Sierra-Manteca FFA



Department Program Plan

Sierra-Manteca FFA



Agriculture Instructors:

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TEACHER OF AGRICULTURE JOB DESCRIPTION

School District:

Position Title: Teacher, Agriculture

Position Function:

To plan and conduct instructional programs designed primarily to prepare and train youths for gainful employment or entrepreneurship in agricultural careers following high school or college; to perform ancillary functions in support of these instructional programs in agriculture; to assist in other school activities as assigned.

Specific Responsibilities and Duties

- 1. Provides agricultural instruction that is realistic in terms of current and future job specifications.
- 2. Utilizes a variety of teaching methods which will promote the attainment of desirable goals by each student.
- 3. Arranges sufficient contact with the work community so that the technical competency of the teachers will be maintained.
- 4. Participates in the development of instructional materials.
- 5. Participates in curriculum development for the specific education assignment and for the total program of the schools.
- 6. Participates in studies of the needs of youths in the school community.
- 7. Seeks the assistance of resource persons who are informed about and responsible for the instruction of students with various mental, physical, educational, and other special needs.
- 8. Assists in placement of students.
- 9. Cooperates with local career counseling and guidance personnel.
- 10. Assists all agricultural education students to make informed decisions regarding personal occupational goals in agriculture.
- 11. Assists all agricultural education students to develop personal training programs appropriate to their occupational goals in agriculture.
- 12. Provides related instruction with field, shop, laboratory, cooperative work, or other occupational experience that is appropriate to the career objectives of the student.

- 13. Assists all agricultural education students to plan, develop, and conduct agricultural experience activities appropriate to their occupational goals.
- 14. Supervises the agricultural experience activities of all agricultural education students through on-site visitation wherever the activities occur by observation and conference with students, employers, and parents.
- 15. Using the vehicle of FFA, assists students to develop those attitudes and skills in citizenship, leadership, and human relations which will contribute to their personal and occupational success.
- 16. Advises and assists officers, committees, and members of the local FFA chapter as they plan and conduct activities of the organizations.
- 17. Encourages, supervises, and coaches FFA career development event teams as appropriate to the members' interests.
- 18. Actively participates in professional improvement activities including meetings and workshops called by the district, the California Department of Education, the California Agricultural Teachers' Association, or other agricultural organizations.
- 19. Evaluates students' progress toward achieving their occupational goals and reports to parents and district administration.
- 20. Maintains an environment which is conductive to learning with particular attention to safety practices, good housekeeping, appropriate instructional aids, textbooks, supplies and equipment, and student behavior.
- 21. Serves as resource person and executive secretary to the district advisory committee for agricultural education.
- 22. Follows up on graduates of agricultural education programs and maintains records of their placement and occupational or education successes.
- 23. Performs basic attendance accounting procedures.
- 24. Prepares annual budges; orders supplies, instructional materials and equipment according to district procedures; maintains inventory records as required.
- 25. Plans, coordinates, and evaluates the work of the teacher aide, student teachers, custodian and lab assistant.
- 26. Prepares and revises as needed the district's goals, objectives, and course outlines for agricultural education programs. Conducts programs in accordance with them.
- 27. Makes minor repairs and adjustments to equipment; requests other equipment and facility maintenance and repair as required.

- 28. Assists in the development of the District Plan for Agricultural Education and in the completion of required statistical reports.
- 29. Performs other duties of student activity supervision as requested by the school administration.
- 30. Serves as a resource person in agriculture for the entire community.
- 31. Cooperates with community organizations.
- 32. Keeps school counselors and administrators informed concerning the educational needs, career opportunities, and instructional programs available to rural youth.

Applicable Authority

The teacher is required to perform his duties within the framework of the following sources of authority:

- 1. Local, state, and federal law.
- 2. District regulations, policies, and procedures.
- 3. Carl D. Perkins Vocational and Technical Education Act of 1998 finding provisions.
- 4. California State Plan for Career Technical Education.
- 5. District budget:
- 6. Community morals and standards.
- 7. Professional ethics.

Minimum Qualifications

- 1. <u>Credential</u> A valid California teaching credential which authorizes the teaching of the agricultural education subject assigned. (May be on a partial-fulfillment basis.)
- 2. <u>Education</u> Fully meets California State Plan for Career Technical Education special qualifications for teachers of agriculture and requirements pertinent to the teaching credential held.
- 3. Occupational Experience Fully meets California State Plan for Career Technical Education requirements and any specified by the teaching credential held.

