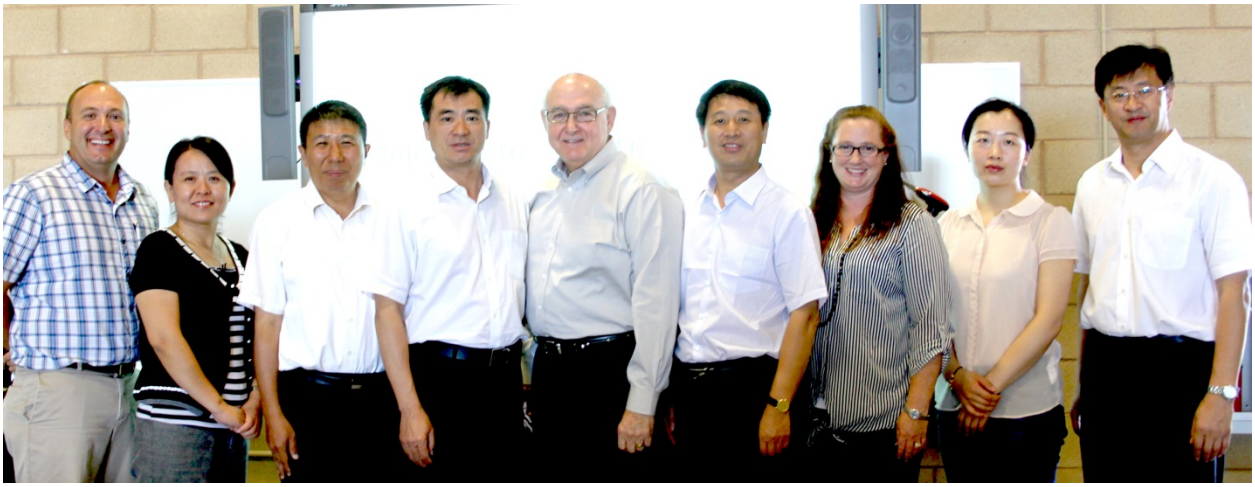
AGED 539

Graduate Project



Presented to

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AgEd 539

By

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On

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AGED 539
Graduate Project

Joy Cowden

TABLE OF CONTENTS

Section A

Quality Program Criteria for Community College

Narrative

Quality Program Criteria for Community College Narrative

TABLE OF CONTENTS

California Community College

Agriculture/Natural Resources
Quality Program Criteria Narrative

INTRODUCTION

Twelve (12) quality criteria were developed for the California Community College system by the statewide Advisory Committee as benchmarks for California Community College Agriculture and Natural Resource programs statewide. These criteria were developed to meet VTEA Title 1B Statewide Agriculture Collaborative Grant Project by:

- Improving the academic skills of vocational and technical education students
- Strengthening connections between secondary and postsecondary education
- Preparing individuals for occupation
- Investing in effective, high quality, local programs

Each criterion addresses specific areas used to evaluate the quality of the school's program, curriculum, staff, resources and their ability to work with industry.

For the purpose of this narrative, I have applied these twelve (12) criteria to the West Hills College Coalinga Agriculture department (also known as the Farm of the Future) to evaluate the overall performance of program delivery. I have analyzed results, developed conclusions and made assumptions where appropriate to form a personal opinion concerning the quality of West Hills College's performance in these 12 crucial areas. In the analysis of these criteria, I have remained objective, to the best of my ability, and have evaluated the information accordingly.

QUALITY CRITERIA #1

INSTITUTIONAL MISSION

A. Program's/Department's planning and decision making is consistent with the college mission statement and is documented in the Agriculture/Natural Resources self-study process.

B. The program/department evaluates and revises its mission statement on a regular basis.

The WHCC Agriculture program conducts a self-study every five years and develops a strategic plan developing a mission, vision and goals. During this process, WHCC and the district's mission and vision are reviewed to ensure the agriculture department is consistent with these overall goals. The Eaton Cummings Group (ECG) facilitates the planning workshop; providing leadership, direction and experience and history to the process.

In July 2000, the first strategic planning workshop was held to crystallize initial thinking about the design and development of the Agriculture department and related programs and services at WHCC. In December 2000, West Hills College District Board of Trustees approved the initial strategic plan, creating the Farm of the Future, recognizing the changing technical, economic, social, and cultural environment that students and the agricultural industry relate to the local and global society. The second strategic planning retreat, held in July 2002, reviewed progress on the strategic plan, and confirmed the positive progress made at the Farm of the Future with recommendations to continue work using the 2000 strategic plan as a guideline. In October 2010, a third strategic planning retreat was held to reflect the changing needs of our communities, industries that we serve, new industries in our region, and most importantly our students. The current strategic planning retreat, held in November 2012, resulted in the 2012-2017 strategic plan.

The following are the Agriculture department mission, vision and goals (Farm of the Future) compared to WHCC mission, vision and goals:

Farm of the Future's Mission Statement:

"WHCC Agriculture and Industrial Science Programs at the Farm of the Future provide exemplary education and training for students utilizing regional strengths, emerging technologies and applied learning, empowering those we serve to be competitive in the global economy."

West Hills College Coalinga's Mission Statement:

"West Hills College Coalinga is committed to achieving student learning through the provision of educational, cultural, and economic development opportunities to our current and future students and the local and global communities that we serve."

Farm of the Future's Vision Statement:

"The Agriculture and Industrial Science Programs at the Farm of the Future will be an international model, emphasizing education and technical training using sustainable practices and resource management. They will specialize in integrated food, fiber, energy and environmental systems-serving our communities, region, State and global partners."

West Hills College Coalinga's Vision Statement:

"West Hills College Coalinga strives to become a premiere interactive learner-centered community college recognized for its contribution to educational, social, cultural, and economic vitality."

Farm of the Future's Goals:

1. *Utilize program review, other assessments, and employer engagement to ensure the vitality, viability, and sustainability of Agriculture and Industrial Science programs at the Farm of the Future.*
2. *Expand programs in the Agriculture and Industrial Science fields.*
3. *Increase internship opportunities and employment placement for Agriculture and Industrial Science students.*[1]

West Hills College Coalinga's Goals:

1. *"We will maintain our focus on improving student success, improving customer service, and on being learner-centered.*
2. *We will develop and strengthen college and community interactions to improve access to education opportunities.*
3. *We will demonstrate academic quality, leadership, engagement, innovation, and creative thought.*
4. *We will effectively utilize existing resources and pursue additional resources to achieve the mission of the college."*[2]

[1] West Hills College Farm of the Future Strategic Plan
[2] http://www.westhillscollege.com/coalinga/about/mission_vision.asp

QUALITY CRITERIA #2

PROGRAM INTEGRITY

A. The program/department maintains current, relevant instruction in Agriculture/Natural Resources as evident by up-to-date course outlines that have been approved by the local curriculum process and board of trustees.

B. The program has integrated statewide course curriculum for applicable courses taught at the institution. These courses have been adopted by the local curriculum process and board of trustees.

C. The program offers current information about certificate and degrees in Agriculture/Natural Resources.

D. A system of student advising has been established by the program to provide accurate information to students about degrees and certificate programs at the institution.

E. The program utilizes qualified full-time and adjunct faculty that meet all minimum qualifications as outlined by state and local equivalency standards.

The Agriculture department is part of the CTE area at WHCC along with business, cooperative work experinece and computer information systems. As part of the curriculum process, the curriculum representative from the CTE area routes all curriculum through the curriclum process including approval by the Board of Trustees. As part of a vocational program, the agriculture curriculum must complete a review process every five years and is set up on a schedule as described in the program review required every two years for all vocational programs.

The following is from Board Policy 4020 Program, Curriculum and Course Development:

The programs and curricula of the District shall be of high quality, relevant to community and student needs, and evaluated regularly to ensure quality and currency. To that end, the Chancellor shall establish procedures for the development and review of all curricular offerings, including their establishment, modification or discontinuance. Furthermore, these procedures shall include:

- *appropriate involvement of the faculty and Academic Senate in all processes;*
- *regular review and justification of programs and course descriptions;*
- *opportunities for training for persons involved in aspects of curriculum development.*

All new courses, programs and program deletions shall be recommended by the Curriculum Committee to the Chief Instructional Officer who shall make the recommendation to the College President. The College President shall then submit a recommendation(s) to the Chancellor for consideration by the Board of Trustees. All new programs shall be submitted to the Office of the Chancellor for the California Community Colleges for approval as required.[3]

[3]http://www.westhillscollege.com/district/about/board_trustees/policies/documents/BP4020ProgramCurriculumandCourseDevelopment.pdf

All college-transferrable coursework is aligned with C-ID. A faculty member is on the C-ID review committee for soil and plant sciences. Currently, due to faculty and staff reassignment, the articulation officer has not updated curriculum through ASSIST, therefore the agreements are outdated or expired. Due to AB1440, the agriculture curriculum is in the process of a major overhaul. Three new degrees are being created to align with the Transfer Model Curriculum, which is proposed to be released in September 2014. When the TMC is approved, new Associate Degrees will be prepared in Plant Science, Agriculture Business and Animal Science. New course curriculum has been prepared to align with the coursework required for the new degrees, but until it is approved at the State level, WHCC is on hold.

Current information concerning certificates and degrees is available in the college catalog (http://www.westhillscollege.com/coalinga/academics/catalog/2013-2015_whcc_catalog.pdf) and on the Farm of the Future website (http://www.westhillscollege.com/coalinga/academics/programs/farm/index.asp).

The college has counseling and advising staff on main campus, but the majority of agriculture students are advised and counseled by agriculture faculty. The following Board Policy 120 describes the administration

> *In addition to the services of academic advising and counseling available through the counseling staff, all faculty members shall maintain office hours so that students may meet with them to discuss issues related to the course or seek other academic advice related to the instructor's particular field of competence. All faculty members will post the hours when they are available for such consultation.*

All faculty, both full-time and adjunct, must meet at least the minimum requirements as outlined by the Board of Governors. Equivalencies may be determined for faculty not meeting the minimum qualifications, as outlined in Administrative Procedure 7211:

> *Faculty shall meet minimum qualifications established by the Board of Governors, or shall possess qualifications that are at least equivalent to the minimum qualifications set out in the regulations of the Board of Governors. Single course equivalencies will be handled in accordance with Title 5 of the California Code of Regulations. An Academic Senate Equivalency Committee shall be established at each college to fulfill the requirement of Education Code Section 87359, which states that the equivalency process "shall include reasonable procedures to ensure that the governing board relies primarily upon the advice and judgment of the Academic Senate to determine that each individual employed under the authority granted by the regulations possesses qualifications that are at least equivalent to the applicable minimum qualifications..."*

QUALITY CRITERIA #3

PROGRAM EFFECTIVENESS

A. The program conducts on-going evaluation in an effort to offer a relevant and effective Agriculture/Natural Resources program.

B. The program has an annual process through which program effectiveness can be measured.

C. The program evaluates student outcomes and makes adjustments to curriculum and programs in an effort to improve those outcomes.

As a vocational program, the agriculture department conducts program review every two years. As part of the program review, Labor Market Information is analyzed to determine if the programs are preparing students for relevant careers in the agriculture industry. Recently, the program has begun reviewing courses using the Lumina Foundation's Degree Qualification Procedure (DQP), which aligns course objectives with skill competencies for the respective industry. Program review is outlined in Administrative Procedure 4270 - Review of Occupational Programs:

> *Section 1 – Procedure if Program Meets Established Criteria*
>
> *Each January, the appropriate Dean of Educational Services shall begin the occupational review process required by Section 78016 of the California Education Code for fifty percent (50%) of the total occupational programs offered by the district, alternating with the other fifty percent (50%) each year. Each occupational training program will complete an occupational program review each year.*
>
> *As part of the program review process, information will be gathered from the VTEA Core Indicator Reports and County Labor Market Information on the Chancellor's Office web site, as well as Central Valley Workforce information on the Fresno and Kings County Workforce Investment Board web sites, to ensure that the program meets the following criteria:*
>
> 1. *Meets a documented labor market demand;*
> 2. *Does not represent unnecessary duplication of other manpower training programs in the area; and*
> 3. *Is of demonstrated effectiveness as measured by the employment and completion success of its students.*
>
> *The appropriate Dean of Educational Services shall submit a written summary of the findings with the program review documents to MARC (Master Plan, Accreditation and Research Committee) for approval. This summary will include review and comments by the appropriate Workforce Investment Board. If MARC determines that the program meets the required criteria, the written review will*

be presented to the Governing Board for approval and made available to the public.

Each instructional program is responsible for their program review; with vocational programs being evaluated every two years. The Instructional Services Council evaluates program review for the following:

- Review program review documents annually and present a summary of proposed needs, changes and problems to the College Planning Council, Curriculum Committee, and Academic Senate as appropriate.
- Determine process for development and approval of new educational programs.
- Determine guidelines for "at-risk" programs and assist faculty in developing action plans to strengthen "at risk" programs.
- Recommend discontinuance of programs that cannot be strengthened.
- Conduct annual evaluation of the effectiveness of program review.
- Conduct annual evaluation of the effectiveness of the Instructional Services Council.

Student Learning is evaluated by developing and assessing student learning outcomes at the course, program and institutional levels.

Course Level

The first level of assessment is at the course level. SLOs are planned on the West Hills College Coalinga Course Level Student Learning Outcomes (Appendix A). Faculty are required to write 3-6 CSLOs per course. When they are being assessed they are inputted into the portal SLO form (Appendix B) on the assessment cycle for that particular course. Faculty members, as a department decide what SLOs should be tested for a particular course. Then, faculty come up with a common assessment for all the classes that teach that same course, a timeframe, and procedure for testing. At the end of the semester, the department meets to go over the results of the assessments. All courses are assessed at least once every 4 semesters.

Program Level

The second level of assessment is the program level. SLOs are planned on the West Hills College Coalinga Program Level Student Learning Outcome Planning Guide and Results (Appendix C). "Program" is defined to be the cohort of courses that are reviewed in the program review process. On the form, WHCC also includes Degree and certificate SLOs since it is most appropriate to include them here. Faculty are required to write at least 2 PSLOs within their program but are encouraged to write more. Usually for academic programs, faculty assess 2 cycles of course Level SLOs and take a year off in order to analyze their PSLO before proceeding into program review. For vocational programs, their PSLO cycle is

every 2 years. Faculty analyze the previous 2 year's cycle of CSLOs and their PSLOs for program review.

<u>Degree Level</u>

The third level of assessment is the Degree Level SLO. Degree Level SLO, GE SLO, and Institutional Level SLOs are all the same thing. At WHCC, we call them Degree Level SLOs in order to have the same verbiage as the ACCJC SLO Rubric. These are overarching themes of learning that run through all of the GE categories. They are as follows

1. *Critical Thinking, Problem Solving, Creative Thinking*
2. *Communication*
3. *Quantitative Analysis and Scientific Reasoning*
4. *Social, Cultural, Environmental and Aesthetic Perspectives*
5. *Information, Technology and Media Literacy*
6. *Personal, Academic, and Career Development*

They are selected when faculty are writing their course level and program level SLOs.

QUALITY CRITERIA #4

EDUCATIONAL PROGRAMS

A. The program offers courses, certificates, and degrees that meet the needs of the college and community.

B. The program offers certificates and degrees in a manner that provides students the opportunity to complete the program announced within a reasonable time.

C. The program identifies and makes public student learning outcomes for its certificate and degree programs.

D. The program documents the technical and professional competence of students completing certificate and degree programs.

E. All certificates and degrees offered in the program have been approved through the local curriculum process and adopted by the local board of trustees.

F. The program utilizes publications and other media to inform the community of program activities.

G. The program continues to improve and expand course offerings to reflect the ever-changing agriculture industry.

As a community college, West Hills College has the ability to adapt and change programs as the needs of the local industry change. As such, courses have been created in high need areas such as precision agriculture, heavy equipment, welding, industrial maintenance technology, irrigation technology, agricultural engineering technology, and pest control adviser. Courses are very hands-on and align with industry standards and the California Identification Numbering system to ensure transferability. Therefore, for a small department West Hills College offers many courses to meet the needs of the college and the community. Where the college is lacking is offering certificates and degrees to meet student and community needs. Currently only one degree, Agriculture Science and Technology, one state certificate, precision agriculture, and two local certificates, precision agriculture and heavy equipment, exist. The amount of time it takes to get a certificate or degree passed at the California Community College Chancellor's Office, has taken a minimum of two years. This has made it difficult for certificates and degrees to keep up with the changes in industry and community needs. The department has hired three new faculty members and the focus has been on creating degrees and certificates to include all of the courses offered. With the adoption of SB 1440 which aims to align curriculum across all California Community Colleges and California State Universities, West Hills College has been actively involved in the adoption of Transfer Model Curriculum. Degrees have been created and are waiting for the final state approval of the TMC's before the curriculum will begin the process of adoption. In addition, with the new legislation which will allow community colleges to offer one Bachelor Degree, West Hills College is in the process of developing a degree in agriculture, but are still in the initial stages and have not finalized the area of emphasis.

A major goal of the agriculture program is to offer degrees that are conducive to timely completion. Most certificate programs are able to be completed either in one semester or two semesters. The Associate of Science degree is designed that students complete the certificate

program in one year and then complete general education requirements in year two to receive their degree. A major barrier for this has been Math which has been the major hurdle for timely degree completion. With 87 percent of students placing below degree level math, students often take three years to reach the math needed for graduation or transfer.

West Hills College has been very forward-thinking in the development and assessment of program level student learning outcomes. As the first community college to be scrutinized under the new accreditation standards, student learning outcomes were a major focus. As part of a Lumina Foundation program, the college is undergoing a new process for student learning outcome development called the Degree Qualification Profile process (DQPP) which aligns student learning outcomes with the skills needed for employment within the given industry. The process was given honorable mention at the Lumina Foundation annual director meeting. Faculty are required to list student learning outcomes on course syllabi and the SLO and results are available on the college website.

Competency-based evaluation has been a major focus for the vocational programs at West Hills College. All programs include a capstone course in which students complete a project involving the competencies learned in the preceding courses. The courses are aligned with industry certifications and include the competencies needed for certification in those areas. For example, welding students complete American Welding Society welding certification tests after completion of the course sequence; pest control adviser students complete all coursework required to set for the Department of Pesticide Regulation's exam; irrigation student complete coursework to take the certification exams for Certified Agricultural Irrigation Specialist and Certified Irrigation Designer through the Irrigation Association; and industrial maintenance mechanic students complete the written tests and skill based competency tests offered through the National Center for Construction Education and Research.

All of the certificates and degrees offered through the program have been approved by the West Hills College Coalinga Curriculum Committee, approved by the WHCCD Board of Trustees and approved by the California Community College Chancellor's Office. There are not certificates or degrees offered which include all of the courses offered.

The program has a marketing/media department which keeps a current webpage and submits press releases to local and regional media. The webpage has received an overhaul in the past year and is more reflective of the current agriculture programs at West Hills College. Brochures are created and produced for existing programs for recruiting and public relations.

The major strength of the agriculture program at West Hills College has been its ability to expand and adapt to industry needs. West Hills College maintains strong industry contacts and utilizes industry recommendations and support when creating curriculum. The area which needs to be expanded upon is keeping the success level high by creating certificates and programs that account for the industry courses.

QUALITY CRITERIA #5

PROGRAM STUDENT SUPPORT AND DEVELOPMENT

A. The Agriculture/Natural Resources program has identified and conducts student leadership activities outside normal classroom instruction.

B. Agriculture/Natural Resources student leadership organizations have been sanctioned by the appropriate college student body organization.

C. Agriculture/Natural Resources student leadership organizations have been sanctioned by have constitutions, advisors, and elected officers.

D. The program provides funding for student leadership organizations and student expenses.

E. The program has an Agriculture/Natural Resources ambassador program.

F. The program regularly has students take part in CAL statewide leadership activities.

G. The program has an alumni, boosters, or backers group that supports the educational program.

The agriculture program has identified and conducts student leadership activities outside normal classroom instruction, but it differs from typical community college programs. The college does maintain agriculture ambassadors, a student shotgun club and an antique tractor pull club. The student involvement varies from year to year based on student interest. The main focus for student leadership activities has been motivated by ensuring that students interact with industry within their discipline of study. For example, as part of the Agriculture Sales and Communication course, students are required to complete an internship with a company for the World Ag Expo in Tulare, CA. Students contact a company of their choice, based on their interests, and work with them, usually before, during and after the Farm Show. This has been great experience for the students and for industry as well as they often hire actors or models to help during the show.

The Agriculture Ambassador club has been sanctioned in the past, but there has been a change in the process at the college level and the new procedure has not been completed.The student clubs have officers which are elected and have officers. The agriculture ambassador club has a constitution but it needs to be updated and tailored to the current club. The other clubs do not have constitutions.

Funding for student organizations has been very variable throughout the years depending on administration. During previous administration the agriculture ambassadors received funding for recruiting and usually recruited at a minimum of 35 schools per year. Currently there is little to no funding and the programs are small.

The agriculture does have an agriculture ambassador program and similar to funding variability has been involved in CAL in the past, but is not actively involved at present.

West Hills College agriculture does not have a boosters or backers program, but does have a strong, though unofficial, alumni support group. Alumni have stayed very involved in the program and often are guest speakers and are involved in the advisory committee. The rodeo program does have a very strong booster club, which raises money to support student travel and recruiting scholarships.

QUALITY CRITERIA #6

INFORMATION AND LEARNING RESOURCES

A. The college provides the Agriculture/Natural Resources program with a computer laboratory facility for students to have access outside of normal classroom situations.

B. The college provides the Agriculture/Natural Resources program with adequate technology that reflects the agriculture industry.

West Hills College does provide the agriculture program with a computer laboratory facility but students have limited access outside of normal classroom situations. It has been discussed to hire a student employee to maintain open laboratory hours for students but it has never been approved. Faculty are accommodating to students and will open the laboratory when they are available. Currently a majority of the students do not live in Coalinga so there is not a very large demand for open access.

Technology is a major focus of the agriculture program at West Hills College; therefore the department technology reflects the agriculture industry. The computer laboratory runs ArcGIS and AutoCAD with versions that are no more than one year old. The precision agriculture equipment is state-of-the art due to numerous grants and donation from industry partners. What equipment that is not owned by the department is available for use from our industry partners which has greatly helped due to the high cost and short time of relevancy for most equipment.

QUALITY CRITERIA #7

FACULTY AND STAFF

A. The program utilizes only qualified full-time and adjunct faculty meeting the minimum local and statewide qualifications.
B. The institution has sufficient faculty and staff that are qualified by appropriate education and experience to support the Agriculture/Natural Resources program.
C. The local faculty are compensated for extended time needed to maintain instructional programs.
D. Instructors are given release time or compensation for the development and coordination of industry internships for students.
E. All full time instructors in the Agriculture/Natural Resources program regularly participate in professional development activities provided by VTEA statewide AGNR Leadership funds.
F. All instructors in the Agriculture/Natural Resources program regularly keep themselves current on degree and articulation requirements so they can advise students properly.
G. All instructors keep current on agriculture/natural resources issues by working with their local industry advisory committees.
H. All faculty are routinely evaluated through college guidelines and go through a process of self-evaluation.

Only faculty who meet minimum qualifications, as outlined in Quality Criteria #2: All faculty, both full-time and adjunct, must meet at least the minimum requirements as outlined by the Board of Governors; or equivalencies may be determined for faculty not meeting the minimum qualifications, as outlined in Administrative Procedure 7211.

The agriculture department recently hired three new faculty members which will help aid in teaching the load required for the department to operate currently. Previous to the new hires, faculty commonly taught at 1.5-3.0 FTE per semester. Two faculty members are retiring after this semester which will again put a strain on the department.

Faculty are compensated at the adjunct rate if they teach overload in excess of 15 Lecture Hour Equivalents (LHE). In previous years, faculty received overload for recruiting and farm operations, but during the major budget cuts in California, all release time other than rodeo, has been cut. All agriculture faculty positions are on a 221 day contract, as opposed to the 179 day contract for general education faculty. This time is filled with duty days for committee, administrative, recruiting, etc. The duty day calendar is created by the faculty and approved by administration during May for the previous academic year.

Instructors are not given release time specifically for the development and coordination of student internships, but they may elect to use duty days for those purposes.

Agriculture faculty participate in a number of professional development activities including: CATA Summer Conference, CATA Mid-Winter Institute, West Hills College Faculty Development,

Irrigation Association Training, ESRI Training, LICA Training, Professional Soil Scientist Training, Continuing Pest Control Adviser Education and other pertinent training. Many of the instructors are industry certified in the areas in which they teach and must maintain their licensure with continuing education in those areas. Instructors are not given release time specifically for professional development but may to use duty days for those purposes. Much of the professional development for faculty is compensated. While not every professional development opportunity is funded for faculty, a majority of their requests are approved and funded.

Faculty have participated in AGNR professional development in the past but have not received funds to participate in the past five years.

Instructors are very knowledgeable in matters of degree and articulation matters and participate in AB1440 curriculum review. Faculty meet annually with high school departments interested in articulating courses. In addition, courses which are college transferrable are written using the C-ID numbering system to ensure transferability within the state system. As there is not a counselor dedicated to the agriculture and vocational programs, faculty frequently advise students concerning degree and transfer requirements.

Industry support and contact are crucial to the agriculture department at West Hills College and as such faculty maintain close industry contacts and participate in advisory meetings and collaboration.

Faculty are reviewed annually, including a self-evaluation process, until they reach tenure, at which time they are evaluated every three years. Faculty evaluation has been under review and Board Policy and Procedures are being re-written this academic year. The previous Board Policy Evaluation of Full-Time and Adjunct Certificated Staff describes board policy:

> *The West Hills Community College District is committed to the principle of evaluation of all facets of its Educational Program. The aim of this comprehensive assessment is the growth and improvement of instruction. A central aspect of this process is the evaluation of all full-time and adjunct certificated personnel. This evaluation is to be a positive procedure specifically oriented toward program performance and instructional improvement. Furthermore, the process is to include self-evaluation, administrative evaluation and student evaluation. Because the responsibilities of each staff member exceed that of class contact, all facets including service, instruction, advisement, counseling and program development will be included in the evaluation. The Chancellor is directed to develop an evaluation procedure which is in compliance with law and includes the involvement of the Faculty Senate in the preparation and review.*

QUALITY CRITERIA #8

PHYSICAL RESOURCES

A. The institution has ensured that Agriculture/Natural Resources program has adequate physical resources to support its educational services wherever and however they are offered.

B. The management, maintenance, and operation of the physical facilities ensure effective utilization and quality necessary to support the Agriculture/Natural Resources program.

C. Physical resource planning and evaluation supports program outcomes and are linked to the planning and evaluation efforts of the program and the institution.

D. The institution provides for a hands-on agriculture laboratory that provides for student outcomes necessary for the agriculture industry.

West Hills College has been very fortunate in the acquisition of physical resources to support its educational services. The agriculture department has undergone an over $25 million dollar renovation in the past five years. This has included a $14 million dollar, state-of-the-art rodeo facility and a four lab shop building, with a computer laboratory, science laboratory, welding shop and heavy equipment/industrial mechanics shop. The programs are fortunate to have a wealth of equipment to use for laboratories; including SMART boards, full GPS laboratory, full GIS laboratory, state-of-the-art welding facility, Plasma CAM torch, surveying equipment, heavy equipment simulators and a full maintenance mechanic equipment suite. The acquisition of steel has been a major setback in the offering of the heavy equipment program. Due to the current Air Resource Board Restrictions, much of the heavy equipment used in the program has become or will become inoperable. This has been a major concern as the replacement value for this equipment is astronomical. The department is in the process of replacing some equipment and purchasing more simulators to offset the initial loss of equipment.

West Hills College purchases much of the equipment with grant funds, which is great for the purchase of expensive equipment that could otherwise not be purchased with general funds. Where this becomes a problem is in the maintenance and upkeep of this equipment. Grant funds rarely allow for maintenance or upkeep costs and the general fund cannot fund enough maintenance costs. Proceeds from the college farm are sometimes used to help offset these costs, but many things are not replaced if they are broken or out-dated. The program with the highest operation costs, Heavy Equipment Operation, completes real-world projects in which the operation costs are funded by the party receiving the work. Grant funds have been used for instructional materials for courses such as welding and industrial maintenance mechanic, but it is difficult to provide the same level of materials for courses not taught during grant funding periods. A majority of the agriculture science courses do not require a tremendous amount of operation costs and are often funded with donation or in-kind support from industry contacts.

Physical resource planning and evaluation supports program outcomes and is linked to the planning and evaluation efforts of the institution for the most part. There has been a tendency to “chase grants” which means that the programs are constantly changing to best fit the pot of money for which we are pursuing. The current approach is to only pursue grants which align with the institutional strategic plan and that of the college agriculture department. There are

still areas in which programs which are successful and with high enrollment are cut due to the completion of grant funding.

West Hills College agriculture department employs a very hands-on approach to its instruction. Dr. Rathbun's motto of teach the students how first and them teach them why has been a model that has allowed for extreme student success both in the classroom and beyond in their future employment endeavors. All of the programs include a skill based competency either in the form of test-outs or in capstone projects. Students are expected to know both how and why by the completion of the programs. The purpose of all agriculture programs in for the student to gain skills needed for employment whether it be immediately upon graduation or after transfer and completion at the university level.

QUALITY CRITERIA #9

FINANCIAL RESOURCES

A. The program has a system for financial planning to support program educational goals.
B. The program work within the governance structure of the college to secure college funding sources for the Agriculture/Natural Resources program.
C. The institution provides sufficient human and financial resources to offer the programs and degrees and certificates.
D. The program works with the local agriculture advisory committee to seek financial support for the agriculture industry for the program.
E. The program operates the agriculture laboratory following industry standards in the production of agriculture commodities.

All agriculture faculty at West Hills College, with the exception of the welding instructor, are paid with general funds and are provided for without grant funding. The welding instructor was paid with grant funds and the position will end this academic year as grant funding is completed. This allows for little fluctuation in the credit courses offered as they are funded with general funds. Many of the contract education or not-for-credit courses are offered with grant funding and fluctuate as grant funding fluctuates. The inclusion of the agriculture courses into the general fund has increased the number of students able to complete their degree requirements. In the past, West Hills College was bad about offering the first year of a new program and then cutting the program, which would make the first year of the students coursework obsolete. For the past ten years, there has been a major effort to eliminate this and to ensure that students are able to gain all of the coursework they need to complete their programs of study. Offering compressed schedules has aided in this process as students are able to complete all of the requirements in one to two semesters.

As West Hills College is a small campus, all faculty are very involved in the governance process. All financial planning committees must include faculty members to ensure that faculty has a say in the financial planning of the college and the district. There have been some issues with the transparency of funds as they are not always easily accessible to the public.

The department has maintained sufficient human and financial resources to offer the current agriculture programs. West Hills College has been very supportive of the agriculture department at both the college and district level. The West Hills College Coalinga President, the West Hills Community College District Chancellor and the West Hills Community College District Board of Trustees are all supportive of the agriculture department and its activities. The agriculture department has been the number one goal for the Foundation fundraising efforts for the past two years and has developed funds and outside support for programs. The college has enacted an agriculture across the curriculum effort in which all course will incorporate agriculture related problems and themes within their coursework.

West Hills College agriculture department is very fortunate to have a very supportive and active advisory committee. Many of the largest growers on the Westside of the San Joaquin Valley are represented on the advisory committee and offer much financial support. The greatest asset has been in the in-kind support in the use of equipment, facilities and human capital.

Many of the advisory committee members volunteer time to teach laboratories, provide field trip opportunities, provide sights for laboratory exercises and let the department borrow equipment such as guided tractors. This really allows students access to equipment and work opportunities similar to what they will experience upon their graduation.

The strong ties to industry and the course alignment with industry certifications ensure that students are receiving training that is relevant to industry and is aligned with industry standards. The Irrigation Technology courses align with the Irrigation Association Certified Agriculture Irrigation Specialist and Certified Irrigation Designer. The Pest Control Adviser courses align with the education requirement for the California Department of Pesticide Regulations Agricultural Pest Control Adviser exam. The Industrial Maintenance Mechanic, Welding and Heavy Equipment Operation align with the National Center for Construction Education and Research (NCCER) certification.

QUALITY CRITERIA #10

GOVERNANCE AND ADMINISTRATION

A. The program faculty participate in the local governance process at the college.

B. The program faculty meet on a regular basis to conduct departmental operations.

C. The program leadership and faculty work with the institutional administration and board of trustees to effectively build the program.

D. A staff member serves as program leader and receives release time to fulfill these duties.

Pursuant to Board Policy 7215 Faculty, Counselor and Librarian Responsibilities, faculty are required to "contribute to the District as a whole in the form of college-wide service." This includes participating the local governance process at the college which has adopted a "shared governance" concept in which means faculty and administration share in the planning and decision-making at the college level.

A major area for improvement needed within the agriculture department at West Hills College is communication. The administration and faculty only meet regularly for special events such as FFA field day preparation. There are no regularly scheduled departmental meetings. In the past this has not been very detrimental due to the small size of the department and the fact that each instructor was almost in their own department. With the hire of new faculty who teach across programs, the need for consistent communication is very evident.

The agriculture program is located on the same property as the West Hills Community College District Office and as such is very involved with the District and the Board of Trustees. Agriculture faculty frequently present to the Board concerning upcoming events and highlighting successful programs and events. Agriculture students frequently address the Board to highlight interesting internships, field trips, projects or coursework. This keeps the Board very involved and invested in the agriculture program. The Board has been very supportive of the Agriculture program and has consistently voted in favor of the agriculture department in terms of funding, resource allocation, human resource endeavors, field trips and faculty development.

The administrative organization at West Hills College does not include department chairs. All of the general education programs report directly to the Vice President of Educational Services (Dean). Most of the vocational programs, such as Health Careers and Agriculture, and Athletics have a Director overseeing the day-to-day operations of the department. The agriculture department has a Director of the Farm of the Future, who "under the supervision of the Vice President of Educational Services, administers and provides support for the various instructional programs and crop operations located at the Farm of the Future." Faculty do not receive release time to complete any administrative or program development activities.

