Recitation - Sectional	x	
Participated in Job Interview Contest - Sectional	x	
Participated in Agricultural COOP Quiz Contest - Sectional		
Submitted State FFA Degree Application	x	
Submitted American FFA Degree Application	x	
Submitted Proficiency Application - Sectional or Regional	x	
Submitted Chapter Award Application - Sectional or Regional		
Participated in Project Competition - Sectional	x	
Participated in any FFA Judging Activity (other than above)	x	
Participated in any other FFA Sectional Activity	x	
Participated in Local Leadership Activities (3 maximum - list below)		
Salida 7th Grade Ag Day	x	
Modesto Farm to Fork	x	
TOTAL AREAS MET	17	

INCENTIVE GRANT IN-SERVICE ACTIVITIES DOCUMENTATION

CRITERIA 4.B **School Year** 2016/17 **School** **Modesto-Gregori**

Based on the previous year's record, every agriculture teacher, teaching at least ½ time agriculture, attends a minimum of four of the following professional development activities:

Qualified and Competent Personnel

ACTIVITIES	TEACHERS NAMES							
	Nower	Delnero	Beeman	Hamrick				
Fall Region Meeting	X		X	X				
Region In-service Day	X		X	X				
Spring Region Meeting	X		X	X				
Section In-service*	X		X	X				
Section In-service*								
Section In-service*								
Section In-service*								
Summer Conference	X	X	X	X				
University AgEd Skills Week				X				
Professional Development **	X							

* Four Section In-service Meetings equals one Professional Development Activity

** Can utilize a *maximum* of two other *"Agriculturally Related"* Professional Development activities than those listed above. Explain the Professional Development:

1 14. Record Book/Prof. Scoring

2 15. Young Teacher Conf

3 20. AET Training

4

5

CALIFORNIA DEPARTMENT OF EDUCATION
AGRICULTURAL VOCATIONAL EDUCATION INCENTIVE GRANT

QUALITY CRITERIA 12

422 Number of Students on Last Year's R-2 Form

12A. Curriculum and Instruction

8 Number of UC Approved Agriculture Courses (must be at least one)

12B. Leadership and Citizenship Development

Number of activities on the approved FFA activity list which the local chapter participated in (must participate in at least 80% of the activities).

12C Practical Application of Occupational Skills

Number of students who received the State FFA Degree (must be at least 5% of the R-2 number)

12D Qualified and Professional Activities

Number of teachers who attended a minimum of 5 professional inservice activities (must attach approved Inservice Activities Verification Page)

12E Community, Business and Industry Involvement

Number of meetings held by the local Agriculture Advisory Committee (must meet at least 3 times with minutes attached)

Name of Agriculture Advisory Committee Chair

Phone Number of Ag. Advisory Committee Chair

12F Retention

Number of students who were in their 3rd and 4th year of agriculture instruction (must be at least 25% of the R-2 number)

12G Graduate Follow-Up

Number of program completers graduating last year.

Number of those who graduated who are employed in agriculture, in the military, or continuing their education (must be at least 75% of the program completers) Attach graduate follow-up

Criteria 12 E: Community Involvement

Section 12E
Community Involvement

The Gregori FFA Chapter participate in many activities throughout the year that help benefit the community. Every year during the holidays, our chapter holds a can food drive; we usually collect a truckload of food. All of it is donated to a nearby food charity to benefit the individuals in our community. In addition, during the holiday our chapter sells Christmas trees to the entire school, during this time we donate 5 Christmas trees to families in need. This year the officers want to partake in more community service activities, therefore we have set up a relationship with a local homeless shelter that our officers will be attending to help serve food.

Criteria 12 F: Retention

Section 12F
Strategies for Retention

Our program has seen an increasing our retention numbers since the implantation of the Central Region consortium grant. Through the revision of our course sequences we were able to create clear pathways. Thanks to the reporting requirements we were able to educate counselors and administration on the importance of helping to guide students to becoming program completers.

Within the department we are continuously counseling students to maintain their enrollment in our program. We encourage students to utilize the high school science credits and History and Art of Floral Design, which falls under the visual and performing arts requirement, available to them through our Agriculture classes. We are always cautious of counseling our students to maintain grade eligibility. We stay in frequent contact with parents through emails, phone calls, and grade sheets sent home.

We work with the administration and counselors to help improve their ability to recognize the important skills that our classes can offer our students. We also work hand-in hand with our administration in developing courses that will meet the graduation requirements. We feel the future development of such courses is vital to our retention process.

Modesto - Gregori
Student Retention Report

Graduation Class of 201700.00% Freshman Retention Rate: **45.00%**

	Grad Year	Years of Ag
	2017	2
	2017	4
	2017	2
	2017	1
	2017	3
	2017	2
	2017	3
	2017	2
	2017	3
	2017	2
	2017	3
	2017	2
	2017	2
	2017	1
	2017	2
	2017	1
	2017	4
	2017	4
	2017	1
	2017	3
	2017	4
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	2017	3

	2017	1
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	2017	3
	2017	4
	2017	1
	2017	4
	2017	1
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	2017	3
	2017	1
	2017	1
	2017	2
	2017	4
	2017	2
	2017	3

Criteria 12 G: Graduation Follow-Up

Modesto City Schools
Vocational Agriculture Education

Graduate Follow-Up Study

November 1, 2009

Dear Vocational FFA Agriculture Alumni:

Under current State Legislation, Vo Ag Programs are utilizing graduate input to assist local programs in maintaining and insuring quality agriculture education in the comprehensive high school. Our hope is that you will take part in this vital study. Graduate opinion is long overdue and should be an essential component in developing curriculum in Vocational Agriculture Education.

Attached you will find a questionnaire/ opinion survey that will assist us in our commitment toward excellence in our local Agriculture programs. Please respond at your earliest convenience to the questionnaire and return no later than November 29, 2009.

Thank You,

Modesto City Schools
Vocational Agriculture Staff

… Alumni assisting toward a commitment to excellence…

Joseph Gregori High School Ag Department
Graduate Follow-up

Name:_____

Address:_____

Phone:_____

1. What are you doing at the present time?

_____Attending school
_____Full-time
_____Part-time
_____Full Time Ag Major
_____Part Time Ag Major

_____Working
_____Full-time
_____Part-time

_____In the military

_____Homemaker

_____Not working
_____Looking for work
_____Not looking for work

_____Other_____

2. In what type of business or industry are you employed?

_____

3. What is your job title or job description?

_____

4. Which statement best applies to your present occupation?

_____

_____I am using <u>most</u> of the skills I learned in the vo-ag program at JGHS.
_____I am using <u>some</u> of the skills I learned in the vo-ag program at JGHS.
_____I am <u>not</u> using any of the skills I learned in the vo-ag program at JGHS.

5. What type of school are you currently attending?

_____High school
_____4-year College
_____ Junior College
_____Adult education

_____Trade/technical school
_____Private business school

Other_____

6. What is your major course of study? _____

7. How would you rate the training received in the JGHS vo-ag program?

_____Excellent _____Good _____Fair _____Poor

8. How do you rate the career guidance and counseling you received in Career Tech.?

_____Excellent _____Good _____Fair _____Poor

FFA

1. Please check the following areas you feel are valuable components of FFA.

_____Officer and committee chairman experience
_____Judging contests
_____Advanced degree and proficiency awards
_____Participation in chapter activities, working with others
_____Livestock raising, shows, fairs, etc.
_____Other –please describe_____

2. What were the most valuable aspects of the SOEP (supervised projects)?

_____Learning skills related to future ag employment
_____Development of responsibility
_____Learning record keeping
_____Other-please describe_____

3. Please rate the facilities and equipment used at GDHS for the vo-ag program:

Facilities: _____Overcrowded _____Adequate space provided
_____Modern _____Out-of-date

Equipment: _____Modern _____Out-of-date
_____Well-maintained _____Poorly maintained
_____Adequate amount of equipment for all students in class

_____Other-please describe_____

Please note any suggestions you have for improving the Instructional Program, including the following areas: classroom, shop, greenhouse, school farm, etc; FFA; SOEP (supervised projects); teaching methods used; facilities/equipment.