Persons to Whom Accountable

- 1. Under the immediate supervision of the high school principal.
- 2. Takes into consideration the recommendation of the community advisory committee for agricultural education.
- 3. Seeks evaluation from students, employers, graduates, and teachers of post-secondary programs in agricultural education.
- 4. Accepts direction from the California State Department of Education Regional Supervisor of Agricultural Education.

Criteria for the Measurement of Student Progress

- All students of Agricultural Education, by not later than early in their second year of
 agricultural education instruction, will have identified their tentative agricultural career
 choice within the framework of the six agricultural career areas as identified by the
 California Department of Education.
- 2. All students of agricultural education, not later than early in their second year of agricultural education will prepare and file with their instructor a plan of career preparation which will include high school and post-high school agricultural education courses which their plans to complete and descriptions of agricultural experience and FFA activities in which he/she plans to engage.
- 3. All students of agricultural education will be engaged in their planned program of occupational experience in agriculture not later than the end of the fall semester of their second year of agricultural education instruction. Once begun, a student's agricultural experience activities must be conducted for at least a portion of each year during which they are enrolled in a agricultural education program and it must be of an appropriate nature and of sufficient duration and intensity to develop the competencies needed for beginning in their chosen agricultural occupation.
- 4. All students of agricultural education will be an active participant in the FFA chapter; is engaged in FFA activities which contribute to the achievement of his/her personal and occupational goals; is making reasonable progress toward the achievement of FFA awards and advanced degrees.
- 5. All students of agricultural education are making reasonable progress in achieving the performance objectives of the agricultural education course(s) in which they are enrolled.
- All students of Agricultural Education, upon completion of an instructional program in agriculture, is placed in employment or in an advanced education program as appropriate to their occupational goals.

B. TARGETED OCCUPATIONS

Step 1 In relation to the competencies taught in each course, make a list of the targeted occupations for each of the contest areas.

Step 2 Make sure to include several possible occupations for all courses taught.

Idea's Use a chart for each course.

Break it down by main program areas.

Have your ag advisory committee assist with this section. It's a great way to incorporate them into the development of this plan, and they know the community.

Note This may be similar to the list of occupations that were included in the Job Market Description section.

ORNAMENTAL HORTICULTURE



JOBS REQUIRING ADVANCED EDUCATION (College or University)

Agri-Chemical Manager
Air Poliution Control Inspector
Campground Manager
Conservation Officer
Forest Fire Ranger
Forest Fire Fighter
Fire Warden
Forest Fire Suppression Crew Leader

JOBS REQUIRING SPECIALIZED TRAINING (Post Secondary)

Chemical Applicator
Field Technician
Animal (Vet) Technician
Plant Propagator
Work Foreman-Parks/Rec.
Air Pollution Control Technician
Forestry Technician
Groundsperson-Arboriculture

JOBS REQUIRING LIMITED TRAINING AND EXPERIENCE ENTRY LEVEL (Secondary and Adult Education)

Sales Clerk
Laborer
Nursery Worker
Conservation Aide
Forestry Aide
Trainee-Arboriculture
Climber-Arboriculture
Floral Sales Person

Ernest Righetti High School, 941 East Foster Rd., Santa Maria, CA 93455 (805) 937-2051 Contact Richard Welch (ext. 225) or Cyntihia Gonsalves (ext. 244)

TARGETED OCCUPATIONS

We train our students to meet competencies in an occupation in one or more of the "Four Program Areas of Occupations in Agriculture." Listed below are various jobs within each of the program areas.

Agriculture Production	Jobs
Crop Production	Irrigator, Propagator, Farmhand, Foreman, Ranch Laborer, Feed Lot Hand, Field Crop Grower, General Maintenance
Animal Production	Livestock Handler, Milker, Inseminator, Auctioneer, Vet Aide, Pet Care, Ranch Laborer, Brand Inspector, Farm Hand, Pest Control
Agriculture Mechanics	Jobs
Mechanics	Small Engine Mechanic, Equipment Operator, Parts Person,
	Farm Mechanic, Shop Foreman, Repairman, General Maintenance/ Mechanics
Welder	Repairman, General Maintenance/

Ornamental Horticulture	Jobs
Greenhouse Management	Greenhouse Worker, Foreman Maintenance, Propagator, Tissue Culture
Nursery & Turf Operator	Nursery Worker, Salesman, Plant Propagator, Gardener, Golf Course Maintenance
Landscape	Grounds Worker, Gardening Business, Garden Store Sales
Floriculture	Floral Design, Floral Sales, Floral Delivery
Agribusiness/Computers	Jobs
Agribusiness	Ag Sales, Banking, Keyboard Operator, Farm Accounting, Ag Secretary/Bookkeeper, Inventory Maintenance