QUALITY CRITERIA #11

ACADEMIC COLLABORATION

A. The program faculty and staff regularly meet with local 9-12 agriculture education managers and instructors to develop integration and articulation agreements recognizing the course content taught at the local high school level.

B. Faculty regularly attend local 9-12 program activities and assist in the development and delivery of leadership training events such as parliamentary procedure, public speaking, etc.

C. Faculty regularly attend meetings and participate in local advisory committee activities at the 9-12 agricultural education programs in their service area.

D. Program managers and staff communicate regularly with UC/CSU to assist in course articulation and student transfer processes.

E. Faculty and staff regularly attend Tech-Prep meetings and other educational activities that foster and encourage articulation and integration of programs at K-12 community college levels.

Through CTE Transitions funding from the California Community College Chancellor's Office, West Hills College faculty meet with local high school programs to review articulation annually during the CTE Connect Day. This effort is not as effective for agriculture as for other areas of CTE, as a majority of students are not from the local high schools. There has been a major emphasis in this area over the past academic year in the creation of an agriculture academy at Avenal High School in which students will enroll in West Hills College courses as part of their high school curriculum. The project just received a multi-million dollar grant for implementation beginning during the 2014-2015 academic year.

In the past, West Hills College has been very active hosting FFA Field Days, but stopped due to pressure from the advisory committee and Board of Trustees. This year, FFA Field Days were reintroduced and West Hills College hosted both a Fall and Spring event with opportunities in Land Judging, Welding, Agriculture Mechanics, Horse Judging, BIG, and Farm Co-Op. Faculty have judged local speaking contests and project competitions.

Faculty members participate in the local advisory committees for Coalinga, Avenal and Strathmore High Schools. A West Hills College faculty member is the president of the Coalinga High School Agriculture advisory committee. Coverage will increase in the coming years with the hire of additional faculty.

West Hills College agriculture faculty work closely with the agriculture programs at California State University, Fresno, California Polytechnic State University, San Luis Obispo and California State University, Chico. Courses are prepared using the California Identification Numbering system (C-ID) to ensure transferability within the state system. Faculty counsel students one-on-one to ensure students transfer seamlessly and are able to obtain the most efficient use of transfer units upon acceptance to their university of choice.

Faculty are involved in the CTE Transition process and continuously meet with secondary schools interested in articulation efforts.

QUALITY CRITERIA #12

COLLABORATION WITH INDUSTRY

A. The Agriculture/Natural Resources programs have established advisory committees that meet at least twice a year to review curriculum, review student learning outcomes, and fulfill advisory functions of the various instructional programs.

B. Students are completing industry internships at sites relating to career goals.

C. Instructors are developing internship sites that support the industry and Agriculture/Natural Resources instructional programs.

D. The program maintains a list of approved internship sites for each major within the department.

E. The program utilizes a cooperative work experience program to place students in internships or jobs to foster relationships with the agriculture community.

West Hills College, Farm of the Future does have an established advisory committee to review curriculum, review student learning outcomes and fulfill advisory functions for the agriculture department. The meeting schedule has not been consistent over the years, often only meeting once per year or five times per year, depending on the administration. Ten years ago, under the direction of Dr. Larry Rathbun, the agriculture department had a large advisory committee, with over 80, high profile members. The committee was effective, in that, it had much control politically, but also ineffective, in that it was too large to hold productive meetings. The advisory capacity was conducted in side meetings rather than at the meetings. The meeting schedule was very organized, with meetings each semester and "Breakfast's at the Farm" quarterly. Five years ago, after Dr. Rathbun's retirement, the advisory committee moved to smaller advisory committees which were hand-picked to provide the feedback which the department wanted. These meetings were held very infrequently, usually consistent with only when there was curriculum to discuss. This allowed for business to be conducted much more quickly, but the department lost the actual advisory function of the advisory committee. The current approach, which is under development, is to have 5-7 member committees for each area (i.e. precision agriculture, irrigation, heavy equipment, college farm), which then will feed into a larger 7-9 overall advisory committee. The meeting schedule will be somewhat fixed, with regular meeting each semester and smaller, teleconference meetings more frequently. The advisory committee consists of large and small growers within our district, community members and university professionals in the respective areas.

West Hills College's strong industry ties have made student internships a very successful endeavor. There are usually four to one internship opportunities to students, especially with the precision agriculture, irrigation and pest control adviser programs. Students are often employed, not only during the summer but during the academic year as well. Many of the companies even subsidize the student's education.

In the areas of plant protection, irrigation management, and precision agriculture technology, instructors have been very successful in developing internship opportunities for students. This has been a less formal process, with industry contacting the instructors and the instructors inform the qualified students. The students contact the employers, with the support of the

instructor, and interview for the position. The instructor offers resume and interview support to increase the student's confidence and job seeking skills. The students have been very successful in obtaining internships with a success rate of over 85% in job placement. The other areas of instruction have been less successful in internship, but as most programs are short-term (one semester or less) there is not much opportunity for internship. The instructors do offer support for full-time employment upon completion.

The program does not maintain a formal list of approved internship sites, but the instructors maintain contact with individuals who often hire interns. Most of the internships are not with large companies; therefore they do not hire interns every year. Many of the employers hire an intern and then hire them upon graduation. Word of mouth and strong industry contact allows new internship paths to be created.

West Hills College does have a cooperative work experience program but it is more of an avenue for students to get units for the internships which they obtain. Depending on which area of CWEE the students are enrolled, little support is offered for job placement.

Section B

Quality Program Criteria
Project on Criteria #4
Educational Programs

Section B
Project on Criteria #4

TABLE OF CONTENTS

Project Proposal Form

Name: Joy Cowden
Address: 951 Chianti Circle
City, State, Zip: Coalinga, CA 93210
Phone: (559) 380-7276
E-mail: joycowden@whccd.edu

Project Proposal

(to be completed in conjunction with AGED 539)

Quality Criteria Number Addressed: Quality Criteria #4 Educational Programs.

Goal or Purpose of the Project:

The **goal** of this project is to ensure the West Hills College Agriculture Program offers courses, certificates, and degrees that meet the needs of the college and the community. The **purpose** will be to research and create certificates in the areas of Pest Control Adviser (PCA) and Irrigation which will best reflect the needs of regional industry. Currently at West Hills College, PCA and Irrigation courses are offered but those courses do not lead to a certificate or a degree; creating a problem for both the department and the students, as those students are not considered completers and are not eligible for all college programs.

Specific Objectives to Accomplish (Be as detailed as possible):

- Certificate programs inclusive of the irrigation and PCA courses for the most efficient student completion
- All curriculum forms and CTE addendums for submission to the West Hills College Curriculum Committee

Estimated number of hours on this project: 180 hours; (40 hours research + 35 hours per certificate)

Estimated expenditures ($) on this project (your costs) : -0-

Proposed timeline for completion of the project: Spring 2014

Progress Report: How will you inform the Cal Poly faculty of your progress on a regular basis? I will contact Dr. Bill Kellogg by email during the progression of the progress concerning timeline and completion date – June 2014.

For Office Use Only:

Project Approved By: Bill Kellogg

Date of Approval: 3/17/14

Quarter student will enroll in AGED 539: Wtr 2014

Precision Agriculture Fundamentals

INSTRUCTIONAL AREA: CTE

PROGRAM PROPOSAL PACKET

FACULTY ORIGINATOR: J. Cowden
DATE: 2/18/2014

☒New Program Proposal ☐Program Revision Proposal

PROGRAM NAME: Precision Agriculture Fundamentals
TYPE OF DEGREE: ☐AA or AS Degree ☒Certificate ☐AA-T or AS-T

CHECKLIST: (check all that apply)
☐AA-T or AS-T Addendum
☒CTE Addendum

1. Statement of Program Goals and Objectives

The Precision Agriculture program prepares students to work with global positioning system (GPS), geographic information systems (GIS) software, surveying equipment, and related computer software. Students will learn through hands-on, real-world applications. Completion of the certificate qualifies students to enter the professional job market or the units may be applied as university transfer or to fulfill the education requirement for the California Department of Pesticide Regulation's (CDPR) Agricultural Pest Control Adviser (PCA) license and the Society of Agronomy's Certified Crop Adviser (CCA).

Upon completion of the Crop Production certificate the student will be able to meet the following objectives:

a. operate wheel and track type tractors safely and properly;
b. evaluate computer applications as a management tool for precision agriculture and recommend courses of action to address specific needs or problem areas;
c. evaluate and select computer hardware appropriate to precision agricultural applications;
d. select, care for, check, adjust, and use in the field: surveying engineer's tapes, plumb bobs, surveyor's pins, stakes, levels, leveling rods, compasses, range poles, and other field surveying equipment;
e. analyze surveying data and plot contours and profiles;
f. describe the importance of irrigation water in agriculture and defend its continued supply;
g. demonstrate a complete understanding of the soil-plant-water relationship by correctly completing a soil water budget;
h. gain knowledge of how crops grow with understanding of environmental and managerial conditions;
i. acquire a knowledge leading toward proper management and care of crops, vegetables, and ornamental plants;
j. describe the scope of precision farming and know the precision farming cycle;
k. understand how positioning systems work;
l. map field boundaries and point data using handheld GPS receivers;
m. import GPS data into ArcGIS and create ranch map with soils and image data.

2. Catalog Statement

The Precision Agriculture program prepares students to work with global positioning system (GPS), geographic information systems (GIS) software, surveying equipment, and related computer software. Students will learn through hands-on, real-world applications. Completion of the certificate qualifies students to enter the professional job market or the units may be applied as university transfer or to fulfill the education requirement for the California Department of Pesticide Regulation's (CDPR) Agricultural Pest Control Adviser (PCA) license and the Society of Agronomy's Certified Crop Adviser (CCA).

Program student learning outcomes:

- Students will collect information about soil or field attributes, yield data, or field boundaries, using field data recorders and basic geographic information systems (GIS).
- Students will create, layer, and analyze maps showing precision agricultural data, such as crop yields, soil characteristics, input applications, terrain, drainage patterns, or field management history.
- Students will document and maintain records of precision agriculture information.
- Students will compile and analyze geospatial data to determine agricultural implications of factors such as soil quality, terrain, field productivity, fertilizers, and weather conditions.
- Students will draw or read maps, such as soil, contour, or plat maps.
- Students will demonstrate an understanding of agronomic fundamentals (soil, plant, water relationships).

3. Program Course Requirements (as it is to appear in the College Catalog)

Course #	Title	Units
AG 12	Tractor Operation	3
AGBUS 15	Computer Application to Agriculture	3
AET 10	Surveying	3
AET 21	Ag-Irrigation Management	3
CRPSCI 1	Introduction to Plant Science	3
CRPSCI 6	Introduction to Precision Agriculture	3
	Total	**18**

4. Program Prerequisite, Corequisite, or Advisory Courses

5. Program Prerequisite Skills and/or Knowledge

6. Background and Rationale

Former precision agriculture certificate is being modified to include two certificates to allow for higher completion and to include new courses and delete course which are no longer being offered.

INSTRUCTIONAL AREA: CTE

PROGRAM PROPOSAL PACKET
Career Technical Education Addendum

FACULTY ORIGINATOR: J. Cowden
DATE: 2/18/2014
PROGRAM NAME: Precision Agriculture Fundamentals

TYPE OF DEGREE:

- ☐ Associate of Arts for Transfer
- ☐ Associate of Science for Transfer
- ☐ Associate of Arts
- ☐ Associate of Science
- ☒ Certificate

ATTACHMENTS REQUIRED

- ☒ Labor/Job Market Data
- ☐ Employer Survey
- ☒ Minutes of Key Meetings

1. Labor Market Information and Analysis (required for new programs)

According to O-Net Online, the projected growth of Precision Agriculture Technician positions from 2010-2020 is expected to increase at an average rate of +10-19%, the projected job openings, nationally is expected to be 33,500. Precision Agriculture in California is listed under All Other Life, Physical, and Social Science Technicians. The projected job openings in California is 440 positions with a +14% increase in positions. The median annual wages in 2012 for the nation and California were $43,100 and $45,200, respectively.

State and National Wages

Location	Pay Period	2012				
		10%	25%	Median	75%	90%
United States	Hourly	$11.98	$15.50	$20.74	$27.35	$34.88
	Yearly	$24,900	$32,200	$43,100	$56,900	$72,600
California	Hourly	$14.52	$17.29	$21.73	$29.26	$36.06
	Yearly	$30,200	$36,000	$45,200	$60,900	$75,000

State and National Trends

United States	Employment		Percent Change	Job Openings
	2010	2020		
Life, Physical, and Social Science Technicians, All Other	62,000	69,400	12%	3,350
California	**Employment**		**Percent Change**	**Job Openings**
	2010	**2020**		
Life, Physical, and Social Science Technicians, All Other	7,800	8,900	14%	440

INSTRUCTIONAL AREA: CTE

2. Employer Survey (required for new programs)

Not Applicable

3. Explanation of Employer Relationship (required for new programs)

Not Applicable

4. List of Members of Advisory Committee (required for new and revised programs)

President - Kerri Birdwell, Ag Leader Vice President - Kurt Quade, Quade Consulting Secretary - Brock Taylor, Taylor Consulting Elliot Dozier, RDO Equipment Jason Letterman, CAPCA Phil Smith, USDA-NRCS

5. Recommendations of Advisory Committee (required for new and revised programs)

See Attached Advisory Minutes

Applications of Precision Agriculture

INSTRUCTIONAL AREA: CTE

PROGRAM PROPOSAL PACKET

FACULTY ORIGINATOR: J. Cowden
DATE: 2/18/2014

☒New Program Proposal ☐Program Revision Proposal

PROGRAM NAME: Applications of Precision Agriculture
TYPE OF DEGREE: ☐AA or AS Degree ☒Certificate ☐AA-T or AS-T

CHECKLIST: (check all that apply)
☐AA-T or AS-T Addendum
☒CTE Addendum

1. Statement of Program Goals and Objectives

The Precision Agriculture program prepares students to work with advanced applications of global positioning system (GPS), geographic information systems (GIS) software including: automatic tractor guidance, variable rate chemical application prescriptions, site-specific soil sampling, remote sensing and related sales and communication. Students will learn through hands-on, real-world applications. Completion of the certificate qualifies students to enter the professional job market or the units may be applied as university transfer or to fulfill the education requirement for the California Department of Pesticide Regulation's (CDPR) Agricultural Pest Control Adviser (PCA) license and the Society of Agronomy's Certified Crop Adviser (CCA).

Upon completion of the Crop Production certificate the student will be able to meet the following objectives:

a. identify the major sources for agricultural sales prospects and the methods used to secure sales commitments from potential buyers;
b. explain the benefits of providing post-sales customer service for agricultural customers;
c. discuss the importance of teamwork in organizations;
d. demonstrate proficiency in spreadsheet applications for agriculture;
e. evaluate and select computer hardware appropriate to precision agricultural applications;
f. complete specific agricultural projects that demonstrate the ability to identify and solve problems using computers;
g. perform site-specific soil and tissue sampling
h. identify various methods for measuring crop yield;
i. understand how various indices can be used to predict crop conditions;
j. identify the components and common sensors used for VRA systems;
k. produce a variable-rate prescription map;
l. identify and describe precision guidance equipment used in agriculture;
m. setup and operate precision guidance equipment.

2. Catalog Statement

The Precision Agriculture program prepares students to work with advanced applications of global positioning system (GPS), geographic information systems (GIS) software including: automatic tractor guidance, variable rate chemical application prescriptions, site-specific soil sampling, remote sensing and related sales and communication. Students will learn through hands-on, real-world applications. Completion of the certificate qualifies students to enter the professional job market or the units may be applied as university transfer or to fulfill the education requirement for the California Department of Pesticide Regulation's (CDPR) Agricultural Pest Control Adviser (PCA) license and the Society of Agronomy's Certified Crop Adviser (CCA).

Program student learning outcomes:

- Students will divide agricultural fields into georeferenced zones, based on soil characteristics and production potentials.
- Students will develop soil sampling grids or identify sampling sites, using geospatial technology, for soil testing on characteristics such as nitrogen, phosphorus, and potassium content, pH, and micronutrients.
- Students will compare crop yield maps with maps of soil test data, chemical application patterns, or other information to develop site-specific crop management plans.
- Students will create recommendations for best crop varieties or seeding rates for specific field areas, based on analysis of geospatial data.
- Students will understand the principles and processes for providing customer and personal services.
- Students will demonstrate an understanding of agronomic fundamentals (soil, plant, water relationships, production and pest management).

3. Program Course Requirements (as it is to appear in the College Catalog)

Course #	Title	Units
AG 11	Agriculture Sales and Communication	3
AGBUS 15	Computer Application to Agriculture	3
CRPSCI 7	Advanced Precision Agriculture	3
SLSCI 21	Soils	4
	Total	**13**

In addition to the core courses the student must take two courses from the following:

Course #	Title	Units
AET 22	Irrigation Evaluation and Design Principles	4
CRPSCI 32	Weeds and Poisonous Plants	3
CRPSCI 36	Fertilizers and Soil Amendments	3
CRPSCI 44	Economic Entomology	3
	Total	**6-7**

Total Units Required for Certificate 19-20

4. Program Prerequisite, Corequisite, or Advisory Courses

5. Program Prerequisite Skills and/or Knowledge

6. Background and Rationale

Former precision agriculture certificate is being modified to include two certificates to allow for higher completion and to include new courses and delete course which are no longer being offered.

INSTRUCTIONAL AREA: CTE

PROGRAM PROPOSAL PACKET
Career Technical Education Addendum

FACULTY ORIGINATOR: J. Cowden
DATE: 2/18/2014
PROGRAM NAME: Applications of Precision Agriculture

TYPE OF DEGREE:

- ☐ Associate of Arts for Transfer
- ☐ Associate of Science for Transfer
- ☐ Associate of Arts
- ☐ Associate of Science
- ☒ Certificate

ATTACHMENTS REQUIRED

- ☒ Labor/Job Market Data
- ☐ Employer Survey
- ☒ Minutes of Key Meetings

1. Labor Market Information and Analysis (required for new programs)

According to O-Net Online, the projected growth of Precision Agriculture Technician positions from 2010-2020 is expected to increase at an average rate of +10-19%, the projected job openings, nationally is expected to be 33,500. Precision Agriculture in California is listed under All Other Life, Physical, and Social Science Technicians. The projected job openings in California is 440 positions with a +14% increase in positions. The median annual wages in 2012 for the nation and California were $43,100 and $45,200, respectively.

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California	Hourly	$14.52	$17.29	$21.73	$29.26	$36.06
	Yearly	$30,200	$36,000	$45,200	$60,900	$75,000

State and National Trends

United States	Employment		Percent Change	Job Openings
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Life, Physical, and Social Science Technicians, All Other	62,000	69,400	12%	3,350
California	**Employment**		**Percent Change**	**Job Openings**
	2010	**2020**		
Life, Physical, and Social Science Technicians, All Other	7,800	8,900	14%	440

INSTRUCTIONAL AREA: CTE

2. Employer Survey (required for new programs)

Not Applicable

3. Explanation of Employer Relationship (required for new programs)

Not Applicable

4. List of Members of Advisory Committee (required for new and revised programs)

President - Kerri Birdwell, Ag Leader Vice President - Kurt Quade, Quade Consulting Secretary - Brock Taylor, Taylor Consulting Elliot Dozier, RDO Equipment Jason Letterman, CAPCA Phil Smith, USDA-NRCS

5. Recommendations of Advisory Committee (required for new and revised programs)

See attached advisory minutes

Crop Production

INSTRUCTIONAL AREA: CTE

PROGRAM PROPOSAL PACKET

FACULTY ORIGINATOR: J. Cowden
DATE: 2/18/2014

☒ New Program Proposal ☐ Program Revision Proposal

PROGRAM NAME: Crop Production
TYPE OF DEGREE: ☐ AA or AS Degree ☒ Certificate ☐ AA-T or AS-T

CHECKLIST: (check all that apply)
☐ AA-T or AS-T Addendum
☒ CTE Addendum

1. Statement of Program Goals and Objectives

Crop production is very important not only in California, but also locally in the Central Valley and Fresno County.[1] California is the nation's top agricultural state, and has been for more than 50 years. Agriculture generates approximately $37.5 billion a year.[2] California has 81,500 farming operations, which is less than 4 percent of the nation's total. However, these farms account for 11.6 percent of the national gross cash receipts from farming. In 2011, California land in farms totaled 25.4 million acres. One out of every five jobs in the Central Valley is related to agriculture, from farm workers to salesperson. Agriculture in the Central Valley produces 57% of California's agricultural products. While it is the Valley's economic base, it also provides healthy and nutritious food for the state, the nation and the world.[3] Fresno County produces more than 350 commercial crops, worth more than $6.8 billion in 2011. It is very important for persons employed in California agriculture to understand crop production.

Upon completion of the Crop Production certificate the student will be able to meet the following objectives:

a. determine the most profitable levels of productions, given cost and income data for each enterprise;
b. develop a strategy for resolving a typical farm labor or personnel issue;
c. create and modify various budgets of the agribusiness including; cash flow, enterprise, and whole farm;
d. describe the scope of precision farming and know the precision farming cycle;
e. identify the applications of variable-rate technology (VRT) in agriculture;
f. map field boundaries and point data using handheld GPS receivers;
g. import GPS data into ArcGIS and create ranch map with soils and image data;
h. perform site-specific soil and tissue sampling;
i. identify various methods for measuring crop yield;
j. understand how various indices can be used to predict crop conditions;
k. produce a variable-rate prescription map;
l. identify and describe precision guidance equipment used in agriculture;
m. setup and operate precision guidance equipment;
n. explain the standard plant propagation methods;
o. describe sexual and asexual reproduction in higher plants;
p. explain photosynthesis, respiration and translocation in higher plants;
q. describe the climatic influences on plant growth and development;
r. categorize the biological competitors of higher plants;

[1] http://www.fcfb.org/PDF-Files/Ag-Facts.pdf
[2] http://www.agclassroom.org/kids/stats/california.pdf
[3] http://www.greatvalley.org/

s. describe the importance of irrigation water in agriculture and defend its continued supply;
t. describe the many problems facing California agriculture in a period of limited water supply and worsening water quality;
u. list the consequences of management decisions on this limited resource;
v. utilize the most common irrigation terminology.

2. Catalog Statement

The Crop Production program prepares students for a career in California Agriculture. Duties include planning, directing, or coordinating the management or operation of farms, ranches, greenhouses, aquacultural operations, nurseries, timber tracts, or other agricultural establishments. May hire, train, and supervise farm workers or contract for services to carry out the day-to-day activities of the managed operation. May engage in or supervise planting, cultivating, harvesting, and financial and marketing activities.

As the nation's leading agriculture state, California is very dependent on crop production. Every $1 produced on the farm generates more than $3.50 in the local and regional economy. Students will learn the fundamentals of farm management, precision agriculture, soils, irrigation/water and plant science. Students will learn through hands-on, real-world applications. Completion of the certificate qualifies students to enter the professional job market or the units may be applied as university transfer or to fulfill the education requirement for the California Department of Pesticide Regulation's (CDPR) Agricultural Pest Control Adviser (PCA) license and the Society of Agronomy's Certified Crop Adviser (CCA).

Program student learning outcomes:

The student will be able to:

a. determine types or quantities of crops to be grown, according to factors such as market conditions, federal programs or incentives or soil conditions;
b. direct crop production operations, such as planning, tilling, planting, fertilizing, cultivating, spraying, or harvesting;
c. evaluate marketing or sales alternatives for farm or ranch products;
d. maintain financial, operational, production, or employment records for farms;
e. monitor activities such as irrigation, chemical application, harvesting or grading to ensure adherence to safety regulations or standards.

3. Program Course Requirements (as it is to appear in the College Catalog)

Course #	Title	Units
AGBUS 20	Farm and Agriculture Business Management	3
CRPSCI 6	Introduction to Precision Agriculture	3
CRPSCI 7	Advanced Precision Agriculture	3
SLSCI 21	Soils	4
	Total	**13**

In addition to the core courses the student must take one course from Irrigation/Water and one from Plant Science:

Irrigation/Water

Course #	Title	Units
AET 21	Ag-Irrigation Management	3
CRPSCI 19	California Water	3
	Total	**3**

Plant Science

Course #	Title	Units
CRPSCI 1	Introduction to Plant Science	3
CRPSCI 2	Plant Science Theory	3
	Total	**3**
Total Units Required for Certificate		**19**

4. Program Prerequisite, Corequisite, or Advisory Courses

5. Program Prerequisite Skills and/or Knowledge

6. Background and Rationale

Crop production is very important not only in California, but also locally in the Central Valley and Fresno County.[4] California is the nation's top agricultural state, and has been for more than 50 years. Agriculture generates approximately $37.5 billion a year.[5] California has 81,500 farming operations, which is less than 4 percent of the nation's total. However, these farms account for 11.6 percent of the national gross cash receipts from farming. In 2011, California land in farms totaled 25.4 million acres. One out of every five jobs in the Central Valley is related to agriculture, from farm workers to salesperson. Agriculture in the Central Valley produces 57% of California's agricultural products. While it is the Valley's economic base, it also provides healthy and nutritious food for the state, the nation and the world.[6] Fresno County produces more than 350 commercial crops, worth more than $6.8 billion in 2011. It is very important for persons employed in California agriculture to understand crop production.

Completion of the certificate allows the student to enter the job market or apply units toward university transfer or California Department of Pesticide Regulation's (CDPR) Agricultural Pest Control Adviser (PCA) certificate. Courses align with CDPR education requirements and C-ID course articulation.

[4] http://www.fcfb.org/PDF-Files/Ag-Facts.pdf
[5] http://www.agclassroom.org/kids/stats/california.pdf
[6] http://www.greatvalley.org/

INSTRUCTIONAL AREA: CTE

PROGRAM PROPOSAL PACKET
Career Technical Education Addendum

FACULTY ORIGINATOR: J. Cowden
DATE: 2/18/2014
PROGRAM NAME: Crop Production

TYPE OF DEGREE:

- ☐ Associate of Arts for Transfer
- ☐ Associate of Science for Transfer
- ☐ Associate of Arts
- ☐ Associate of Science
- ☒ Certificate

ATTACHMENTS REQUIRED

- ☒ Labor/Job Market Data
- ☐ Employer Survey
- ☒ Minutes of Key Meetings

1. Labor Market Information and Analysis (required for new programs)

According to O-Net Online, the outlook for careers in this area is bright. Even though the projected growth of positions from 2010-2020 is expected to decline slowly or moderately at -8%, the projected job openings, nationally is expected to be 234,500 due to retirement and turnover. The projected job openings in California is 2,680 positions with only a -3% decline in positions. The median annual wages in 2012 for the nation and California were $69,300 and $83,600, respectively.

State and National Trends[1]

United States	**Employment**		**Percent Change**	**Job Openings**
	2010	**2020**		
Farmers, Ranchers, and Other Agricultural Managers	1,202,500	1,106,400	-8%	23,450
California	**Employment**		**Percent Change**	**Job Openings**
	2010	**2020**		
Farmers, Ranchers, and Other Agricultural Managers	137,700	133,000	-3%	2,680

State and National Wages

Location	**Pay Period**	**2012**				
		10%	**25%**	**Median**	**75%**	**90%**
United States	Hourly	$15.24	$22.40	$33.32	$43.93	$59.69
	Yearly	$31,700	$46,600	$69,300	$91,400	$124,200
California	Hourly	$21.58	$30.92	$40.20	$56.27	$68.34
	Yearly	$44,900	$64,300	$83,600	$117,000	$142,100

[1] http://www.careerinfonet.org/occ_rep.asp?optstatus=011000000&soccode=119013&id=1&nodeid=2&stfips=06&search=Go

2. Employer Survey (required for new programs)

Not Applicable

3. Explanation of Employer Relationship (required for new programs)

Not Applicable

4. List of Members of Advisory Committee (required for new and revised programs)

President - Kerri Birdwell, Ag Leader Vice President - Kurt Quade, Quade Consulting Secretary - Brock Taylor, Taylor Consulting Elliot Dozier, RDO Equipment Jason Letterman, CAPCA Phil Smith, USDA-NRCS

5. Recommendations of Advisory Committee (required for new and revised programs)

See attached advisory minutes

Crop Health

INSTRUCTIONAL AREA: CTE

PROGRAM PROPOSAL PACKET

FACULTY ORIGINATOR: J. Cowden
DATE: 2/18/2014

☒New Program Proposal ☐Program Revision Proposal

PROGRAM NAME: Crop Health
TYPE OF DEGREE: ☐AA or AS Degree ☒Certificate ☐AA-T or AS-T

CHECKLIST: (check all that apply)
☐AA-T or AS-T Addendum
☒CTE Addendum

1. Statement of Program Goals and Objectives

The Crop Health program prepares students for a career in the agriculture production field; learning the skills needed for careers involved in the production and care of agricultural crops through hands-on, real-world experience. Completion of the certificate qualifies students to enter the professional job market or the units may be applied as university transfer or to fulfill the education requirement for the California Department of Pesticide Regulation's (CDPR) Agricultural Pest Control Adviser (PCA) license and the Society of Agronomy's Certified Crop Adviser (CCA).

Upon completion of the Crop Production certificate the student will be able to meet the following objectives:

a. identify common weeds found in Central California and statewide;
b. explain the methods of safely applying various herbicides;
c. identify the basic fertilizer requirements of major crops grown in the area;
d. explain the importance of fertilizers in agricultural production;
e. list the different methods of applying fertilizers including the advantages and disadvantages;
f. identify insects and closely related plant and animal pests and pest damage;
g. explain the economic aspects of beneficial and harmful insects;
h. select possible methods and timing of control in a given circumstance;
i. understand the difference between California laws and DPR regulations;
j. diagram and describe the parts of a pesticide label;
k. understand the requirements to use a pesticide with a restricted label;
l. identify and describe the various DPR pest control certifications and licenses;
m. employ the principles and concepts of IPM in field crop environments;
n. explain the mode of action of pesticides, pesticide absorption by the human body, and the importance of poisoning measurements;
o. safely and properly mix, calibrate, apply, and dispose of different pesticide formulations utilizing different techniques and equipment;
p. demonstrate the determination of the following soil physical properties: textures (two methods), use of texture triangle, bulk density, particle density, pore space, organic content, color, pH, structure, conductivity and reactivity;
q. demonstrate practical soil management including soil conservation and sustainability;
r. describe and demonstrate how to read a soil map, explain the importance of soil mapping and how to locate a specific site using both township/range and GIS (Geographic Information Systems).

2. Catalog Statement

The Crop Health program prepares students for a career in the agriculture production field; learning the skills needed for careers involved in the production and care of agricultural crops through hands-on, real-world experience. Completion of the certificate qualifies students to enter the professional job market or the units may be applied as university transfer or to fulfill the education requirement for the California Department of Pesticide Regulation's (CDPR) Agricultural Pest Control Adviser (PCA) license.

Program student learning outcomes:

- Students will demonstrate an understanding of common agricultural weeds in California and the methods to control them.
- Students will demonstrate an understanding of the basic fertilizer requirements of major crops grown in California.
- Students will demonstrate an understanding of common agricultural insect pests in California and the methods to control them.
- Students will demonstrate an understanding of current California pest control laws and regulations.
- Students will demonstrate an understanding of integrated pest management and its application to California farming.
- Students will demonstrate an understanding of agronomic fundamentals (soils, crops).

3. Program Course Requirements (as it is to appear in the College Catalog)

Course #	Title	Units
CRPSCI 32	Weeds and Poisonous Plants	3
CRPSCI 36	Fertilizers and Soil Amendments	3
CRPSCI 44	Economic Entomology	3
CRPSCI 45	California Pest Control Laws and Regulations	2
CRPSCI 46	Integrated Pest Management	3
SLSCI 21	Soils	4
	Total	**18**

4. Program Prerequisite, Corequisite, or Advisory Courses

5. Program Prerequisite Skills and/or Knowledge

6. Background and Rationale

"The graying of America is on a collision course with the feeding of America. One of the key elements in California's ability to feed millions are the state's 4,100 licensed Pest Control Advisers." There is a severe shortage of qualified employees. Terry Stark, of the California Association of Pest Control Advisers, said a survey revealed that only 17% are 44 or younger while 35% are 45 to 55 and almost 40% of its members are over 55. "The opportunities for crop protection professionals over the next five to 10 years are endless," said Steve Alexander of Helena Chemical Company in Fresno, CA. [1] Of the approximately 3,000 Pest Control Advisers who are members of CAPCA, about half are expected to retire in the next 10 years, says Terry Stark, CAPCA executive director.[2] Currently the demand for employees possessing a PCA license far exceeds the supply. This creates the perfect gap for training students for a high skill, high wage career in agriculture.

[1] http://westernfarmpress.com/management/california-pathway-pca-program-looking-lot-good-men-women-0

[2] http://www.thegrower.com/news/Recruitment-program-slows-loss-of-pest-control-advisers-132474563.html

INSTRUCTIONAL AREA: CTE

PROGRAM PROPOSAL PACKET
Career Technical Education Addendum

FACULTY ORIGINATOR: J. Cowden
DATE: 2/18/2014
PROGRAM NAME: Crop Health

TYPE OF DEGREE:

- ☐ Associate of Arts for Transfer
- ☐ Associate of Science for Transfer
- ☐ Associate of Arts
- ☐ Associate of Science
- ☒ Certificate

ATTACHMENTS REQUIRED

- ☒ Labor/Job Market Data
- ☐ Employer Survey
- ☒ Minutes of Key Meetings

1. Labor Market Information and Analysis (required for new programs)

According to O-Net Online, the projected growth of Pest Control Worker positions from 2010-2020 is expected to increase faster than average at +26%, the projected job openings, nationally is expected to be 4,850. The projected job openings in California is 660 positions with a +29% increase in positions. The median annual wages in 2012 for the nation and California were $30,100 and $30,900, respectively.