_____

_____

_____

AGED 539 PROJECT

Kyle Beeman

JOSEPH A GREGORI HIGH SCHOOL

Synopsis

The Joseph A. Gregori Agricultural Department plans to construct a raised bed garden in the lawn area in front of the M building and adjacent to the L building parking lot. The area is currently lawn space and can be better utilized.

The 16 proposed raised beds will be 4'X8' with clearance all the way around to provide ample room students and garden maintenance. The boxes will be constructed out of 12'' galvanized C purlins for longevity.

Funding for this project is the result of MCS being selected for A USDA farm to school grant See attached proposal.

Project Purpose

The purpose of the raised bed project is to serve as an extension to the horticulture portion of our Ag program. This is currently the weakest portion of our program. The beds will enable students to take the plant starts, transplant them and further their understanding of plant growth production and requirements. The vision is that the 16 raised beds would be used for a variety of annual/perennial horticulture products as well as a seasonal Vegetable garden to be utilized in landscaping and agricultural production.

The raised beds will also serve as an agriculture literacy component to the agriculture program. Students, staff and community alike at Gregori will be exposed and reminded daily of the importance of agriculture in our country. Beds will be labeled to educate and inform about agriculture.

The area will also be utilized by agriculture science classes alike to conduct experiments in relation to the next generation science standards. Students will be able to design, implement and draw conclusion from their own experiments.

Project Rationale

As outlined by the agriculture incentive grant, criteria 5A, a comprehensive program should include a greenhouse, growing area and student project area. The philosophy of agriculture education is, "learn by doing". Creating space for students to work outside of the four walls of the classroom is paramount to our beliefs. All involved in the project will increase their knowledge of the agriculture industry, creating a lifelong learner with an appreciation of where their food comes from.

Location Rationale

Many factors were considered when selecting the appropriate location for this project. The proposed area was selected for the following reasons;

Students in horticulture class can effectively move between the classroom and growing area and have access to the tools and equipment required for class activities.

The location of the proposed beds will serve as a daily reminder that agriculture is an important part of our heritage in the central valley. Agriculture is the leading industry in Stanislaus County, it is important that others understand this diverse industry.

In its proposed location, students, staff and community will be exposed to agriculture as they enter and exit campus.

Students in agriculture and science classes will be able to access the area as needed. The close proximity to the campus allows students to access the site within minutes from the classroom.

The horticulture class is in an appropriate location for special needs students that have limited opportunities in the day to experience mainstream courses. Currently there are special needs students in the horticulture class and the central location of the garden beds allow them easy access.

Possible district Concerns

Risk that products from the growing beds will be used to vandalize the campus?

In conversation with district, a fence may be constructed to secure the growing bed area.

Project Cost Estimate

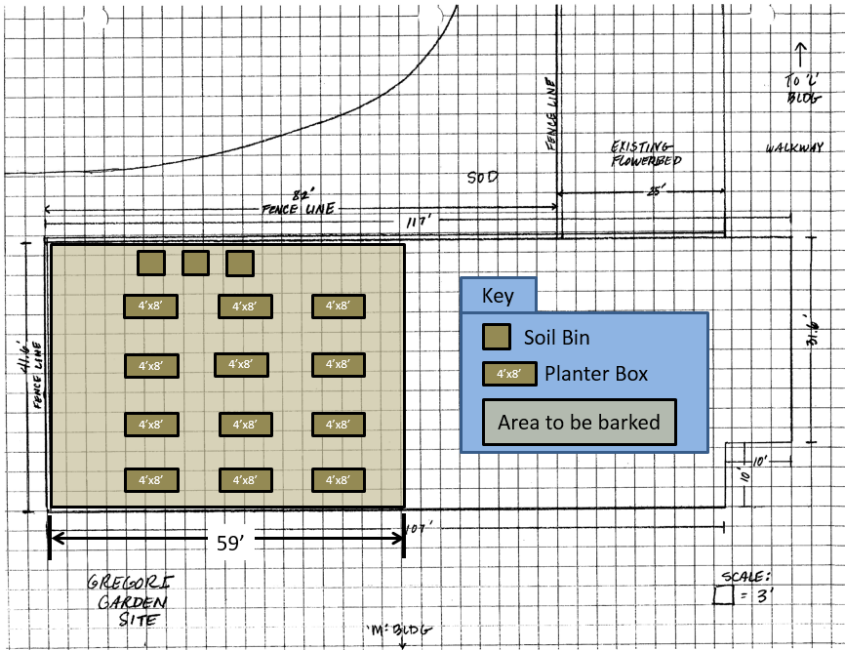
See attached grant proposal.

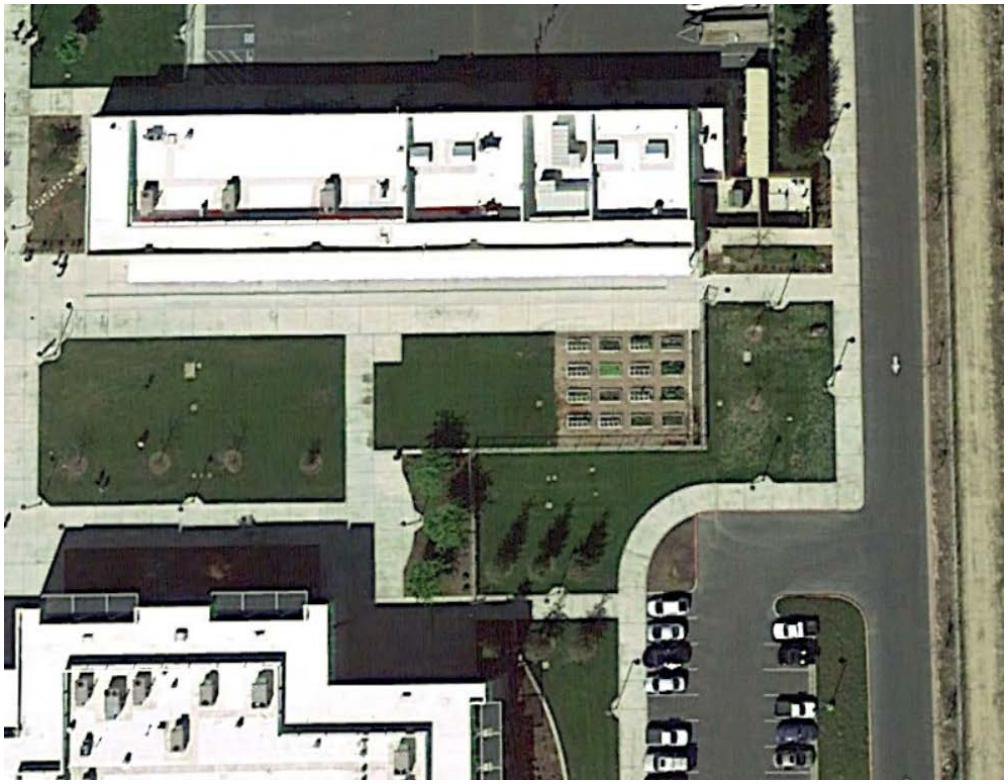
Other Considerations

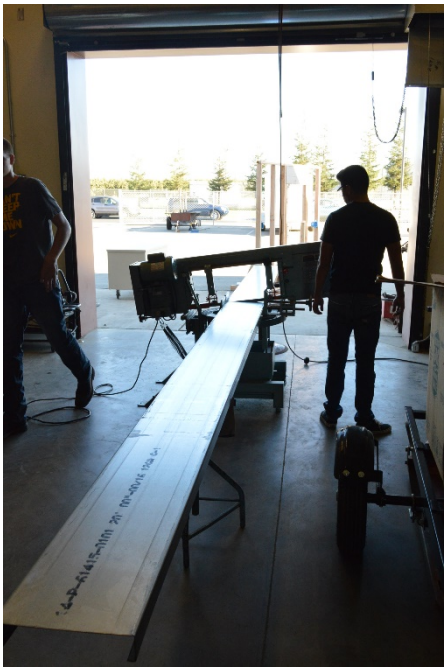
USDA Grant

Modesto City Schools was recently informed that it is one of six districts in California to receive a USDA farm to School grant. The purpose of the grant is to increase awareness of food sources, the benefits of healthy food choices, and educate students about the many facets of farming and food production. The grant will initiate the installation of school gardens at 6-8 MCS campuses within the next year. This project at Gregori High School serves as an example of what these working labs should look like.