C. Total Program Goals and Objectives

C. TOTAL PROGRAM GOALS AND OBJECTIVES

STEP 1	Have each agriculture staff member determine the goals each has for the overall program
STEP 2	Schedule a meeting to discuss the goals and come up with a consensus for the year.
STEP 3	This should be done prior to the start of the school year.
STEP 4	Program goals should be reviewed and revised on a yearly basis.
Idea's	Besides overall program goals, it wouldn't be a bad idea to have individual goals and list them as well.
	Set a completion date for each goal.
	Assign responsibility by attaching a name of the staff member or members who will oversee each goal.
	Share this information with your ag advisory committee and your principal so they know the direction your program is heading.
Note	Set realistic goals for each year and not too many at one time.
	Consider time and money when choosing the goals for the program.

Agricultural Education Aims

The outcome of achievements derived from courses in agriculture are many even though they are not always realized immediately. The more desirable ones are described below.

- 1. The student's interest in agriculture is determined.
- 2. An appreciation of conversation of our natural resources is developed in the student.
- 3. The student is given a knowledge of living and growing things.
- 4. Gives the student the ability to make intelligent selections of farm products for home use.
- 5. Teaches the student to provide and maintain attractive home surroundings.
- 6. Develops in the student an appreciation and understanding of the importance of agriculture to all citizens.
- 7. Acquaints the student with related agricultural fields. (Job prospects)
- 8. Trains the student for related agricultural fields.
- 9. Prepares the student to become engaged in an agricultural production enterprise.
- 10. Prepares the student for higher education in agriculture or its related fields.

PROGRAM GOALS AND OBJECTIVES

AGRICULTURE PRODUCTION

A. <u>Agricultural Production</u> (01.01)

This instructional program is designed to prepare persons employment in enterprise involved in the production of plant or animal products associated with food, feed, clothing, etc. Most occupations served by this program are located on the farm or ranch.

The goals of this instructional program are:

- 1. To supply students with the knowledge and skills required for entry into and successful progress in those agricultural production occupations that do not require education beyond the secondary school level.
- 2. To prepare students for post-secondary level vocational education in agricultural education.
- 3. To enable students to acquire an understanding of the economic and social impact of the agriculture production industry upon society and its relationship to agriculture in general.
- 4. To provide the agricultural production industry with appropriate numbers of persons adequately prepared for successful employment in those occupations that now exists and that are developing in the industry.

B. <u>Agricultural Mechanics</u> (01.03)

This instructional program is designed to prepare persons for employment in enterprises associated with any agricultural industry but requiring primarily mechanical competencies of the worker. Agricultural mechanics maintain and repair farm equipment and machinery, fabricate parts, and perform welding tasks.

The goals of this instructional program are:

- 1. To supply students with the knowledge and skills required for entry and successful progress in those agricultural mechanics occupations that do not require education beyond the secondary school level.
- 2. To prepare students for advanced post secondary vocational education in agricultural mechanics.
- 3. To enable students to acquire and understanding of the economic and social impact of the agricultural mechanics industry upon society and its relationship to agriculture in general.
- 4. To provide the agricultural mechanics industry with appropriate numbers of persons adequately prepared for successful employment in those occupations which presently exist and which are developing in the industry.

C. <u>Ornamental Horticulture (01.05)</u>

This instructional program is designed to prepare persons for employment in enterprises associated with floriculture, greenhouse operation, turf production and management, and floristry. The occupations in this industry involve mostly outdoor work growing and managing plants.

The goals of this instructional program are:

- 1. To supply students with the knowledge and skills required for entry into and successful progress in those ornamental horticulture occupations that do not require education beyond the secondary school level.
- 2. To prepare students for post secondary vocational education in agriculture.
- 3. To enable students to acquire an understanding of the economic and social impact of the ornamental horticulture industry on society and its relationship to agriculture in general.
- 4. To provide the ornamental horticulture industry with appropriate numbers of persons adequately prepared for successful employment in those occupations that presently exist and that are developing in the industry.

D. Introduction to Agriculture (01.08)

This course, called Ag Science 1, is the introductory vocational agricultural course that is taught as the common entry point for all instructional programs in agricultural education.