State and National Wages

Location	Pay Period	2012				
		10%	25%	Median	75%	90%
United States	Hourly	$9.39	$11.84	$14.45	$18.38	$22.97
	Yearly	$19,500	$24,600	$30,100	$38,200	$47,800
California	Hourly	$10.50	$12.36	$14.84	$19.15	$23.55
	Yearly	$21,800	$25,700	$30,900	$39,800	$49,000

State and National Trends

United States	Employment		Percent Change	Job Openings
	2010	2020		
Pest Control Workers	68,400	86,200	26%	4,850
California	**Employment**		**Percent Change**	**Job Openings**
	2010	**2020**		
Pest Control Workers	9,000	11,600	29%	660

The problem with O-Net data is that agricultural pest control in California is more regulated than in other areas of the country, therefore Pest Control Workers are not a true reflection of the career opportunities in the field. Although, students who receive a certificate in crop health would still be qualified for pest control worker positions, pest control adviser salaries are more closely reflected on Indeed.com with a median annual income

of $58,000[1] and at Simply Hired at $55,000[2].

2. Employer Survey (required for new programs)

Not Applicable

3. Explanation of Employer Relationship (required for new programs)

Not Applicable

4. List of Members of Advisory Committee (required for new and revised programs)

President - Kerri Birdwell, Ag Leader
Vice President - Kurt Quade, Quade Consulting
Secretary - Brock Taylor, Taylor Consulting
Elliot Dozier, RDO Equipment
Jason Letterman, CAPCA
Phil Smith, USDA-NRCS

5. Recommendations of Advisory Committee (required for new and revised programs)

See attached advisory minutes

[1] http://www.indeed.com/salary?q1=Pest+Control+Advisor&l1=California&friend=1
[2] http://www.simplyhired.com/salaries-k-pest-control-advisor-jobs.html

Irrigation Design

INSTRUCTIONAL AREA: CTE

PROGRAM PROPOSAL PACKET

FACULTY ORIGINATOR: J. Cowden
DATE: 2/18/2014

☒New Program Proposal ☐Program Revision Proposal

PROGRAM NAME: Irrigation Design
TYPE OF DEGREE: ☐AA or AS Degree ☒Certificate ☐AA-T or AS-T

CHECKLIST: (check all that apply)
☐AA-T or AS-T Addendum
☒CTE Addendum

1. Statement of Program Goals and Objectives

The Irrigation Design program prepares students for careers in irrigation sales, installation, design and operation; learning skills in computer-aided drafting, irrigation management, evaluation and design, including advanced design and drip and micro irrigation design and management. The curriculum is designed to align with the Irrigation Association's certified irrigation designer (CID) certification. Completion of the certificate qualifies students to enter the professional job market or the units may be applied as university transfer or to fulfill the education requirement for the California Department of Pesticide Regulation's (CDPR) Agricultural Pest Control Adviser (PCA) license and the Society of Agronomy's Certified Crop Adviser (CCA).

Upon completion of the Crop Production certificate the student will be able to meet the following objectives:

a. draw basic two-dimensional drawings with the associated drawing tools and aids;
b. create 2-dimensional isometric drawings with the associated drawing tools;
c. demonstrate a complete understanding of the soil-plant-water relationship by correctly completing a soil water budget;
d. calculate evapotranspiration rates for crops common to California over a complete growing season;
e. compare and install all the major water supply systems (i.e. surface, sprinkler, drip, and micros). Surface as well as buried systems;
f. perform an irrigation system evaluation for drip/micro irrigation systems;
g. determine irrigation system distribution uniformity and application efficiency for given irrigation systems;
h. determine which type of irrigation system is appropriate for given specific site conditions, i.e. soil properties and crop data;
i. specify materials and components to make a complete system that optimizes the balance between capital investment and operation and maintenance costs;
j. determine plant water use for given crops and climatic conditions;
k. calculate sprinkler spacing for head-to-head coverage;
l. select proper sprinklers for given crops and irrigation system components;
m. complete irrigation designs for efficiency and uniformity;
n. calculate system flow rate requirements and friction losses in hoses;
o. determine allowable pressure differences in irrigation systems;
p. determine proper pipe size, pressure regulation and appropriate filtration for given design parameters;
q. select proper emission devices and design for minimization of clogging.

2. Catalog Statement

The Irrigation Design program prepares students for careers in irrigation sales, installation, design and operation; learning skills in computer-aided drafting, irrigation management, evaluation and design, including advanced design and drip and micro irrigation design and management. The curriculum is designed to align with the Irrigation Association's certified irrigation designer (CID) certification. Completion of the certificate qualifies students to enter the professional job market or the units may be applied as university transfer or to fulfill the education requirement for the California Department of Pesticide Regulation's (CDPR) Agricultural Pest Control Adviser (PCA) license and the Society of Agronomy's Certified Crop Adviser (CCA).

Program student learning outcomes:

- Students will demonstrate an understanding of soil-plant-water relationships.
- Students will determine irrigation system distribution uniformity and application efficiency for given irrigation systems.
- Students will determine which type of irrigation system is appropriate for given specific site conditions, i.e. soil properties and crop data.
- Students will specify materials and components to make a complete system that optimizes the balance between capital investment and operation and maintenance costs.
- Students will complete irrigation designs for efficiency and uniformity.
- Students will determine proper pipe size, pressure regulation and appropriate filtration for given design parameters.
- Students will understand agronomic fundamentals and technological principles (i.e. surveying, CAD, precision agriculture, soil and plant science).

3. Program Course Requirements (as it is to appear in the College Catalog)

Course #	Title	Units
AET 15	CAD for Agriculture	2
AET 21	Ag-Irrigation Management	3
AET 22	Irrigation Evaluation and Design Principles	4
AET 23	Advanced Irrigation Design	3
AET 24	Drip and Micro Irrigation Design and Management	3
	Total	**15**

In addition to the core courses the student must take at least three units from the following courses:

Course #	Title	Units
AET 10	Surveying	3
AET 11	Advanced Surveying with GIS Applications	2
AET 16	CAD Applications for Land Management in Agriculture	1
CRPSCI 6	Introduction to Precision Agriculture	3
CRPSCI 7	Advanced Precision Agriculture	3
CRPSCI 19	California Water	3
SLSCI 21	Soils	4
	Total	**3-4**

Total Units Required for Certificate 18-19

4. Program Prerequisite, Corequisite, or Advisory Courses

5. Program Prerequisite Skills and/or Knowledge

6. Background and Rationale

California agriculture is in the middle of a severe crisis, with yet another year of drought coupled with increased environmental concerns and a down turned economy. "Farmers' decisions to fallow thousands of acres during last year's drought cost $260 million in crop losses statewide, as well as hundreds of jobs. That's bad news in Firebaugh, a city of 6,000. Because of the downturn in the economy, the city's sales tax plummeted 43% in the last quarter of 2008 " If the Westside is California's heartland, then Valley agriculture is its heart and water is its lifeblood.

With the decrease in water supply, area growers need to conserve every drop of water. This is creating a gap between industry needs and education. There currently are not enough students entering careers in irrigation, thus creating a need for employees trained in irrigation design, scheduling and consulting. This certification program is designed to align with the Irrigation Association's Certified Irrigation Designer. The Irrigation Technology program will align with the Irrigation Association's Certified Irrigation Designer (CID.) The Irrigation Association is the leading membership organization for irrigation equipment and system manufacturers, dealers, distributors, designers, consultants, contractors and end users. Certification will allow students to enter the workforce, or transfer on to four-year programs such as Agricultural Engineering at Cal Poly, San Luis Obispo.

INSTRUCTIONAL AREA: CTE

PROGRAM PROPOSAL PACKET
Career Technical Education Addendum

FACULTY ORIGINATOR: J. Cowden
DATE: 2/18/2014
PROGRAM NAME: Irrigation Design

TYPE OF DEGREE:

- ☐ Associate of Arts for Transfer
- ☐ Associate of Science for Transfer
- ☐ Associate of Arts
- ☐ Associate of Science
- ☒ Certificate

ATTACHMENTS REQUIRED

- ☒ Labor/Job Market Data
- ☐ Employer Survey
- ☒ Minutes of Key Meetings

1. Labor Market Information and Analysis (required for new programs)

Labor Market Information for Irrigation Designers is not listed, a similar category and one for which completers would be qualified is Environmental Engineering Technicians. According to O-Net Online, the projected growth for Environmental Engineering Technicians from 2010-2020 is expected to increase faster than average at +24%, the projected job openings, nationally is expected to be 820. The projected job openings in California is 100 positions with a +19% increase in positions. The median annual wages in 2012 for the nation and California were $45,300 and $57,000, respectively.

Environmental Engineering Technicians State and National Wages

Location	Pay Period	2012				
		10%	25%	Median	75%	90%
United States	Hourly	$13.79	$16.93	$21.80	$28.79	$36.81
	Yearly	$28,700	$35,200	$45,300	$59,900	$76,600
California	Hourly	$16.08	$20.16	$27.42	$39.57	$48.39
	Yearly	$33,400	$41,900	$57,000	$82,300	$100,700

Environmental Engineering Technicians State and National Trends

United States	Employment		Percent Change	Job Openings
	2010	2020		
Environmental Engineering Technicians	18,800	23,300	24%	820
California	**Employment**		**Percent Change**	**Job Openings**
	2010	**2020**		
Environmental Engineering Technicians	2,700	3,200	19%	100

2. Employer Survey (required for new programs)

Not Applicable

3. Explanation of Employer Relationship (required for new programs)

Not applicable

4. List of Members of Advisory Committee (required for new and revised programs)

President - Kerri Birdwell, Ag Leader
Vice President - Kurt Quade, Quade Consulting
Secretary - Brock Taylor, Taylor Consulting
Elliot Dozier, RDO Equipment
Jason Letterman, CAPCA
Phil Smith, USDA-NRCS

5. Recommendations of Advisory Committee (required for new and revised programs)

See attached advisory minutes

FOF Advisory Committee Meeting Agenda and Minutes

WEST HILLS COLLEGE COALINGA

FOF Advisory Committee Meeting Agenda and Minutes

Date Wednesday, Dec 18
Time 6:15 PM – 7:00 PM
Location Room FB03

Area/Position	Person	Present	
		Yes	No
President	Kerri Birdwell	X	
Voting member	Brock Taylor	X	
Voting member	Elliot Dozier	X	
Voting member	Phil Smith	X	
Voting member	Kurt Quade	X	
	Justin Letterman	X	
Non-Voting	David Castillo	X	
Non-Voting	Chris Chaney	X	
Non-Voting	Clint Cowden	X	
Non-Voting	Tim Ellsworth	X	

1.0 Call to order

1.1 **Call to order at 6:13 PM**
1.2 Additions to the Agenda

2.0 Public Comments

2.1

3.0 Minutes

3.1 Minutes for April 2011

4.0 Administrative Report

4.1 N/A

5.0 Area Reports

5.1 Irrigation

5.2 Precision Agriculture

5.3 Soil Science

5.4 Ag Systems Management

5.5 Pest Control

5.6 West Side Agriculture

5.7 Other

6.0 Old Business

6.1 Ag Science and Technology AS
6.2 PCA Classes

8.0 New Business

8.1	Ag 12
8.2	CrpSci 1
8.3	AET 10
8.4	AET 11
8.5	AET 15
8.6	AET 16
8.7	AET 21
8.8	AET 22
8.9	AET 23
8.10	AET 24
8.11	AG 11
8.12	CrpSci 19
8.13	CrpSci 2
8.14	CrpSci 32
8.15	CrpSci 32
8.16	CrpSci 36
8.17	CrpSci 44
8.18	CrpSci 45
8.19	CrpSci 46
8.20	CrpSci 49
8.21	CrpSci 6
8.22	CrpSci 7
8.23	SISci 21
8.24	Irrigation Design Cert
8.25	Applications of Precision Agriculture Cert
8.26	Crop Health Cert
8.27	Crop Production Cert
8.28	Precision Agriculture Fundamentals Cert
8.29	TMC Plant Science AS-T
8.30	Internships
8.31	Externships
8.32	Student Job Placement

The next meeting will be a brief consultation meeting to review CrpSci 7 and will occur at the February 11-13, 2014 World Ag Expo in Tulare.

The meeting was called to order by Kerri at 6:13 PM. Kerri asked what the purpose of tonight's meeting. Clint explained the need for the meeting was to have the committee review course materials and programs, provide input on the same, and, if acceptable, approve these courses and programs. If the materials are not acceptable, the committee is charged with providing guidance

and direction to improve the program. It was explained that the advisory committee approval was required prior to obtaining approval from three subsequent review boards which include the WHCC academic senate committee, the California Community College senate, and the state chancellor's office.

The discussion noted that items 8.3 – 8.25 listed above have already been approved by the latter three review boards. Thus, Elliot moved that discussion of these items be tabled. This was approved by Kurt and voting was unanimous to table these items.

The discussion then focused on Ag 12 and CrpSci 1.

With regard to Ag 12, Brock asked if the class also teaches harvest equipment concepts, which he was told by Clint it does not. Clint pointed out that Ag 12 is taught currently at Cal Poly SLO and Merced College. He also pointed out that there is an advanced class that teaches students in regards to harvest equipment.

Elliot made a motion to accept the class as described, Jason seconded the motion and everyone voted unanimously to approve the motion.

The discussion than focused on CrpSci 1.

Clint pointed out that if this class is approved by the committee, it will be sent to the previously mentioned subsequent review boards (e.g., WHCC academic senate, etc.) for approval as a GE course. Brock moved to accept class, Jason seconded the move, and the vote was unanimous in favor.

Committee discussion switched to focus on the Irrigation Design program.
Clint explained the purpose of the Program and the importance of certificates to serve CTE for people who do not intend to proceed to a 4 year institution but who do want gain greater depth. This program provides a national level certificate and qualify people for a job at $18/hr and put them on a pathway for a career.

Kurt makes motion to approve program, Brock seconds the motion and the committee voted and approved the motion.

Discussion then turned to the Applications of Precision Ag Program. It was explained that the Advanced GPS class is much more focused than the Intro course on guidance systems, remote sensing, etc.

Kerri mentioned that the program is lacking and needs instruction on installation of machinery guidance systems.

Clint pointed out that this was prior course content in CrpSci 7. He felt that this material should be covered in that course. Even though CrpSci 7 is currently approved by all required approval committees, it needs to be revised to include instruction in the installation of guidance systems.

The Committee decided to approve program but recommended revision of CrpSci 7. The committee decided to review a revised CrpSci 7 course description at the World Ag Expo Farm show in February. The instruction could focus on aftermarket or plug and play equipment. David asked if we could use a video or two to train students on this topic. Kerri suggested the need to teach variable rate seeding and variable rate application installations as well as guidance systems, etc. Suggestion was made by Kerri to consider a 1 unit course that focused on installation only.

Brock made a motion to accept the program, Kurt seconded the motion which was unanimously approved.

The topic then switched to the Crop Health Cert. It was noted that all of the courses in this certificate are hybrid courses in that they include online lecture and face-2-face labs.

Clint explained that these certification programs provide a useful means of capturing educational success if students complete the certificate. In the past, students have completed the coursework, obtained gainful employment, and yet this success has not been recognized by the college. These certificates provide a means of identifying such success.

The aim of these certificates is to develop programs that prepare students for Pest Control Advisor and Certified Crop Advisor exams. Kurt moved that we approve this program, Brock seconded the motion and the committee unanimously supported the motion.

The discussion than focused on the Crop Production Certificate. The program focuses on the PCA plus Ag Business. Elliot moved to accept the program. Brock seconded the motion. Jason asked where is the WHCC service area? Clint mentioned that Salinas growers frequent the area in the winter for vegetable production and suggested that realistically it may be an 85 mile radius. Kerri asked for a vote on the motion, which vote was unanimous.

The next topic of discussion was the Precision Ag Fundamentals Certificate. This was explained as being an introductory certificate that has good job placement but perhaps the lowest pay among the programs discussed tonight. There are many targeted potential students for this certificate including an employer who wants his farm manager to obtain continuing education credits, a city FFA student who knows nothing about agriculture, and a student who wants to pursue a plant science BS degree. Kurt moved that we approve this certificate, Elliot seconded the motion, and the vote was unanimous in favor.

A brief discussion ensued regarding the correlation among programs and between courses within programs in terms of content introduction, practice and demonstration. The review of correlation followed the Degree Qualifications Profile Project (DQPP, http://www.dqpp.org/) outlinie.

Jason made a motion to discuss items 8.37 – 8.39. Clint challenged the committee to provide externship opportunities for Clint and Tim to follow an industry professional 4 or 5 days over a month or two. A similar request was made for student internships. A discussion ensued to provide internships that coordinate between industry professional, faculty and student with a

signed learning agreement that includes learning objectives, reporting requirements, and a structure to for students to receive academic credit. A similar structure could apply to externship efforts that would identify learning objectives for the externship experiences.

Elliot made a motion to adjourn the meeting, Kurt seconded the motion and the voting was in favor of adjourning the meeting.

The meeting was adjourned at 8:30 PM.

Section C

Supporting Materials and Documentation

SUPPORTING DOCUMENTS
TABLE OF CONTENTS

1.

Student Data Sheets

Staff ▸

Search this site...

Payment is due at the time of registration for Summer and Fall 2014 classes. If the registration fees are not paid within 24 hours, you may be dropped from your class(es). Registration fees for Spring 2015 are due by November 1, 2014. For Spring 2015 classes added after November 1, 2014, payment will be due within 24 hours.

Class Roster

Course Name and Title	Instructor	Meeting Information	Reg/Avail/Wait
AGMM-52D-C01 (5924) Technical Report Writing	J. Cowden	02/08/2011-02/18/2011 Laboratory/Studio/Activity Monday, Tuesday, Wednesday, Thursday, Friday 09:00AM - 11:50AM, Farm of the Future, Room FF403	4 / 14 / 0

<--Select a different course section E-Mail these Students

Student	ID	Access	E-mail Address	Phone Number	Pass Aud	Class	Academic Level	Status	Repeat	Credits	CEUs	Cross-Listed Section
[redacted]						Freshman	UG	New		0.50		
						Freshman	UG	New		0.50		
						Freshman	UG	New		0.50		
						Freshman	UG	New		0.50		

Security Access Messages

None

Show Dropped/Withdrawn Students ☐

Show Waitlisted Students ☑

SUBMIT

Staff ▸

Search this site...

Payment is due at the time of registration for Summer and Fall 2014 classes. If the registration fees are not paid within 24 hours, you may be dropped from your class(es). Registration fees for Spring 2015 are due by November 1, 2014. For Spring 2015 classes added after November 1, 2014, payment will be due within 24 hours.

Class Roster

Course Name and Title	Instructor	Meeting Information	Reg/Avail/Wait
AGMM-52C-C01 (5923) Job Preparation	J. Cowden	02/02/2011-02/16/2011 Laboratory/Studio/Activity Monday, Tuesday, Wednesday, Thursday 01:00PM - 03:50PM, Farm of the Future, Room FF403	4 / 14 / 0

<--Select a different course section E-Mail these Students

Student	ID	Access	E-mail Address	Phone Number	Pass Aud	Class	Academic Level	Status	Repeat	Credits	CEUs	Cross-Listed Section
[redacted]						Freshman	UG	New		0.50		
						Freshman	UG	New		0.50		
						Freshman	UG	New		0.50		
						Freshman	UG	New		0.50		

Security Access Messages

None

Show Dropped/Withdrawn Students ☐

Show Waitlisted Students ☑

SUBMIT

Staff ▸

Search this site...

Payment is due at the time of registration for Summer and Fall 2014 classes. If the registration fees are not paid within 24 hours, you may be dropped from your class(es). Registration fees for Spring 2015 are due by November 1, 2014. For Spring 2015 classes added after November 1, 2014, payment will be due within 24 hours.

Class Roster

Course Name and Title	Instructor	Meeting Information	Reg/Avail/Wait
AG-10-C01 (6826) Intro to Agriculture	B. Hunt, J. Cowden	08/16/2011-12/13/2011 Lecture And/Or Discussion Tuesday 06:00PM - 08:50PM, Farm of the Future, Room FF404	11 / 13 / 0

<--Select a different course section E-Mail these Students

Student	ID	Access	E-mail Address	Phone Number	Pass Aud	Class	Academic Level	Status	Repeat	Credits	CEUs	Cross-Listed Section
[redacted]						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		

Security Access Messages

None

Show Dropped/Withdrawn Students ☐

Show Waitlisted Students ☑

SUBMIT

Staff ▸

Search this site...

Payment is due at the time of registration for Summer and Fall 2014 classes. If the registration fees are not paid within 24 hours, you may be dropped from your class(es). Registration fees for Spring 2015 are due by November 1, 2014. For Spring 2015 classes added after November 1, 2014, payment will be due within 24 hours.

Class Roster

Course Name and Title	Instructor	Meeting Information	Reg/Avail/Wait
AET-22-C01 (6825) Irrigation Evaluation and Desi	C. Cowden, C. Cowden, J. Cowden, J. Cowden	08/15/2011-12/16/2011 Lecture And/Or Discussion Monday, Wednesday, Friday 02:00PM - 02:40PM, Farm of the Future, Room FF404 08/15/2011-12/16/2011 Laboratory/Studio/Activity Monday, Wednesday, Friday 03:00PM - 04:50PM, Farm of the Future, Room FF404	6 / 18 / 0

<--Select a different course section E-Mail these Students

Student	ID	Access	E-mail Address	Phone Number	Pass Aud	Class	Academic Level	Status	Repeat	Credits	CEUs	Cross-Listed Section
[redacted]						Freshman	UG	New		4.00		
						Freshman	UG	New		4.00		
						Freshman	UG	New		4.00		
						Freshman	UG	New		4.00		
							UG	New		4.00		
						Freshman	UG	New		4.00		

Security Access Messages

None

Show Dropped/Withdrawn Students ☐

Show Waitlisted Students ☑

SUBMIT

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Class Roster

Course Name and Title	Instructor	Meeting Information	Reg/Avail/Wait
CRPSCI-46-C01 (9966) Integrated Pest Management	J. Cowden, C. Cowden	03/11/2013-05/24/2013 Lecture Via Online Media Days to be Announced, Times to be Announced, Room to be Announced 04/13/2013-04/14/2013 Laboratory/Studio/Activity Saturday, Sunday 08:00AM - 11:50AM, Farm of Future, Room FB04 04/13/2013-04/14/2013 Laboratory/Studio/Activity Saturday, Sunday 12:30PM - 04:50PM, Farm of Future, Room FB04 05/04/2013-05/05/2013 Laboratory/Studio/Activity Saturday, Sunday 08:00AM - 11:50AM, Farm of Future, Room FB04 05/04/2013-05/05/2013 Laboratory/Studio/Activity Saturday, Sunday 12:30PM - 04:50PM, Farm of Future, Room FB04 05/25/2013-05/26/2013 Laboratory/Studio/Activity Saturday, Sunday 08:00AM - 11:50AM, Farm of Future, Room FB04 05/25/2013-05/26/2013 Laboratory/Studio/Activity Saturday, Sunday 12:30PM - 04:50PM, Farm of Future, Room FB04	8 / 22 / 0

<--Select a different course section E-Mail these Students

Student	ID	Access	E-mail Address	Phone Number	Pass Aud	Class	Academic Level	Status	Repeat	Credits	CEUs	Cross-Listed Section
[redacted]						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		

Security Access Messages

None

Show Dropped/Withdrawn Students ☐

Show Waitlisted Students ☑

SUBMIT

Staff ▸

Search this site...

Payment is due at the time of registration for Summer and Fall 2014 classes. If the registration fees are not paid within 24 hours, you may be dropped from your class(es). Registration fees for Spring 2015 are due by November 1, 2014. For Spring 2015 classes added after November 1, 2014, payment will be due within 24 hours.

Class Roster

Course Name and Title	Instructor	Meeting Information	Reg/Avail/Wait
CRPSCI-44-C01 (9965) Economic Entomology	J. Cowden, C. Cowden	03/11/2013-05/24/2013 Lecture Via Online Media Days to be Announced, Times to be Announced, Room to be Announced 04/06/2013-04/07/2013 Laboratory/Studio/Activity Saturday, Sunday 08:00AM - 11:50AM, Farm of Future, Room FB04 04/06/2013-04/07/2013 Laboratory/Studio/Activity Saturday, Sunday 12:30PM - 04:50PM, Farm of Future, Room FB04 04/27/2013-04/28/2013 Laboratory/Studio/Activity Saturday, Sunday 08:00AM - 11:50AM, Farm of Future, Room FB04 04/27/2013-04/28/2013 Laboratory/Studio/Activity Saturday, Sunday 12:30PM - 04:50PM, Farm of Future, Room FB04 05/18/2013-05/19/2013 Laboratory/Studio/Activity Saturday, Sunday 08:00AM - 11:50AM, Farm of Future, Room FB04 05/18/2013-05/19/2013 Laboratory/Studio/Activity Saturday, Sunday 12:30PM - 04:50PM, Farm of Future, Room FB04	10 / 20 / 0

<--Select a different course section E-Mail these Students

Student	ID	Access	E-mail Address	Phone Number	Pass Aud	Class	Academic Level	Status	Repeat	Credits	CEUs	Cross-Listed Section
[redacted]						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New	Y	3.00		
						Freshman	UG	New		3.00		

Security Access Messages

None

Show Dropped/Withdrawn Students ☐

Show Waitlisted Students ☑

SUBMIT

Staff ▸

Search this site...

Payment is due at the time of registration for Summer and Fall 2014 classes. If the registration fees are not paid within 24 hours, you may be dropped from your class(es). Registration fees for Spring 2015 are due by November 1, 2014. For Spring 2015 classes added after November 1, 2014, payment will be due within 24 hours.

Class Roster

Course Name and Title	Instructor	Meeting Information	Reg/Avail/Wait
CRPSCI-32-C01 (9967) Weeds and Poisonous Plants	J. Cowden, C. Cowden, C. Cowden, C. Cowden	03/11/2013-05/24/2013 Lecture Via Online Media Days to be Announced, Times to be Announced, Room to be Announced 03/23/2013-03/24/2013 Laboratory/Studio/Activity Saturday, Sunday 08:00AM - 11:50AM, Farm of Future, Room FB04 03/23/2013-03/24/2013 Laboratory/Studio/Activity Saturday, Sunday 12:30PM - 04:50PM, Farm of Future, Room FB04 04/20/2013-04/21/2013 Laboratory/Studio/Activity Saturday, Sunday 08:00AM - 11:50AM, Farm of Future, Room FB04 04/20/2013-04/21/2013 Laboratory/Studio/Activity Saturday, Sunday 12:30PM - 04:50PM, Farm of Future, Room FB04 05/11/2013-05/12/2013 Laboratory/Studio/Activity Saturday, Sunday 08:00AM - 11:50AM, Farm of Future, Room FB04 05/11/2013-05/12/2013 Laboratory/Studio/Activity Saturday, Sunday 12:30PM - 04:50PM, Farm of Future, Room FB04	12 / 18 / 0

<--Select a different course section E-Mail these Students

Student	ID	Access	E-mail Address	Phone Number	Pass Aud	Class	Academic Level	Status	Repeat	Credits	CEUs	Cross-Listed Section
[redacted]						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		

Security Access Messages

None

Show Dropped/Withdrawn Students ☐

Show Waitlisted Students ☑

SUBMIT

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Search this site...

Payment is due at the time of registration for Summer and Fall 2014 classes. If the registration fees are not paid within 24 hours, you may be dropped from your class(es). Registration fees for Spring 2015 are due by November 1, 2014. For Spring 2015 classes added after November 1, 2014, payment will be due within 24 hours.

Class Roster

Course Name and Title	Instructor	Meeting Information	Reg/Avail/Wait
CRPSCI-19-C01 (9950) California Water	J. Cowden	01/15/2013-05/23/2013 Lecture Via Online Media Days to be Announced, Times to be Announced, Room to be Announced	23 / 27 / 0

<--Select a different course section E-Mail these Students

Student	ID	Access	E-mail Address	Phone Number	Pass Aud	Class	Academic Level	Status	Repeat	Credits	CEUs	Cross-Listed Section
[redacted]						Freshman	UG	New		3.00		
						Freshman	UG	Add		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New	Y	3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	Add		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		

[redacted]	Freshman	UG	New	3.00
	Freshman	UG	New	3.00
	Freshman	UG	New	3.00
	Freshman	UG	New	3.00

Security Access Messages

None

Show Dropped/Withdrawn Students ☐

Show Waitlisted Students ☑

SUBMIT

Staff ▸

Search this site...

Payment is due at the time of registration for Summer and Fall 2014 classes. If the registration fees are not paid within 24 hours, you may be dropped from your class(es). Registration fees for Spring 2015 are due by November 1, 2014. For Spring 2015 classes added after November 1, 2014, payment will be due within 24 hours.

Class Roster

Course Name and Title	Instructor	Meeting Information	Reg/Avail/Wait
CRPSCI-19-C01 (10365) California Water	J. Cowden	08/19/2013-12/20/2013 Lecture Via Online Media Days to be Announced, Times to be Announced, Room to be Announced	30 / 20 / 0

<--Select a different course section E-Mail these Students

Student	ID	Access	E-mail Address	Phone Number	Pass Aud	Class	Academic Level	Status	Repeat	Credits	CEUs	Cross-Listed Section
[redacted]						Freshman	UG	Add	Y	3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		
						Freshman	UG	New		3.00		

[redacted]	Freshman	UG	New	3.00
	Freshman	UG	New	3.00
	Freshman	UG	New	3.00
	Freshman	UG	New	3.00
	Freshman	UG	New	3.00
	Freshman	UG	New	3.00
	Freshman	UG	New	3.00
	Freshman	UG	New	3.00
	Freshman	UG	New	3.00
	Freshman	UG	New	3.00
	Freshman	UG	New	3.00
	Freshman	UG	New	3.00

Security Access Messages

None

Show Dropped/Withdrawn Students ☐

Show Waitlisted Students ☑

SUBMIT

2.

Course Outlines

West Hills College
Agriculture Department
Spring 2013

Course Information
Crop Science 46 – Integrated Pest Management

Instructor: Lecture: Mrs. Joy Cowden
Laboratory: Mr. Clint Cowden

Meeting Time: Lecture: 3/11/13 – 5/24/13
Laboratory: 4/13 – 4/14; 5/04 – 5/05; 5/25 – 5/26

Meeting Place: Lecture: Online
Laboratory: FB04, Allen Farm

Office: FB Office, Allen Farm
Joy: (559) 934-2708
joycowden@whccd.edu
Clint: (559) 934-2701
clintcowden@whccd.edu

Office Hours: MTRF – 1:00 – 2:00 PM
*At all other times as long as the office door is open, you are welcome to visit my office. Additional office hours can be made by appointment.

I will also be available for online chats and will make a schedule available throughout the semester. I may also be reached by email throughout the day.

Course Description

CRPSCI 46 studies the origin, history, and management measures for insect, plant pathogen, weed, and other pests of field crops, pest biology and life cycles are studied to demonstrate the use of various Integrated Pest Management (IPM) technologies for economic crop production. Pesticide regulations, application, formulations, and materials for specific uses are covered. Laboratory required. (C-ID AG-PS 156L)

Course Objectives

Upon completion of the course, students will be able to:

A. explain the terms plant protection and IPM as they relate to a field crop situation;
B. describe the role of government agencies and regulations as they relate to IPM and food safety;
C. employ the principles and concepts of IPM in field crop environments;
D. identify insects and related pests, diagnose and analyze crop injury, and select proper management techniques;
E. identify plant pathogens and related pests, diagnose and analyze crop injury, and select proper management techniques;
F. identify weeds, diagnose and analyze crop injury, and select proper management techniques;
G. identify other pests, diagnose and analyze crop injury, and select proper management techniques;
H. safely and properly mix, calibrate, apply, and dispose of different pesticide formulations utilizing different techniques and equipment;
I. explain basic first aid and spill management techniques in a pesticide accident situation;
J. explain the mode of action of pesticides, pesticide absorption by the human body, and the importance of poisoning measurements;
K. design a yearlong IPM program for a specific crop at a specific field.

Student Learning Outcomes

1. Given a laboratory assignment, students will design a yearlong IPM program for a specific crop and location.
2. Given an examination question, students will explain the terms plant protection and IPM as they relate to a field crop situation.

Textbook

Principles and Methods of Integrated Pest Management
ISBN# 978-1-879906-50-1

Other Materials

Students should come to laboratory with a pen or pencil, binder and notepaper. Much of the work will be done out in the field and note taking will be required during the laboratory. Material needed for preserving weed sample collection will be needed and will be described in the assignment. In addition, this course will require approximately one 250 MB or greater USB storage device.

Grading Policies

Course grades will be calculated on a straight scale – in other words, there will not be a curve. Course grades will be determined according to the following items:

Laboratories	35%
Quizzes	20%
Exams	15%
Discussion Boards	10%
Homework	10%
IPM Project	10%
Total	100%

Final Grades will be assessed as follows:

100-90%	A
89-80%	B
79-70%	C
69-60%	D
<60%	F

Labs Assn's: This course will have six laboratories: 4/13, 4/14, 5/04, 5/05, 5/25 and 5/26. Labs will consist of three field trips and three on campus activities. The field trips will be with local industry; therefore we are working on their schedule, which means that schedules may change without much prior notice. Meeting location and brief schedule will be posted on the online management system and it will be the student's responsibility to check the location. There will be a quiz before each laboratory to ensure students know the correct location.

Quizzes: Quizzes will be given at the end of each section and will include questions from the PowerPoint presentation and reading.

Exams: There will be one midterm exam and one comprehensive final. The midterm and final exams will be taken during the laboratory. The midterm will be derived from the section quizzes, homework, discussion boards, reading and laboratory. The final exam will be comprehensive and derived from quizzes, homework, discussion boards, reading and laboratory.