Project Photos







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MODESTO CITY SCHOOLS
FARM TO SCHOOL IMPLEMENTATION GRANT
PROPOSAL NARRATIVE

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FARM TO SCHOOL EXPERIENCE

1. Procurement

Modesto City Schools District (MCS) defines "local" as Stanislaus, Merced, and San Joaquin counties; "regional" boundaries stretch from Redding (to the north) to Bakersfield (to the south) and Salinas Valley (to the west). MCS has a Nutrition Services division that serves as the central kitchen for all 36 schools in the district. The state-of-the-art facility has the capacity to produce large quantities of locally sourced, minimally processed foods for the National School Lunch Program and the Fresh Fruit and Vegetable Program (FFVP). The facility houses large peeling machines capable of peeling melon and jicama in less than five seconds per unit, a large vegetable cutting machine that can produce thousands of carrot sticks in less than an hour, and a large commercial Adamatic bread machine that produces over 100,000 units per week from grains milled and purchased regionally. During the 2011-12 school year, MCS food costs were $3,900,000. Approximately 60% (without milk) and 70% (with milk) of the district's food costs were directed to local and regional suppliers. MCS offers meal service 178 days during the school year (excluding summer feeding programs), and 100% of those days included local or regional offerings. Locally sourced products are offered in school meals daily. In ranking order from most frequently purchased to least frequently purchased, the district has locally sourced: tortillas and chips (Modesto), milk (Modesto), turkey (Livingston), fresh fruits and vegetables (Turlock and Fresno), and whole wheat flour (Woodland). These local products are sourced through local fruit and vegetable distributors (FreshPoint and Fresno Produce), food service co-ops (DJ's Co-op) , and local producers (La Tapatia, Foster Farms, Certified Foods).

2. Promotion

Nutrition Services does not currently advertise that a menu item is a local or regional product. To date, we have not created any regular or branded special programs that would highlight local offerings in the school lunch program. However, we have engaged students in taste tests to develop new, healthy menu items; we just haven't made them aware that the items were made with locally sourced foods. Our implementation plan for this grant includes promotion of local offerings in the cafeteria (further described in section II).

3. Experiential Learning

MCS is located in Modesto, California in the heart of the Central Valley and has a rich agricultural heritage. Modesto is home to the National Ag Science Center, which began hosting TASTES (Teacher Agricultural Science Technology Education Seminars) in 2008. Each seminar day, there is a topic introduction, field trips to agricultural operations to see practical applications of each topic, guest speakers and hands-on lesson ideas to take back and use in the classroom. The 2013 TASTES program from June 3-5, which includes an optional "From Field to Table" tour and dinner on June 6 (see attached flyer). Experiential learning opportunities are numerous throughout the district and are unique to each school site. The diverse programs represent the depth and breadth of partnerships between students, teachers, parents, community organizations, and other schools in the district. Some highlights include:

School Gardens: *Everett Elementary* has a partnership with the Modesto Garden Club, and volunteers work with 5th grade students in the Everett school garden. The class and the club plant seasonal vegetables. The school has an apple tree and grapes as perennials. Ms. Kucera's class organizes a salad tasting made from Everett grown lettuce. Comcast Cable donated supplies for the Everett gardens during Comcast Cares Day in April. *Franklin Elementary* has a new school garden implemented by West Modesto King Kennedy Neighborhood Collaborative with funding from Kaiser Permanente (see attached photos). *Orville Wright Elementary* has a pumpkin patch,

a sunflower garden, a salsa garden, and a mixed fruit and vegetable bed. *Beyer High* donates plants from the Beyer greenhouse to Orville Wright. *Downey High* currently grows fresh fruits and vegetables for use in the Culinary Arts program and has several raised beds in the Ag Department, including a greenhouse for seedlings and plants. Downey's Culinary Arts school garden program is patterned after Alice Water's "Edible Schoolyard", and the Ag Department sells flower and vegetable plants they have grown to the public (see attached flyers).

Farms: *Davis* and *Gregori* high schools currently share a two-acre farm with a large barn and adjoining pasture on Tully Road in Modesto. From February to July, FFA students raise animals for market and showmanship (student agricultural experience projects) at the fair. The Tully Road farm houses steer (4 pens), pigs (38 pens), goats, sheep, and chickens. *Beyer High* has a small farm, used primarily for goats, along with a small fruit-bearing orchard. *Johansen High* also has a farm located on its campus with similar activities. The other 3 high schools (*Downey, Enoch, and Modesto*) have students store projects on private farms or share a small barn on county property on Crows Landing Road. Future plans for the district include a new 5 acre joint Ag Facility that will include a significant fruit and vegetable garden and fruit tree orchard. The request for bid for a barn on the property will go out to bid in July.

Elementary School Ag Days: Like the other high schools in the district, *Downey High* FFA students visit *La Loma Jr. High* and its other feeder schools to promote and educate incoming students about the benefits of agriculture education. La Loma students visit stations with experiential mini-workshops on a variety of topics taught by Downey students (small engines, FFA, sheep shearing, vegetable identification and judging, floriculture, and others).

4. Curriculum Integration

Agriculture education began at MCS in 1928, and the Agriculture Program at Modesto High was the number two chapter in California. Successful Agriculture Education programs are in place at all 7 comprehensive high schools within MCS. During the 2012-13 school year, 2,562 students district-wide (approximately 18% of the total district high school population) were members of the Future Farmers of America (FFA) chapters at their respective school sites. FFA students participate in Supervised Agricultural Experience projects which culminate in competition at the Stanislaus County Fair. A variety of Agriculture course offerings at all high schools emphasize the integration of core and applied learning, and provide skill-based vocational training and leadership opportunities. Courses include animal science, horticulture, agriculture science, nursery production, and agriculture marketing. This year, Johansen High School started an Agriculture Academy as part of a California Partnership Academy grant.

All but one high school offers Foods/Nutrition courses through which students participating in these electives learn food preparation techniques and units on nutrition. Students often conduct in-class taste tests of the food they produce. Johansen and Downey High Schools offer the capstone Culinary Arts program courses for students who wish to learn more and pursue the full culinary pathway. The Culinary Arts program at Downey, Knights Culinary, is a specialized career technical education program through which students take part in every aspect of food service, including purchasing ingredients, production, marketing, display, quality control, customer service, and finance. Construction was completed last summer to remodel Downey's 1950's era home economics classrooms into a full-service culinary arts facility featuring a commercial kitchen. The school garden outside the classroom was established and fresh fruits and vegetables grown on campus are integrated into the program. Knights Culinary students prepare scones and cinnamon rolls from scratch to sell to Downey staff every Friday. The earned revenue is reinvested into the program. Knights Culinary also caters all home football games and

other special events.

Food and agricultural lessons are disseminated in elementary and junior high schools in many ways. For example, in 4th grade History and Social Science, students learn how water projects help make California a major farming state. Students learn about food webs in 6th grade Science and learn about the anatomy and physiology of plants and animals in 7th grade Life Science.

Nutrition education offered district-wide at all grade levels fosters lifelong habits of healthy eating and physical activity, establishing linkages between health education, school meal programs, and related community services. Students in K-6 learn that healthy meal and snack choices help improve physical performance. Junior high students record and analyze food consumption for one day and make a plan to replace foods and quantities less likely to enhance performance in physical activity with healthier choices. Nutrition education in the high schools is contained in the curriculum for Health Education, a one semester course required for graduation.

5. Management and Organization

MCS has a small informal Farm to School (F2S) program. Key elements include: agriculture, foods and nutrition education, culinary arts, and nutrition services. In May 2012, the leaders of these programs collaborated to apply for 2013 F2S funding. There currently is not an oversight committee or other formal governance body that guides F2S efforts. All F2S efforts will be coordinated by a team led by Mike Henderson, Director of Alternative & Vocational Education and Criss Atwell, Director of Nutrition Services. The F2S Program team will be program representatives from schools that have any of the above-mentioned F2S elements at their sites.

Our goal is to implement a comprehensive F2S program at the district's 34 school sites in the next two years that includes program implementation, expansion, and sustainability planning. F2S is not formally mentioned in our district's Student Wellness Policy or Administrative Regulations. However, through our F2S implementation process, we will determine how to include F2S in our policy statements and regulations. MCS attempts to give preference to local food service vendors from Stanislaus, Merced, and San Joaquin counties if the quality meets our standards. We give regional vendors consideration over national vendors when purchasing food items. All federal and state regulations are adhered to when developing guidelines.