The goals of this course are:

- 1. To supply students with some of the basic agricultural knowledge and skill required for entry and common to most agricultural occupations.
- 2. To supply students with the knowledge and understanding required to make informed career choices in agriculture and assist them to do so.
- 3. To assist students to prepare a personal plan of preparation for their chosen agricultural career.

The objectives of this course are:

- 1. Each student completing Ag Science 1 will possess certain basic agricultural competencies that are commonly required in-entry-level agricultural occupations that form the foundation for advanced, specialized vocational education in one of the four instructional programs in agricultural education.
- 2. Each student completing Ag Science 1 will have made at least a preliminary tentative personal choice pertaining to an agricultural career.
- 3. Each student completing Ag Science 1 and selecting a personal career in agriculture will have prepared an educational plan for achieving that career goal. The plan shall consist of learning activities in at least the following: course work in agriculture, selected activities conducted through the FFA organization, and supervised occupational experience.

Aq. Business/Computers

This instructional program is designed to prepare students for entry level positions in agribusiness. The occupations in this industry will be varied depending on the specific industry involved.

The goals of this instructional program are:

- 1. To introduce students to computer hardware and software applications.
- 2. To enable students to understand that computers are an ongoing process and that technology is constantly changing.
- 3. To prepare students for post-secondary Vocational Education in agriculture.

The objectives of this course are:

- 1. Upon completion of this course each student will be able to demonstrate how computers increase efficiency and influence management decisions.
- 2. Each student completing this course will be able to distinguish between spreadsheet, word processing and database programs.
 - A) Understand the term and principles of computer management.
 - B) Identify practical applications of computer management.

Righetti FFA Agriculture Department Goals

- 1. Install in the hearts of each member confidence in the Righetti FFA as well as in themselves at all times.
- 2. To develop a competitive attitude as well as a sense of fairness at all FFA activities.
- 3. To improve communication between Chapter Officers, Advisors, and Members as well as with the Community, Parents, and School Leaders.
- 4. To improve member involvement in fairs, judging teams, meetings and other FFA related activities.
- 5. To encourage all members to observe FFA week as a week of honor and celebration.
- 6. To make the public aware of our chapter's success and activities.
- 7. To have regular publications in both school and local newspapers.
- 8. To have a monthly newsletter that is available to all FFA members.
- 9. To promote the great opportunities of agricultural careers and to instill an interest in members to pursue one.
- 10. To provide fun and organized recreational activities of interest to FFA members on a regular basis.

1996-97 Department Projects

<u>Pr</u>	<u>ojects</u>	In Charge	<u>Completion</u>
1.	Electricity in barn		August 96
2.	Gutters on barn		November 96
3.	Trailer Bumper		August 96
4.	Pasture gates hinged on posts		August 96
5.	Barn lights		August 96
6.	Small animal room window		August 96
7.	Barn painting		November 96
8.	Graffiti (Barn Roof/OH Wall)		August 96
9.	Shop safety lines		August 96
10.	Gates inside pasture		August 96
11.	Racks		September 96
12.	Replace pasture fence along barn		September 96
13.	OH sprinklers		November 96
	Greenhouse repairs		August 96
	Program of Work		August 96
	Fair exhibitors handbook		July 31, 96
	Establish Ag Boosters Committee		January 97
	Local Project Competition		March 97
	Tool room		October 96
	Metal storage (outside)		June 97
	Breed Ewes		September 96
	Shade house		November 96
	Vegetable crop		May 97
	Mother stock plots		November 96
	Sheep cover		November 96
	Ag entrance planters		September 96
	Ag department sign		November 96
	Relocate shop equipment		June 97
	Ag leadership class curriculum		August 96
	UC credit for Ag Biology		August 96
	Disc/tractor repair		September 96
	20 State Farmers		January 97
	2 American Farmers		May 97
	FFA and School interaction	•	Monthly
	Fair landscape		September 96
	Project Visits		Bi-Weekly
	Alfalfa crop		September 96
	Fair projects		Sept 96/May 97
	Student soda reward		September 96
	Barn road		November 96
41.	Community appreciation (hats)		September 96

D. Program Description of included Courses, SOE and Leadership

D. Program Description

Step 1 Refer to the course outline for each class taught in your program. Each course should have a brief description of the content taught. Step 2 Step 3 Each course outline include SOE and FFA Step 4 If the course outlines contain this information, then just photo copy them and add to this section Step 5 If you are missing the SOE and FFA component in the course outlines, then write a general explanation and addressing how you include SOE and Leadership Development in all courses. If your course outlines do not show that SOE and FFA is taught in Idea's all the classes your program offers, you might want to have the teachers revise them and include this information. Note It is required that all ag classes include SOE and Leadership development.