Discussions: Approximately one to two discussion topics will be posted each week. Students are expected to write a 4-5 sentence answer for each topic (unless otherwise noted.) The answers should be based on information gathered from the reading, online research, the laboratory and lecture information. In addition students

are required to give a 2-3 sentence critique of two other student answers. Grade will be based 75% on their own answer and 25% on critiques.

Homework: Problems must be solved in a clear, precise manner and all work must be shown and properly laid out. Sources must be cited as well as numbers obtained from tables. Homework will be due in the dropbox as assigned.

IPM Project: Students will develop IPM management plans for given crops and locations. The project will be due during the last laboratory period, May 26, 2013.

Attendance:

- Regular attendance is required of all students enrolled in classes at West Hills Community College including traditional face-to-face classes and labs, online classes and labs, and all other distance classes and hybrids thereof.
  - Attendance for online classes and labs is determined by a student's "cyberpresence."
    - Demonstrated cyber-presence includes participation in online discussion boards, quizzes, exams, or other assignments for that class. This will confirm that the student is "present." A student is not "in attendance" if the student merely logs onto the class and does not participate.
  - Student Responsibility
    - Regular attendance is an obligation assumed by every student at the time of registration. Students who fail to attend class meetings the classes in which they are enrolled, will be marked absent for those meetings. **Moreover, after the equivalent of one week of no attendance a student will be dropped from a class unless extenuating circumstances exist.**
    - Students who withdraw from classes are responsible for initiating the drop process by appropriate deadlines.
    - After census but before the drop deadline, it is the responsibility of the student to drop the class.
  - Faculty Responsibility
    - Additionally, before the census date or the deadline for dropping and withdrawing from classes, all instructors must clear their rosters of inactive enrollment pursuant to California Code of Regulations Title 5, Section 58004. Inactive enrollment includes students who have officially dropped or withdrawn from the class; students who have been officially dropped by the instructor; and students who have been identified as a "No Shows." and students who have been identified as No Longer Participating.
    - Attendance records shall be recorded and kept by faculty and the Office of Admissions and Records according to rules and regulations prescribed by the Board of Governors of the California Community Colleges. The only official rosters for all classes are the records stored on the district student information system. Therefore, prior to census date, each faculty member shall verify class rosters and no later than seven days after census date provide the Office of Admissions and records a roster of currently enrolled students who meet the district policy on attendance.
    - The instructor must mark a student absent if the student does not "attend class" either physically, or by exhibiting cyber-presence.

- <u>Attendance is required at every laboratory</u> and roll will be taken daily. Students should come to class ready to participate in discussion and activities. The instructor is not responsible for dropping a student for lack of attendance. If the student stops attending class, student will receive an 'F' in the course if student does not drop the course.

Other Info

- Students are expected to do their own work on exams and assignments, unless otherwise stated. Cheating will not be tolerated and will result in an automatic F on the assignment or exam. Consult the West Hills

College Catalog for further details regarding college policies on cheating and/or plagiarism. Assignments will be turned in to TurnItIn, which is an automatic plagiarism check.

- Students will not be allowed to make up assignments or exams unless PRIOR ARRANGEMENTS are made with the instructor. Instructor will determine whether or not make up opportunities are appropriate on an individual basis.

- Cell phones, pagers, and other electronic devices must be turned off during class.

- CRPSCI 46 meets 54 hours in the field laboratory. The classroom laboratory environment is standard classroom table and chair seating. The field laboratory – approximately 60% of the laboratory time – is conducted in the field requiring the student to move throughout the area making observations, collecting data, installing instrumentation, adjusting equipment and machinery, and operating tractors and off highway vehicles. In addition the students will attend field trips which require mobility in tight quarters and extended periods of walking.

- Laboratories include on the farm application of crop science and technology. Success requires the student to:
  - Use muscles to lift, push, pull or carry heavy objects.
  - Move two or more limbs together to complete job tasks.
  - Make quick, precise adjustments to machine controls.
  - Use one or two hands to grasp, move or assemble objects.
  - Use muscles for extended periods without getting tired.
  - Use stomach and lower back muscles to support the body for long periods.
  - Coordinate movement of several parts of the body, such as arms and legs, while moving in the laboratory setting.
  - Quickly and repeatedly bend, stretch, twist, or reach with the body, arms and legs.
  - Use muscles to jump, sprint, or throw objects.
  - See object details, whether they are nearby or far away.
  - Operate farm equipment.
  - Ability to climb on and off farm equipment.

- Students with learning disabilities or challenges are encouraged to notify the instructor so that additional resources can be made available.

- **West Hills College Coalinga is committed to providing access to education for students with disabilities. If you have a disability or medical condition that requires an accommodation, please contact me within the first two weeks of classes so arrangements can be made.**

- **INSTRUCTOR ACCOMMODATION RESPONSIBILITIES**
  1. Please notify the DSPS program if you feel any additional accommodations would be necessary for the student.
  2. Place test in a sealed envelope and deliver it either to the DSPS Department or DSPS lab. Do not allow the student to deliver the test.
  3. **Please indicate test conditions (open book, notes permitted, etc.).**
  4. **Please indicate the deadline for administration of the test.**
  5. Upon completion of the exam, we will place the test in a sealed envelope in your mailbox.

- **STUDENT ACCOMODATION RESPONSIBIITIES**

  It is the student's responsibility to comply with the DSPS policies and procedures. The following are the student requirements for testing accommodations:
  1. Test proctoring may be provided to a student who has an educational limitation and would benefit from this service.

2. Please discuss this service with the DSPS office. The DSPS staff will review your request and your educational plan; then make an appropriate accommodation.
3. Test proctoring will be provided at time and a half of your regular examination length. Make proctoring arrangements with each instructor prior to the test dates. Students should inform the instructor to forward the exam to the DSPS lab. If possible, proctoring should take place the same day of the exam; if not, the exam must be taken within 2 days of the regularly scheduled time. After 2 days, the exam will be returned to the instructor.
4. Appear promptly at the designated time for proctoring with the necessary testing supplies (pencils, pens, scantrons, essay books, etc.) All other materials must be left at the door.
5. Plan your testing time carefully as you will not be allowed to leave during the testing time and return later to finish.
6. Do not discuss the classroom tests with other students.
7. The coordination of the proctoring services is the sole responsibility of the DSPS staff.
8. Failure to comply with the above procedures may result in the termination of this service.

Tentative Schedule

CRPSCI 46 Schedule

	Date	Reading	PowerPoints	Lab Topics	Quizzes	Labs Assignments	Presentations	Exam
Unit 1	Start 3/11/2013 End 4/12/2013	1. Introduction; 2. Ecological Principles as They Apply to Pest Management; 3. The Integrated Pest Management Concept; 4. Understanding Pests	1. Introduction; 2. Ecological Principles as They Apply to Pest Management; 3. The Integrated Pest Management Concept; 4. Understanding Pests		Quizzes 1-4			
	Lab #1 4/13/2013			Welcome; Syllabus; Safety; Lab Write-up example; Farm Tour; Introduction Presentation		Syllabus; Farm Tour	Introduction	
	Lab #2 4/14/2013			**Field Trip #1**		Field Trip #1		
Unit 2	Start 4/15/2013 End 5/3/2013	5. Management Methods for IPM Programs; 6. Monitoring and Decision-Making Guidelines; 7. Setting Up Monitoring Programs and Field Trials	5. Management Methods for IPM Programs; 6. Monitoring and Decision-Making Guidelines; 7. Setting Up Monitoring Programs and Field Trials		Quizzes 5-7			
	Lab #3 5/4/2013			**Field Trip #2**		Field Trip #2		
	Lab #4 5/5/2013			IPM; Chp 1-5 Presentations; Chp 1-5 Midterm			30 Min (Chp 1-5)	**Midterm (Chp 1-5)**
Unit 3	Start 5/6/2013 End 5/24/2013	8. Health and Environmental Concerns; 9. Setting Up an IPM Program	8. Health and Environmental Concerns; 9. Setting Up an IPM Program		Quizzes 8-9			
	Lab #5 5/25/2013			**Field Trip #3**		Field Trip #3		
	Lab #6 5/26/2013			Chp 6-9 Presentations; IPM Presentation; Final Exam			30 Min (Chp 6-9); IPM	**Final**

CRPSCI 46
Student Signature Page
Spring 2013

I have read and understand the requirements for CRPSCI 46.

Including the following grading policy:

Laboratories	_____%
Quizzes	_____%
Exams	_____%
Discussion Boards	_____%
Homework	_____%
Weed Collection	_____%

I have also read and understand the following policy on cheating and plagiarism:

Cheating will not be tolerated and will _____.

I have read and understand the following policy on attendance:

Regular attendance is required of all students enrolled in classes at West Hills Community College including traditional face-to-face classes and labs, online classes and labs, and all other distance classes and hybrids thereof.

True or False:_____

Moreover, after the equivalent of _____of no attendance a student will be dropped from a class unless extenuating circumstances exist.

Attendance is required at every laboratory.

True or False: _____

By reading this document and completing the quiz I acknowledge my rights and responsibilities for this course.

COURSE PREFIX and NUMBER: CRPSCI 46
COURSE TITLE: Integrated Pest Management
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

WEST HILLS COLLEGE COALINGA
COURSE OUTLINE OF RECORD PACKET

FACULTY ORIGINATOR: C. Cowden
DATE: 4/7/2012

☒ NEW COURSE PROPOSAL ☐ COURSE REVISION

CHECKLIST: (check all that apply)

- ☐ Course Revision Form
- ☒ New Course Proposal
- ☒ Course Outline
- ☒ Learning Resources Statement
- ☒ Distance Education Statement
- ☒ Adopted Textbook Form
- ☐ Prerequisite Form A
- ☐ Prerequisite Form B
- ☐ Limitations on Enrollment Form C

MIS DATA: (Administrative Use Only)

TOP Code: 0103.10
Credit Status: Degree Applicable
Basic Skills Status: Not Basic Skills
SAM Code: C
Prior to College Level: Y
Noncredit Category:
Funding Agency Category:

ROUTING: (must be filled out prior to agenda submission)

Originating faculty: C. Cowden Date: 4/7/2012
Comments: Click here to enter text.

Curriculum Representative: B. Hunt Date: 4/18/2012
Comments: Click here to enter text.

Technical Review: M. Magnuson Date: 4/18/2012
Comments: See TRC sheet

Chief Instructional Officer: J Stearns Date: 4/27/2012
Comments: Click here to enter text.

COURSE PREFIX and NUMBER: CRPSCI 46
COURSE TITLE: Integrated Pest Management
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

COURSE REVISION (use for existing courses only)

RULE OF SEVEN – There are seven course characteristics which require approval of the West Hills College Lemoore Curriculum Committee if the course is common to both colleges. Check any of the following characteristics that are being changed:

- ☐ Course Number
- ☐ Course Title
- ☐ Course Prefix
- ☐ Units
- ☐ Transfer
- ☐ Course Objectives (minimum 3)
- ☐ Prerequisites

OTHER CHANGES – check all that apply

- ☐ Five Year Review
- ☐ Grading Option
- ☐ Advisory/Prerequisite
- ☐ Catalog Description
- ☐ Instructional Objectives
- ☐ Course Content and Scope
- ☐ Instructional Methodologies
- ☐ Cultural Pluralism
- ☐ Textbook
- ☐ Distance Education
- ☐ Critical Thinking Assignments
- ☐ Methods of Evaluation
- ☐ Revisions to the curriculum have been discussed with discipline faculty

NEW COURSE PROPOSAL (use for new courses only)

Units: 3	Semester Lecture Hrs: 36	Semester Lab Hrs: 54
Transferability (attach evidence):	☒ CSU	☒ UC
New Major?	☐ Yes	☒ No
If yes, state the new major:	*Click here to enter text.*	
Intended for Transfer?	☒ Yes (complete next row)	☐ No
☒ Transfer Elective	☐ Transfer General Education	☒ Transfer Major Requirement
Associate Degree?	☐ Yes (complete next row)	☐ No
☒ AA/AS Elective	☐ AA/AS General Education	☐ AA/AS Major Requirement
Certificate Program?	☒ Yes	☐ No
If yes, state the certificate:	*Proposed Pest Control Adviser Program*	

Room Space Requirements: 30
Staff Requirements: No New FTE
Equipment Requirements: Lab will require tools/equipment such as:

COURSE PREFIX and NUMBER: CRPSCI 46
COURSE TITLE: Integrated Pest Management
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

COURSE OUTLINE (use for all courses)

UNITS: 3	Semester Lecture Hrs: 36	Semester Lab Hrs: 54
Grading (check all that apply):	☒Standard	☐Pass/No Pass
Repeatable for Credit?	☐Yes Click here to enter text.	☒No
Materials Fee: $	*Description:*	

1. Course/Catalog Description

CRPSCI 46 studies the origin, history, and management measures for insect, plant pathogen, weed, and other pests of field crops, pest biology and life cycles are studied to demonstrate the use of various Integrated Pest Management (IPM) technologies for economic crop production. Pesticide regulations, application, formulations, and materials for specific uses are covered. Laboratory required. (C-ID AG-PS 156L)

2. Prerequisites

3. Corequisites

4. Advisories

5. Enrollment Limitations

6. Instructional Objectives (Use measurable objectives only; courses that allow repeatability must specify objectives for each time the course can be repeated)

Upon completion of the course the student will be able to meet the following objectives:

A. explain the terms *plant protection* and *IPM* as they relate to a field crop situation;
B. describe the role of government agencies and regulations as they relate to IPM and food safety;
C. employ the principles and concepts of IPM in field crop environments;
D. identify insects and related pests, diagnose and analyze crop injury, and select proper management techniques;
E. identify plant pathogens and related pests, diagnose and analyze crop injury, and select proper management techniques;
F. identify weeds, diagnose and analyze crop injury, and select proper management techniques;
G. identify other pests, diagnose and analyze crop injury, and select proper management techniques;
H. safely and properly mix, calibrate, apply, and dispose of different pesticide formulations utilizing different techniques and equipment;
I. explain basic first aid and spill management techniques in a pesticide accident situation;
J. explain the mode of action of pesticides, pesticide absorption by the human body, and the importance of poisoning measurements;
K. design a yearlong IPM program for a specific crop at a specific field.

7. Course Content (Instructional topics or units)

A. Introduction
   1. History of plant protection
      a. Early chemicals and methods
      b. FIFRA
      c. FDA and EPA
   2. History of IPM
      a. Economic entomology
      b. Disease forecasting
      c. Economic thresholds
      d. Adaptation of IPM
      e. IPM in crop production today
B. Entomology plant protection / IPM
   1. Review
      a. Insect orders
         i. Basic insect structure and its relation to management
         ii. Life cycles and their relation to management
      b. Destructive insects
         i. Chewing insects
         ii. Rasping insects
         iii. Sucking insects
         iv. Disease transmission
      c. Beneficial insects and their usage
         i. Combating other insects
         ii. Combating weeds and other problems
   2. IPM techniques and strategies
      a. Preventing an insect outbreak
      b. Sweeps, traps, and field counts
         i. Evaluating a field
            (a) Techniques and equipment for sampling, seeing, and counting pests.
            (b) Pheromones
         ii. Determining economic thresholds
            (a) Relating economic thresholds to stage of crop
      c. Recommending a strategy in a field crop situation
      d. Implementing strategy in a field crop situation
   3. Preventing insect outbreaks
      a. Regional vs. local perspective
      b. Cultural and crop rotation methods
      c. Chemical methods
   4. Managing insect outbreaks
      a. Cultural methods
      b. Chemical methods
C. Plant Pathology – IPM
   1. Hosts and pathogenic organisms
      a. Fungi
      b. Bacteria
      c. Viruses and virus-like organisms
      d. Nematodes

e. Non-biotic problems
2. Life cycle and infection
   a. Disease triangle
   b. Koch's postulates
3. Damage and impact on production
   a. Barratt-Horsfall assessments
4. Prevention
   a. Genetic resistance
   b. Host susceptibility
   c. Timing
5. Managing disease outbreaks
   a. Timing
   b. Chemical management techniques

D. Weeds – IPM
1. Identification
   a. Grasses, dicots, and legumes
   b. Weed plant families
2. Weed life cycles
3. Preventing weed outbreaks
4. Managing weed outbreaks
   a. Timing
   b. Mechanical management techniques
   c. Chemical management techniques

E. Other Pests – IPM
1. Mollusks
2. Vertebrates
3. Presenting pest outbreaks
4. Managing pest outbreaks

F. Pesticides and IPM
1. Laws and regulations
   a. Pesticide registration
   b. Restricted materials
   c. Operators – licensing
   d. Storage, transportation, and disposal
   e. Applicator and field worker safety
   f. Public safety and pesticide residues
2. Types of pesticides
   a. Benefits, uses, and needs
   b. Formulations
   c. Insecticides
      i. Application methods
      ii. Mode of action
   d. Plant pathological pesticides
      i. Application methods
      ii. Mode of action
   e. Herbicides
      i. Application methods
      ii. Mode of action

3. Pesticide application and safety
   a. Label
   b. Mixing and applying
   c. Equipment calibration
   d. Protective clothing
   e. Handling pesticides
   f. First aid
   g. Spill management

8. Lab Content (For courses with lab hours only)

A. Introduction
B. Entomology plant protection - IPM
C. Plant pathology – IPM
D. Weeds – IPM
E. Other pests – IPM
F. Pesticides and IPM
G. Pesticide application and safety

9. Methods of Instruction (Instructor initiated learning strategies)

A. Hands-on experience
B. Lecture
C. Demonstrations

10. Out of Class Assignments

One, eight-hour field trip, to be determined.

11. Methods of Evaluation (Measurements of student achievement)

A. Unit exams consisting of objective and essay questions
B. Quizzes
C. Classroom discussion and participation
D. Oral presentations
E. Graded problem solving sets
F. Laboratory skill demonstrations

12. Cultural Pluralism Assignment and Methodology (Specific instructor initiated example)

Instructor will open discussions concerning approaches to pest management in different areas of the world and approaches to plant protection used by a variety of cultures. The effects of different climates and economies on pests and their eradication will be discussed.

13. Critical Thinking Assignment (Use detail and state in cognitive terms)

Students are given a mock farming operation for which they are to create yearlong IPM program for a specific crop at a specific field. They must inquire about the parameters they need to determine the integrated pest management needs. They must also use their finding to research options and evaluate those options to determine a solution which they will present to the farm manager.

14. Writing Assignments/Proficiency Demonstration

A. Students will be given exams that include essay questions.
B. Students will be required to demonstrate laboratory skills.

COURSE PREFIX and NUMBER: CRPSCI 46
COURSE TITLE: Integrated Pest Management
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

LEARNING RESOURCES STATEMENT (use for all courses)

☒ The Learning Resources collection has been reviewed by the faculty originator and the librarian.

The following resources are currently available for course support:

☐ Books
☐ Reference Materials
☒ Media
☒ Electronic Resources

The following resources are recommended for purchase to further support the course:

☒ Books
☒ Reference Materials
☐ Media
☐ Electronic Resources

Additional Comments: Books and reference materials listed on the California Department of Pesticide Regulation's Pest Control Adviser's Study Materials would be beneficial.

COURSE PREFIX and NUMBER: CRPSCI 46
COURSE TITLE: Integrated Pest Management
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

TEXTBOOK FORM (use for all courses)

All transfer-level courses are required 1) to have an 11 or higher readability and 2) be no more than five years old. All textbooks must have readability statistics attached.

Title: IPM in Practice: Principles and Methods of Integrated Pest Management
Edition and Publication Year: 2001 ISBN: 978-1-879906-50-1
Author(s): Statewide Integrated Pest Management Project
Publisher: University of California, Agriculture and Natural Resources
Required ☒ Optional ☐
Readability Level: 13.6

Title: Click here to enter text.
Edition and Publication Year: Click here to enter text. ISBN: Click here to enter text.
Author(s): Click here to enter text.
Publisher: Click here to enter text.
Required ☐ Optional ☐
Readability Level: Click here to enter text.

Title: Click here to enter text.
Edition and Publication Year: Click here to enter text. ISBN: Click here to enter text.
Author(s): Click here to enter text.
Publisher: Click here to enter text.
Required ☐ Optional ☐
Readability Level: Click here to enter text.

Title: Click here to enter text.
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Author(s): Click here to enter text.
Publisher: Click here to enter text.
Required ☐ Optional ☐
Readability Level: Click here to enter text.

Readability

IPM in Practice: Principles and Methods of Integrated Pest Management

Page 2

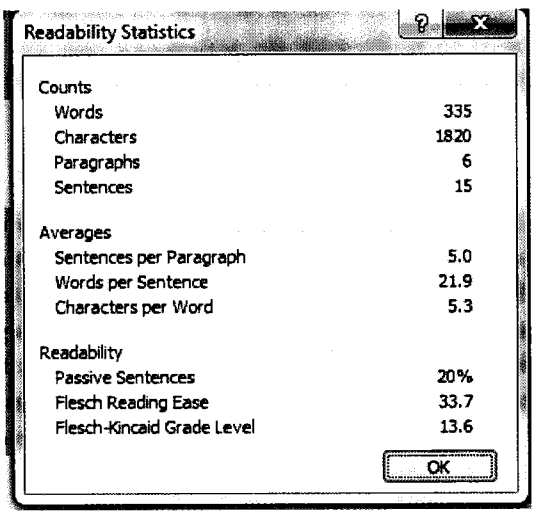
Integrated pest management programs emphasize ecosystem-based strategies that provide economical, long-term solutions to pest problems. Pesticides are used only when they are necessary to prevent imminent loss or damage to the managed resource; IPM strategies thus minimize hazards to human health, the environment, and nontarget organisms. Many pest management professionals regularly employ the concepts of integrated pest management in their daily work. For example, to avoid pests or reduce pest to noneconomic levels, pest control advisers often recommend the use of pest resistant plant varieties, a change in planting or harvest dates, or a system of crop rotation. IPM recommendations may include managing water and fertilizer, adjusting cultivation techniques, the use of mating disruption techniques, or the destruction of pest habitats.

Page 130

Selective pesticides target chemical processes unique to one pest or pest group. Selectivity is influenced by the rate of penetration of the toxicant, the binding of the toxicant to the organism's tissues, and the speed with which the organism breaks down the toxicant. Selectivity can also be achieved through the use of application techniques that cause a pesticide to come into contact with the target pest and not with nontarget organisms. For example, spraying only the trunks of elm trees to control elm leaf beetle larvae as they crawl down from the tree canopy to pupate in the soil leaves the beneficial species in the foliage unharmed.

Page 259

When working as a PCA for a public agency, there are other important points to consider when setting up a successful IPM program. Pest management programs in public agencies rely on the coordinated activities of many individuals. Many public agencies don't have PCAs on staff but do have people who are involved in pest management decisions. Often several departments or supervisors may be involved in activities that affect pest problems and their management. All must be enlisted in a program that shares common goals and approaches. In addition, public agencies must be accountable and responsive to the citizens of their community.



Readability Statistics

Counts	
Words	335
Characters	1820
Paragraphs	6
Sentences	15
Averages	
Sentences per Paragraph	5.0
Words per Sentence	21.9
Characters per Word	5.3
Readability	
Passive Sentences	20%
Flesch Reading Ease	33.7
Flesch-Kincaid Grade Level	13.6

OK

COURSE PREFIX and NUMBER: CRPSCI 46
COURSE TITLE: Integrated Pest Management
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

Course Outline of Record Approval (required)

Originating Faculty	Date
Instructional Area Representative	Date
WHCC Chief Instructional Officer	Date
WHCC Articulation Officer (transfer courses only)	Date
Associate Vice Chancellor of Educational Planning	Date
WHCC Curriculum Chair	Date
WHCCD Board of Trustees	Date

COURSE PREFIX and NUMBER: CRPSCI 46
COURSE TITLE: Integrated Pest Management
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

DISTANCE EDUCATION ADDENDUM (for courses requesting DE only)
Faculty Originator: C. Cowden
Date: 3/19/2012

The following must be completed for the delivery of this course via distance education technology in addition to the original course outline. (An additional textbook form is required if text differs from the classroom modality) This addendum is NOT REQUIRED for web enhanced courses.

☒The instructional area recommends that this course be taught via distance education.

The instructional area recommends the following modality:
☐Video Conference
☒Hybrid (Any replacement of traditional classroom time with online; complete #1 & 2)
☐Online (complete #2)

1. HYBRID – a portion of the traditional classroom time will be replaced with online instruction

Describe the face-to-face requirements of the course ONLY:
The 54 hours of laboratory will be taught 100% face-to-face.

2. ONLINE OUTLINE – Instructional Objectives, Methods of Instruction and Methods of Evaluation must be adapted for online instruction.

Instructional Objectives: Copy your Instructional Objectives (see COR #6) into the LEFT side of the table below (one method per row). In the RIGHT side, specify the activity that will be used to meet the objective in the online environment. Please address each individual objective.
Title 5 requires that "regular, effective contact" (54 hours) between the student and the instructor are included in the design of the Instructional Objectives in an online environment.

Instructional Objectives	Activity (including approximate hours of contact)
A. Explain the terms *plant protection* and *IPM* as they relate to a field crop situation	Chapter reading; online glossary; vocabulary quiz explaining plant protection and IPM (1-2 hours)
B. Describe the role of government agencies and regulations as they relate to IPM and food safety	Chapter reading; lecture; discussion board response to directed questions; and graded problem sets describing the role of government agencies and regulations as they relate to IPM and food safety (2-3 hours)
C. Employ the principles and concepts of IPM in field crop environments	N/A
D. Identify insects and related pests, diagnose and analyze crop injury, and select proper management techniques	Chapter reading; lecture; and graded problem sets identifying insects and related pests, diagnose and analyze crop injury, and select proper management techniques (6-7 hours)
E. Identify plant pathogens and related pests, diagnose and analyze crop injury, and select proper management techniques	Chapter reading; lecture; and graded problem sets identifying plant pathogens and related pests, diagnose and analyze crop injury, and select proper

	management techniques (6-7 hours)
F. Identify weeds, diagnose and analyze crop injury, and select proper management techniques	Chapter reading; lecture; and graded problem sets identifying weeds, diagnose and analyze crop injury, and select proper management techniques (6-7 hours)
G. Identify other pests, diagnose and analyze crop injury, and select proper management techniques	Chapter reading; lecture; and graded problem sets identifying other pests, diagnose and analyze crop injury, and select proper management techniques (6-7 hours)
H. Safely and properly mix, calibrate, apply, and dispose of different pesticide formulations utilizing different techniques and equipment	N/A
I. Explain basic first aid and spill management techniques in a pesticide accident situation	Chapter reading; lecture; and graded problem sets explaining basic first aid and spill management techniques in a pesticide accident situation (3-4 hours)
J. Explain the mode of action of pesticides, pesticide absorption by the human body, and the importance of poisoning measurements	Chapter reading; lecture; and graded problem sets explaining the mode of action of pesticides, pesticide absorption by the human body, and the importance of poisoning measurements (6-7 hours)
K. Design a yearlong IPM program for a specific crop at a specific field	N/A

Methods of Instruction: Copy your Methods of Instruction (see COR #9) into the LEFT side of the table below (one method per row). In the RIGHT side, specify how the methods will be adapted to the online environment. Please address each individual method.

Methods of Instruction	**Online Adaptation**
A. Hands-on experience	N/A
B. Lecture	Lecture materials will be posted on the course management system.
C. Demonstrations	Through the course management system instructors will post demonstrations.

Methods of Evaluation: Copy your Methods of Evaluation (see COR #11) into the LEFT side of the table below (one method per row). In the RIGHT side, specify how the methods will be adapted to the online environment. Please address each individual method.

Methods of Evaluation	**Online Adaptation**
A. Unit exams consisting of objective and essay questions	Students will take required exams either within the course management system.
B. Quizzes	Students will take required quizzes in the course management system.
C. Classroom discussion and participation	N/A
D. Oral presentations	N/A
E. Graded problem solving sets	Graded problem solving sets will be posted and turned in via the course management system.

F. Laboratory skill demonstrations	N/A

Verification of Process (required)

Indicate in the table below the faculty, support staff, and administrators that have been consulted as part of the DE proposal process. Consultation does not constitute approval of the proposal.

Required Consultation	Name(s)	Date
Discipline Faculty	C. Cowden, B. Hunt, M. Welch, C. Chaney	3/23/2012
Instructional Area Representative	B. Hunt	3/23/2012
WHCC Chief Instructional Officer		Click here to enter a date.
WHCC Articulation Officer		Click here to enter a date.

Distance Education Addendum Approval (required)

Required Signatures	Date
Originating Faculty	
Instructional Area Representative	
WHCC Chief Instructional Officer	
Associate Vice Chancellor of Educational Planning	
WHCC Curriculum Chair	
WHCCD Board of Trustees Approval Date (no signature required)	

West Hills College
Agriculture Department
Spring 2013

Course Information
Crop Science 44 – Economic Entomology

Instructor: Lecture: Mrs. Joy Cowden
Laboratory: Mr. Clint Cowden
Meeting Time: Lecture: 3/11/13 – 5/24/13
Laboratory: 4/06 – 4/07; 4/27 – 4/28; 5/18 – 5/19
Meeting Place: Lecture: Online
Laboratory: FB04, Allen Farm
Office: FB Office, Allen Farm
Joy: (559) 934-2708
joycowden@whccd.edu
Clint: (559) 934-2701
clintcowden@whccd.edu

Office Hours: MTRF – 1:00 – 2:00 PM
*At all other times as long as the office door is open, you are welcome to visit my office. Additional office hours can be made by appointment.

I will also be available for online chats and will make a schedule available throughout the semester. I may also be reached by email throughout the day.

Course Description

CRPSCI 44 is the study of the insects and mites of economic importance to agriculture including morphology, taxonomy, identification, life cycles, hosts, habitat relationships, and control methods. Collection and labeling of specimens will be required. Laboratory required. (C-ID AG-PS 144L)

Course Objectives

Upon completion of the course, students will be able to:

A. identify insects and closely related plant and animal pests and pest damage;
B. describe rules and regulations for pest control;
C. operate pesticide equipment efficiently and safely;
D. explain the economic aspects of beneficial and harmful insects;
E. diagram and describe the anatomy, morphology, and physiology of a typical insect;
F. classify insects into taxonomic orders;
G. describe the danger levels of categories I, II, III, and IV pesticides;
H. compare alternate methods of pest control;
I. prepare and classify an insect collection;
J. select possible methods and timing of control in a given circumstance;
K. define common pest and control terminology;
L. estimate the critical levels in an insect population;
M. identify the common chemicals in use today;
N. prepare field reports and other required forms in pest control;
O. describe spraying and fumigation systems, formulations, and adjuncts currently in use;
P. explain Integrated Pest Control (I.P.M.) principles.

Student Learning Outcomes

1. Given an insect identification exam, students will be able to recognize the insects listed by the Department of Pesticide Regulation.
2. Given a laboratory assignment, students will prepare and classify an insect collection.

Textbook

Entomology and Pest Management
ISBN# 9780135132951

Other Materials

Students should come to laboratory with a pen or pencil, binder and notepaper. Much of the work will be done out in the field and note taking will be required during the laboratory. Material needed for preserving weed sample collection will be needed and will be described in the assignment.
In addition, this course will require approximately one 250 MB or greater USB storage device.

Grading Policies

Course grades will be calculated on a straight scale – in other words, there will not be a curve. Course grades will be determined according to the following items:

Laboratories	35%
Quizzes	20%
Exams	15%
Discussion Boards	10%
Homework	10%
Insect Collection	10%
Total	100%

Final Grades will be assessed as follows:

100-90%	A
89-80%	B
79-70%	C
69-60%	D
<60%	F

Labs Assn's: This course will have six laboratories: 4/06, 4/07, 4/27, 4/28, 5/18 and 5/19. Labs will consist of three field trips and three on campus activities. The field trips will be with local industry; therefore we are working on their schedule, which means that schedules may change without much prior notice. Meeting location and brief schedule will be posted on the online management system and it will be the student's responsibility to check the location. There will be a quiz before each laboratory to ensure students know the correct location.

Quizzes: Quizzes will be given at the end of each sub-section and will include questions from the PowerPoint presentation and reading. In addition there will be a weekly insect identification quiz; insects will be taken from the CDPR list of common insects.

Exams: There will be one midterm exam, one Insect ID exam and one comprehensive final. The midterm and Insect ID exams will be taken during the laboratory. The midterm will be derived from the section quizzes, homework, discussion boards, reading and laboratory. The Insect ID exam will include the CDPR listed insects and will be during the last laboratory day May 19, from 2-5 pm. The final exam will be comprehensive and derived from quizzes, homework, discussion boards, reading and laboratory.

Discussions: Approximately one to two discussion topics will be posted each week. Students are expected to write a 4-5 sentence answer for each topic (unless otherwise noted.) The answers should be based on information gathered from the reading, online research, the laboratory and lecture information. In addition students are required to give a 2-3 sentence critique of two other student answers. Grade will be based 75% on their own answer and 25% on critiques.

Homework: Problems must be solved in a clear, precise manner and all work must be shown and properly laid out. Sources must be cited as well as numbers obtained from tables. Homework will be due in the dropbox as assigned.

Collection: Students will develop an insect collection. The collection will be due during the last laboratory period, May 19, 2013.