6. Key Partners & Strategic Relationships

Modesto Chamber of Commerce: Collaborates with MCS to host the Ag Aware Luncheon to raise money for agriculture scholarships and support the FFA national convention trip. This year, the 18th annual event was attended by over 500 business leaders and community supporters.

Modesto Garden Club: Volunteers from the club work side-by-side with students in their school gardens. Club members have also helped maintain school gardens during the summer.

Modesto Junior College Agriculture Department: Hosts the sectional FFA Project Competition, Parliamentary Procedure Contest, High School Senior Day, and FFA Field Day. Provides scholarships to incoming Agriculture students, and training with MCS agriculture students for FFA Career Development Event teams.

University of California, Agriculture and Natural Resources: Provides classroom nutrition education and activities in the afterschool program, and nutrition education trainings for teachers and afterschool instructors to incorporate in the classrooms. All curriculum is written to the California State Board of Education Content Standards.

Foster Farms: Supplies locally sourced milk to MCS for school meals, and local poultry prepared by Downey High Culinary Arts class for football games and program fundraisers.

Certified Foods, Inc.: Operates a whole grain milling process to mill California grown wheat producing whole wheat flour that we use for our baked goods offered in school meals.

La Tapatia: Local producer of fresh corn tortillas that supplies taco shells and individually packaged tortilla chips for our school meals.
Edith's Bakery: Local producer of Harvest Low-Fat Chocolate Chip Granola Bars for the Universal Breakfast Program.
FreshPoint Central California and Fresno Produce Company: Both companies supply locally sourced fresh fruits and vegetables for our school meals.
Institute of Technology: Partners with the Downey Culinary Arts program to provide extended learning and helps in food preparation and serving of program fund raisers.

7. Evaluation Protocols

The Director of Nutrition Services has process evaluation tools in place in his department to track all foods procured by the district. The department requests information from suppliers including grower and location of farm. We are able to track the quantity and types of local foods purchased, how often local and regional food items are place on school menus, and how many of those items are purchased in school cafeterias. We have developed new recipes in the past year to make fresh fruit and vegetables more appealing to students and to increase consumption of local offerings. We use outcome evaluation tools to measure current F2S efforts in the district.

8. Lessons Learned to Date

With the heightened awareness of the F2S Program and the commitment of the district to purchase locally and regionally procured food items, we will have the opportunity to increase our contacts with local growers, distributors, and producers. This will enable us to expand the quantity and variety of local food available to school meal programs.

The key challenge that Nutrition Services needs to address is finding a local produce grower that has a large enough operation to supply us with the amount of fresh produce that we need. We are in the process of contacting a local produce grower/supplier, Ratto Brothers (Modesto), to develop a relationship. Another challenge is getting students to consume whole fresh fruits offered in the cafeteria. Most students toss their fruit in the trash at the end of the lunch line. For example, oranges get tossed because students don't want to hassle with peeling an orange. We are exploring a process to "reintroduce" students to whole fresh fruits and have discovered that if we cut the fruit into bite size pieces, the students are more likely to consume them. In addition, we are exploring different recipes to integrate locally grown produce into the entire dish rather than serve as a discreet side dish.

THE PROJECT

9. Proposed Project

DISTRICT OVERVIEW: MCS is located in Modesto, CA (Stanislaus County seat) and is composed of an elementary district (K-8) and a high school district (9-12) with a common Board of Education and administration. Seven other school districts feed into Modesto City Schools at the high school level. The District maintains a staff of about 1,600 certificated and 1,300 classified employees. Current enrollment is approximately 30,229. Students are served in 22 elementary schools (K-6), four junior high schools (7-8), seven comprehensive high schools (9-12), and an extensive alternative education program, including an opportunity and continuation school, independent study and adult evening high school. A variety of specialized academies and specific programs of instruction are available at each high school. In addition, several courses are offered through our School to Career program and Regional Occupational Program. Our Free/Reduced lunch rate is 70.2%. The district has an ethnically diverse student body (58.4% Hispanic or Latino, 24.4% White, 4.6% Asian, 3.6% African American, and 9% other/more than one race).

MCS is blessed to be located in the agricultural heart of the Central Valley. Rich, fertile farmland is located within the city limits and the adjacent areas of the county. The valley has an excellent year-round growing climate. Agriculture in Stanislaus County covers everything from apricots to walnuts. Farmers in this county grow over 250 commodities and produce value added products, which are shipped worldwide. Agriculture represents over $2.5 billion gross dollars (2010) and one-third of the county's jobs. Stanislaus County is the number six agricultural county in the state. Milk, almonds, poultry, and walnuts lead the county in gross farm revenue. Ann Veneman, former United States Secretary of Agriculture (2001 – 2005), was raised on a peach farm in Modesto and graduated from Thomas Downey High School (MCS) in 1967.

While the ultimate goal of the F2S program is to increase the consumption of locally procured fresh fruits, vegetables, and other healthy foods, we also want to influence and encourage students to make a lifetime of healthy choices. Stanislaus County has above average rates for childhood obesity and diabetes. Over 34% of the county's 5th, 7th, and 9th grade school children are in the unhealthy fitness zone for body composition. According to the American Community Survey, Modesto has been hit hard by the recession over the past four years, with the median household income dropping 21.4% to $48,652, and 35.9% children in the city live in poverty. The county's unemployment rate is currently 14.6%, and 67,110 residents receive SNAP/food stamps (an increase of 20% from 2010). Lower socioeconomic levels mean families make inexpensive, poor food choices just to keep food on the table. Through the F2S program, we want to give kids the tools and experiences that can transfer to their lives at home. Kids will be involved in planning, building, planting, harvesting and, in some cases, food preparation. Maybe they will be inspired to start a tomato plant in a pot on the back porch for a salad, or plant tomatillo and pepper plants on the side of the house to make their own fresh salsa. According to Ron Finley, founder of LA Green Grounds, ***"If kids grow kale, kids eat kale. If they grow tomatoes, they eat tomatoes. But when none of this is presented to them, if they're not shown how food affects the mind and the body, they blindly eat whatever you put in front of them."***

PROJECT GOAL: The goal of the project is to ***implement a formal Farm to School Program at MCS that inspires healthy eating choices by promoting an understanding and appreciation of agriculture through experiential garden-based education and by forming partnerships with local farms to procure foods for school meals.*** The project period is October 1, 2013 – September 30, 2015 (24 months). The project will enable MCS to initiate new F2S experiential programs and enhance and expand existing F2S efforts district-wide. The project will include new school gardens, orchards, enhanced F2S curriculum, and enhanced procurement efforts. We will share our best practices from our F2S experience with other interested districts in the region.

PROJECT OUTCOMES

1. *Increase the quantity and variety of local and/or regional food items in school meals produced by Nutrition Services by forming new partnerships with local growers and suppliers.*
2. *Improve and Expand processing capabilities at Nutrition Services to increase their capacity to process local foods for school meals.*
3. *Increase the consumption of fresh fruit and vegetables by students through promotional activities, taste tests and samplings, and new recipe development.*
4. *Expand experiential and agriculture-based learning opportunities by:*
   a. *Implement a School Garden and/or Orchard program at 4 new school sites (Elliott, Mark Twain, Martone, John Muir)*

b. *Strengthen and Enhance existing School Garden and/or Orchard programs at 7 school sites (Beyer, Davis, Downey, Enochs, Gregori, Everett, Orville Wright)*
c. *Develop new and Strengthen existing Farm to School educational partnerships between 3 high schools and 4 elementary schools (Beyer partner with Orville Wright, Davis partner with Martone and Everett, Downey partner with John Muir)*
d. *Expand nutrition/culinary arts, agriculture, and wellness education at 12 school sites (Beyer, Davis, Downey, Elliot, Enochs, Gregori, Mark Twain, Everett, Franklin, John Muir, Martone, Orville Wright)*
e. *Develop new and Strengthen existing Farm to School partnerships between the district and the agricultural community*

PROGRAM DESIGN

1. NUTRITION SERVICES: The F2S Program will be implemented district-wide by increasing the capacity of Nutrition Services to provide more food items grown and produced locally and regionally in school meals each day. In order to accomplish this, the department will continue to develop relationships with local growers, producers, and distributors to procure food items grown locally. In addition, we will attempt to give regional vendors consideration over national vendors when purchasing food items. The department will develop procurement guidelines in collaboration with the purchasing department to insure that MCS adheres to all state and federal guidelines. Local will be defined as Stanislaus, Merced, and San Joaquin counties. Regional boundaries stretch from Redding (to the north) to Bakersfield (to the south) and Salinas Valley (to the west).