PROGRAM DESCRIPTION

We offer the three parts of a complete agricultural educational program at Firebaugh High School: Classroom Instruction, Hands On Training, and Leadership Development. Our staff is committed to focusing their teaching procedures in these three areas.

Our Classroom Instruction involves teaching the basic concepts of the units taught within each of our courses offered. Students are required to use their reading, writing, and thinking skills. Assignments, Tests, and Quizzes are given and graded regularly.

Our Hands On Training supplements the education that takes place in the classroom. Students are taught the various procedures and techniques used in Animals, Plants, Mechanics, and Ag Business. They put these methods to use in "real life" situations both in and out of the classroom setting.

Our Leadership Development is taught through the FFA. We teach an FFA Unit in all ag classes so students can build on their own leadership skills whether they are new to the program or continuing on. We focus on leadership, responsibility, and cooperation. Students put these traits to use through the various activities they participate in during their involvement in our program.

Program Description

This section lists each of the programs of instruction along with an explanation of each program. The occupations listed are typical of those which are included in each of the program areas and which require agricultural competencies.

Agricultural Science

The Agri-Science program at the District consists of two core courses (Agri-Science I-A/B, and Agri-Science II-A/B) designed to explore the full spectrum of Agri-Science including California agriculture, animal science, agricultural business management and leadership. The advanced course covers a more in-depth study of these areas. Also included in this program are anatomy and physiology, artificial insemination, breeding, genetics, feed/nutrition, pests, diseases, health and sanitation and livestock management. Also offered in the program are courses in Advanced Plant Science – soil and crop science and production, Agri-Computers, emphasizing word processing, data base and simple spreadsheet calculations. These course are usually taken in sequence Agri-Science I A/B then Agri-Science II A/B.

Agricultural Mechanics and Farm Power

An instructional program which is designed to prepare students for employment or entrepreneurship in agricultural mechanics occupations including farm power, construction, machinery and equipment, welding, and other areas for employment. The program also prepares students to continue in advanced post-secondary occupational training programs in this field. Agricultural Mechanics A is offered as an intro course and then continuing on to Agriculture Mechanics B.

Ornamental Horticulture

Instructional program designed to prepare students for occupations which require agricultural competencies in the culture, processing and sale of ornamental plants. Persons in these occupations are dealing with nursery practices, floriculture, floristry, landscaping and turf management.

Agricultural Products and Processing

Instructional program designed to prepare students for occupations which require agricultural competencies in the agricultural product processing, inspection, and marketing categories. Persons in these occupations are dealing with food and non-food agriculture products after they have been released by the producer and are being prepared for use by the consumer. Included in this program is the Regional Occupations Program (ROP) Meat Processing Program

which is a one-year course two periods per day. It is designed for students who wish to understand and develop skills of meat cutting, employment opportunities in meat, slaughtering, by-products, cold storage, refrigeration, curing and smoking processes, care and handling of equipment and shop safety and sanitation. This course is usually focus towards students older than 16 years old that are Juniors and Seniors.

Agricultural Biology

Agricultural Biology is a one year, laboratory science course designed for the college-bond student with career interests in agriculture. Using agriculture as the learning vehicle, the course emphasizes the principles, central concepts and inter-relationships among the following topics: the molecular and cellular aspects of life, the chemical structural basis of life, energetics of life, growth and reproduction in plants and animals, evolution of modern plants and domestic livestock behavior, ecological relationships among plants, animals, humans and the environment, nutrition in animals, health and diseases in animals, and the similarities between animals and humans. The course is centered around an extensive laboratory component in order to connect the central idea of biological science with agricultural applications, earth and physical science principals, and other curricular areas, including extensive written and oral reporting skills. This course is usually focused towards Juniors and Seniors, which usually have taken Agriculture I & II.

Agricultural Economics

This is the first semester of a year-long course designed to provide students with a basic knowledge of agricultural business management. Emphasis will be place on agricultural economics, types of agribusiness, agricultural marketing, agricultural accounting credit and financing, agricultural business laws, and career opportunities. Students will be required to keep their own record books. This course is usually focused towards Juniors and Seniors, which usually have taken Agriculture I & II.