Attendance:

- Regular attendance is required of all students enrolled in classes at West Hills Community College including traditional face-to-face classes and labs, online classes and labs, and all other distance classes and hybrids thereof.
  - Attendance for online classes and labs is determined by a student's "cyberpresence."
    - Demonstrated cyber-presence includes participation in online discussion boards, quizzes, exams, or other assignments for that class. This will confirm that the student is "present." A student is not "in attendance" if the student merely logs onto the class and does not participate.
  - Student Responsibility
    - Regular attendance is an obligation assumed by every student at the time of registration. Students who fail to attend class meetings the classes in which they are enrolled, will be marked absent for those meetings. **Moreover, after the equivalent of one week of no attendance a student will be dropped from a class unless extenuating circumstances exist.**
    - Students who withdraw from classes are responsible for initiating the drop process by appropriate deadlines.
    - After census but before the drop deadline, it is the responsibility of the student to drop the class.
  - Faculty Responsibility
    - Additionally, before the census date or the deadline for dropping and withdrawing from classes, all instructors must clear their rosters of inactive enrollment pursuant to California Code of Regulations Title 5, Section 58004. Inactive enrollment includes students who have officially dropped or withdrawn from the class; students who have been officially dropped by the instructor; and students who have been identified as a "No Shows." and students who have been identified as No Longer Participating.
    - Attendance records shall be recorded and kept by faculty and the Office of Admissions and Records according to rules and regulations prescribed by the Board of Governors of the California Community Colleges. The only official rosters for all classes are the records stored on the district student information system. Therefore, prior to census date, each faculty member shall verify class rosters and no later than seven days after census date provide the Office of Admissions and records a roster of currently enrolled students who meet the district policy on attendance.
    - The instructor must mark a student absent if the student does not "attend class" either physically, or by exhibiting cyber-presence.

- <u>Attendance is required at every laboratory</u> and roll will be taken daily. Students should come to class ready to participate in discussion and activities. The instructor is not responsible for dropping a student for lack of attendance. If the student stops attending class, student will receive an 'F' in the course if student does not drop the course.

Other Info

- Students are expected to do their own work on exams and assignments, unless otherwise stated. Cheating will not be tolerated and will result in an automatic F on the assignment or exam. Consult the West Hills College Catalog for further details regarding college policies on cheating and/or plagiarism. Assignments will be turned in to TurnItIn, which is an automatic plagiarism check.

- Students will not be allowed to make up assignments or exams unless PRIOR ARRANGEMENTS are made with the instructor. Instructor will determine whether or not make up opportunities are appropriate on an individual basis.

- Cell phones, pagers, and other electronic devices must be turned off during class.

- CRPSCI 44 meets 54 hours in the field laboratory. The classroom laboratory environment is standard classroom table and chair seating. The field laboratory – approximately 60% of the laboratory time – is conducted in the field requiring the student to move throughout the area making observations, collecting data, installing instrumentation, adjusting equipment and machinery, and operating tractors and off highway vehicles. In addition the students will attend field trips which require mobility in tight quarters and extended periods of walking.

- Laboratories include on the farm application of crop science and technology. Success requires the student to:
  - Use muscles to lift, push, pull or carry heavy objects.
  - Move two or more limbs together to complete job tasks.
  - Make quick, precise adjustments to machine controls.
  - Use one or two hands to grasp, move or assemble objects.
  - Use muscles for extended periods without getting tired.
  - Use stomach and lower back muscles to support the body for long periods.
  - Coordinate movement of several parts of the body, such as arms and legs, while moving in the laboratory setting.
  - Quickly and repeatedly bend, stretch, twist, or reach with the body, arms and legs.
  - Use muscles to jump, sprint, or throw objects.
  - See object details, whether they are nearby or far away.
  - Operate farm equipment.
  - Ability to climb on and off farm equipment.

- Students with learning disabilities or challenges are encouraged to notify the instructor so that additional resources can be made available.

- **West Hills College Coalinga is committed to providing access to education for students with disabilities. If you have a disability or medical condition that requires an accommodation, please contact me within the first two weeks of classes so arrangements can be made.**

- **INSTRUCTOR ACCOMMODATION RESPONSIBILITIES**
  1. Please notify the DSPS program if you feel any additional accommodations would be necessary for the student.
  2. Place test in a sealed envelope and deliver it either to the DSPS Department or DSPS lab. Do not allow the student to deliver the test.
  3. **Please indicate test conditions (open book, notes permitted, etc.).**
  4. **Please indicate the deadline for administration of the test.**
  5. Upon completion of the exam, we will place the test in a sealed envelope in your mailbox.

- **STUDENT ACCOMODATION RESPONSIBIITIES**

  It is the student's responsibility to comply with the DSPS policies and procedures. The following are the student requirements for testing accommodations:

1. Test proctoring may be provided to a student who has an educational limitation and would benefit from this service.
2. Please discuss this service with the DSPS office. The DSPS staff will review your request and your educational plan; then make an appropriate accommodation.
3. Test proctoring will be provided at time and a half of your regular examination length. Make proctoring arrangements with each instructor prior to the test dates. Students should inform the instructor to forward the exam to the DSPS lab. If possible, proctoring should take place the same day of the exam; if not, the exam must be taken within 2 days of the regularly scheduled time. After 2 days, the exam will be returned to the instructor.
4. Appear promptly at the designated time for proctoring with the necessary testing supplies (pencils, pens, scantrons, essay books, etc.) All other materials must be left at the door.
5. Plan your testing time carefully as you will not be allowed to leave during the testing time and return later to finish.
6. Do not discuss the classroom tests with other students.
7. The coordination of the proctoring services is the sole responsibility of the DSPS staff.
8. Failure to comply with the above procedures may result in the termination of this service.

Tentative Schedule

CRPSCI 44 Schedule

	Date	Reading	PowerPoints	Lab Topics	Quizzes	Labs Assignments	Presentations	Exam
Unit 1	Start 3/11/2013 End 4/5/2013	1. Introduction; 2. Insect Structures and Life Processes; 3. Insect Classification; 4. The Insect Life Cycle; 5. Insect Ecology; 6. Surveillance and Sampling	1. Introduction; 2. Insect Structures and Life Processes; 3. Insect Classification; 4. The Insect Life Cycle; 5. Insect Ecology; 6. Surveillance and Sampling		Quizzes 1-6			
	Lab #1 4/6/2013			Welcome; Syllabus; Safety; Lab Write-up example; Farm Tour; Introduction Presentation		Syllabus; Farm Tour	Introduction	
	Lab #2 4/7/2013			**Field Trip #1**		Field Trip #1		
Unit 2	Start 4/8/2013 End 4/26/2013	7. Economic Decision Levels for Pest Populations; 8. Pest Management Theory; 9. Management with naural Enemies; 10. Ecological Management of the Crop Environment; 11. Conventional Insecticides for Management	7. Economic Decision Levels for Pest Populations; 8. Pest Management Theory; 9. Management with naural Enemies; 10. Ecological Management of the Crop Environment; 11. Conventional Insecticides for Management		Quizzes 7-11			
	Lab #3 4/27/2013			**Field Trip #2**		Field Trip #2		
	Lab #4 4/28/2013			Chp 4-7 Presentations; Chp 8-11 Presentations; Chp 1-8 Midterm			30 Min (Chp 4-7) and 30 Min (Chp 8-11)	**Midterm (Chps 1-8)**
Unit 3	Start 4/29/2013 End 5/17/2013	12. Biopesticides for Management; 13. Managing Insects with Resistant Plants; 14. Management by Modifying Insect Development and Behavior; 15. Sterile-Insect Technique and Other Pest Genetic Tactics; 16. The Practice of Insect Pest Management	12. Biopesticides for Management; 13. Managing Insects with Resistant Plants; 14. Management by Modifying Insect Development and Behavior; 15. Sterile-Insect Technique and Other Pest Genetic Tactics; 16. The Practice of Insect Pest Management		Quizzes 12-16			
	Lab #5 5/18/2013			**Field Trip #3**		Field Trip #3		
	Lab #6 5/19/2013			Chp 12-16 Presentations; Insect Presentation; Insect ID Exam			30 Min (Chp 12-16); Insect	**Insect ID Exam**
Unit Final	Start 5/20/2013 End 5/24/2013	The Final can be taken anytime during finals week, and will be due by noon on Friday, May 24, 2013.						**Final**

CRPSCI 44
Student Signature Page
Spring 2013

I have read and understand the requirements for CRPSCI 44.

Including the following grading policy:

Laboratories	_____%
Quizzes	_____%
Exams	_____%
Discussion Boards	_____%
Homework	_____%
Weed Collection	_____%

I have also read and understand the following policy on cheating and plagiarism:

Cheating will not be tolerated and will _____.

I have read and understand the following policy on attendance:

Regular attendance is required of all students enrolled in classes at West Hills Community College including traditional face-to-face classes and labs, online classes and labs, and all other distance classes and hybrids thereof.

True or False:_____

Moreover, after the equivalent of _____of no attendance a student will be dropped from a class unless extenuating circumstances exist.

Attendance is required at every laboratory.

True or False: _____

By reading this document and completing the quiz I acknowledge my rights and responsibilities for this course.

COURSE PREFIX and NUMBER: CRPSCI 44
COURSE TITLE: Economic Entomology
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

WEST HILLS COLLEGE COALINGA
COURSE OUTLINE OF RECORD PACKET

FACULTY ORIGINATOR: C. Cowden
DATE: 4/7/2012

☒ NEW COURSE PROPOSAL ☐ COURSE REVISION

CHECKLIST: (check all that apply)

- ☐ Course Revision Form
- ☒ New Course Proposal
- ☒ Course Outline
- ☒ Learning Resources Statement
- ☒ Distance Education Statement
- ☒ Adopted Textbook Form
- ☐ Prerequisite Form A
- ☐ Prerequisite Form B
- ☐ Limitations on Enrollment Form C

MIS DATA: (Administrative Use Only)

TOP Code: 0103.10
Credit Status: Degree Applicable
Basic Skills Status: Not Basic Skills
SAM Code: C
Prior to College Level: Y
Noncredit Category:
Funding Agency Category:

ROUTING: (must be filled out prior to agenda submission)

Originating faculty: C. Cowden Date: 4/7/2012
Comments: Click here to enter text.

Curriculum Representative: B. Hunt Date: 4/18/2012
Comments: Click here to enter text.

Technical Review: M. Magnuson Date: 4/18/2012
Comments: See TRC sheet

Chief Instructional Officer: J Stearns Date: 4/27/2012
Comments: Click here to enter text.

COURSE PREFIX and NUMBER: CRPSCI 44
COURSE TITLE: Economic Entomology
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

COURSE REVISION (use for existing courses only)

RULE OF SEVEN – There are seven course characteristics which require approval of the West Hills College Lemoore Curriculum Committee if the course is common to both colleges. Check any of the following characteristics that are being changed:

- ☐ Course Number
- ☐ Course Title
- ☐ Course Prefix
- ☐ Units
- ☐ Transfer
- ☐ Course Objectives (minimum 3)
- ☐ Prerequisites

OTHER CHANGES – check all that apply

- ☐ Five Year Review
- ☐ Grading Option
- ☐ Advisory/Prerequisite
- ☐ Catalog Description
- ☐ Instructional Objectives
- ☐ Course Content and Scope
- ☐ Instructional Methodologies
- ☐ Cultural Pluralism
- ☐ Textbook
- ☐ Distance Education
- ☐ Critical Thinking Assignments
- ☐ Methods of Evaluation
- ☐ Revisions to the curriculum have been discussed with discipline faculty

NEW COURSE PROPOSAL (use for new courses only)

Units: 3	Semester Lecture Hrs: 36	Semester Lab Hrs: 54
Transferability (attach evidence):	☒ CSU	☒ UC
New Major?	☐ Yes	☒ No
If yes, state the new major:	*Click here to enter text.*	
Intended for Transfer?	☒ Yes (complete next row)	☐ No
☒ Transfer Elective	☐ Transfer General Education	☒ Transfer Major Requirement
Associate Degree?	☒ Yes (complete next row)	☐ No
☒ AA/AS Elective	☐ AA/AS General Education	☐ AA/AS Major Requirement
Certificate Program?	☒ Yes	☐ No
If yes, state the certificate:	*Proposed Pesticide Control Adviser Program*	

Room Space Requirements: 30
Staff Requirements: No New FTE
Equipment Requirements: Lab will need varied tools/equipment such as:

COURSE PREFIX and NUMBER: CRPSCI 44
COURSE TITLE: Economic Entomology
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

COURSE OUTLINE (use for all courses)

UNITS: 3	Semester Lecture Hrs: 36	Semester Lab Hrs: 54
Grading (check all that apply):	☒Standard	☐Pass/No Pass
Repeatable for Credit?	☐Yes Click here to enter text.	☒No
Materials Fee: $	*Description:*	

1. Course/Catalog Description

CRPSCI 44 is the study of the insects and mites of economic importance to agriculture including morphology, taxonomy, identification, life cycles, hosts, habitat relationships, and control methods. Collection and labeling of specimens will be required. Laboratory required. (C-ID AG-PS 144L)

2. Prerequisites

3. Corequisites

4. Advisories

5. Enrollment Limitations

6. Instructional Objectives (Use measurable objectives only; courses that allow repeatability must specify objectives for each time the course can be repeated)

Upon completion of the course the student will be able to meet the following objectives:

A. identify insects and closely related plant and animal pests and pest damage;
B. describe rules and regulations for pest control;
C. operate pesticide equipment efficiently and safely;
D. explain the economic aspects of beneficial and harmful insects;
E. diagram and describe the anatomy, morphology, and physiology of a typical insect;
F. classify insects into taxonomic orders;
G. describe the danger levels of categories I, II, III, and IV pesticides;
H. compare alternate methods of pest control;
I. prepare and classify an insect collection;
J. select possible methods and timing of control in a given circumstance;
K. define common pest and control terminology;
L. estimate the critical levels in an insect population;
M. identify the common chemicals in use today;
N. prepare field reports and other required forms in pest control;
O. describe spraying and fumigation systems, formulations, and adjuncts currently in use;
P. explain Integrated Pest Control (I.P.M.) principles.

7. Course Content (Instructional topics or units)

A. The place of the insect in our agricultural economy
B. Elementary anatomy, morphology, and physiology of insects
C. Identification and classification of insects
D. Field specimens collected and identified
E. Type of damage to agricultural crops, products, and materials
F. Principles of control
G. Methods of control
H. Selection and application of control methods
I. Insect collections
   1. Collecting
   2. Preserving
   3. Mounting
   4. Identification
J. Regulations and legal aspects of pest control
K. Field reports and required forms
L. Calibration of pesticide application equipment
M. Integrated Pest Management (I.P.M)

8. Lab Content (For courses with lab hours only)

A. Insect anatomy
B. Insect morphology
C. Physiology of insects
D. Identification and classification of insects
E. Field specimens collected and identified
F. Type of damage to agricultural crops, products, and materials
G. Principles of control
H. Methods of control
I. Selection and application of control methods
J. Insect collections
   1. Collecting
   2. Preserving
   3. Mounting
   4. Identification
K. Field reports
L. Calibration of pesticide application equipment
M. Variable rate technology
N. Integrated Pest Management (IPM)

9. Methods of Instruction (Instructor initiated learning strategies)

A. Hands-on experience
B. Lecture
C. Demonstrations

10. Out of Class Assignments

One, eight-hour field trip, to be determined.

11. Methods of Evaluation (Measurements of student achievement)

A. Unit exams consisting of objective and essay questions
B. Quizzes
C. Classroom discussion and participation
D. Oral Presentations
E. Graded problem solving sets
F. Laboratory skill demonstrations

12. Cultural Pluralism Assignment and Methodology (Specific instructor initiated example)

Instructor will open discussions concerning various insect problems in different areas of the world and approaches to pest management used by a variety of cultures. The effects of different climates on the insects and approaches to management will be discussed. Examples include the difference in management techniques for kosher products as compared to organic.

13. Critical Thinking Assignment (Use detail and state in cognitive terms)

Students are given a mock farming operation for which they are to create an insect management regime. They must inquire about the parameters (i.e. kosher, organic, etc.) needed to determine the insect management needs and create a presentation in which they will present to the farm manager this regimen and schedule.

14. Writing Assignments/Proficiency Demonstration

A. Students will be given exams that include essay questions.
B. Students will be required to demonstrate laboratory skills.

COURSE PREFIX and NUMBER: CRPSCI 44
COURSE TITLE: Economic Entomology
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

LEARNING RESOURCES STATEMENT (use for all courses)

☒ The Learning Resources collection has been reviewed by the faculty originator and the librarian.

The following resources are currently available for course support:

☐ Books
☐ Reference Materials
☒ Media
☒ Electronic Resources

The following resources are recommended for purchase to further support the course:

☒ Books
☒ Reference Materials
☐ Media
☐ Electronic Resources

Additional Comments: Books and reference materials listed on the California Department of Pesticide Regulation's Pest Control Adviser's Study Materials would be beneficial.

COURSE PREFIX and NUMBER: CRPSCI 44
COURSE TITLE: Economic Entomology
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

TEXTBOOK FORM (use for all courses)

All transfer-level courses are required 1) to have an 11 or higher readability and 2) be no more than five years old. All textbooks must have readability statistics attached.

Title: Entomology and Pest Management
Edition and Publication Year: 6th Edition, 2009 ISBN: 9780135132951
Author(s): Pedigo, Larry P. and Rice, Marlin
Publisher: Prentice Hall
Required ☒ Optional ☐
Readability Level: 15.1

Title: Click here to enter text.
Edition and Publication Year: Click here to enter text. ISBN: Click here to enter text.
Author(s): Click here to enter text.
Publisher: Click here to enter text.
Required ☐ Optional ☐
Readability Level: Click here to enter text.

Title: Click here to enter text.
Edition and Publication Year: Click here to enter text. ISBN: Click here to enter text.
Author(s): Click here to enter text.
Publisher: Click here to enter text.
Required ☐ Optional ☐
Readability Level: Click here to enter text.

Title: Click here to enter text.
Edition and Publication Year: Click here to enter text. ISBN: Click here to enter text.
Author(s): Click here to enter text.
Publisher: Click here to enter text.
Required ☐ Optional ☐
Readability Level: Click here to enter text.

Readability

Entomology and Pest Management, 6th Edition

Page 14

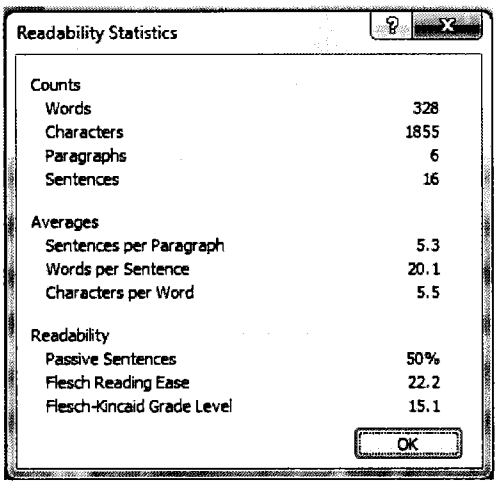
Differing from all other arthropods and invertebrates, most insects can fly. This ability to fly is one of the most important reasons for success of the class as a whole. Flying aids insects in escaping predators and, perhaps more important, enables widespread dispersal of species. This dispersal promotes colonization of new habitats. Finally, the great reproductive capacity of insects and features of their growth and development have enhanced their ability to persist even in unfavorable environments. The ability to lay large numbers of eggs, combined with a relatively short generation time, produces a great amount of genetic variability that can be tested against the environment.

Page 454

Some of the earliest observations of plant resistance to insects were recorded in the late eighteenth and early nineteenth centuries. As early as 1792, "Underhill" variety wheat resistant to the introduced Hessian fly, *Mayetiola destructor*, was reported in the United States by J. N. Haves. This is generally considered the earliest documented report of an insect-resistant plant variety. Somewhat later, in 1831, "Winter Majetin" apples were reported resistant to the woolly apple aphid, *Eriosoma lanigerum*. The first dramatic example of the value of plant resistance against insets occurred in the late 1800s. An insect species, the grape phylloxera *Daktulospaira vitifoliae*, was inadvertently introduced into French vineyards and spread across Europe.

Page 634

Management of almond insects relies on several tactics, including, sanitation, monitoring (usually by pest control advisors), biological controls, and treatment with insecticides when necessary. The management program is based on seasonal timeline for initiation of tactics, which includes: (1) a dormancy period, (2) a bloom/postbloom period, (3) an in-season period, (4) a harvest period, and (5) a postharvest period. Dormancy occurs during the winter months, and management activities in this period are preventive, focusing on the navel orangeworm and sanitation. Mummy nuts are removed to less than two per tree before February 1 and destroyed on the ground naturally from wet weather or by flail mowing.



Readability Statistics

Counts	
Words	328
Characters	1855
Paragraphs	6
Sentences	16
Averages	
Sentences per Paragraph	5.3
Words per Sentence	20.1
Characters per Word	5.5
Readability	
Passive Sentences	50%
Flesch Reading Ease	22.2
Flesch-Kincaid Grade Level	15.1

OK

COURSE PREFIX and NUMBER: CRPSCI 44
COURSE TITLE: Economic Entomology
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

Course Outline of Record Approval (required)

Originating Faculty	Date
Instructional Area Representative	Date
WHCC Chief Instructional Officer	Date
WHCC Articulation Officer (transfer courses only)	Date
Associate Vice Chancellor of Educational Planning	Date
WHCC Curriculum Chair	Date
WHCCD Board of Trustees	Date

COURSE PREFIX and NUMBER: CRPSCI 44
COURSE TITLE: Economic Entomology
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

DISTANCE EDUCATION ADDENDUM (for courses requesting DE only)
Faculty Originator: C. Cowden
Date: 3/19/2012

The following must be completed for the delivery of this course via distance education technology in addition to the original course outline. (An additional textbook form is required if text differs from the classroom modality) This addendum is NOT REQUIRED for web enhanced courses.

☒The instructional area recommends that this course be taught via distance education.

The instructional area recommends the following modality:
☐Video Conference
☒Hybrid (Any replacement of traditional classroom time with online; complete #1 & 2)
☐Online (complete #2)

1. HYBRID – a portion of the traditional classroom time will be replaced with online instruction

Describe the face-to-face requirements of the course ONLY:
The 54 hours of laboratory will be taught 100% face-to-face.

2. ONLINE OUTLINE – Instructional Objectives, Methods of Instruction and Methods of Evaluation must be adapted for online instruction.

Instructional Objectives: Copy your Instructional Objectives (see COR #6) into the LEFT side of the table below (one method per row). In the RIGHT side, specify the activity that will be used to meet the objective in the online environment. Please address each individual objective.
Title 5 requires that "regular, effective contact" (54 hours) between the student and the instructor are included in the design of the Instructional Objectives in an online environment.

Instructional Objectives	Activity (including approximate hours of contact)
A. Identify insects and closely related plant and animal pests and pest damage	Chapter reading; lecture; discussion board response to directed questions; and graded problem sets identifying insects and closely related plant and animal pests and pest damage (5-6 hours)
B. Describe rules and regulations for pest control	Chapter reading; lecture; discussion board response to directed questions; and graded problem sets describing rules and regulations for pest control (2-3 hours)
C. Operate pesticide equipment efficiently and safely	N/A
D. Explain the economic aspects of beneficial and harmful insects	Chapter reading; lecture; discussion board response to directed questions; and graded problem sets explaining the economic aspects of beneficial and harmful insects (3-4 hours)
E. Diagram and describe the anatomy, morphology, and physiology of a typical insect	Chapter reading; lecture; and graded problem sets diagramming and describing the anatomy, morphology, and physiology of a typical insect (4-5

	hours)
F. Classify insects into taxonomic orders	Chapter reading; lecture; and graded problem sets classifying insects into taxonomic orders (4-5 hours)
G. Describe the danger levels of categories I, II, III, and IV pesticides	Chapter reading; lecture; discussion board response to directed questions; and graded problem sets describing the danger levels of categories I, II, III, and IV pesticides (2-3 hours)
H. Compare alternate methods of pest control	Chapter reading; lecture; discussion board response to directed questions; and graded problem sets comparing alternate methods of pest control (3-4 hours)
I. Prepare and classify an insect collection	N/A
J. Select possible methods and timing of control in a given circumstance	Chapter reading; lecture; and "mock farming" research and presentation selecting possible methods and timing of control (2-3 hours)
K. Define common pest and control terminology	Chapter reading; online glossary; periodic vocabulary quizzes using common pest and control terminology (3-4 hours)
L. Estimate the critical levels in an insect population	N/A
M. Identify the common chemicals in use today	Chapter reading; lecture; discussion board response to directed questions; and graded problem sets identifying the common chemicals in use today (3-4 hours)
N. Prepare field reports and other required forms in pest control	N/A
O. Describe spraying and fumigation systems, formulations, and adjuncts currently in use	Chapter reading; lecture; discussion board response to directed questions; and graded problem sets describing spraying and fumigation systems, formulations, and adjuncts currently in use (2-3 hours)
P. Explain Integrated Pest Control (I.P.M.) principles	Chapter reading; lecture; discussion board response to directed questions; and graded problem sets explaining Integrated Pest Control (I.P.M.) principles (3-4 hours)

Methods of Instruction: Copy your Methods of Instruction (see COR #9) into the LEFT side of the table below (one method per row). In the RIGHT side, specify how the methods will be adapted to the online environment. Please address each individual method.

Methods of Instruction	**Online Adaptation**
A. Hands-on experience	N/A
B. Lecture	Lecture materials will be posted on the course management system.
C. Demonstrations	Through the course management system instructors will post demonstrations.

COURSE PREFIX and NUMBER: CRPSCI 44
COURSE TITLE: Economic Entomology
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

Methods of Evaluation: Copy your Methods of Evaluation (see COR #11) into the LEFT side of the table below (one method per row). In the RIGHT side, specify how the methods will be adapted to the online environment. Please address each individual method.	
Methods of Evaluation	**Online Adaptation**
A. Unit exams consisting of objective and essay questions	Students will take required exams either within the course management system or in laboratory face-to-face.
B. Quizzes	Students will take required quizzes in the course management system.
C. Classroom discussion and participation	N/A
D. Oral presentations	N/A
E. Graded problem solving sets	Graded problem solving sets will be posted and turned in via the course management system but additional time may be available in laboratory.
F. Laboratory skill demonstrations	N/A

Verification of Process (required)

Indicate in the table below the faculty, support staff, and administrators that have been consulted as part of the DE proposal process. Consultation does not constitute approval of the proposal.

Required Consultation	Name(s)	Date
Discipline Faculty	C. Cowden, B. Hunt, M. Welch, C. Chaney	3/23/2012
Instructional Area Representative	B. Hunt	3/23/2012
WHCC Chief Instructional Officer		Click here to enter a date.
WHCC Articulation Officer		Click here to enter a date.

Distance Education Addendum Approval (required)

Required Signatures	Date
Originating Faculty	
Instructional Area Representative	

COURSE PREFIX and NUMBER: CRPSCI 44
COURSE TITLE: Economic Entomology
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

WHCC Chief Instructional Officer	
Associate Vice Chancellor of Educational Planning	
WHCC Curriculum Chair	
WHCCD Board of Trustees Approval Date (no signature required)	

West Hills College
Agriculture Department
Spring 2013

Course Information
Crop Science 32 – Weeds and Poisonous Plants

Instructor: Lecture: Mrs. Joy Cowden
Laboratory: Mr. Clint Cowden
Meeting Time: Lecture: 3/11/13 – 5/24/13
Laboratory: 3/23 – 3/24; 4/20 – 4/21; 5/11 – 5/12
Meeting Place: Lecture: Online
Laboratory: FB04, Allen Farm
Office: FB Office, Allen Farm
Joy: (559) 934-2708
joycowden@whccd.edu
Clint: (559) 934-2701
clintcowden@whccd.edu

Office Hours: MTRF – 1:00 – 2:00 PM
*At all other times as long as the office door is open, you are welcome to visit my office. Additional office hours can be made by appointment.

I will also be available for online chats and will make a schedule available throughout the semester. I may also be reached by email throughout the day.

Course Description

CRPSCI 32 is the study of the classification, identification, and life cycle of common and poisonous weeds in California production areas and grasslands and their effects on animals and humans including management practices such as prevention, mechanical, biological, and chemical methods. Weeds establishment and chemical resistance will also be discussed. Laboratory required. (C-ID AG-PS 132L)

Course Objectives

Upon completion of the course, students will be able to:

A. explain the botany of weeds and plant physiologic and growth functions;
B. identify common weeds found in Central California and statewide;
C. explain the methods of safely applying various herbicides;
D. describe the differences in weed species and their habitats;
E. explain the phytotoxic properties of applied herbicides;
F. explain the role of biologicals in weed management;
G. describe specific cultural practices to prevent and manage weed infestations;
H. explain the public perceptions about pesticides and be able to defend weed management practices;
I. describe various career options available in weed science;
J. develop a weed collection of 30 weeds representing 10 different families;
K. present a herbicide report to classmates and instructor.

Student Learning Outcomes

1. Given an identification examination, students will identify the 50 common weeds as listed by the California Department of Pesticide Regulation.
2. Given a laboratory assignment, students will develop a weed collection of 30 weeds representing 10 different families.

Textbook

Weeds of California and Other Western States
ISBN# 978-1-879906-69-3

Optional (If you plan on taking the PCA exam these texts are really beneficial)
Principles of Weed Control, 3rd Edition
ISBN# 0-913702-64-1

Applied Weed Science, 3rd Edition
ISBN# 978-0-13-502814-8

Other Materials

Students should come to laboratory with a pen or pencil, binder and notepaper. Much of the work will be done out in the field and note taking will be required during the laboratory. Material needed for preserving weed sample collection will be needed and will be described in the assignment. In addition, this course will require approximately one 250 MB or greater USB storage device.

Grading Policies

Course grades will be calculated on a straight scale – in other words, there will not be a curve. Course grades will be determined according to the following items:

Laboratories	35%
Quizzes	20%
Exams	15%
Discussion Boards	10%
Homework	10%
Weed Collection	10%
Total	100%

Final Grades will be assessed as follows:

100-90%	A
89-80%	B
79-70%	C
69-60%	D
<60%	F

Labs Assn's: This course will have six laboratories: 3/23, 3/24, 4/20, 4/21, 5/11 and 5/12. Labs will consist of three field trips and three on campus activities. The field trips will be with local industry; therefore we are working on their schedule, which means that schedules may change without much prior notice. Meeting location and brief schedule will be posted on the online management system and it will be the student's responsibility to check the location. There will be a quiz before each laboratory to ensure students know the correct location.

Quizzes: Quizzes will be given at the end of each sub-section and will include questions from the PowerPoint presentation and reading. In addition there will be a weekly weed identification quiz; weeds will be taken from the CDPR list of common weeds.

Exams: There will be one midterm exam, one Weed ID exam and one comprehensive final. The midterm and Weed ID exams will be taken during the laboratory. The midterm will be derived from the section quizzes, homework, discussion boards, reading and laboratory. The weed ID exam will include 50 common weed species and will be during the last laboratory day May 12, from 2-5 pm. The final exam will be comprehensive and derived from quizzes, homework, discussion boards, reading and laboratory.

Discussions: Approximately one to two discussion topics will be posted each week. Students are expected to write a 4-5 sentence answer for each topic (unless otherwise noted.) The answers should be based on information gathered from the reading, online research, the laboratory and lecture information. In addition students are required to give a 2-3 sentence critique of two other student answers. Grade will be based 75% on their own answer and 25% on critiques.

Homework: Problems must be solved in a clear, precise manner and all work must be shown and properly laid out. Sources must be cited as well as numbers obtained from tables. Homework will be due in the dropbox as assigned.

Collection: Students will develop a weed collection of 30 weeds representing 10 different families. The collection will be due during the last laboratory period, May 12, 2013.

Attendance:

- Regular attendance is required of all students enrolled in classes at West Hills Community College including traditional face-to-face classes and labs, online classes and labs, and all other distance classes and hybrids thereof.
  - Attendance for online classes and labs is determined by a student's "cyberpresence."
    - Demonstrated cyber-presence includes participation in online discussion boards, quizzes, exams, or other assignments for that class. This will confirm that the student is "present." A student is not "in attendance" if the student merely logs onto the class and does not participate.
  - Student Responsibility
    - Regular attendance is an obligation assumed by every student at the time of registration. Students who fail to attend class meetings the classes in which they are enrolled, will be marked absent for those meetings. **Moreover, after the equivalent of one week of no attendance a student will be dropped from a class unless extenuating circumstances exist.**
    - Students who withdraw from classes are responsible for initiating the drop process by appropriate deadlines.
    - After census but before the drop deadline, it is the responsibility of the student to drop the class.
  - Faculty Responsibility
    - Additionally, before the census date or the deadline for dropping and withdrawing from classes, all instructors must clear their rosters of inactive enrollment pursuant to California Code of Regulations Title 5, Section 58004. Inactive enrollment includes students who have officially dropped or withdrawn from the class; students who have been officially dropped by the instructor; and students who have been identified as a "No Shows." and students who have been identified as No Longer Participating.
    - Attendance records shall be recorded and kept by faculty and the Office of Admissions and Records according to rules and regulations prescribed by the Board of Governors of the California Community Colleges. The only official rosters for all classes are the records stored on the district student information system. Therefore, prior to census date, each faculty member shall verify class rosters and no later than seven days after census date provide the Office of Admissions and records a roster of currently enrolled students who meet the district policy on attendance.
    - The instructor must mark a student absent if the student does not "attend class" either physically, or by exhibiting cyber-presence.

- <u>Attendance is required at every laboratory</u> and roll will be taken daily. Students should come to class ready to participate in discussion and activities. The instructor is not responsible for dropping a student for lack of attendance. If the student stops attending class, student will receive an 'F' in the course if student does not drop the course.

Other Info

- Students are expected to do their own work on exams and assignments, unless otherwise stated. Cheating will not be tolerated and will result in an automatic F on the assignment or exam. Consult the West Hills College Catalog for further details regarding college policies on cheating and/or plagiarism. Assignments will be turned in to TurnItIn, which is an automatic plagiarism check.

- Students will not be allowed to make up assignments or exams unless PRIOR ARRANGEMENTS are made with the instructor. Instructor will determine whether or not make up opportunities are appropriate on an individual basis.

- Cell phones, pagers, and other electronic devices must be turned off during class.

- CRPSCI 32 meets 54 hours in the field laboratory. The classroom laboratory environment is standard classroom table and chair seating. The field laboratory – approximately 60% of the laboratory time – is conducted in the field requiring the student to move throughout the area making observations, collecting data, installing instrumentation, adjusting equipment and machinery, and operating tractors and off highway vehicles. In addition the students will attend field trips which require mobility in tight quarters and extended periods of walking.