Nutrition Services has minor enhancements to make to introduce locally procured foods in a palatable fashion. The bottom line is no matter how healthy a food product is, if it doesn't taste good, kids won't eat it. The department will collaborate with a local food consultant and Downey's Culinary Arts program to modify recipes so that the foods are appealing to kids. This includes new recipe development and tastes tests with students during lunches in Downey's quad to get their feedback. F2S promotional material such as posters highlighting local offerings in the cafeteria and promotional items such as cool rubber wristbands with F2S messages will be distributed to students to encourage them to eat local foods in school meals. The department also has the capacity to purchase foods grown in the school gardens to include in the school meals. This will enhance the sustainability of the garden projects at each campus beyond the grant period.

2. SCHOOL-BASED PROGRAMS: F2S experiential activities will be implemented and expanded at selected school sites and evaluated for program effectiveness during the grant period. This will enable us to determine best practices, make adjustments to the program, and coordinate efforts to scale up to remaining school sites in the district. Each school in the district is at a different stage of development and sophistication with their F2S activities. ***This grant will allow us to unify and provide sustainable models for other schools in our district (and outlying districts) to replicate.*** Students will be involved in a broad combination of activities and instruction, including but not limited to: garden planning, care and cultivation of the garden, tool identification and use/safety, science-based aspects of plants, safety and hygiene related to food preparation, and marketing. Students will plant a variety of fruits, vegetables, herbs, fruit trees, and nut trees. A *Gardening Consultant* will work with the F2S Program Team to develop planting schedules for school gardens, develop a plan for school garden maintenance during non-school days, provide on-site garden education for students, and other school garden consulting duties. The plan may include working with UC Agriculture and

Natural Resources to engage Junior Master Gardeners as volunteers during summer months, and engaging FFA students interested in summer garden maintenance as their FFA project. MCS school sites for the scalable project are listed below with **Free/Reduced Lunch Rates**:

a. Elementary Schools

New school gardens will be developed at ***Martone (83%)*** and ***John Muir (84%)*** with assistance from their partner high schools (listed in #c below). Existing school gardens will be enhanced and expanded at ***Everett (76%)*** and ***Orville Wright (98%).*** Students at each school will plant, care for, and harvest fruits and vegetables at their school garden. Partner high schools will germinate seeds as part of their garden activities and deliver the plants to their partner elementary school. Students from the high school will visit their partner campus a few times a year to discuss the garden, do workshops for the students, and conduct taste tests. Students will also participate in field trips to local farms, gardens, and agriculture-related events.

b. Junior High School

Mark Twain (97%) is located in West Modesto and the school population is primarily Hispanic. As they leave school each day, students are inundated with unhealthy foods from street vendors and ice cream trucks. A school garden and small fruit and nut tree orchard will be developed on campus. Life science students will compost, plant, work soil, and harvest fruits, vegetables, and nuts. A garden club will be established as the amount of time and attention needed to maintain the garden will require more time than the 7th grade curriculum allows. During harvest time, a table with the produce will be set up during lunch for students to taste test.

c. High Schools

Elliott Continuation (70%) serves the highest number of at-risk youth in the district. Students will use F2S grant funds to develop a school garden and fruit tree orchard on 1 acre of land on their campus. The entire garden will be tied to the curriculum. Physical science classes will experiment with the soil, water, and chemical traits; Life science will study seed development and growth; Math classes will predict crop outcomes and supply vs. demand; English classes will keep daily almanac journals and document progress; and Art and elective classes will promote the garden. Elliott oversees the Cal SAFE program (pregnant minors and teen parents) for the district. A majority of their curriculum involves or relates to food and nutrition. The garden will put food in the students' hands and teach them and their children to live and eat healthier. A salad bar will be purchased to serve to students fresh fruit and vegetables harvested from the on-campus farm. ***Downey (65%)*** (partner with John Muir) will implement a new garden project as a collaboration between multiple departments on campus. Inspiration for the Downey Project comes from Alice Waters and her "Edible Schoolyard" concept. The focus is on growing product on campus with the product being prepared by and served to students. Students in Ag classes will grow the various foods that the Culinary Arts program will harvest, prepare and serve. A holistic approach is planned with cross-curricular projects and participation by a variety of student groups: Foods and Nutrition classes, Art/Photography, Multi-Media and Culinary Arts along with an assortment of core classes such as math, science and English. The Culinary Arts program will also conduct new recipe development and student taste tests, which will be shared with Nutrition Services to possibly scale-up for the district meal service. ***Beyer (43%)*** (partner with Orville Wright), ***Davis (65%)*** (partner with Martone and Everett), ***Enochs (38%),*** and ***Gregori (43%)*** each have various levels of garden

projects at their sites. Foods and Nutrition instructors are collaborating with their agriculture departments to plan enhancements to their existing projects. Beyer, Enochs, and Davis are focusing on improving "kitchen gardens", while Gregori will establish a fruit and nut tree orchard. The gardens and orchards will be used as a tool to teach many aspects of food and nutrition, canning and preserving, gardening and composting. Produce grown on campus will be used in Food and Nutrition cooking classes. Gregori also has plans to sell produce and nuts harvested on campus at the Farmer's Market near their campus.

3. COMMUNITY PARTNERSHIPS AND OUTREACH: MCS will continue to work with its existing partners, and establish new partnerships to support F2S efforts in the district. This will include organizations that specialize in agriculture, culinary arts, business, and marketing. Key partners for the project are listed below in section B; however, our Ag partnerships in the community are numerous, as evidenced by the support for the Ag Aware Luncheon (see attachments). To promote the MCS F2S program in the community, Downey Culinary Arts will present a "Farm to Fork" event during the grant period. All schools in the grant proposal will be involved. Schools will harvest foods from their gardens, which will be transported to Downey for preparation by students in the Culinary Arts program. The dinner will be served to event attendees, and will showcase the F2S program at MCS. This will be a perfect opportunity for MCS to thank current partners and engage new partnerships and funding for the F2S program in the district.

10. Key Project Partners

West Modesto King Kennedy Neighborhood Collaborative (WMKKNC): Operates a small (6 acre) semi urban farm as part of their effort to provide affordable and healthy food to their community. Produce is sold at the West Modesto Certified Farmer's Market during summer months, and a Community Supported Agriculture (CSA) vegetable basket subscription. They will provide experiential opportunities for students through field trips to the farm. All services and support are in-kind to the project. (Staff: Cle Moore-Bell)

University of California, Agriculture and Natural Resources (UCANR): Will provide the following services in-kind to the project: curriculum development, assist with promotional campaign and education, teacher training, and train HS students to work with elementary school students in the garden. They will also provide the evaluation component for the program (listed in 12b and 12d below). (Staff: Theresa Spezzano)

FreshPoint Central California and Fresno Produce Company: Both of these local produce companies will supply locally sourced fresh fruits and vegetables for our school meals, and provide information on where each item was geographically sourced from.

Modesto Junior College Agriculture Department: Will host the sectional FFA Project Competition, Parliamentary Procedure Contest, High School Senior Day, and FFA Field Day. Provide scholarships to incoming Agriculture students, and training with MCS agriculture students for FFA Career Development Event teams.