E. Program and/or Course Subject Matter Content Outline

E. PROGRAM/COURSE SUBJECT MATTER CONTENT

Step 1	Make sure all courses taught in your program have a complete course outline.
Step 2	Photo copy all course outlines.
Step 3	If in a multi person department, have each teacher provide you with a copy of their course outlines.
Idea's	Make sure all teachers in your program understand the content that must be included in each course prior to creating or revising their course outlines.
Note	This is very similar to part D and this evidence can be used for both.

Agriculture

I. Course Information

A. Course Title: Introduction to California Agriculture

B. Length of Course: One Year

C. Units or Credits: Ten
D. Prerequisites: None
E. Grade Level 9-10

F. Special Course Designation:

G. Course Code Number: 133

II. Course Description

This course presents a survey of the animal and plant industries in California from production to the consumer. In addition, the student studies how animals and plants affect human life. Each student is involved in raising a live project as a "learn by doing" activity. Activities with the Future Farmers of America (FFA) organization are an integral part of this class. Elective entrance requirements are met by this class for the California State University system.

III. Goals, Objectives, and Performance Indicators

1. <u>California Agriculture</u>

The student will develop an understanding of the complexities of California's agriculture industry and its significance to his/her life and well being.

- 1.1 The student shall understand the economic importance of the agricultural sector in California, including leading production areas and commodities.
 - 1.1.1 Identify the major agricultural production areas of California and commodities produced in each. (Knowledge, Comprehension)
 - 1.1.2 List the approximate dollar value of the five leading agricultural commodities produced in Orange County. (Knowledge, Comprehension)
 - 1.1.3 List the approximate dollar value of the five leading agricultural commodities produced in California. (Knowledge, Comprehension)
 - 1.1.4 Describe and discuss the economic impact of the California agricultural sector on the state and national economy.(Analysis, Synthesis, Evaluation)

Agriculture/Introduction to California Agriculture Page 2

- III. Goals, objectives, and Performance Indicators (cont.)
 - 1.1.5 Describe and discuss the "cost-price squeeze" and understand its effect on California agriculture. (Analysis, Synthesis, Evaluation)
 - 1.2 The student shall understand the interrelationship of agriculture and society in California, including factors which influence agricultural activities.
 - 1.2.1 Identify problems faced by California farmers caused by population shifts and social and technological trends. (Knowledge, Comprehension)
 - 1.2.2 Identify government agencies which influence and affect agricultural production in California. (Knowledge, Comprehension)
 - 1.3 The student shall understand the impact of agricultural production on the environment and natural resources of California.
 - 1.3.1 Define the economic effects of air pollution on agricultural production in California. (Knowledge, Comprehension)
 - 1.3.2 Describe the major watersheds of California. (Knowledge, Comprehension)
 - 1.3.3 Identify the major water quality and pollution problems in California. (Knowledge, Comprehension)
 - 1.3.4 Identify the major forest regions of California. (Knowledge, Comprehension)
 - 1.3.5 List major environmental effects of production agriculture n California. (Knowledge, Comprehension)
 - Understand the relationship of farmers and ranchers as stewards of natural resources. (Analysis, Synthesis, Evaluation)

2. <u>Animal Science</u>

The student will develop an understanding of the physiology, behavior, nutritional requirements, preventive health procedures, economic trends, live and carcass evaluations for domesticated meat animals.

- 2.1 The student will understand the importance of domestic animals and their role in modern society.
 - 2.1.1 Describe the importance of animal domestication. (Analysis, Synthesis, Evaluation)

Agriculture/Introduction to California Agriculture Page 3

- III. Goals, Objectives, and Performance Indicators (cont.)
 - 2.1.2 Identify within each domestic species four livestock enterprises that are part of production agriculture
 - 2.1.3 Identify the major sources of animal protein in the world. (Knowledge, Comprehension)
 - 2.1.4 Be aware of the public health issues related to growth hormones and their use in meat production. (Analysis, Synthesis, Evaluation)
 - 2.1.5 Maintain an animal through a full production cycle. (Application)
 - 2.2 The student will develop a basic understanding of animal behavior, morphology, and taxonomy.
 - 2.2.1 Visually identify the external anatomical parts of the pig, cow, horse, chicken, goat and sheep. (Knowledge, Comprehension)
 - 2.2.2 Describe the basic differences between animal and plant cells and identify examples of each. (Analysis, Synthesis, Evaluation)
 - 2.2.3 Define binomial nomenclature (i.e. genus and species). (Knowledge, Comprehension)
 - 2.2.4 Describe the difference between a species and a subspecies (variety) and provide examples from among domestic animals. (Analysis, Synthesis, Evaluation)
 - 2.3 The student will develop a basic understanding of the structure, function and maintenance of the major body systems (e.g., digestive organ system, etc.) and their components.
 - 2.3.1 Describe the basic physiological function of the primary components of the digestive systems. (Knowledge, Comprehension)
 - 2.3.2 Visually identify examples of each and describe the basic differences between the three types of digestive systems found in farm animals. (Analysis, Synthesis, Evaluation)
 - 2.3.3 Describe the shape and function of different animal anatomical structures and compare them to similar human structures.(Stomach, small intestine, large intestine, etc.) (Analysis, Synthesis, Evaluation, Knowledge, Comprehension)
 - 2.3.4 Explain the value of neutering the male in meat animal production and the general metabolic and physiological changes resulting from castration. (Analysis, Synthesis, Evaluation)