- Laboratories include on the farm application of crop science and technology. Success requires the student to:
  - Use muscles to lift, push, pull or carry heavy objects.
  - Move two or more limbs together to complete job tasks.
  - Make quick, precise adjustments to machine controls.
  - Use one or two hands to grasp, move or assemble objects.
  - Use muscles for extended periods without getting tired.
  - Use stomach and lower back muscles to support the body for long periods.
  - Coordinate movement of several parts of the body, such as arms and legs, while moving in the laboratory setting.
  - Quickly and repeatedly bend, stretch, twist, or reach with the body, arms and legs.
  - Use muscles to jump, sprint, or throw objects.
  - See object details, whether they are nearby or far away.
  - Operate farm equipment.
  - Ability to climb on and off farm equipment.

- Students with learning disabilities or challenges are encouraged to notify the instructor so that additional resources can be made available.

- **West Hills College Coalinga is committed to providing access to education for students with disabilities. If you have a disability or medical condition that requires an accommodation, please contact me within the first two weeks of classes so arrangements can be made.**

- **INSTRUCTOR ACCOMMODATION RESPONSIBILITIES**
  1. Please notify the DSPS program if you feel any additional accommodations would be necessary for the student.
  2. Place test in a sealed envelope and deliver it either to the DSPS Department or DSPS lab. Do not allow the student to deliver the test.
  3. **Please indicate test conditions (open book, notes permitted, etc.).**
  4. **Please indicate the deadline for administration of the test.**
  5. Upon completion of the exam, we will place the test in a sealed envelope in your mailbox.

- **STUDENT ACCOMODATION RESPONSIBIITIES**

  It is the student's responsibility to comply with the DSPS policies and procedures. The following are the student requirements for testing accommodations:

1. Test proctoring may be provided to a student who has an educational limitation and would benefit from this service.
2. Please discuss this service with the DSPS office. The DSPS staff will review your request and your educational plan; then make an appropriate accommodation.
3. Test proctoring will be provided at time and a half of your regular examination length. Make proctoring arrangements with each instructor prior to the test dates. Students should inform the instructor to forward the exam to the DSPS lab. If possible, proctoring should take place the same day of the exam; if not, the exam must be taken within 2 days of the regularly scheduled time. After 2 days, the exam will be returned to the instructor.
4. Appear promptly at the designated time for proctoring with the necessary testing supplies (pencils, pens, scantrons, essay books, etc.) All other materials must be left at the door.
5. Plan your testing time carefully as you will not be allowed to leave during the testing time and return later to finish.
6. Do not discuss the classroom tests with other students.
7. The coordination of the proctoring services is the sole responsibility of the DSPS staff.
8. Failure to comply with the above procedures may result in the termination of this service.

Tentative Schedule

CRPSCI 32 Lecture Schedule

	Date	Reading	PowerPoints	Lab Topics	Quizzes	Weed ID	Labs Assignments	Presentations	Exam
Unit 1	Start 3/11/2013 End 3/22/2013	1. Plants; 2. Weed Biology and Ecology; 3. Vegetation Management Systems	1. Plants; 2. Weed Biology and Ecology; 3. Vegetation Management Systems		Quizzes 1-17	Weeds 1-16			
	Lab #1 3/23/2013			Welcome; Syllabus; Safety; Lab Write-up example; Farm Tour; Introduction Presentation			Syllabus; Farm Tour	Introduction	
	Lab #2 3/24/2013			**Field Trip #1**			Field Trip #1		
Unit 2	Start 3/25/2013 End 4/19/2013	4. Cultural and Physical Control Methods; 5. Mechanical Control Methods; 6. Biological Control Methods; 7. Chemical Control Methods			Quizzes 18-28	Weeds 1-32			
	Lab #3 4/20/2013			**Field Trip #2**			Field Trip #2		
	Lab #4 4/21/2013			Sections 1-6 Presentations; Sections 1-6 Midterm; Weed ID and Collection			Weed ID and Collection	30 Min (Sections 1-6)	**Midterm (Sections 1-6)**
Unit 3	Start 4/22/2013 End 5/10/2013	8. Herbicides; 9. Herbicide-Tolerant Crops; 10. Safe Use of Pesticides; 11. Environmental Fate of Herbicides			Quizzes 29-50	Weeds 1-50			
	Lab #5 5/11/2013			**Field Trip #3**			Field Trip #3		
	Lab #6 5/12/2013			Sections 7-11 Presentations; Crop Presentations; Weed ID Exam				30 Min (Sections 7-11); Crop	**Weed ID Exam**
Unit Final	Start 5/13/2013 End 5/24/2013	The Final can be taken anytime during finals week, and will be due by noon on Friday, May 24, 2013.							**Final**

CRPSCI 32
Student Signature Page
Spring 2013

I have read and understand the requirements for CRPSCI 32.

Including the following grading policy:

Laboratories	_____%
Quizzes	_____%
Exams	_____%
Discussion Boards	_____%
Homework	_____%
Weed Collection	_____%

I have also read and understand the following policy on cheating and plagiarism:

Cheating will not be tolerated and will _____.

I have read and understand the following policy on attendance:

Regular attendance is required of all students enrolled in classes at West Hills Community College including traditional face-to-face classes and labs, online classes and labs, and all other distance classes and hybrids thereof.

True or False:_____

Moreover, after the equivalent of _____of no attendance a student will be dropped from a class unless extenuating circumstances exist.

Attendance is required at every laboratory.

True or False: _____

By reading this document and completing the quiz I acknowledge my rights and responsibilities for this course.

COURSE PREFIX and NUMBER: CRPSCI 32
COURSE TITLE: Weeds and Poisonous Plants
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

WEST HILLS COLLEGE COALINGA
COURSE OUTLINE OF RECORD PACKET

FACULTY ORIGINATOR: C. Cowden
DATE: 3/21/2012

☒NEW COURSE PROPOSAL ☐COURSE REVISION

CHECKLIST: (check all that apply)

- ☐Course Revision Form
- ☒New Course Proposal
- ☒Course Outline
- ☒Learning Resources Statement
- ☒Distance Education Statement
- ☒Adopted Textbook Form
- ☐Prerequisite Form A
- ☐Prerequisite Form B
- ☐Limitations on Enrollment Form C

MIS DATA: (Administrative Use Only)

TOP Code: 0103.10
Credit Status: Degree Applicable
Basic Skills Status: Not Basic Skills
SAM Code: C
Prior to College Level: Y
Noncredit Category:
Funding Agency Category:

ROUTING: (must be filled out prior to agenda submission)

Originating faculty: C. Cowden Date: 3/21/2012
Comments: Click here to enter text.

Curriculum Representative: B. Hunt Date: 4/18/2012
Comments: Click here to enter text.

Technical Review: M. Magnuson Date: 4/18/2012
Comments: See TRC sheet

Chief Instructional Officer: J Stearns Date: 4/27/2012
Comments: Click here to enter text.

COURSE PREFIX and NUMBER: CRPSCI 32
COURSE TITLE: Weeds and Poisonous Plants
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

COURSE REVISION (use for existing courses only)

RULE OF SEVEN – There are seven course characteristics which require approval of the West Hills College Lemoore Curriculum Committee if the course is common to both colleges. Check any of the following characteristics that are being changed:

- ☐ Course Number
- ☐ Course Title
- ☐ Course Prefix
- ☐ Units
- ☐ Transfer
- ☐ Course Objectives (minimum 3)
- ☐ Prerequisites

OTHER CHANGES – check all that apply

- ☐ Five Year Review
- ☐ Grading Option
- ☐ Advisory/Prerequisite
- ☐ Catalog Description
- ☐ Instructional Objectives
- ☐ Course Content and Scope
- ☐ Instructional Methodologies
- ☐ Cultural Pluralism
- ☐ Textbook
- ☐ Distance Education
- ☐ Critical Thinking Assignments
- ☐ Methods of Evaluation
- ☐ Revisions to the curriculum have been discussed with discipline faculty

NEW COURSE PROPOSAL (use for new courses only)

Units: 3	Semester Lecture Hrs: 36	Semester Lab Hrs: 54
Transferability (attach evidence):	☒ CSU	☒ UC
New Major?	☐ Yes	☒ No
If yes, state the new major:	*Click here to enter text.*	
Intended for Transfer?	☒ Yes (complete next row)	☐ No
☒ Transfer Elective	☐ Transfer General Education	☒ Transfer Major Requirement
Associate Degree?	☐ Yes (complete next row)	☒ No
☐ AA/AS Elective	☐ AA/AS General Education	☐ AA/AS Major Requirement
Certificate Program?	☒ Yes	☐ No
If yes, state the certificate:	*Proposed Pest Control Adviser*	

Room Space Requirements: 30
Staff Requirements: No new FTE
Equipment Requirements: None

COURSE PREFIX and NUMBER: CRPSCI 32
COURSE TITLE: Weeds and Poisonous Plants
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

COURSE OUTLINE (use for all courses)

UNITS: 3	Semester Lecture Hrs: 36	Semester Lab Hrs: 54
Grading (check all that apply):	☒Standard	☐Pass/No Pass
Repeatable for Credit?	☐Yes Click here to enter text.	☒No
Materials Fee: $	*Description:*	

1. Course/Catalog Description

CRPSCI 32 is the study of the classification, identification, and life cycle of common and poisonous weeds in California production areas and grasslands and their effects on animals and humans including management practices such as prevention, mechanical, biological, and chemical methods. Weeds establishment and chemical resistance will also be discussed. Laboratory required. (C-ID AG-PS 132L)

2. Prerequisites

3. Corequisites

4. Advisories

5. Enrollment Limitations

6. Instructional Objectives (Use measurable objectives only; courses that allow repeatability must specify objectives for each time the course can be repeated)

Upon completion of the course the student will be able to meet the following objectives:

A. explain the botany of weeds and plant physiologic and growth functions;
B. identify common weeds found in Central California and statewide;
C. explain the methods of safely applying various herbicides;
D. describe the differences in weed species and their habitats;
E. explain the phytotoxic properties of applied herbicides;
F. explain the role of biologicals in weed management;
G. describe specific cultural practices to prevent and manage weed infestations;
H. explain the public perceptions about pesticides and be able to defend weed management practices;
I. describe various career options available in weed science;
J. develop a weed collection of 30 weeds representing 10 different families;
K. present a herbicide report to classmates and instructor.

7. Course Content (Instructional topics or units)

A. Introduction to weed science
    1. What is a weed?
B. Weed identification
    1. Families and their characteristics.

C. Weed life cycles – plant physiology and growth
    1. Annual, perennial, and biennial
        a. Review of plant growth and meristematic sites
            i. Mitosis
            ii. Photosynthesis and respiration
    2. Means of propagation
        a. Sexual and asexual
    3. Phenology data and weed growth
D. Poisonous weeds and their effects
    1. Identification
    2. Effects on domestic animals and livestock
E. Development of weed outbreaks
F. Weed management practices
    1. Prevention
        a. Cultural practices – crop specific
            i. Cropping systems and tillage
        b. Chemical practices – crop specific
            i. Pre-plant and PPI herbicides
    2. Weed infestation management
        a. Cultural practices – crop specific
            i. Cropping systems and tillage
        b. Chemical practices – crop specific
            i. Label and non-selective materials
            ii. Persistence and cropping systems
            iii. Herbicide families and their use
                (a.) Modes of action
        c. Avoiding future infestations
            i. Crop and management rotation practices
        d. Chemical resistance
        e. Roundup Ready crops and weed management
    3. Organic weed management practices
        a. Flame weeding
        b. Weeder geese, goats, and other animals
        c. Organic herbicide materials
        d. Allelopathy
        e. Living mulches and cover crops
    4. Biological weed management
        a. History
        b. Successes and failures
        c. Future prospects
    5. Sprayers and their calibration
        a. Nozzle selection
        b. Herbicide formulations and mixing
        c. Safety
    6. Weed management situations
        a. Turf and ornamental landscapes
        b. Range weed management

c. Weed management in orchards and vineyards
d. Irrigated pasture and forage weed management
e. Weed management in cereals
f. Weed management in row crops

G. Issues in weed management
1. Career options
2. FIFRA and material phase-out
3. New materials and recouping costs
4. Health problems and chemical weed usage

8. Lab Content (For courses with lab hours only)

A. Weed identification
B. Poisonous weeds and their effects
1. Identification
2. Effects on domestic animals and livestock
C. Cultural practices – crop specific
1. Cropping systems and tillage
D. Chemical practices – crop specific
1. Pre-plant and PPI herbicides
2. Label and non-selective materials
3. Persistence and cropping systems
4. Herbicide families and their use
E. Modes of action
F. Crop and management rotation practices
G. Chemical resistance
H. Roundup Ready crops and weed management
I. Organic weed management practices
1. Flame weeding
2. Weeder geese, goats, and other animals
3. Organic herbicide materials
4. Allelopathy
5. Living mulches and cover crops
J. Biological weed management
K. Sprayers and their calibration
L. Nozzle selection
M. Herbicide formulations and mixing
N. Safety
O. Site-Specific Weed Management
P. Variable rate technology
Q. Weed management situations
1. Turf and ornamental landscapes
2. Range weed management
3. Weed management in orchards and vineyards
4. Irrigated pasture and forage weed management
5. Weed management in cereals
6. Weed management in row crops

9. Methods of Instruction (Instructor initiated learning strategies)

A. Hands-on experience
B. Lecture
C. Demonstrations

10. Out of Class Assignments

None

11. Methods of Evaluation (Measurements of student achievement)

A. Unit exams consisting of objective and essay questions
B. Quizzes
C. Classroom discussion and participation
D. Oral presentations
E. Graded problem solving sets
F. Laboratory skill demonstrations

12. Cultural Pluralism Assignment and Methodology (Specific instructor initiated example)

Instructor will open discussions concerning various weed problems in different areas of the world and approaches to weed management used by a variety of cultures. An example includes how the Monterey Pine is considered a weed in South America whereas Pampas Grass, grown in South America, is considered an invasive weed in California.

13. Critical Thinking Assignment (Use detail and state in cognitive terms)

Students are given a mock farming operation for which they are to create a weed management regime. They must inquire about the parameters (i.e. IPM, organic, etc.) needed to determine weed management needs and create a presentation in which they will present to the farm manager this management regimen and schedule.

14. Writing Assignments/Proficiency Demonstration

A. Students will be given exams that include essay questions.
B. Students will be required to demonstrate laboratory skills.

COURSE PREFIX and NUMBER: CRPSCI 32
COURSE TITLE: Weeds and Poisonous Plants
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

LEARNING RESOURCES STATEMENT (use for all courses)

☒ The Learning Resources collection has been reviewed by the faculty originator and the librarian.

The following resources are currently available for course support:

☐ Books
☐ Reference Materials
☒ Media
☒ Electronic Resources

The following resources are recommended for purchase to further support the course:

☒ Books
☒ Reference Materials
☐ Media
☐ Electronic Resources

Additional Comments: Books and reference materials listed on the California Department of Pesticide Regulation's Pest Control Adviser's Study Materials would be beneficial.

COURSE PREFIX and NUMBER: CRPSCI 32
COURSE TITLE: Weeds and Poisonous Plants
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

TEXTBOOK FORM (use for all courses)

All transfer-level courses are required 1) to have an 11 or higher readability and 2) be no more than five years old. All textbooks must have readability statistics attached.

Title: Weeds of California and Other Western States
Edition and Publication Year: 2007
ISBN: 978-1-879906-69-3
Author(s): Joseph M. Ditomaso
Publisher: University of California, Agricultural and Natural Resources
Required ☒ Optional ☐
Readability Level: 13.3

Title: Click here to enter text.
Edition and Publication Year: Click here to enter text.
ISBN: Click here to enter text.
Author(s): Click here to enter text.
Publisher: Click here to enter text.
Required ☐ Optional ☐
Readability Level: Click here to enter text.

Title: Click here to enter text.
Edition and Publication Year: Click here to enter text.
ISBN: Click here to enter text.
Author(s): Click here to enter text.
Publisher: Click here to enter text.
Required ☐ Optional ☐
Readability Level: Click here to enter text.

Title: Click here to enter text.
Edition and Publication Year: Click here to enter text.
ISBN: Click here to enter text.
Author(s): Click here to enter text.
Publisher: Click here to enter text.
Required ☐ Optional ☐
Readability Level: Click here to enter text.

Readability

Weeds of California and Other Western States: Volume 1 – Aizoaceae-Fabaceae and Volume 2 – Geraniaceae-Zygophyllaceae

Page 5

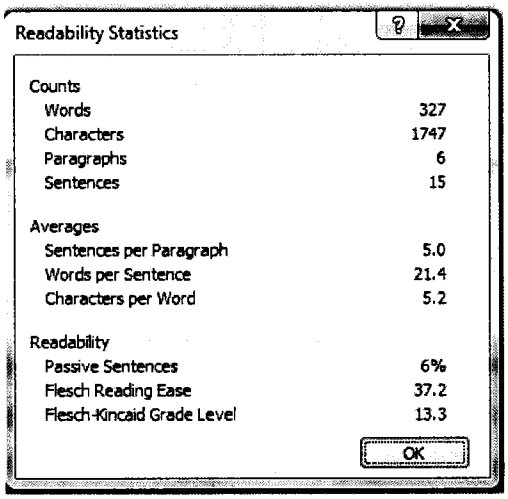
Weeds of California and Other Western States provides users with a number of resources to aid in identifying weeds in agricultural and nonagricultural areas. Although we expect that most users will leaf through the book until they see a photo that matches the plant of concerns, there are other, perhaps faster, methods of identification. For example, if the plant of interest has an unusual characteristic, such as square stems, a glandular or sticky surface, spiny structure, or milky latex, it can be identified by finding these characteristics in the shortcut identification tables on pages 16-30. Using these tables narrows the number of choices and hopefully saves time in correctly identifying a plant.

Page 723

Male and female flowers develop separately in specialized flower clusters on the same plant (monoecious). Flower clusters umbel-like at the stem tips, with the central clusters maturing first. What appears to be on flower is actually a specialized cluster of reduced unisexual flowers (cyathium) that is unique to the spurge family. A cyathium consists of several male flowers, each consisting of 1 stamen, inserted on a bell-shaped hypanthium (receptacle extension) and one female flower consisting of an ovary situated above the male flowers on a stalk from the center of the hypanthium. The 3-chambered ovary has 3 styles fused together at the bases and branched at the tips.

Page 1587

Germination does not require the presence of a host and can occur under dry to moist conditions, depending on the species. Successful infection of a host occurs only when seeds germinated on or near a suitable infection site. Seeds remaining in berries do not germinate, but can survive until berries decompose, about 1 season. Dispersed seeds (removed from berries) survive about 1 season. Mistletoe shoots lose water through transpiration at much greater rates than host trees and cannot control their stomata (pores) during drought conditions. Mistletoe tissues can also maintain greater concentrations of solutes or osmotic potentials that host tissues.


Readability Statistics

Counts	
Words	327
Characters	1747
Paragraphs	6
Sentences	15
Averages	
Sentences per Paragraph	5.0
Words per Sentence	21.4
Characters per Word	5.2
Readability	
Passive Sentences	6%
Flesch Reading Ease	37.2
Flesch-Kincaid Grade Level	13.3

OK

COURSE PREFIX and NUMBER: CRPSCI 32
COURSE TITLE: Weeds and Poisonous Plants
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

Course Outline of Record Approval (required)

Originating Faculty	Date
Instructional Area Representative	Date
WHCC Chief Instructional Officer	Date
WHCC Articulation Officer (transfer courses only)	Date
Associate Vice Chancellor of Educational Planning	Date
WHCC Curriculum Chair	Date
WHCCD Board of Trustees	Date

COURSE PREFIX and NUMBER: CRPSCI 32
COURSE TITLE: Weeds and Poisonous Plants
INSTRUCTIONAL AREA: AG/BUS/CIS/CWEE

DISTANCE EDUCATION ADDENDUM (for courses requesting DE only)
Faculty Originator: C. Cowden
Date: 3/19/2012

The following must be completed for the delivery of this course via distance education technology in addition to the original course outline. (An additional textbook form is required if text differs from the classroom modality) This addendum is NOT REQUIRED for web enhanced courses.

☒ The instructional area recommends that this course be taught via distance education.

The instructional area recommends the following modality:
☐ Video Conference
☒ Hybrid (Any replacement of traditional classroom time with online; complete #1 & 2)
☐ Online (complete #2)

1. HYBRID – a portion of the traditional classroom time will be replaced with online instruction

Describe the face-to-face requirements of the course ONLY:
The 54 hours of laboratory will be taught 100% face-to-face.

2. ONLINE OUTLINE – Instructional Objectives, Methods of Instruction and Methods of Evaluation must be adapted for online instruction.

Instructional Objectives: Copy your Instructional Objectives (see COR #6) into the LEFT side of the table below (one method per row). In the RIGHT side, specify the activity that will be used to meet the objective in the online environment. Please address each individual objective.
Title 5 requires that "regular, effective contact" (54 hours) between the student and the instructor are included in the design of the Instructional Objectives in an online environment.

Instructional Objectives	Activity (including approximate hours of contact)
A. Explain the botany of weeds and plant physiologic and growth functions	Chapter reading; lecture; and discussion board response to directed questions explaining the botany of weeds and plant physiologic and growth functions (3-4 hours)
B. Identify common weeds found in Central California and statewide	N/A
C. Explain the methods of safely applying various herbicides	Chapter reading; lecture; discussion board response to directed questions; and graded problem sets explaining the methods of safely applying various herbicides (6-7 hours)
D. Describe the differences in weed species and their habitats	Chapter reading; lecture; discussion board response to directed questions; and graded problem sets describing the differences in weed species and their habitats (6-7 hours)
E. Explain the phytotoxic properties of applied herbicides	Chapter reading; lecture; discussion board response to directed questions; and graded problem sets

	explaining the phytotoxic properties of applied herbicides (6-7 hours)
F. Explain the role of biologicals in weed management	Chapter reading; lecture; discussion board response to directed questions; and graded problem sets explaining the role of biologicals in weed management (6-7 hours)
G. Describe specific cultural practices to prevent and manage weed infestations	Chapter reading; lecture; discussion board response to directed questions; and graded problem sets describing specific cultural practices to prevent and manage weed infestations (3-4 hours)
H. Explain the public perceptions about pesticides and be able to defend weed management practices	Chapter reading; lecture; and discussion board response to directed questions explaining the public perceptions about pesticides and be able to defend weed management practices (3-4 hours)
I. Describe various career options available in weed science	Chapter reading; lecture; and discussion board response to directed questions describing various career options available in weed science (3-4 hours)
J. Develop a weed collection of 30 weeds representing 10 different families	N/A
K. Present a herbicide report to classmates and instructor	N/A

Methods of Instruction: Copy your Methods of Instruction (see COR #9) into the LEFT side of the table below (one method per row). In the RIGHT side, specify how the methods will be adapted to the online environment. Please address each individual method.

Methods of Instruction	**Online Adaptation**
A. Hands-on experience	N/A
B. Lecture	Lecture materials will be posted on the course management system.
C. Demonstrations	Through the course management system instructors will post demonstrations.

Methods of Evaluation: Copy your Methods of Evaluation (see COR #11) into the LEFT side of the table below (one method per row). In the RIGHT side, specify how the methods will be adapted to the online environment. Please address each individual method.

Methods of Evaluation	**Online Adaptation**
A. Unit exams consisting of objective and essay questions	Students will take required exams either within the course management system or in laboratory face-to-face.
B. Quizzes	Students will take required quizzes in the course management system.
C. Classroom discussion and participation	N/A
D. Oral presentations	N/A
E. Graded problem solving sets	Graded problem solving sets will be posted and turned in via the course management system but additional time may be available in laboratory.

F. Laboratory skill demonstrations	N/A

Verification of Process (required)

Indicate in the table below the faculty, support staff, and administrators that have been consulted as part of the DE proposal process. Consultation does not constitute approval of the proposal.

Required Consultation	Name(s)	Date
Discipline Faculty	C. Cowden, B. Hunt, M. Welch, C. Chaney	3/23/2012
Instructional Area Representative	B. Hunt	3/23/2012
WHCC Chief Instructional Officer		Click here to enter a date.
WHCC Articulation Officer		Click here to enter a date.

Distance Education Addendum Approval (required)

Required Signatures	Date
Originating Faculty	
Instructional Area Representative	
WHCC Chief Instructional Officer	
Associate Vice Chancellor of Educational Planning	
WHCC Curriculum Chair	
WHCCD Board of Trustees Approval Date (no signature required)	

West Hills College
Agriculture Department
Spring 2013

Course Information
Crop Science 19 – Water Management

Instructor: Mrs. Joy Cowden
Meeting Time: 01/14/2013-5/24/2013
Meeting Place: Online
Office: FB Office, Allen Farm
(559) 934-2708
joycowden@whccd.edu

Office Hours: MTRF – 1:00 – 2:00 PM
*At all other times as long as the office door is open, you are welcome to visit my office. Additional office hours can be made by appointment.

I will also be available for online chats and will make a schedule available throughout the semester. I may also be reached by email throughout the day.

Course Description

CRPSCI 19 is an interdisciplinary examination of California's water use and management with an historical emphasis on the politics and conflict arising from water scarcity. Instruction in the fundamentals of irrigation application and measurement systems will be provided. Included will be a study of the basic irrigation systems: flood, sprinkler, micro, sub-irrigation and their variations. California's water systems and water quality problems will be reviewed. (C-ID AG 116)

Course Objectives

Upon completion of the course, students will be able to:

A. describe the history of California's water development and use;
B. discuss basic scientific concepts concerned with water and its movement;
C. identify the critical parts of California's hydrologic system;
D. classify specific areas of origin for urban, agriculture and environmental water supplies;
E. analyze the nature and trends of California's water supply and use;
F. draw a map of California's water containment and distribution system;
G. list and describe the major types, operation and functional aspects of California's water distribution system;
H. contrast and compare the relationship between California's three primary water users: agriculture, urban, and environment;
I. examine California's water rights and water law;
J. assess the effects that current and proposed water-related legislation will have on California residents;
K. evaluate the impact that current population and land-use trends have on California's water supply and service groups;
L. collect, sort, analyze, and describe data.

Student Learning Outcomes

1. Given an examination, students will be able to discuss development of California Water, including the major users and where they obtain their water.
2. Given an examination, students will be able to identify the different types of irrigation, their uses, advantages and disadvantages.

3. Given an examination, students will be able to discuss general California water law and its effects on farming practices.

Textbook

California Water II
ISBN # 978-0-923956-75-2

Grading Policies

Course grades will be calculated on a straight scale – in other words, there will not be a curve. Course grades will be determined according to the following items:

Unit Quizzes	25%
Exams	20%
Discussion Boards	15%
Wikis	15%
Homework	10%
Water Issues	
Rough Draft	5%
Paper	10%
Total	100%

Final Grades will be assessed as follows:

100-90%	A
89-80%	B
79-70%	C
69-60%	D
<60%	F

Unit Quizzes: Quizzes will be given at the end of each unit and will include questions from the PowerPoint presentation, text and additional reading.

Exams: There will be one midterm exam and one comprehensive final. The exams will be open-note and open-book. The midterm will be derived from the unit quizzes, homework and discussion boards. The final exam will be comprehensive and derived from quizzes, the textbook and additional reading.

Discussions: Approximately one to two discussion topics will be posted each week. Students are expected to write a 4-5 sentence answer for each topic (unless otherwise noted.) The answers should be based on information gathered from the text, links and lecture information. In addition students are required to give a 2-3 sentence critique of two other student answers. Grade will be based 50% on their own answer and 50% on critiques.

Wikis: Approximately one wiki topic will be posted each week. The overall answer to the question will be graded and the grade will be based on the student's involvement in the group answer.

Homework: Problems must be solved in a clear, precise manner and all work must be shown and properly laid out. Sources must be cited as well as numbers obtained from tables. Homework will be due in the dropbox as assigned.

Water Issues: A paper discussing a particular California water issue will be assigned. The paper should be a minimum of 5 pages and will follow MLA or other science formatting. Rough drafts will be edited and are encouraged.

Attendance:

- Regular attendance is required of all students enrolled in classes at West Hills Community College including traditional face-to-face classes and labs, online classes and labs, and all other distance classes and hybrids thereof.
  - Attendance for online classes and labs is determined by a student's "cyberpresence."
  - Demonstrated cyber-presence includes participation in online discussion boards, quizzes, exams, or other assignments for that class. This will confirm that the student is "present." A student is not "in attendance" if the student merely logs onto the class and does not participate.
- Student Responsibility
  - Regular attendance is an obligation assumed by every student at the time of registration. Students who fail to attend class meetings the classes in which they are enrolled, will be marked absent for those meetings. **Moreover, after the equivalent of one week of no attendance a student will be dropped from a class unless extenuating circumstances exist.**
  - Students who withdraw from classes are responsible for initiating the drop process by appropriate deadlines.
  - After census but before the drop deadline, it is the responsibility of the student to drop the class.
- Faculty Responsibility
  - Additionally, before the census date or the deadline for dropping and withdrawing from classes, all instructors must clear their rosters of inactive enrollment pursuant to California Code of Regulations Title 5, Section 58004. Inactive enrollment includes students who have officially dropped or withdrawn from the class; students who have been officially dropped by the instructor; and students who have been identified as a "No Shows." and students who have been identified as No Longer Participating.
  - Attendance records shall be recorded and kept by faculty and the Office of Admissions and Records according to rules and regulations prescribed by the Board of Governors of the California Community Colleges. The only official rosters for all classes are the records stored on the district student information system. Therefore, prior to census date, each faculty member shall verify class rosters and no later than seven days after census date provide the Office of Admissions and records a roster of currently enrolled students who meet the district policy on attendance.
  - The instructor must mark a student absent if the student does not "attend class" either physically, or by exhibiting cyber-presence.

Other Info

- Students are expected to do their own work on exams and assignments, unless otherwise stated. Cheating will not be tolerated and will result in an automatic F on the assignment or exam. Consult the West Hills College Catalog for further details regarding college policies on cheating and/or plagiarism. Assignments will be turned in to TurnItIn, which is an automatic plagiarism check.

- Students will not be allowed to make up assignments or exams unless PRIOR ARRANGEMENTS are made with the instructor. Instructor will determine whether or not make up opportunities are appropriate on an individual basis.

- Students with learning disabilities or challenges are encouraged to notify the instructor so that additional resources can be made available.

- **West Hills College Coalinga is committed to providing access to education for students with disabilities. If you have a disability or medical condition that requires an accommodation, please contact me within the first two weeks of classes so arrangements can be made.**

- **INSTRUCTOR ACCOMMODATION RESPONSIBILITIES**

1. Please notify the DSPS program if you feel any additional accommodations would be necessary for the student.
2. Place test in a sealed envelope and deliver it either to the DSPS Department or DSPS lab. Do not allow the student to deliver the test.
3. **Please indicate test conditions (open book, notes permitted, etc.).**
4. **Please indicate the deadline for administration of the test.**
5. Upon completion of the exam, we will place the test in a sealed envelope in your mailbox.

Please contact our program if you have any questions. Thank you for your continued cooperation with the DSPS Programs

- **STUDENT ACCOMODATION RESPONSIBIITIES**

It is the student's responsibility to comply with the DSPS policies and procedures. The following are the student requirements for testing accommodations:

1. Test proctoring may be provided to a student who has an educational limitation and would benefit from this service.
2. Please discuss this service with the DSPS office. The DSPS staff will review your request and your educational plan; then make an appropriate accommodation.
3. Test proctoring will be provided at time and a half of your regular examination length. Make proctoring arrangements with each instructor prior to the test dates. Students should inform the instructor to forward the exam to the DSPS lab. If possible, proctoring should take place the same day of the exam; if not, the exam must be taken within 2 days of the regularly scheduled time. After 2 days, the exam will be returned to the instructor.
4. Appear promptly at the designated time for proctoring with the necessary testing supplies (pencils, pens, scantrons, essay books, etc.) All other materials must be left at the door.
5. Plan your testing time carefully as you will not be allowed to leave during the testing time and return later to finish.
6. Do not discuss the classroom tests with other students.
7. The coordination of the proctoring services is the sole responsibility of the DSPS staff.
8. Failure to comply with the above procedures may result in the termination of this service.