11. Objectives, Activities and Timeline

Objectives	Activities and Completion Date	Responsible
1. By December 31, 2014, develop & strengthen educational partnerships between 3 high schools & 4 elementary schools	1. High schools form F2S partnerships with teachers at their feeder elementary school. (6/14) 2. High school students provide leadership to garden projects at their feeder school. (12/14)	Henderson (MCS) Henderson (MCS)
2. By December 31, 2014, enhance existing School Garden and/or Orchard programs at 7 school sites	1. Develop maintenance plan for summer (4/14) 2. Develop enhancement plans (6/14) 3. Enhance school gardens at 7 sites to supplement current plantings (12/14)	Henderson (MCS) Henderson (MCS) Henderson (MCS)

3. By May 31, 2015, complete implementation of new School Garden and/or Orchard programs at 4 new school sites	1. Develop maintenance plan for summer (4/14) 2. Develop detailed site plans (6/14) 3. Install school gardens at 2 sites (5/15) 4. Install gardens & orchards at 2 sites (5/15)	Henderson (MCS) Henderson (MCS) Henderson (MCS) Henderson (MCS)
4. By May 31, 2015, expand nutrition/culinary arts, agriculture, and wellness education at 12 school sites.	1. MCS works with UC Ag and Natural Resource to enhance curriculum. (8/14) 2. Provide F2S teacher training (10/14) 3. Deliver integrated curriculum to students (12/14)	Henderson (MCS) Spezzano (UCANR) Henderson (MCS)
5. By May 31, 2015, expand the districts capacity to procure and process local foods into school meals	1. Work with purchasing to develop local/regional procurement guidelines (4/14)	Atwell (MCS)
6. By May 31, 2015, conduct promotional events and activities to increase the amount of local foods consumed by students	1. Develop a minimum of 6 new recipes (1/15) 3. Distribute promotional materials to showcase local foods & encourage healthy eating in cafeterias (1/15) 2. Conduct a minimum of 10 taste tests (5/15)	Atwell, May (MCS) Henderson (MCS) Atwell, May (MCS)
7. By May 31, 2015, increase the number of Farm to School partnerships between the district and the community	1. Partner with Chamber for Ag Aware annually (5/15) 2. Develop signature "Farm to Fork" annual fundraising dinner to raise funds for program and foster new partnerships (5/14)	Henderson (MCS) May and Henderson (MCS)
8. By September 30, 2015, participate in activities that will strengthen and sustain the F2S program beyond the grant period	1. Develop and implement sustainability plan (3/15). 2. Participate in orientation webinar and periodic webinars throughout the course of the grant (5/15) 3. Attend the USDA Farm to School meeting, coinciding with the national conference. (5/15) 4. Evaluate the effectiveness of the F2S program in the district. Share best practices with other districts (8/15)	Henderson (MCS) Henderson, Atwell, and May (MCS) Henderson, Atwell (MCS) Henderson (MCS)

12. Evaluation Plan

Our evaluation plan includes the following measurements:

a. Increase the amount of local and regionally sourced meal components into the cafeteria, as evidenced by the number and types of local or regional food procured, and the % of total foods purchased that are local or regional (target increase is 15%).
b. Increase consumption of fresh fruits and vegetables, as evidenced by the number of new recipes developed with local foods, the number of taste tests conducted, pre and post plate waste analysis, and the % of students who report increased their consumption of fresh fruits and vegetables (target increase is 50%).
c. Expand experiential and agriculture-based learning opportunities, as evidenced by the number of new school gardens implemented (4), number of existing school gardens enhanced (7), total square footage of garden/orchard space pre and post grant, number of students engaged in school garden activities; and number of new F2S partnerships developed in the community.
d. Increase students' knowledge of food and nutrition, as evidenced by the number of students that receive F2S related education, number and types of F2S promotional items distributed to students, % of students who have an increased understanding of where their food comes from, % of students who have and increased understanding of how nutrition affects their health and well-being (target is 50%).

We will submit quarterly financial and progress reports, and final financial and progress reports.

13. Sustainability

The long-term goal beyond the grant period is to "scale-up" and integrate successful Farm 2 School activities at all school sites in the district. To support this goal, the F2S Program Team will develop a comprehensive sustainability plan during the grant period that will enable all components of our F2S program to continue/expand after the grant period ends. This will include (but not a limited to) the following post-grant activities:

- Nutrition Services will procure and process local and regional foods for school meals. In addition, they will purchase foods harvested from the school gardens to process into school meals, thus providing a sustainable revenue stream for the school gardens.
- Schools will sell their produce at the local farmers market and to students during non-lunch hours, and reinvest the revenue into the program.
- An annual "Farm to Fork" fundraising event benefiting the MCS F2S program will feature produce grown at all F2S gardens in the district and prepared by Downey Culinary Arts program.

QUALITY ASSURANCE & STAFFING

14. Project Management & Quality Assurance

MCS has extensive experience in managing grant-funded projects. MCS will manage the project through a F2S Program Team. This team will be led by Mike Henderson, Alternative & Vocation Education; Criss Atwell, Director of Nutrition Services; and Chris May, Culinary Arts Instructor; and will consist of at least one representative from the 12 schools participating in the F2S school garden program, and a representative from each key project partner. High Schools will send 2 representatives (1 Ag teacher and 1 Food/Nutrition/Culinary Arts teacher). The team will meet on a bi-weekly basis from October 2013 – March 2014, and on a monthly basis from April 2014 – October 2015. The team will review project progress, program budget and expenditures, determine best practices and identify program challenges, facilitate sharing outcomes with adjacent school districts, and report on partnership activities.

15. Staffing

Resumes/CV's are attached for the following staff who will manage the project:

Criss Atwell, Director of Nutrition Services, MCS: Criss directs the Nutrition Services Department for MCS including a central processing facility and 34 school sites. He has been in this role since 1994. The annual revenue for the food service program is approximately $13 million. Criss oversees a staff of over 200 employees. Criss also oversees a catering operation within the department that generates over $400,000 per year. His role in the F2S program will include approving design specifications for maintenance and modernization of Nutrition Services to enable the processing of locally procured food items; negotiating food contracts with local and regional growers, distributors, and producers; supervise all personnel within the department; and develop promotional activities to promote local offerings served in the school meals.

Mike Henderson, Director of Alternative and Vocational Education, MCS: Mike will oversee the implementation and expansion of school gardens and orchards in the district, and will work with all community partners related to agriculture experiential education and curriculum development. Mike supervises the School to Career program, including daily operation of Regional Occupational Programs. He managed the career-technical facilities grant for renovation of Downey High School's Culinary Arts program from 1950's era kitchen to state-of-the-art commercial kitchen.

Christopher May, Culinary Arts Program Instructor at Downey High School, MCS: Culinary Arts Instructor at Downey since 2007, Chris also has 20 year of experience as Executive Chef/CEO of The Spa Restaurant in Indiana. Responsible for transforming Home Economics curriculum into a current Culinary Arts program, with multiple additional revenue streams. Chris will work as the lead with the Food and Nutrition instructors at selected schools in the project. He will also direct the Culinary Arts students in the creation of the annual "Farm to Fork" fundraising dinner.

Budget Narrative: Farm to School Grant

Modesto City Schools

Grant Period **October 1, 2013 - September 30, 2015**	**USDA Farm to School Grant CFDA 10.575**	**Match Funds 26% Non-Federal**	**Project Total**
A. Personnel			
Substitute Teacher: 59 sub days x $130/day = $7,670 Sub days will be used by teachers at 3 of the high school sites to conduct F2S experiential activities with their students at their partner elementary school. Sub days will also be used for teachers participating in F2S promotional events (taste tests, outreach events). Teachers in the elementary schools will use sub days for field trips or other F2S experiential activities that will require that they spend a day out of the classroom.	$ 7,670		$ 7,670
8th Period Stipend: 3 semesters x $3,033/semester = $9,099 An optional 8th Period will be offered to students at Elliott Alternative High School. Students will enroll in a Farm to School class that where they will be involved in all aspects of implementing and maintaining the school garden and orchard project at their school as outlined in the proposal narrative. The class will be taught by a certificated teacher with agriculture experience, to be hired. The 8th Period Farm to School class will be offered second semester 2013/14 (January - May 2014), first semester 2014/15 (Aug - Dec 2014), and second semester 2014/15 (Jan - May 2015)	$ 9,099		$ 9,099
Director of Alternative and Vocational Education (MATCH): 0.12 FTE @ $119,000 year x 2 years = $28,560 Mike Henderson will oversee the implementation and expansion of school gardens and orchards in the district, and will work with all community partners related to agriculture experiential education and curriculum development. Mike supervises the School to Career program, including daily operation of Regional Occupational Programs. Recently he oversaw the career-technical facilities grant for renovation of Downey High School's Culinary Arts program from 1950's era kitchen to state-of-the-art commercial kitchen. *(Match source is non-Federal Funds: Regional Occupational Program (ROP) and General Fund)*		$ 28,560	
Total Personnel	**$ 16,769**	**$ 28,560**	**$ 45,329**