Agriculture/Introduction to California Agriculture Page 4

III. Goals, Objectives, and Performance Indicators (cont.)

- 2.4 The student will develop an understanding of the factors involved in animal nutrition, animal feeding, and the basic feedstuffs available for that purpose.
 - 2.4.1 Describe the six classes of nutrients and identify examples of feeds containing each. (Knowledge, Comprehension)
 - 2.4.2 Identify common feed additives. (Knowledge, Comprehension)
 - 2.4.3 Define symbiosis and describe how microorganisms (protozoa/bacteria) contribute to the breakdown of complex carbohydrates in ruminants. (Knowledge, Comprehension)
 - 2.4.4 List contributions of microbial digestion (in ruminants) to the host including synthesis of amino acids and B-vitamins. (Knowledge, Comprehension)
 - 2.4.5 Feed an animal through a full production cycle. (Application)
 - 2.4.6 Explain the importance of feeding regimes in animal management. (Analysis, Synthesis, Evaluation)
- 2.5 The student shall understand the concept of animal health. The student will become familiar with methods of identification of unhealthy animals, treatment, preventative measures and the causal agents of common animal health problems in animal of economic significance.
 - 2.5.1 List predisposing conditions that cause animal health problems. (Knowledge, Comprehension)
 - 2.5.2 Identify samples of parasites, describe how they may harm the host and prescribe methods of control for each. (two internal and two external) (Knowledge, Comprehension)
 - 2.5.3 Demonstrate a method of control for an internal and external parasite. (Application)
 - 2.5.4 Identify ways that infectious agents may gain entrance and do harm to an animal. (Knowledge, Comprehension)
 - 2.5.5 Diagram the life cycle of two internal parasites common to farm animals. (Analysis, Synthesis, Evaluation)
 - 2.5.6 Properly determine the body temperature of an animal. (Application)
 - 2.5.7 Identify unhealthy animals by using both visual and nonvisual indicators of health. (Knowledge, Comprehension)
- 2.6 The student will develop an appreciation for the factors involved in and the ability to evaluate and select livestock for specific uses.

G. Description of Facilities and Major Equipment

G. DESCRIPTION OF FACILITIES AND EQUIPMENT

Step 1	Develop a list of all facilities and equipment in your department
Step 2	To make this task easier, have all teachers, if in a multi person program, provide a list from each of their areas.
Step 3	Compile this list into one or break it down by specific programs.
Idea's	This is a great way to do a yearly check on your existing inventory.
Note	Using a database or simple chart on a word processing program will make this document easy to read.

Agriculture Department Shop Inventory 6,000 Square Feet

Lincoln AC/DC 225 Amp weiders	1(
Portable Miller AC/DC welders	2
Lincoln Tig welder	1
Miller Matic 35 Mig welder	4
L-Tech 225 mig welder	2
Millermetic 250 MP	1
Millermetic 200/w Aluminum spool gun	1
Miller Bluestar 2E motor Driven welder/Generator	1
Hypertherm max 43 plasma cutter	1
Lincoln SP-130T Mig welder	1
Stationary Oxy-Acet hand torches & Misc. Tips.	10
Oxy-Acet Pressure gauges	20
Portable Oxy-Acet carts with gauges	3
Oxy-Acet Pattern Cutter & Table	1
Arcair gouger torch	1
Scotchman Iron worker	1
Pedastal Grinders	3
Cincinnati grinder with exhaust	1
Rexon Milling/Drill Pres.	1
Jet Floor Drill Pres.	1
Rockwell Drill Pres.	1
Vises	4
Rockwell Radial Arm Saw	1
Vega 114 Band Saw	1
Vega 10" Table Saw	1
Carolina Metal Band Saw	1
San-Blast Sand blaster	1
Brilliant Metal cut off saw	1
Scotchman cold cutting saw	1
Roper Whitney Pan Brake	1
Carolina 30 ton pres.	1
Anvil	1
Hossfeld bender	1
Wood working benches	5
Metal working benches with lockers	5

H. Five Year Facility And Equipment Acquisition Schedule

H. FIVE YEAR FACILITY AND EQUIPMENT ACQUISITION

- **Step 1** Have a department meeting to discuss possible improvements for upcoming years.
- **Step 2** Each teacher needs to have a list for each of their program areas and address potential growth and improvement areas.
- **Step 3** This list needs to be broken done into years for a total of five years.
- **Step 4** This list should be presented to your advisory committee for approval.
- **Idea's** Develop a simple list that explains what your program plans to purchase, add or make improvements on for each year.

Keep this realistic for each year but remember the goal is to make a continued positive impact on your program.

All staff members should agree before developing the final list.

Share this information with your principal after your advisory committee gives the stamp of approval.

Note

FIREBAUGH HIGH SCHOOL AGRICULTURE DEPARTMENT FIVE YEAR PLAN

Year 1 1998-99

- 1. Purchase four computers, a printer and a scanner.
- Continue facility/equipment repairs.
- 3. Maintain a functional pasture and breed school ewes.
- 4. Continue to landscape area around the greenhouse and the barn.
- Continue to purchase lab equipment.
- 6. Have planned plant sells throughout the year.
- 7. Organize the shop tools and equipment.
- 8. Continue small animal breeding projects.
- 9. Purchase a cool box that can house fresh flowers and vegetables.
- 10. Market organic vegetables through our own farmers market.
- 11. Add on to existing OH tool room.
- 12. Establish a soil mixing and work table area.

Year 2 1999-00

- 1. Purchase an additional four computers and two desk jet printers.
- 2. Plant a variety of plants to use for identification purposes.
- 3. Begin pumpkin patch project with the FFA for sale in October.
- 4. Add on to hog unit at the barn by building more pens with cement, drain system, and cover.
- 5. Expand on other small animal projects.
- 6. Hire a part time student farm manager.
- 7. Build a hay barn.
- 8. Replace existing rabbit hanging cages with an upright type.
- 9. Buy a lathe and mill for the shop.
- 10. Improve science work space and equipment.

Year 3 2000-01

- 1. Build a science laboratory facility.
- 2. Continue to upgrade and replace computers.
- 3. Continue to improve the landscape unit and surrounding areas.
- 4. Add additional trees and shrubs for plant identification.
- Purchase a tractor.
- Plant fruit trees.

Year 4 2001-02

- 1. Hire a full time farm manager for the school farm.
- Department repairs/replacements.
- 3. Build another greenhouse.

Year 5 2002-03

- 1. Trade Ford Dully in for a new one.
- Replace shop equipment as needed.
- 3. Hire a part time Ag secretary.

Sierra-Manteca FFA

Advisor Duties 2010-2011

Advisor:	Duties:

Amanda Gardner

FFA Club Advisor
Swine Projects- market and breeding
Beef Projects- market and breeding
Greenhouse- sales and maintenance
Livestock Judging- team coach
Public Speaking- team(s) coach
Greenhand Conference
Complete R-2's for State
Compile Student Data Sheets

Pat Ariaz

Sheep Projects- breeding and market Goat Projects- breeding and market Metal Projects- at Fairs Montadale Sheep Advisor

Note: All Advisors are to attend monthly FFA meetings, CATA Regional meetings, Football Concession sales, MUSD Ag Venture, Planet Party Day, Pre-Show Day, Opening/Closing Contests, and State Convention. All Advisors are expected to attend Advisory Committee Mtgs.

Sierra-Manteca Chapter

Advisor's Duties

Teacher: Responsibilities:

Amanda Gardner

FFA Advisor

Breeding Swine Projects Market Swine Projects

Livestock Judging Team coach

Pat Ariaz

Montadale Sheep Project Market/Breeding Sheep Market/Breeding Goats Vine Pruning Team coach

Mark Chaffin

Small Animal Projects

Turkey Projects

O.H. Judging team coach

Lloyd Bunch

Beef Projects

Parliamentary Procedure Coach

vegetable | garden projects

Reaching for the Stars!



Sierra-Manteca FFA
Program of Activities