Grant Period October 1, 2013 - September 30, 2015	USDA Farm to School Grant CFDA 10.575	Match Funds 26% Non-Federal	Project Total
B. Fringe Benefits			
Substitute Teacher: $7,670 x 11.6% = $890 11.6% fringe consists of STRS 8.25%, Medicare 1.45%, SUI 1.10%, and Workers Compensation .80%	$ 890		$ 890
8th Period Stipend: $9,099 x 12.26% = $1,116 11.6% fringe consists of STRS 8.25%, Medicare 1.45%, SUI 1.10%, and Workers Compensation .80%	$ 1,116		$ 1,116
Director of Alternative and Vocational Education (MATCH): $28,560 x 24.15% = $6,897 24.15% fringe consists of PERS 11.417%, PERS Reduction 1.603%, FICA 6.2%, Medicare 1.45%, SUI 1.1%, Workers Compensation .80%, LTD 1.0%, and OPEB .58% *(Match source is non-Federal Funds: ROP and General Fund)*		$ 6,897	
Total Fringe Benefits	**$ 2,005**	**$ 6,897**	**$ 8,902**
C. Travel			
Field Trips: average $200/trip x 16 trips = $3,200 The 4 elementary schools in the project will take 4 field trips each (16 total trips) during the grant period to local farms, gardens, nurseries, partner high schools, and other F2S activities. Cost per trip is based on the average cost of trips within 60 miles of the district.	$ 3,200		$ 3,200
Farm to School/USDA convening = $2,212 Travel costs for one project representative to attend the required F2S convening for grantees. Cost is based on round trip air fare from San Francisco (SFO) to Washington DC on a major airline carrier in March 2014, 3 day/3 night hotel stay in DC: Roundtrip Airfare from SFO-DCA on major carrier = $710 Hotel $300 per night for 3 nights = $900 (includes tax, etc) Car Rental $60/day for 4 days inc tax and fees = $240 Meals $40 per diem including partial for each travel day = $160 Mileage RT Modesto - SFO 220 miles x .555/mi = $122 Parking at SFO $20/day for 4 days = $80	$ 2,212		$ 2,212
Total Travel	**$ 5,412**	**$ -**	**$ 5,412**
D. Equipment			
Garden Equipment			
Rototiller: 2 x $650 each = $1,300 Cost for 2 Husqvarna 205cc 14" Tine rototillers (model CRT900) to be shared by all F2S partners in the district for their school gardens and orchards.	$ 1,300		$ 1,300
Total Equipment	**$ 1,300**	**$ -**	**$ 1,300**

Grant Period October 1, 2013 - September 30, 2015	USDA Farm to School Grant CFDA 10.575	Match Funds 26% Non-Federal	Project Total
E. Supplies			
Garden Supplies: The following supplies will be used to implement new school gardens and/or orchards at 4 new school sites, and strengthen/enhance school gardens and/or orchards at 7 school sites. A detailed accounting of the supplies allocated per site is included on the 2 pages following this narrative titled "Farm to School Budget Detail by Site".			
Fencing: 150 linear feet of 6' chain link fence @ $33.33 foot installed at Mark Twain Junior High School to keep trespassers out of garden area. Cost includes labor and access gate.	$ 5,000		$ 5,000
Wheelbarrow: 11 wheelbarrows @ $50 each	$ 550		$ 550
Utility Cart: 4 carts @ $50 each	$ 200		$ 200
Shovels, hoes, rakes, pruners: average cost $20 ea x 113	$ 2,260		$ 2,260
Gloves, rubber work boots: average cost $10 ea x 150 pairs	$ 1,500		$ 1,500
Stakes/Trellis system: average cost $20 ea x 120 units	$ 2,400		$ 2,400
Composter and supplies: 4 large composters @ $350 each 5 small tumble composters @ $220 each. Costs include composting supplies	$ 2,500		$ 2,500
Hoses: soaker and heavy duty hoses calculated at an average cost of $20 each x 44 hoses	$ 880		$ 880
Soil amenders/fertilizers: 288 bags flower/vege garden soil @ $8.48ea, 44 bags Tree/shrub soil @ $7.98ea, 400 bags soil conditioner @ $7.98 ea, 12 Miracle-Gro sprayers @ $10.47 ea, 22 Miracle-Gro 1.5 lbs granules @ $5.78ea. Plus 7.625% local tax.	$ 6,720		$ 6,720
Raised Beds: redwood lumber, bolts, and screws to build eighteen 12'x4' raised beds @ $150/ea average	$ 2,700		$ 2,700
Fruit trees: 50 fruit and nut trees at an average cost of $45/tree (cost depends upon tree maturity and type of fruit/nut). Will also solicit tree donations from local growers.	$ 2,250		$ 2,250
Seeds/Plants: seasonal vegetable plants and seeds, fruit plants and seed, and fruit and vegetable vines at an average cost of $2 per 6 pak or $2 per pack of seeds x 1500 packs (3 - 4 seasonal plantings at 10 school sites).	$ 3,000		$ 3,000

Grant Period October 1, 2013 - September 30, 2015	USDA Farm to School Grant CFDA 10.575	Match Funds 26% Non-Federal	Project Total
Floating Planting Trays Systems: 67 planting trays systems @ $70 each (tray, cells, gro-plugs, lid)	$ 4,690		$ 4,690
Warming Mat: 2 mats @ $200 each	$ 400		$ 400
Shed w/ lock (min 8'x10'): 2 large sheds to store garden tools and equipment @ $440 each; 4 small sheds to store garden tools and equipment @ $330 each.	$ 2,200		$ 2,200
Irrigation equipment: PVC pipe, sealant, irrigation valves, sprinkler heads, drip system supplies at average cost of $1 per linear foot x 8,000 linear feet for in-the-ground school gardens and orchards.	$ 8,000		$ 8,000
Food Service Supplies			
Salad Bar: cost of one salad bar for Elliott Alternative High School. Footprint is 64" x 20". Cost is $3,095 plus 7.625% sales tax	$ 3,331		$ 3,331
Food Supplies: Cost of fruit and vegetables for taste test samples above and beyond what Nutrition Services procures for meal service. Cost is for 3 semesters @ $200/semester. Most taste test fruit will be in-kind by Nutrition Services or supplied from school gardens.	$ 600		$ 600
Curriculum and Outreach: Cost for Farm to School curriculum, promotional items (F2S rubber bracelets and incentive items), posters promoting local food offerings in the school cafeteria = $5,601. Cost for Gregori High School to have a booth at the certified Farmers Market. $350 for 2013 + $350 for 2014 = $700	$ 6,301		$ 6,301
Total Supplies	**$ 55,482**		**$ 55,482**
F. Contractual/Consultant			
Gardening Consultant: $50 hour x 118 hours= $5,900 Duties include developing a plan for maintaining the school gardens during non-school days (winter, spring, and summer breaks), developing planting schedules for school gardens, providing on-site garden education for students, and other school garden consulting duties as agreed upon. Candidate has not yet been identified.	$ 5,900		$ 5,900
Total Contractual	**$ 5,900**		**$ 5,900**

Grant Period October 1, 2013 - September 30, 2015	USDA Farm to School Grant CFDA 10.575	Match Funds 26% Non-Federal	Project Total
G. Construction			
N/A	$ -		$ -
Total Construction	$ -		$ -
H. Other			
N/A	$ -		$ -
Total Other	$ -		$ -
I. Total Direct Charges	**$ 86,868**	**$ 35,457**	**$ 122,325**
J. Indirect Charges (4.47%): Indirect charges of 4.47% are determined annually for the district by the California Department of Education. This is the rate set by CDE for the 13/14 school year. Rate for 14/15 has not yet been determined.	$ 3,883		$ 3,883
K. TOTAL PROJECT BUDGET	**$ 90,751**	**$ 35,457**	**$ 126,209**

Farm to School E .get Detail by Site
Budget Period 10/1/13 - 9/30/15

Grant Period October 1, 2013 - September 30, 2015	cost per	Elliot	Mark Twain	Beyer	Davis	Downey	Enochs	Gregori	Everett	John Muir	Martone	O Wright	District/NS	TOTAL
A. Personnel														
Substitute Teacher	130			1,040	2,340	2,600	910		780					7,670
8th Period Stipend		9,099												9,099
Total Personnel		**9,099**	**0**	**1,040**	**2,340**	**2,600**	**910**	**0**	**780**	**0**	**0**	**0**	**0**	**16,769**
B. Fringe Benefits														
Substitute Teacher	11.60%			121	271	302	106		90					890
8th Period Stipend	12.26%	1,116												1,116
Total Fringe Benefits		**1,116**	**0**	**121**	**271**	**302**	**106**	**0**	**90**	**0**	**0**	**0**	**0**	**2,005**
C. Travel														
Field Trips	200/trip								800	800	800	800		3,200
Farm to School/USDA convening													2,212	2,212
Total Travel		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**800**	**800**	**800**	**800**	**2,212**	**5,412**
D. Equipment														
Garden Equipment														
Rototiller		650			650									1,300
Total Equipment		**650**	**0**	**0**	**650**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,300**
E. Supplies														
Garden Supplies														
Fencing (John Luikkonen)			5,000											5,000
Wheelbarrow	*50*	150	100		50	100	100	50						550
Utility Cart	*50*								50	50	50	50		200
Shovels, hoes, rakes, pruners	*20*	300	300	200	100	260	200	100	200	200	200	200		2,260
Gloves, rubber work boots	*10*	400	300	200		200			100	100	100	100		1,500
Stakes/Trellis system	*20*	400	400	200		200	200	200	200	200	200	200		2,400
Composter and supplies	*350L 220S*	350	350	220		350	350		220	220	220	220		2,500
Hoses	*20*	160	100	60	60	100	60	60	100	60	60	60		880
Soil amenders/fertilizers	*2 sqft*	1,160	800	800	800	1,160	800		300	300	300	300		6,720
Raised Beds (average cost)	*150*					600	600	1,050		150	300			2,700

Farm to School E get Detail by Site
Budget Period 10/1/13 - 9/30/15

Grant Period October 1, 2013 - September 30, 2015	cost per	Elliot	Mark Twain	Beyer	Davis	Downey	Enochs	Gregori	Everett	John Muir	Martone	O Wright	District/NS	TOTAL
Fruit trees (50 trees)	*45*	540	360	270		360		720						2,250
Seeds/Plants	*2/pk*	550	300	300	300	350	300		300	200	200	200		3,000
Planting Trays/gro-plugs/drain tray	*70*	840	560	420	420	560	420		420	350	350	350		4,690
Warming Mat	*200*					200	200							400
Shed w/ lock (min 8'x10')	*440L 330S*	440	440						330	330	330	330		2,200
Irrigation equipment	*1/linear ft*	2,000	2,000			1,000	1,000	2,000						8,000
Food Service Supplies														0
Salad Bar	3095+tax	3,331												3,331
Food Supplies													600	600
Curriculum and Outreach								700					5,601	6,301
Total Supplies		**10,621**	**11,010**	**2,670**	**1,730**	**5,440**	**4,230**	**4,880**	**2,220**	**2,160**	**2,310**	**2,010**	**6,201**	**55,482**
F. Contractual/Consultant														
Gardening Consultant	50/hour												5,900	5,900
Total Contractual		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5,900**	**5,900**
G. Construction														
N/A														0
Total Construction		0	0	0	0	0	0	0	0	0	0	0	0	0
H. Other														
N/A														0
Total Other		0	0	0	0	0	0	0	0	0	0	0	0	0
I. Total Direct Charges		**21,486**	**11,010**	**3,831**	**4,991**	**8,342**	**5,246**	**4,880**	**3,890**	**2,960**	**3,110**	**2,810**	**14,313**	**86,869**
J. Indirect Charges (4.47%)		960	492	171	223	373	234	218	174	132	139	126	640	3,883
Total Project Budget by site		**22,446**	**11,502**	**4,002**	**5,215**	**8,714**	**5,480**	**5,098**	**4,064**	**3,092**	**3,249**	**2,936**	**14,953**	**90,752**

Total Grant Request	**90,752**
MATCH (Director, Alternative/Voc Ed)	**35,457**
K. TOTAL PROJECT BUDGET	**126,209**

28% *(Minimum 25% match required)*

Based on 3 days/3 nights to Washington DC for one project representative

Air	700	
Hotel	900	300/night including tax and fees
Car Rental	250	60/day plus tax and fees
Meals (per diem)	160	40/day (includes travel days)
Mileage to/from airport	122.1	220 mi*.555
Parking	80	
	2212.1	

Soil Amender Justification: Lowe's

Item	Qty	Cost per	Total	Use
Kellogg 3-cu ft Flower and Vegetable Garden Soil	288	$ 8.48	$ 2,442.24	For each of the planter boxes (18 raised beds at 48 cu ft each)
Kellogg 3-cu ft Tree and Shrub Garden Soil	44	$ 7.98	$ 351.12	For each of the Fruit tree planting holes (44 fruit trees)
Kellogg 3-cu ft Ready to Use Organic Soil Conditioner	400	$ 7.98	$ 3,192.00	For sites that will be planting gardens directly in the soil (Elliot 580 ft2, Mark Twain 400 ft2, Beyer 400 ft2, Davis 400 ft2, Downey 388 ft2, Everett 150 ft2, Orville Wright 150ft2). Enough cubic footage to amend soil to 1-1/2 foot depth (2468 ft2 of planting area x 50% = 1234 cu ft of conditioner)
Miracle-Gro Flower and Vege Food Sprayer	12	$ 10.47	$ 125.64	One sprayer per site plus one for breakage (11 sites + 1 = 12)
Miracle-Gro 1.5 lbs all purpose flower and vege food water-soluble granules	22	$ 5.78	$ 127.16	2 boxes per site (11 sites x 2 boxes = 22)
			$ -	
Subtotal			$ 6,238.16	
Sales Tax @ 7.625%			$ 475.66	
TOTAL			$ 6,713.82	

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Modesto City Schools USDA Farm to School Grant Task/Activity Snapshot

School Partnerships & Tasks

Schools	Partner	New Garden	Expand Existing Garden	Subs/Ag Education ($130/per)	Field Trips (local farms, gardens, ag-related events) ($200/trip)	Equipment Rototiller	Fencing	Garden Supplies									
								Wheelbarrow ($50/ea)	Utility Cart ($50/ea)	Shovels, hoes, rakes, pruners	Gloves, rubber work boots	Stakes/Trellis system ($20/ea)	Composter & Supplies (350L; 220S)	Hoses ($20/ea)	Soil Amenders/ fertilizers (2	Raised Beds $150/ea ave cost)	Fruit Trees ($45 /ea)
Everett	Davis HS		X	780	800				50	200	100	200	220	100	300		
Martone	Davis HS	X			800				50	200	100	200	220	60	300	300	
Davis HS	Everett Martone		X	2,340		650		50		100				60	800		
John Muir	Downey HS	X			800				50	200	100	200	220	60	300	150	
Downey HS	John Muir		X	2,600				100		260	200	200	350	100	1160	600	360
Orville Wright	Beyer HS		X		800				50	200	100	200	220	60	300		
Beyer HS	Orville Wright		X	1,040						200	200	200	220	60	800		270
Mark Twain	King Kennedy	X					5,000	100		300	300	400	350	100	800		360
Enochs HS			X	910				100		200		200	350	60	800	600	
Gregori HS			X					50		100		200		60		1050	720
Elliott		X				650		150		300	400	400	350	160	1160		540

Schools	Partner	Seeds/plants (2/pk)	Planting Trays/gro-plugs/ drain tray($70/ea)	Warming mat ($200)	Shed w/ lock (min 8' X 10/) ($440L; $330S)	Irrigation equipment (1/linear mtg)	Salad Bar (3095 + tax)	Curriculum & Outreach
Everett	Davis HS	300	420		330			
Martone	Davis HS	200	350		330			
Davis HS	Everett Martone	300	420					
John Muir	Downey HS	200	350		330			
Downey HS	John Muir	350	560	200		1000		
Orville Wright	Beyer HS	200	350		330			
Beyer HS	Orville Wright	300	420					
Mark Twain	King Kennedy	300	560		440	2000		
Enochs HS		300	420	200		1000		
Gregori HS						2000		700
Elliott		550	840		440	2000	3331	