Tentative Schedule

	Date	Reading	PowerPoint	Quiz	Disscussion	Wiki	Homework Due	Paper	Exam
Week 1	Start 1/14/2013 End 1/18/2013		Cadillac Desert 1 (1-9)	Syllabus	Introduction				
Week 2	Start 1/21/2013 End 1/25/2013	Chp 1: Pgs 1-19	California Water	CA Water	CA Water	CA Water	Cadillac Desert 1		
Week 3	Start 1/28/2013 End 2/1/2013	Chp 1: Pgs 20-30	California Water Supply	Water Supply	Water Supply	Water Supply	Chp 1		
Week 4	Start 2/4/2013 End 2/8/2013		Cadillac Desert 2 (1-6) and Cadillac Desert 3 (1-6)						
Week 5	Start 2/11/2013 End 2/15/2013		The Central Valley and State Water Projects	The CVP and SWP	The CVP and SWP	The CVP and SWP	Cadillac Desert 2		
Week 6	Start 2/18/2013 End 2/22/2013	Chp 12: Pgs 313-340	The Colorado River	Colorado River	Colorado River	Colorado River	CVP and SWP		
Week 7	Start 2/25/2013 End 3/1/2013		Cadillac Desert 4 (1-6)		Cadillac Desert		Chp 12	**Assigned**	
Week 8	Start 3/4/2013 End 3/8/2013		Irrigation Systems	Irrigation Systems		Irrigation Systems	Cadillac Desert 4		
Week 9	Start 3/11/2013 End 3/15/2013	The Midterm can be taken anytime during the week and will be due by midnight on Friday. The remainder of the week can be used to work on your water issues paper.							**Midterm**
Week 10	Start 3/18/2013 End 3/22/2013	Chp 2: Pgs 31-36	Water Rights Law	Water Law	Water Law	Water Law	Irrigation Systems		
Week 11	Start 3/25/2013 End 3/29/2013	Chp 3: Pgs 37-68	Surface Water Rights Law	Surface Water Law	Surface Water Law	Surface Water Law	Chp 2		
Week 12	Start 4/1/2013 End 4/5/2013		The Delta	Delta	Delta	Delta	Chp 3		
Week 13	Start 4/8/2013 End 4/12/2013	Chp 5: Pgs 89-130	Allocating Water in CA	Allocating Water	Allocating Water	Allocating Water		**Rough Draft Due**	
Week 14	Start 4/15/2013 End 4/19/2013	Chp 9: Pgs 229-254	Interaction of Federal Law and State Water Law	Federal & State Law	Federal & State Law	Federal & State Law	Chp 5		
Week 15	Start 4/22/2013 End 4/26/2013	Chp 4: Pgs 69-88	Groundwater	GW	GW	GW	Chp 9		
Week 16	Start 4/29/2013 End 5/3/2013	Chp 6: Pgs 131-170	Environmental Resotoration	ER	ER	ER	Chp 4		
Week 17	Start 5/6/2013 End 5/10/2013	Chp 10: Pgs 255-286	Water Conservation and Water Recycling	WC & WR	WC & WR	WC & WR	Chp 6		
Week 18	Start 5/13/2013 End 5/17/2013	Chp 11: Pgs 287-312	Water Marketing	Marketing	Marketing	Marketing	Chp 10	**Final Draft Due**	
Finals Week	Start 5/20/2013 End 5/24/2013	The Final can be taken anytime during finals week, and will be due by noon on Friday, May 24, 2013.							**Final**

CRPSCI 19
Student Signature Page
Spring 2013

I have read and understand the requirements for CRPSCI 19.

Including the following grading policy:

Unit Quizzes _____%

Exams _____%

Discussion Boards _____%

Wikis _____%

Homework _____%

Water Issues

Rough Draft _____%

Paper _____%

I have also read and understand the following policy on cheating and plagiarism:

Cheating will not be tolerated and will _____.

I have read and understand the following policy on attendance:

Regular attendance is required of all students enrolled in classes at West Hills Community College including traditional face-to-face classes and labs, online classes and labs, and all other distance classes and hybrids thereof.

True or False:_____

Moreover, after the equivalent of _____of no attendance a student will be dropped from a class unless extenuating circumstances exist.

By reading this document and completing the quiz I acknowledge my rights and responsibilities for this course.

West Hills College Coalinga
Course Revision Packet

Course Prefix, Number & Title: **CRPSCI 19 Water Management**
Faculty Originator: **Clint Cowden**
Date: **September 12, 2005**

Checklist:

- ☒ **Course Revision Form**
- ☒ **Course Outline**
- ☒ **Distance Education Statement**
- ☒ **Learning Resources Statement**
- ☒ **Adopted Textbook Form**
- ☐ **Prerequisite Form A**
- ☐ **Prerequisite Form B**
- ☐ **Prerequisite Form C**
- ☐ **Limitations on Enrollment Justification**

Signatures:

_____ Date_____ Curriculum Instructional Area Representative (required)	_____ Date_____ Articulation Officer (required if transferable)
_____ Date_____ Consulting Department Curriculum Instructional Area Representative (required when overlapping course content)	_____ Date_____ Associate Dean of Vocational Education (required if Voc Ed)
_____ Date_____ Chief Instructional Officer (required)	_____ Date_____ Dean of Learning Resources (required)
_____ Date_____ College Curriculum Committee Chair (approved)	Date_____ West Hills Community College District Board of Trustees (approved)
☒ **Revisions to this curriculum packet have been discussed with faculty in the Instructional Area**	

COURSE REVISION FORM
West Hills College Coalinga

Course Prefix & Number: **CRPSCI 19** **Course Title:** **Water Management**

Instructional Area: **AG/Bus/CIS/CWEE** **Date:** **9/12/05**

Faculty Originator: **Clint Cowden**

RULE OF FIVE – The District Curriculum Committee voted to approve common course characteristics of a revised course for approval by the Coalinga Curriculum committee. If the faculty originator changes any of the items below, the course requires approval from West Hills College Lemoore curriculum committee.

- ☐ Number
- ☐ Title
- ☐ Prefix
- ☒ Units
- ☐ Transfer

Other Changes:

- ☐ Grading Option
- ☐ Advisory/Prerequisite
- ☐ Catalog Description
- ☐ Instructional Objectives
- ☐ Course Content and Scope
- ☒ Instructional Methodologies
- ☒ Methods of Evaluation
- ☒ Critical Thinking Assignments
- ☐ Cultural Pluralism
- ☒ Student Learning Outcome
- ☒ Textbook
- ☐ Distance Education
- ☐ Other

Explain:

- ☐ **Five Year Review**

Content has been evaluated and updated. Yes ☒

Do any of the above changes affect the course content to the degree a student could retake the course? Yes ☒ or No ☐

Explain: When the course is 3 units, it is transferable to CSU for a D7.

Change Previous Course Outline Information:

From:

Credits 2.00

To: (Write new information here for any changes checked above.)

Credits 3.00

Justification: (Reasons for the above changes.)

In order to be transferable as a D7 for CSU the course needs to be 3 units.

COURSE OUTLINE
West Hills College Coalinga

Date: 9/12/2005

Instructional Area: **Ag/Bus/CIS/CWEE**

Course Prefix & Number: **CRPSCI 19**

Course Title: **Water Management**
Course Articulation Number (CAN) CCAG 755 GE
Units: **3**

Grading option (select one): ☒ Standard Grading Only ☐ Credit/No Credit Only
☐ Standard Grading/Credit/No Credit

Materials Fee: $ *Justification:*

Semester Lecture Hours: **36** Semester Lab Hours: **54**

How many times may this course be taken for credit (repeatability)? **1**

1. PREREQUISITES: None

   and/or

   ADVISORIES: None

2. CATALOG DESCRIPTION:
   Crop Science 19 provides instruction in the fundamentals of irrigation application and measurement systems. It includes a study of the basic irrigation system: Flood, surge, sprinkler, trickle or drip, sub-irrigation, and their variations. California's water systems and water quality problems will be reviewed. Various types of pumps and pumping systems will also be studied. (AA, CSU)

3. INSTRUCTIONAL OBJECTIVES (Use measurable objectives only-courses that allow repeatability must specify objectives for each time the course can be repeated):
   Upon completion of the course the student will be able to:
   1. name the different types of irrigation systems used in California agriculture.
   2. discuss the appropriate use of such systems in different crop production situations.
   3. demonstrate the use of the above systems.
   4. describe the sources of California's agricultural water supply.
   5. recall the use and application of different pumping systems.

4. COURSE CONTENT AND SCOPE (instructional topics or units):
   A. Orientation
      a. Resource Laboratory
         a. Tour Library
         b. Research Internet Resources
   B. Water Sources
      1. Water Sources Laboratory
         a. Discuss, Research and View
            a. CIMIS Web-site
            b. Campbell Scientific Instrumentation
            c. Groundwater

        i. Recharge
        ii. Overdraft
    d. Surface Water
        i. California Aqueduct
    e. Water Storage
    f. Flood Control
    g. Distribution System
        i. State Water Project
        ii. Federal Water Project
        iii. Irrigation and Water Districts
    h. Water Users
        i. Agriculture
        ii. Urban
        iii. Environmental

C. California Water
    1. California Water Issues Laboratory
        a. Research and Discuss
            a. Endangered Species Act
            b. Conflict
                i. Agriculture-urban-environmental conflict
            c. Water Transfers
            d. Water Conservation
        b. Discuss and View Cadillac Desert
        c. Group Projects
            a. Research and Report current and future issues
    2. California Water Issues Paper
        a. Quantification Settlement Agreement
        b. Westlands Water District Land Retirement
    3. California Water Field Trip
        a. Water Districts
            a. Urban
            b. Agricultural
        b. Water Issues
    4. Water Rights and Water Law Laboratory
        a. Debate Water Cases
            a. Owens Valley
            b. Hetch Hetchey
            c. Central Valley
            d. Miller v. Lux
            e. Salton Sea
            f. Kesterson Reservoir
        b. Discuss Water Law
            a. Discuss allocation of water between consumptive and environmental uses
    5. Endangered Species Act
        a. Discuss

D. Soil, Plant and Water Relations
    1. Soil Moisture by Feel Laboratory
    2. Soil Moisture using Technology
        a. TDR
        b. FDR
        c. Neutron Probe
        d. Pressure Bomb
        e. Tensiometers

f. Gypsum Blocks
3. Irrigation Scheduling Laboratory
a. Use Excel or other scheduling software to create irrigation schedules
4. Guest Speaker
a. Irrigation Scheduler/Agronomist

E. Irrigation Methods
1. Irrigation Systems Laboratory
a. Discuss and View
i. Flood
i. Check
ii. Basin
iii. Furrow Irrigation
a. Sprinkler Systems
(a.) Hand Lines
(b.) Wheel Lines
(c.) Pivot Irrigation
(d.) Fertigation and Application of Chemicals
b. Drip Irrigation
(a.) Temporary or Permanent Methods
(b.) Pesticide and Fertilizer Application

F. Distribution Uniformity
1. Drip Irrigation Evaluation Laboratory
a. Perform Evaluation for Drip
2. Sprinkler Irrigation Evaluation Laboratory
a. Perform Evaluation for Sprinklers

G. Watershed Management
1. Watershed Management Laboratory
a. Use GIS to view and manage watersheds

H. Waste Water and Water Quality
1. Waste Water Quality Laboratory
a. Visit Waste Water Treatment Plant
b. Discuss Uses of Wastewater
c. Discuss State Water Resources Control Board

5. INSTRUCTIONAL METHODOLOGIES (instructor initiated learning strategies):
A. Overhead Lectures
B. Laboratory operation and demonstration of equipment
C. Assignment of Articles to Read on Specific Topics
D. Field Trips

6. MULTIPLE METHODS OF EVALUATION (measurements of student achievement):
A. Four short reports (homework) on assigned articles and/or field trips
B. Two Examinations
C. A research paper and an oral report on use of an irrigation system

7. WRITING ASSIGNMENTS/PROFICIENCY DEMONSTRATION:
A. Homework requires at least one written page
B. Short answer essay questions are part of the examinations
C. The research paper is a required component of 5 to 7 pages
D. Laboratory reports on use and application of irrigation technology

8. ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING
(use detail when describing student assignments and state in cognitive terms):

A. Laboratories use information learned in lecture and applied to real-world applications require critical thinking
B. The selection and research of topics required for the paper require critical thinking

9. ASSIGNMENTS, METHODOLOGIES, OR OTHER EXAMPLES OF HOW CULTURAL PLURALISM IS ADDRESSED:
Lectures are reinforced by laboratories where everyone is encourages to participate in discussions. Weaknesses that are apparent at that point are dealt with by utilizing different methods to clarify the material. Some examples are:

a. Demonstrations
b. Practical Application (hands-on)
c. Group Interaction and Involvement (teamwork)
d. Tutoring Assistance by Classmates is Encourages
e. Individual Attention During Office Hour or by Appointment
f. Campus Tutorial Resources

Also, the instructor is aware of and receptive to ethnic diversities and has and will continue to work toward equal education for all.

10. REQUIRED EXTRA CLASS ASSIGNMENTS:
Students are encourages to attend, and will receive extra credit for attending appropriate seminars and conferences.

11. STUDENT LEARNING OUTCOMES (courses that allow repeatability must specify student learning outcomes for each time the course can be repeated):

1. Students will write a critical assessment discussing current California Water issues including the effects that current and proposed water-related legislation will have on California residents.
2. Given a multiple choice test, students will be able to identify the different types of irrigation, their uses, advantages and disadvantages.
3. Given classroom, laboratory or field experiences, students will collect and analyze distribution uniformity data and develop recommendations for improvement.
4. Given a laboratory assignment using various moisture monitoring equipment for data collection and analysis, students will learn to collect and analyze data as well as create an irrigation schedule.

DISTANCE EDUCATION STATEMENT
West Hills College Coalinga

Course Prefix, Number & Title: **CRSCI 19 Water Management**

Instructional Area: **Ag/Bus/CIS/CWEE**

Faculty Originator: **Clint Cowden**

Date: **9/12/05**

☒ The instructional area does not recommend this course be taught via distance education at this time.

Justification: The laboratories are performed on the school farm where irrigation equipment is available.

The following must be completed for the delivery of this course via distance education technology in addition to the original course outline:
(A textbook form will need to be completed if text differs from the original course).

1. What distance education modality is being proposed for the delivery of this course?

☐ Video Conference ☐ Hybrid (Mix of Traditional/Online) ☐ Online (100% Online)

2. What strategies will be employed for effective contact between instructor and students to assure learning outcomes, as specified in the course outline, are met? Check all that apply.

☐ email ☐ face-to-face ☐ discussion board ☐ online office hours

☐ other – *describe*

LIBRARY/LEARNING RESOURCES STATEMENT
West Hills College Coalinga

Course Prefix, Number & Title: **CRSCI 19 Water Management**

Instructional Area: **Ag/Bus/CIS/CWEE**

Faculty Originator: **Clint Cowden** Date: **9/12/2005**

The holdings of the L/LRC collection in the subject area(s) related to the proposed new/revised course/discipline have been reviewed.

☒ The L/LRC has sufficient resources presently available for support of this course/discipline.

☐ The L/LRC resources are not presently adequate to support this course/discipline. Additional needed items have been identified and should be purchased.

Comments:

ADOPTED TEXTBOOK FORM

West Hills College Coalinga

Course Prefix, Number & Title: **CRSCI 19 Water Management** Instructional Area: **AG/Bus/CIS/ CWEE**

Faculty Originator: **Clint Cowden** Date: **9/12/2005**

All transfer-level courses require 11-12th grade level or above.

A. Title: BRAE 340 Irrigation Water Management
Edition: August 1998 ISBN #: _____
Author(s): Dr. Charles M. Burt
Publisher: Irrigation Training & Research Center
Required ☒ Optional ☐
Readability level: 12.0 (Attach readability materials to original.)

B. Title: _____
Edition: _____ ISBN #: _____
Author(s): _____
Publisher: _____
Required ☐ Optional ☐
Readability level: _____ (Attach readability materials to original.)

C. Title: _____
Edition: _____ ISBN #: _____
Author(s): _____
Publisher: _____
Required ☐ Optional ☐
Readability level: _____ (Attach readability materials to original.)

D. Title: _____
Edition: _____ ISBN #: _____
Author(s): _____
Publisher: _____
Required ☐ Optional ☐
Readability level: _____ (Attach readability materials to original.)

CRSCI 19 Readability Readability = 12.0

BRAE 340 Irrigation Water Management

As the nation's most populous state, California faces many complicated and compelling problems. Although recent polls have shown the public's top concerns are job security, education, crime and immigration, water fuels the economy. Proper management of the quality and quantity of the state's liquid gold is critical to California's well being.

Page CWI-1

Labor requirements vary depending on the degree of automation and mechanization of the equipment used. Hand-move systems require the least degree of skill, but the greatest amount of labor. At the other extreme, center pivot, linear move and LEPA systems require considerable skill in operation and maintenance, but the overall amount of labor needed is low.

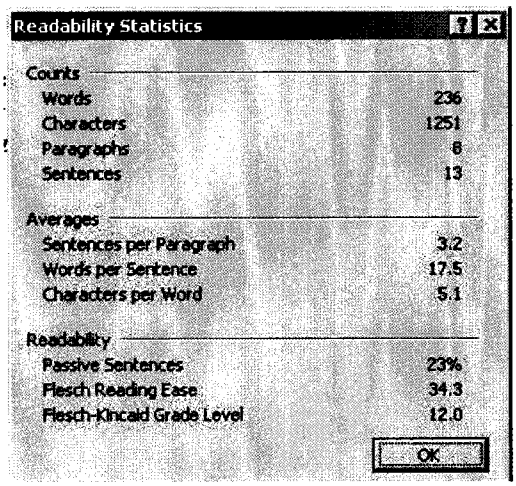
Page SYS-11

A primary objective of irrigation is to provide water which can be used beneficially by enhancing plant growth. Transpiration is the water which passes from the soil into agricultural plant roots, through the plants, and out the leaves into the air. The majority of water movement through the soil and plant is as a liquid. Once it reaches the leaves, it is converted to water vapor in the stomata (large pores on the underside of leaves).

Page SPW-24

Water which percolates below the root zone (leaches) carries salt with it. Some leaching is necessary to remove the salts which are brought in by the irrigation water itself. However, the excessive leaching cause by non-uniformity and poor irrigation scheduling results in heavy fertilizer losses.

Page E-21



Readability Statistics

Counts	
Words	236
Characters	1251
Paragraphs	6
Sentences	13
Averages	
Sentences per Paragraph	3.2
Words per Sentence	17.5
Characters per Word	5.1
Readability	
Passive Sentences	23%
Flesch Reading Ease	34.3
Flesch-Kincaid Grade Level	12.0

OK

West Hills College
Agriculture Department
Fall 2011

Course Information
Agricultural Engineering Technology 22 – Irrigation Evaluation and Design

Instructor: Mr. Clint Cowden
Meeting Time: Monday, Wednesday, Friday – 2:00 – 2:40 pm, 3:00 – 4:50 pm
Meeting Place: FF 404, Allen Farm
Office: FF 402, Allen Farm
(559) 934-2701 – (559) 816-9465 – cell – (559) 935-1425 - home
clintcowden@whccd.edu

Office Hours: M, T, W, Th, F – 1:00 – 2:00 pm,
*At all other times as long as the office door is open, you are welcome to visit the office. Additional office hours can be made by appointment.

Course Description

AET 22 will cover on-farm irrigation system evaluation and management; including drip, micro-spray, furrow, border strip, and sprinkler systems. Irrigation efficiency and uniformity, land grading design and operation, management, and evaluation of irrigation methods will be discussed. Basic principles of on-farm irrigation system design; micro, surface, and sprinkler irrigation systems will be covered. This course aligns with the Irrigation Association's Certified Irrigation Designer certification (CID Step 2). (AA, CSU, UC)

Course Objectives

Upon completion of the course, students will be able to:

1. perform an irrigation system evaluation for drip/micro irrigation systems.
2. determine irrigation system distribution uniformity and application efficiency for given irrigation systems.
3. determine which type of irrigation system is appropriate for given specific site conditions, i.e. soil properties and crop data.
4. specify materials and components to make a complete system that optimizes the balance between capital investment and operation and maintenance costs.

Student Learning Outcomes

- As determined by a project, students will perform a scientific distribution uniformity irrigation evaluation using the ITRC model for a drip irrigation system.
- As determined by a project, students will perform a scientific distribution uniformity irrigation evaluation using the ITRC model for a hand move irrigation system.
- Given a laboratory scenario, students will size irrigation pipe using crop information and friction charts.

Textbooks

- Irrigation Evaluation
  Irrigation Training & Research Association
- Certified Irrigation Designer Reference Manual
  Irrigation Association

Supplies

Students should come to class daily with a pen or pencil, binder and notepaper. Much of the work will be done on the computer or out in the field, but note taking will be required during the lecture. In addition, this course will require approximately one 250 MB or greater USB storage device, a scientific calculator

and 16 medium-sized (freezerettes) disposable storage containers. It is also recommended to have a pair of rubber boots and rain gear.

Grading Policies

Course grades will be calculated on a straight scale – in other words, there will not be a curve. Course grades will be determined according to the following items:

Lab Assignments	35%
Projects (4)	30%
Exams (including final)	20%
Homework	5%
Class Participation	5%
Notebook	5%
Total	100%

Final Grades will be assessed as follows:

100-90%	A
89-80%	B
79-70%	C
69-60%	D
<60%	F

Lab Assn's: The introduction of topics and subsequent lecture material will culminate with an in-class assignment to be completed in the "lab" portion of each class meeting. If student is unable to complete the assignment in the allotted time, work must be completed before the next class meeting.

Projects: There will be 4 projects as assigned throughout the semester: drip irrigation evaluation, sprinkler evaluation, a wildcard evaluation and pipe sizing. The wildcard evaluation will be chosen and set up by the student and can be either a drip, micro, sprinkler or surface irrigation evaluation. The projects will be written up in an ASAE report format.

Exams: There will be two midterms and a comprehensive final. Exams will be derived 50% from the laboratory and 50% from the reading.

Homework: Homework will be due at the first five minutes of lecture as assigned; no homework will be accepted after this time. Homework must be presented neatly on one side of paper only and stapled together before coming to class. Problems must be solved in a clear, precise manner and all work must be shown and properly laid out. Sources must be cited as well as numbers obtained from tables.

Participation: Students will be graded on class and laboratory participation, including laboratory set-up/tear-down, discussions and professionalism.

Notebook: Student will maintain a notebook throughout the semester and turn in for grading during the final.

Safety

Safety is an important issue, both within the classroom and the laboratory. Unsafe behavior will not be tolerated as it puts you, your fellow students and your instructor at risk of injury and or death. Unsafe behavior will be handled using the following rules:

1st offense	-	Verbal warning
2nd offense	-	Student must meet with the dean
3rd offense	-	Student will be removed from the class

Other Info

- Wear only appropriate clothing in the laboratory. Not allowed are loose flowing sleeves or blouses, bulky jewelry, scarves, shorts, miniskirts, bare feet, sandals and open toe shoes. Required are tight long sleeves or short sleeves, slacks or mid-length skirts and regular shoes or sneakers.

- Attendance is required and roll will be taken daily. Students should come to class ready to participate in classroom discussion and activities. The instructor is not responsible for dropping a student for lack of attendance. If the student stops attending class, student will receive an 'F' in the course if student does not drop the course.

- Students are expected to do their own work on exams and assignments, unless otherwise stated. For example, some lab exercises may be completed in a group setting. Cheating will not be tolerated and will result in an automatic F on the assignment or exam. Consult the West Hills College Catalog for further details regarding college policies on cheating and/or plagiarism.

- Students will not be allowed to make up lab activities or exams unless PRIOR ARRANGEMENTS are made with the instructor. Instructor will determine whether or not make up opportunities are appropriate on an individual basis.

- Students with learning disabilities or challenges are encouraged to notify the instructor so that additional resources can be made available.

- Cell phones, pagers, and other electronic devices must be turned off during class.

- AET 22 meets in lecture 2 hours per week and 6 hours per week in classroom and field laboratory. The lecture environment is standard classroom table and chair seating. The classroom laboratory – approximately 35% of laboratory time – in mixed standard classroom and a 20 station computer environment in which students sit in chairs to use the computer, moving frequently to either the standard laser printer or an ink jet large image plotter. The field laboratory – approximately 65% of the laboratory time – is conducted in the field requiring the student to move throughout the area making observations, collecting data, installing instrumentation, adjusting equipment and machinery, and operating tractors and off highway vehicles. In addition the students will attend field trips which require mobility in tight quarters and extended periods of walking.

- Employment opportunities include on the farm application of irrigation and technology. Success requires the employee to:
  - Use muscles to lift, push, pull or carry heavy objects.
  - Move two or more limbs together to complete job tasks.
  - Make quick, precise adjustments to machine controls.
  - Use one or two hands to grasp, move or assemble objects.
  - Use muscles for extended periods without getting tired.
  - Use stomach and lower back muscles to support the body for long periods.
  - Coordinate movement of several parts of the body, such as arms and legs, while moving in the job setting.
  - Quickly and repeatedly bend, stretch, twist, or reach with the body, arms and legs.
  - Use muscles to jump, sprint, or throw objects.
  - See object details, whether they are nearby or far away.
  - Operate farm equipment.
  - Ability to climb on and off farm equipment.

- "If you have a verified need for an academic accommodation or materials in alternate media (i.e. Braille, large print, electronic text, etc.) per the Americans with Disabilities Act or Section 504 of the Rehabilitation Act, please contact you instructor as soon as possible."

- **INSTRUCTOR ACCOMMODATION RESPONSIBILITIES**
  It is the instructor's responsibility to comply with the DSPS policies and procedures. The following are the instructor requirements for testing accommodations:
  1. Please notify the DSPS program if you feel any additional accommodations would be necessary for the student.
  2. Place test in a sealed envelope and deliver it either to the DSPS Department or DSPS lab. Do not allow the student to deliver the test.
  3. **Please indicate test conditions (open book, notes permitted, etc.).**
  4. **Please indicate the deadline for administration of the test.**
  5. Upon completion of the exam, we will place the test in a sealed envelope in your mailbox. Please contact our program if you have any questions. Thank you for your continued cooperation with the DSPS Program

- **STUDENT ACCOMODATION RESPONSIBIITIES**
  It is the student's responsibility to comply with the DSPS policies and procedures. The following are the student requirements for testing accommodations:
  1. Test proctoring may be provided to a student who has an educational limitation and would benefit from this service.
  2. Please discuss this service with the DSPS office. The DSPS staff will review your request and your educational plan; then make an appropriate accommodation.
  3. Test proctoring will be provided at time and a half of your regular examination length. Make proctoring arrangements with each instructor prior to the test dates. Students should inform the instructor to forward the exam to the DSPS lab. If possible, proctoring should take place the same day of the exam; if not, the exam must be taken within 2 days of the regularly scheduled time. After 2 days, the exam will be returned to the instructor.
  4. Appear promptly at the designated time for proctoring with the necessary testing supplies (pencils, pens, scantrons, essay books, etc.) All other materials must be left at the door.
  5. Plan your testing time carefully as you will not be allowed to leave during the testing time and return later to finish.
  6. Do not discuss the classroom tests with other students.
  7. The coordination of the proctoring services is the sole responsibility of the DSPS staff.
  8. Failure to comply with the above procedures may result in the termination of this service.

THE FINAL EXAM IS TENTATIVELY SCHEDULED FOR: December 14, 2011 1:00 pm

AET 22
Student Signature Page
Fall 2011

I, _____, have read and understand the requirements for AET 22. Including the following grading policy:

Lab Assignments	_____%
Projects (4)	_____%
Exams (including final)	_____%
Homework	_____%
Class Participation	_____%
Notebook	_____%
Total	_____%

I have read and understand the following policy on unsafe behavior:

Unsafe behavior will be handled using the following rules:

1st offense - _____

2nd offense - _____

3rd offense - _____

I have read and understand the following policy on cheating and plagiarism:

Cheating will not be tolerated and will _____.

I have read and understand the following policy on attendance:

If the student stops attending class, student will _____.

By signing and returning this document I acknowledge my rights and responsibilities for this course.

_____
Student Signature

_____
Date

West Hills College Coalinga
Agenda Routing Form

Check the appropriate box, fill in name and date.

☒ **Originating Faculty**

Name: C. Cowden
Course Packet has been reviewed and approved for Curriculum Agenda Date: 4/6/09
Comments:

☒ **Curriculum Committee Representative**

Name: C. Cowden
Course Packet has been reviewed and approved for Curriculum Agenda Date: 4/6/09
Comments:

☒ **Technical Review Committee (TRC)**

Name: C. Cowden
Course Packet has been reviewed and approved for Curriculum Agenda Date: 4/20/09
Comments:

☐ **Chief Instructional Officer (CIO)**

Name:
Course Packet has been reviewed and approved for Curriculum Agenda Date:
Comments:

West Hills College Coalinga
New Course Packet

Course Prefix, Number & Title: **AET 22 - Irrigation Evaluation and Design Principles**
Faculty Originator: **C. Cowden**
Date: **4/6/09**

Checklist:

- ☒ **New Course Proposal Form**
- ☒ **Course Outline**
- ☐ **Distance Education Statement**
- ☒ **Learning Resources Statement**
- ☒ **Adopted Textbook Form**
- ☐ **Prerequisite Form A**
- ☐ **Prerequisite Form B**
- ☐ **Prerequisite Form C**
- ☐ **Limitations on Enrollment Justification**

Signatures:

_____ Date_____ Originating Faculty (required)	_____ Date_____ Articulation Officer (required if transferable)
_____ Date_____ Curriculum Instructional Area Representative (required)	_____ Date_____ Dean of Learning Resources
_____ Date_____ Dean of Student Learning (required)	
_____ Date_____ College Curriculum Committee Chair (approved)	Date_____ West Hills Community College District Board of Trustees (approved)

☒ **This curriculum packet has been discussed with faculty in the Instructional Area**

NEW COURSE PROPOSAL

West Hills College Coalinga

Faculty Originator: **C. Cowden** Instructional Area: **AG/BUS/CIS/CWEE** Date: **4/6/09**

TO BE COMPLETED BY INITIATING FACULTY MEMBER

EXACT CATALOG LISTING:
Course Prefix & Number: **AET 22**
Course Title: **Irrigation Evaluation and Design Principles**

Units: **4**
Semester Lecture Hours: **36** Semester Lab Hours: **108**

Transferability (attach evidence):
CSU: ☒ UC: ☒ Private: ☐

1. Yes ☒ No ☐ Is the course part of a new major? If so, *explain*. As an elective for the proposed Agricultural Engineering Technology degree.

2. Yes ☒ No ☐ Is the course intended for transfer? (Check all that apply.)
(See the Articulation Officer.)
Elective ☒ General Education ☐ Major Requirement ☒
(Submit requests for General Education separately.)

3. Yes ☒ No ☐ Is the course part of the Associate Degree? Proposed AET
Elective ☒ General Education ☐ Major Requirement ☒

4. Yes ☒ No ☐ Is the course part of a Certificate Program? If so, state the certificate: Proposed Irrigation Technology

5. Yes ☒ No ☐ Is the course vocational?
6. Yes ☒ No ☐ Has an advisory committee been involved? Attach minutes.

7. Room Space Requirements: (Consider # of stations, safety regulations prescribed by law, etc.)
20
8. Staffing Implications: (As a result, what other course may not be offered?)
N/A
9. Equipment Requirements:
Each group of four students will need an evaluation kit including: graduated cylinders, pressure gauges, goof plugs, hand tools, water capture devices and etc. $200/year for equipment upkeep and replacement.
10. Learning Resources: (Will this course require special collections or additions to current holdings?) **no**

11. Estimated Costs:

Start Up: Staffing:	$ 7488	Supplies:	$	Equipment:	$ 10000
On-Going: Staffing:	$ 7488	Supplies:	$	Equipment:	$ 200

12. Material Fees: $ *Justification*
13. Yes ☐ No ☒ Is special funding available?
14. Yes ☐ No ☒ Evidence of meeting needs of District ethnic demographics?
15. Yes ☐ No ☒ Are there special safety regulations. If so, *explain*.
16. Yes ☒ No ☐ Requires additional Information Technology Services resources. If so, *explain*. ITRC **Irrigation evaluation software.**

COURSE OUTLINE
West Hills College Coalinga

Date: **4/6/09**

Instructional Area: **AG/BUS/CIS/CWEE**

Course Prefix & Number: **AET 22**

Course Title: **Irrigation Evaluation and Design Principles**

Units: **4**

Grading option (select one): ☒ Standard Grading ☐ Credit/No Credit
☐ Standard Grading/Credit/No Credit

Materials Fee $ _____ *Justification:*

Semester Lecture Hours: **36** Semester Lab Hours: **108**

How many times may this course be taken for credit? (repeatability) 1

1. PREREQUISITE(S):

   and/or

   ADVISORY(S): AET 21

2. CATALOG DESCRIPTION: AET 22 will cover on-farm irrigation system evaluation and management; including drip, micro-spray, furrow, border strip, and sprinkler systems. Irrigation efficiency and uniformity, land grading design and operation, management, and evaluation of irrigation methods will be discussed. Basic principles of on-farm irrigation system design; micro, surface, and sprinkler irrigation systems will be covered. This course aligns with the Irrigation Association's Certified Irrigation Designer certification (CID Step 2).

3. INSTRUCTIONAL OBJECTIVES (Use measurable outcomes only-course that allow repeatability must specify objectives for each time the course can be repeated):
   Upon completion of the course the student will be able to:
   A. perform an irrigation system evaluation for drip/micro irrigation systems.
   B. determine irrigation system distribution uniformity and application efficiency for given irrigation systems.
   C. determine which type of irrigation system is appropriate for given specific site conditions, i.e. soil properties and crop data.
   D. specify materials and components to make a complete system that optimizes the balance between capital investment and operation and maintenance costs.

4. COURSE CONTENT AND SCOPE (Instructional topics or units):
   A. Lecture
      1. Irrigation Performance Measures
      2. Seasonal Performance
      3. Irrigation System Evaluations
         a. Furrow
         b. Border Strip
         c. Drip

d. Micro Irrigation
e. Permanent Undertree Sprinklers
f. Hand Move Sprinklers
g. Side Roll Sprinklers
h. Linear Move
i. Center Pivot

4. Irrigation System Selection Based on Specific Site Conditions
   a. Types of Systems
   b. Advantages/disadvantages
   c. Theory of Selected System
   d. Specific Site Requirements
5. Hydraulics of Irrigation Systems
   a. Hydraulic Principles
   b. Friction Losses in Pipeline Systems
6. Irrigation Pumps
   a. Volute and Turbine Pumps
   b. Heads Related to Pumps
7. Electricity for Irrigation
   a. Fundamentals of Electricity
   b. Electrical Formulas
   c. Electric Motors

B. Laboratory
1. Irrigation System Evaluations
   a. Furrow
   b. Border Strip
   c. Drip
   d. Micro Irrigation
   e. Permanent Undertree Sprinklers
   f. Hand Move Sprinklers
   g. Side Roll Sprinklers
   h. Linear Move
   i. Center Pivot

5. <u>INSTRUCTIONAL METHODOLOGIES</u> (instructor initiated learning strategies):
A. Hands on experience
B. Lecture
C. Demonstrations

6. <u>MULTIPLE METHODS OF EVALUATION</u> (measurements of student achievement):
A. Unit exams consisting of objective and essay type questions
B. Quizzes
C. Classroom discussion and participation
D. Oral presentations
E. Graded problem solving sets
F. Laboratory skill demonstrations
G. Written assignments

7. <u>WRITING ASSIGNMENTS/PROFICIENCY DEMONSTRATION</u>:
A. Students will be given exams that include essay questions.
B. Students will be required to demonstrate laboratory skills.

8. ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING
(use detail when describing student assignments and state in cognitive terms):
Students will be given a field for which they must determine which type of evaluation to perform, perform the evaluation and prepare and present a presentation to the farm manager concerning the repairs and maintenance that must be performed.

9. ASSIGNMENTS, METHODOLOGIES, OR OTHER EXAMPLES OF HOW CULTURAL PLURALISM IS ADDRESSED:
There are many design constraints faced by irrigation designers in other regions of the world which are not faced by American designers. Instructor will open discussions and assignments which will introduce specific issues of cultural diversity and include examples of how irrigation systems vary throughout the world, for example, the delivery systems used in regions with limited electricity.

10. REQUIRED EXTRA CLASS ASSIGNMENTS:
Three eight-hour field trips, during times other than designated class time, are required.

LIBRARY/LEARNING RESOURCES STATEMENT
West Hills College Coalinga

Course Prefix, Number & Title: **AET 22 Irrigation Evaluation and Design Principles**

Instructional Area: **AG/BUS/CIS**

Faculty Originator: **C. Cowden** Date: **4/6/09**

The holdings of the L/LRC collection in the subject area(s) related to the proposed new/revised course/discipline have been reviewed.

The L/LRC has sufficient resources presently available for support of this course/discipline in the following areas:

- ☒ Books
- ☒ Reference Materials
- ☒ Media
- ☒ Electronic Resources

Additional items have been recommended for purchase for support in this course/discipline in the following areas:

- ☐ Books
- ☐ Reference Materials
- ☐ Media
- ☐ Electronic Resources

Comments:

Signature:

_____ Date_____

Librarian (required)

ADOPTED TEXTBOOK FORM

West Hills College Coalinga

Course Prefix, Number & Title: **AET 22 Irrigation Evaluation and Design Principles** Instructional Area: **AG/BUS/CIS/CWEE**

Faculty Originator: **C. Cowden** Date: **4/6/09**

1. Recommended textbooks: All transfer-level courses require 11-12th grade level or above.

   A. Title: **Irrigation Evaluation**
   Edition: _____ ISBN #: _____
   Author(s): **Burt, Charles; Walker, Robert; Styles, Stuart; Parrish, John**
   Publisher: **Irrigation Training And Research Center**
   Required ☒ Optional ☐
   Readability level: **12.6** (Attach readability materials to original.)

   B. Title: **Certified Irrigation Designer Reference Manual**
   Edition: _____ ISBN #: _____
   Author(s): _____
   Publisher: **The Irrigation Association**
   Required ☒ Optional ☐
   Readability level: **12.3** (Attach readability materials to original.)

2. Supplemental text(s):

   A. Title: _____
   Edition: _____ ISBN #: _____
   Author(s): _____
   Publisher: _____
   Required ☐ Optional ☐
   Readability level: _____ (Attach readability materials to original.)

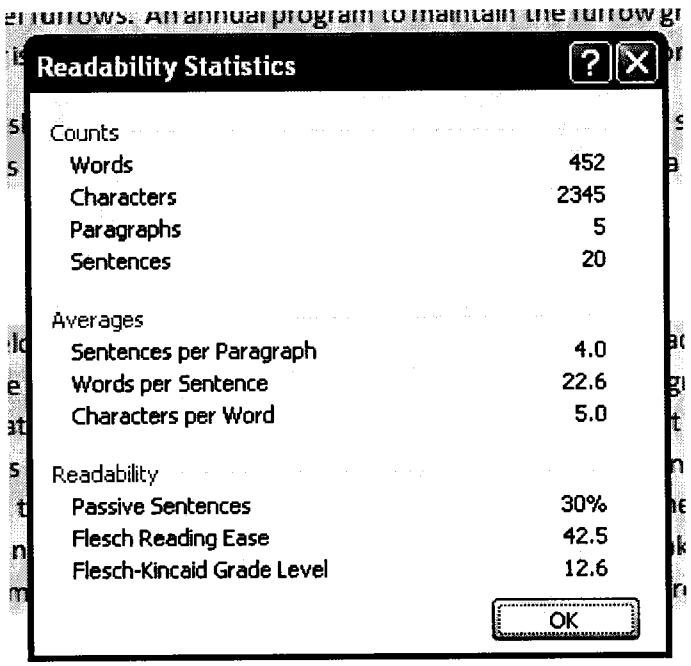
Readability

Irrigation Evaluation

Section III - Page 15
High and low spots within a level furrow system result in decrease in the uniformity of the depth of water infiltration. The magnitude of the reduction in uniformity is directly related to the size of the high and low spots in the level furrows. An annual program to maintain the furrow grade is very important where the cost of water is high and/or where water control for seed germination is critical. Maintenance programs should include land smoothing with land planes or drag scrapers prior to planting the crop. This is extremely important for full cover crops such as alfalfa which are not planted each year.

Section VIII – Page 5
The "volume caught" below is a very important item. It is also one of the least accurate measurement s in some surveys because it takes time and evaluators often use containers and graduated cylinders which are too small. Water should be diverted into a large container for at least one minute to minimize measuring errors. Errors can also be reduced by using very large graduated cylinders (over 20 ml in size) to measure the water in the container. It is best to take at least two measurements (both for the same time) per location and enter the average volume caught in the table below. Make sure the sprinklers are not plugged before making measurements. Plugging problems are not ignored; they are handled in a previous question.

Section XIV – Page 426
A beneficial use of water, by definition, supports the production of crops: food, fiber, oil, landscape, turf, ornamentals, or forage. Water consumed in order to achieve an agronomic objective is beneficial. The major beneficial uses are crop ET and water needed for improving or maintaining soil productivity, that is, salt removal (for simplicity, the term "salts" is used to refer to soluble chemicals transported by water). Additional beneficial uses might include water applied for climate control (cooling, or frost protection of plants), seedbed preparation, germination of seeds, softening of a soil crust for seedling emergence, and ET from plants beneficial to the crop (wind breaks or cover crops for orchards).



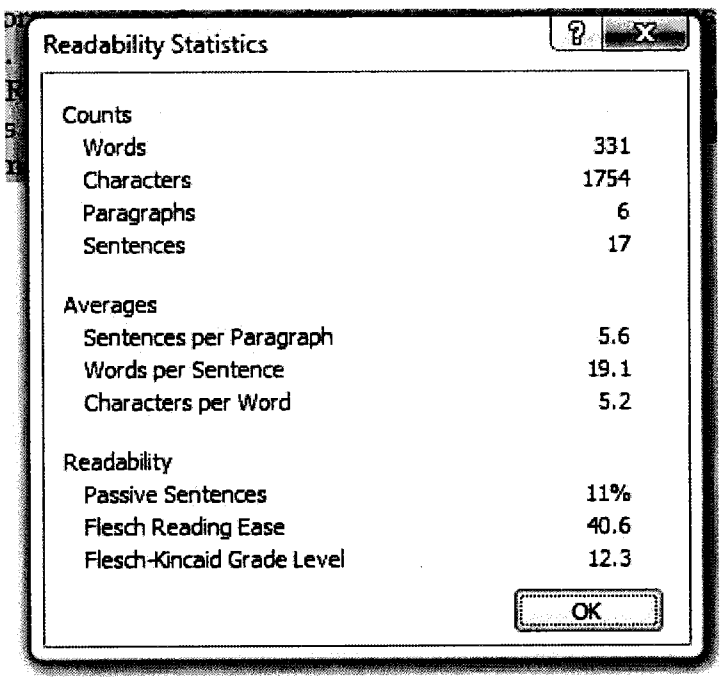
Readability

Certified Irrigation Designer Reference Manual

Page 16
The most important climatic factor affecting evapotranspiration is solar radiation. It is the source of energy necessary to transfer water from a liquid to the vapor phase from plant leaves and the soil surface. Soil and air temperatures, humidity, rainfall, wind, and plant characteristics also influence evapotranspiration of a given crop. Soil physical factors affecting evapotranspiration include quantity of available water in the root zone, concentration of carbon dioxide in the soil, soil temperature, and salt concentration. Evaporation from the soil is greater when the soil surface is wet and only partial plant cover exists, than when the soil surface is dry and the plant canopy is nearly complete.

Page 108
Centrifugal pumps are not positive displacement pumps as their flow rates do not remain constant against changing heads. An example of a positive displacement pump is a piston-type chemical injection pump commonly used with pressurized irrigation system. Regardless of the pressure this pump operates against, a constant flow of chemical enters the system at a flow rate dictated by the diameter, stroke and traveling speed of the piston. The flow rate from a centrifugal pump is indirectly related to the head it operates against. That is, if the head it operates against increases (by partially closing a discharge valve of for some other reason), the flow rate decreases.

Page 153
Chemical treatment of soil is a good way to decrease ground rod resistance when you can't drive deeper rods or use multiple rods because of hard underlying rock. When choosing the chemical treatment, consider the corrosive effects of the chemical on the rod. Also, consider the potential effects of the chemical in the soil. Some commonly used chemicals include, ordinary rock salt, copper sulfate and magnesium sulfate. Remember, chemical treatment is not a permanent way to improve your rod resistance. The chemicals are gradually washed away in the soil through rainfall and natural drainage. Another method of treatment to consider is the use of a soil wetting agent.


Readability Statistics

Counts	
Words	331
Characters	1754
Paragraphs	6
Sentences	17
Averages	
Sentences per Paragraph	5.6
Words per Sentence	19.1
Characters per Word	5.2
Readability	
Passive Sentences	11%
Flesch Reading Ease	40.6
Flesch-Kincaid Grade Level	12.3

OK

Farm of the Future
Advisory Meeting Minutes
Irrigation Technology
April 16, 2009

The Irrigation Technology Advisory Committee met in FF404 at the Farm of the Future in Coalinga, California.

Members Present
Dominic Rossini – Eurodrip
Linda Lahondey – Lemoore Chamber of Commerce
Jamie Anthony – Coalinga High School
Kerri Birdwell – Cal Poly, SLO
Mike Dow – Helena Chemical
Rod Haarberg – Topcon Positioning
Wade Cook – Topcon Positioning
Nick Sumonium – CSUF
Balaji Sethuramasamyraja – CSUF
Randy Grumbles – WHC Student
Mike Howard – Chico State
Kurt Quade – Quade Consulting
Robert Nielsen – USDA – Agricultural Engineer
Tim Stone – Integro
Jack Ramsey – WHC
Robert Blattler – T-Tape
Arturo Carvajal – NRCS – Water Specialist
Rick Peeren – Irrichem
Clint Cowden
Joy Cowden

WELCOME
Clint Cowden thanked everyone for coming and stated the importance of their involvement in the committee. He stressed the importance of the committee and how far the college has improved.

INTRODUCTIONS
Clint Cowden made introductions around the table.

PROGRESS REPORT
Clint Cowden gave an overall update about the Farm of the Future.

CURRICULUM
From industry advice we are creating and Irrigation Technology certificate program. We would like approval for the following courses.
Kerri Birdwell moved motion to approve course AET 21.
Mike Howard and Tim Stone second.
Motion approved.
Mike Dow moved motion to approve course AET 22.
Kurt and Jamie second.
Motion approved.
Mike Howard moved motion to approve course AET 23.
Kerri Birdwell and Kurt Quade second.

Motion passed.
Kurt Quade and Randy Grumbles moved motion to approve course AET 24.
Tim Stone and Wade Cook second.
Motion passed.
Kerri Birdwell moved motion to approve Irrigation Technology certificate.
Kurt Quade and Time Stone second
Motion passed.

Our goal is to prepare students for the Irrigation Association's Certified Irrigation Designer Certification. Students will be able to take additional courses to obtain an Agricultural Engineering Technology Associate Degree with an emphasis in Irrigation Technology.

COMMENTS
Linda Lahodney suggested adding college information to all Farm Bureau websites and recruit through growers.
Rick Pereen suggested recruiting students aged 21-22, more focused.
Wade suggested contacting the local VA's to recruit veterans.

Clint adjourned meeting

West Hills College
Agriculture Department
Fall 2005

Course Information
Agriculture 10 – Introduction to Agriculture

Instructor: Mr. Clint Cowden
Meeting Time: Monday & Wednesday, 9:00 – 10:20am
Meeting Place: FF 404, Allen Farm
Office: FF 402, Allen Farm
(559) 934-2701
clintcowden@westhillscollege.com
Office Hours: Monday & Wednesday, 8:00 – 9:00 am
Tuesday & Thursday, 11:00 am – 12:30 pm
*At all other times as long as the office door is open, you are welcome to visit my office. Additional office hours can be made by appointment.

Course Description

Agriculture 10 will provide the student with a general overview of California agriculture. Employment opportunities and current socio- economic issues will be discussed. (AA, CSU).

Course Objectives

Upon completion of the course, students will be able to:

1. Acquire knowledge of agricultural jobs concerning the following:

a. Description of Work
b. Earnings
c. History of Occupation
d. Working Conditions
e. Hours of Work
f. Abilities Required
g. Temperament Required
h. Education and Training Required
i. Attractive Features
j. Disadvantages
k. Outlook for the Future
l. Licensing, Unions, Organizations
m. Suggested College Courses and Activities
n. Methods to Enter Work

2. Prepare and present presentations related to California Agricultural Issues.
3. Participate in agriculture professionals presentations with professionalism.

Textbook

NONE

Other Materials

Students should come to class daily with a pen or pencil, binder and notepaper. The majority of work will be done on the computer, but a small amount of note taking will be required.

Grading Policies

Course grades will be calculated on a straight scale – in other words, there will not be a curve. Course grades will be determined according to the following items:

Class Assignments	40%	
Projects	40%	
Participation	10%	
Exams (including final)	10%	
Notebook	5%	
Total	100%*	*(5% Extra Credit)

Final Grades will be assessed as follows:

100-90%	A
89-80%	B
79-70%	C
69-60%	D
<60%	F

Class Assn's: The introduction of topics and subsequent lecture material will culminate with an in-class assignment to be completed each class meeting. If student is unable to complete the assignment in the allotted time, work must be completed before the next class meeting.

Projects: Class will be divided into groups, with each group responsible for preparing and presenting presentations on the assigned agricultural issues.

Participation: Students will be graded on class participation, including discussions and professionalism.

Exams: There will be one exams and a comprehensive final.

Notebook: Student will maintain a notebook throughout the semester and turn in for grading during the final.

Other Info

- Attendance is required and roll will be taken daily. Students should come to class ready to participate in classroom discussion and activities.
- Students are expected to do their own work on exams and assignments, unless otherwise stated. For example, some lab exercises may be completed in a group setting. Cheating will not be tolerated and will result in an automatic F on the assignment or exam. Consult the West Hills College Catalog for further details regarding college policies on cheating and/or plagiarism.
- Students will not be allowed to make up lab activities or exams unless PRIOR ARRANGEMENTS are made with the instructor. Instructor will determine whether or not make up opportunities are appropriate on an individual basis.
- Students with learning disabilities or challenges are encouraged to notify the instructor so that additional resources can be made available.
- Cell phones, pagers, and other electronic devices must be turned off during class.

THE FINAL EXAM IS TENTATIVELY SCHEDULED FOR: Monday Dec 12 - 9:00 - 11:00am

West Hills College
Agriculture Department
Spring 2011

Course Information
AGMM 52D – Technical Report Writing

Instructor: Mrs. Joy Cowden
Meeting Time: Monday- Thursday – 9:00 am – 11:50 am – February 8-18, 2011
Meeting Place: FF403
Office: FF 402, Allen Farm
(559) 934-2708
joycowden@whccd.edu
Office Hours: M,T,Th – 12:00pm – 1:00pm
*At all other times as long as the office door is open, you are welcome to visit the office. Additional office hours can be made by appointment.

Course Description

This course covers the basics of technical report writing as applied to the agricultural industry. Students will identify and write various types of reports, analyze data, and record information that are associated with production work.

Course Objectives

Upon completion of the course, students will be able to:

1. identify and write various types of reports
2. analyze data
3. interpret certain types of production reports
4. interpret and record information to industry standards as determined by the instructor.

Student Learning Outcomes

- Given a maintenance mechanic work scenario, students will be able to complete an accident investigation report.
- Given a laboratory scenario, students will be able to write a user's manual for a piece of equipment.

Textbook

Industrial Maintenance, 2nd Ed.

Other Materials

Students should come to class daily with a pen or pencil, binder and notepaper. Much of the work will be done in the classroom or out in the laboratory, but note taking will be required during the lecture.

Grading Policies

Course grades will be calculated on a straight scale – in other words, there will not be a curve. Course grades will be determined according to the following items:

Lab Assn's	30%
Projects	30%
Class Participation	25%
Final	10%
Notebook	5%
Total	100%

Final Grades will be assessed as follows:

100-90%	A
89-80%	B
79-70%	C
69-60%	D
<60%	F

Lab Assn's: The introduction of topics and subsequent lecture material will culminate with an in-class assignment to be completed in the "lab" portion of each class meeting. If student is unable to complete the assignment in the allotted time, work must be completed before the next class meeting.

Projects: Students will complete 3 projects; 1) office correspondence; 2) timecard and work log for class and 3) instruction manual.

Participation: Students will be graded on class participation, including discussions and professionalism.

Final: There will be a comprehensive final derived from lecture and laboratory assignments.

Notebook: Student will maintain a notebook, throughout, with all handouts and projects to turn in for grading during the final.

Other Info

- Wear only appropriate clothing in the laboratory. Not allowed are loose flowing sleeves or blouses, bulky jewelry, scarves, shorts, miniskirts, bare feet, sandals and open toe shoes. Required are tight long sleeves or short sleeves, slacks or mid-length skirts and regular shoes or sneakers.

- Attendance is required and roll will be taken daily. Students should come to class ready to participate in classroom discussion and activities. The instructor is not responsible for dropping a student for lack of attendance. If the student stops attending class, student will receive an 'F' in the course if student does not drop the course.

- Students are expected to do their own work on exams and assignments, unless otherwise stated. For example, some lab exercises may be completed in a group setting. Cheating will not be tolerated and will result in an automatic F on the assignment or exam. Consult the West Hills College Catalog for further details regarding college policies on cheating and/or plagiarism.

- Students will not be allowed to make up lab activities or exams unless PRIOR ARRANGEMENTS are made with the instructor. Instructor will determine whether or not make up opportunities are appropriate on an individual basis.

- Students with learning disabilities or challenges are encouraged to notify the instructor so that additional resources can be made available.

- Cell phones, pagers, and other electronic devices must be turned off during class.

- Agricultural Maintenance Mechanic courses meet in lecture and classroom and shop laboratory settings. The lecture environment is standard classroom table and chair seating. The classroom laboratory – approximately 20% of laboratory time – in mixed standard classroom and a 20 station computer environment in which students sit in chairs to use the computer, moving frequently to either the standard laser printer. The field laboratory – approximately 80% of the laboratory time – is conducted in the shop requiring the student to move throughout the area making using and adjusting equipment and machinery, and operating various types of equipment. Use of laboratory equipment will require the use of specific safety equipment such as welding helmet and gloves. In addition students must be able to lift heavy objects and make precise movements of hands and limbs.

- Employment opportunities include application of maintenance mechanic skills in manufacturing/processing plants or in other operations. Success requires the employee to:

  - Use muscles to lift, push, pull or carry heavy objects.
  - Move two or more limbs together to complete job tasks.
  - Make quick, precise adjustments to machine controls.
  - Use one or two hands to grasp, move or assemble objects.
  - Use muscles for extended periods without getting tired.
  - Use stomach and lower back muscles to support the body for long periods.
  - Coordinate movement of several parts of the body, such as arms and legs, while moving in the job setting.
  - Quickly and repeatedly bend, stretch, twist, or reach with the body, arms and legs.
  - Use muscles to jump, sprint, or throw objects.
  - See object details, whether they are nearby or far away.
  - Operate shop equipment.
  - Ability to climb on and off machinery equipment.

Tentative Schedule (Instructor holds the right to change without notice)

AGMM 52D Tentative Schedule

		Lecture/Lab	Assignment Due
T	**2/8**	Syllabus/Grammar/Timecards	
W	**2/9**	Farm Show	
Th	**2/10**	Grammar/Sentences/Paragraphs/Memos	Farm Show Lab
M	**2/14**	Sales and Work Orders	Farm Show/Work Orders
T	**2/15**	Accident Report	Memos
W	**2/16**	Instruction Manual	Accident Report 1
W	**2/16**	Grammar	Instruction Manual 1
Th	**2/17**	Instruction Manual	Instruction Manual 2
Th	**2/17**	**Final**	Notebook/ Timecard

AGMM 52D – Technical Report Writing
Signature Page

I, _____, have read and understand the syllabus for AGMM 52D-Technical Report Writing.

Including the following grading policy:

Lab Assn's	_____%
Projects	_____%
Class Participation	_____%
Final	_____%
Notebook	_____%

I have read and understand the following policy on cheating and plagiarism:

Cheating will not be tolerated and will _____.

I have read and understand the following policy on attendance:

If the student stops attending class, student will _____.

By signing and returning this document I acknowledge my rights and responsibilities for this course.

_____
Student Signature

_____
Date

West Hills College Coalinga
Agenda Routing Form

Check the appropriate box, fill in name and date.

☒ **Originating Faculty**

Name: Clint Cowden
Course Packet has been reviewed and approved for Curriculum Agenda Date: 10/31/07
Comments:

☒ **Curriculum Committee Representative**

Name: Clint Cowden
Course Packet has been reviewed and approved for Curriculum Agenda Date: 10/31/07
Comments:

☒ **Technical Review Committee (TRC)**

Name: Scott Sutherland
Course Packet has been reviewed and approved for Curriculum Agenda Date: 20 November 2007
Comments:

☒ **Chief Instructional Officer (CIO)**

Name: Jill Stearns
Course Packet has been reviewed and approved for Curriculum Agenda Date:3.26.08
Comments:

West Hills College Coalinga
New Course Packet

Course Prefix, Number & Title: **AgMM 52D Technical Report Writing**
Faculty Originator: **Clint Cowden**
Date: **10/31/07**

Checklist:

- ☒ **New Course Proposal Form**
- ☒ **Course Outline**
- ☐ **Distance Education Statement**
- ☒ **Learning Resources Statement**
- ☒ **Adopted Textbook Form**
- ☐ **Prerequisite Form A**
- ☐ **Prerequisite Form B**
- ☐ **Prerequisite Form C**
- ☐ **Limitations on Enrollment Justification**

Signatures:

_____ Date_____ Originating Faculty (required)	_____ Date_____ Articulation Officer (required if transferable)
_____ Date_____ Curriculum Instructional Area Representative (required)	_____ Date_____ Dean of Learning Resources
_____ Date_____ Dean of Student Learning (required)	
_____ Date_____ College Curriculum Committee Chair (approved)	Date_____ West Hills Community College District Board of Trustees (approved)

☒ **This curriculum packet has been discussed with faculty in the Instructional Area**

NEW COURSE PROPOSAL

Faculty Originator: **Clint Cowden** Instructional Area: **AG/BUS/CIS/CWEE** Date: **10/31/07**

TO BE COMPLETED BY INITIATING FACULTY MEMBER

EXACT CATALOG LISTING:
Course Prefix & Number: **AG 52D**
Course Title: **Technical Report Writing**

Units: **0.5**
Semester Lecture Hours: Semester Lab Hours: **27**

Transferability (attach evidence):
CSU: ☐ UC: ☐ Private: ☐

1. Yes ☐ No ☒ Is the course part of a new major? If so, *explain.*

2. Yes ☐ No ☒ Is the course intended for transfer? (Check all that apply.)
(See the Articulation Officer.)
Elective ☐ General Education ☐ Major Requirement ☐
(Submit requests for General Education separately.)

3. Yes ☐ No ☒ Is the course part of the Associate Degree?
Elective ☐ General Education ☐ Major Requirement ☐

4. Yes ☐ No ☒ Is the course part of a Certificate Program? If so, state the certificate:

5. Yes ☒ No ☐ Is the course vocational?
6. Yes ☐ No ☒ Has an advisory committee been involved? Attach minutes.

7. Room Space Requirements: (Consider # of stations, safety regulations prescribed by law, etc.)
600 sq. ft. vocational type- building
8. Staffing Implications: (As a result, what other course may not be offered?)

9. Equipment Requirements:

10. Learning Resources: (Will this course require special collections or additions to current holdings?) _____

11. Estimated Costs:

Start Up: Staffing:	$ 3000	Supplies: $	Equipment: $
On-Going: Staffing:	$ 3000	Supplies: $	Equipment: $

12. Material Fees: $ *Justification*
13. Yes ☒ No ☐ Is special funding available?
14. Yes ☒ No ☐ Evidence of meeting needs of District ethnic demographics?
15. Yes ☐ No ☒ Are there special safety regulations. If so, *explain.*
16. Yes ☐ No ☒ Requires additional Information Technology Services resources. If so, *explain.*

COURSE OUTLINE
West Hills College Coalinga

Date: **10/31/07**

Instructional Area: **AG/BUS/CIS/CWEE**

Course Prefix & Number: **AG 52D**

Course Title: **Technical Report Writing**

Units: **0.5**

Grading option (select one): ☒ Standard Grading ☒ Credit/No Credit
☐ Standard Grading/Credit/No Credit

Materials Fee $ _____ *Justification:*

Semester Lecture Hours: Semester Lab Hours: **27**

How many times may this course be taken for credit? (repeatability) 1

1. PREREQUISITE(S): None

   and/or

   ADVISORY(S):

2. CATALOG DESCRIPTION: This course covers the basics of technical report writing as applied to the agricultural industry. Students will identify and write various types of reports, analyze data, and record information that are associated with production work.

3. INSTRUCTIONAL OBJECTIVES (Use measurable outcomes only-course that allow repeatability must specify objectives for each time the course can be repeated):
   Upon completion of the course the student will be able to:
   A. identify and write various types of reports
   B. analyze data
   C. interpret certain types of production reports
   D. interpret and record information to industry standards as determined by the instructor.

4. COURSE CONTENT AND SCOPE (Instructional topics or units):
   A. Description writing for job-related forms
      1. Work orders
      2. Sales orders
      3. Requisitions
      4. Proposals

B. Descriptive writing for job-related records
   1. Safety reports
   2. Inspection reports
C. Reading and taking notes prior to report writing
D. Writing a report
E. Topical Outline
   1. Laws and theorems applied to pneumatic and hydraulics
   2. Names of components used in fluid power systems
   3. Analytical terms and values
   4. British thermal habits of measure
   5. Laws and theorems and identifications of electrical components
   6. Forms and filling procedures used to communicate in the manufacturing work place
   7. Use the WEB to search for identifications and specifications of various control devices

5. INSTRUCTIONAL METHODOLOGIES (instructor initiated learning strategies):
   A. Lectures with demonstrations
   B. Audiovisual materials
   C. Guest speakers from industry to reinforce work order, sales order concepts

6. MULTIPLE METHODS OF EVALUATION (measurements of student achievement):
   A. Unit exams consisting of objective and essay type questions
   B. Quizzes
   C. Classroom discussion and participation
   D. Oral presentations
   E. Graded problem solving sets
   F. Laboratory skill demonstrations
   G. Written assignments

7. WRITING ASSIGNMENTS/PROFICIENCY DEMONSTRATION:
   A. Students will be given exams that include essay questions.
   B. Students will be required to write a final, cumulative report.

8. ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING
   (use detail when describing student assignments and state in cognitive terms):
   Students will be given written and practical exams demonstrating students' ability to apply material learned in lecture and laboratory. For example students will write a final report that incorporates lessons learned in lecture and laboratory.

9. ASSIGNMENTS, METHODOLOGIES, OR OTHER EXAMPLES OF HOW CULTURAL PLURALISM IS ADDRESSED:
   Students will work together in surveying teams and compile their information to be compared with other like teams.

10. REQUIRED EXTRA CLASS ASSIGNMENTS:
    None

LIBRARY/LEARNING RESOURCES STATEMENT
West Hills College Coalinga

Course Prefix, Number & Title: **AG 52D Technical Report Writing**

Instructional Area: **AG/BUS/CIS/CWEE**

Faculty Originator: **Clint Cowden** Date: **10/31/07**

The holdings of the L/LRC collection in the subject area(s) related to the proposed new/revised course/discipline have been reviewed.

The L/LRC has sufficient resources presently available for support of this course/discipline in the following areas:

- ☒ Books
- ☒ Reference Materials
- ☒ Media
- ☒ Electronic Resources

Additional items have been recommended for purchase for support in this course/discipline in the following areas:

- ☐ Books
- ☐ Reference Materials
- ☐ Media
- ☐ Electronic Resources

Comments:

Signature:

_____ Date_____

Librarian (required)

ADOPTED TEXTBOOK FORM

West Hills College Coalinga

Course Prefix, Number & Title: **AG 52D Technical Report Writing** Instructional Area: **AG/BUS/CIS/CWEE**

Faculty Originator: **Clint Cowden** Date: **11/5/07**

1. Recommended textbooks: All transfer-level courses require 11-12th grade level or above.

   A. Title: **Industrial Maintenance**
   Edition: **2nd** ISBN #: **0-8269-3609-1**
   Author(s): **Denis Green, Jonathan F. Cosse**
   Publisher: **American Technical Publishers, Inc.**
   Required ☒ Optional ☐
   Readability level: **10.2** (Attach readability materials to original.)

   B. Title: _____
   Edition: _____ ISBN #: _____
   Author(s): _____
   Publisher: _____
   Required ☐ Optional ☐
   Readability level: _____ (Attach readability materials to original.)

2. Supplemental text(s):

   A. Title: _____
   Edition: _____ ISBN #: _____
   Author(s): _____
   Publisher: _____
   Required ☐ Optional ☐
   Readability level: _____ (Attach readability materials to original.)

   B. Title: _____
   Edition: _____ ISBN #: _____
   Author(s): _____
   Publisher: _____
   Required ☐ Optional ☐
   Readability level: _____ (Attach readability materials to original.)

3. Additional Textbooks:

   A. Title: _____
   Edition: _____ ISBN #: _____
   Author(s): _____
   Publisher: _____
   Required ☐ Optional ☐
   Readability level: _____ (Attach readability materials to original.)

   B. Title: _____
   Edition: _____ ISBN #: _____
   Author(s): _____
   Publisher: _____
   Required ☐ Optional ☐
   Readability level: _____ (Attach readability materials to original.)

Readability

Industrial Maintenance, 2nd Ed. Green, Denis and Jonathan F. Gosse. American Technical Publishers, Inc: Homewood, Illinois. (2006).

Page 39

Electrical shock occurs when a person contacts two conductors of a circuit or when the body becomes part of an electrical circuit. Electrical shock causes muscle spasms that can topple a victim from a ladder or cause the person to be locked to the electrical source. Severe electrical shock can cause heart and lungs to stop functioning.

Page 133

Changes in measured voltage are the best indication that contacts are actually opening or closing. Contacts may not open or close even though the contact operator works properly. An operator is the device that is pressed, pulled, or rotated by the individual operating the circuit. The contacts may be out of position or melted together, or they may have melted away.

Page 220

In a hot water heating system, hot water produced in the boiler is used to transport heat energy to building spaces. Hot water supplied commonly ranges from 180 degrees F to 220 degrees F. Water is heated in the boiler and circulated in the system by the circulating pump. Branch lines direct hot water to the heating unit(s). At the heating unit(s), heat is transferred to building spaces. The water is then circulated back to the boiler to repeat the cycle. A compression tank allows water to expand in the system without increasing the overall system pressure. Water is added to the system by the makeup water supply line.

Page 308

When installing mechanical drive systems, the shafts to be connected by the drive system must be aligned to an acceptable tolerance. For example, a belt or chain drive system requires a lesser tolerance than a gear drive system, and a flexible coupling requires a lesser tolerance than a rigid coupling. Misalignment may be parallel, angular, or a combination of parallel and angular. Parallel and angular misalignment should be checked using a dial indicator, laser, or specialized equipment. Misalignment must be checked when installing or performing routine maintenance on any mechanical drive system. The mechanical drive system experiences premature failure if angular and parallel misalignment occurs.

Readability Statistics

Counts	
Words	357
Characters	1850
Paragraphs	9
Sentences	25
Averages	
Sentences per Paragraph	5.0
Words per Sentence	13.9
Characters per Word	5.0
Readability	
Passive Sentences	40%
Flesch Reading Ease	46.4
Flesch-Kincaid Grade Level	10.2

OK

West Hills College
Agriculture Department
Spring 2011

Course Information
AGMM 52C – Job Preparation

Instructor: Mrs. Joy Cowden
Meeting Time: Monday, Tuesday, Wednesday & Thursday 1:00 pm – 3:50 pm
Meeting Place: FF403, Allen Farm
Office: FF 402, Allen Farm
(559) 934-2708
joycowden@whccd.edu
Office Hours: M,T,Th – 12:00pm – 1:00pm
*At all other times as long as the office door is open, you are welcome to visit the office. Additional office hours can be made by appointment.

Course Description

This course guides students in preparing resumes, portfolios, and improving employment-seeking skills for careers within the agricultural maintenance mechanic industry.

Course Objectives

Upon completion of the course, students will be able to:

1. formulate and develop a paper resume and portfolio
2. analyze and evaluate potential employment opportunities
3. develop written and oral employment opportunity interview skills
4. display attitudes for successful employment and interpersonal relationships to industry standards as determined by the instructor.

Student Learning Outcomes

- Given a job interview scenario, students will be able to complete a formal job interview.
- Given a laboratory scenario, students will be able to fill out a job application.

Textbook

Industrial Maintenance, 2nd Ed.
ISBN: 0-8269-3609-1

Other Materials

Students should come to class daily with a pen or pencil, binder and notepaper. Much of the work will be done in the classroom or out in the laboratory, but note taking will be required during the lecture.

Grading Policies

Course grades will be calculated on a straight scale – in other words, there will not be a curve. Course grades will be determined according to the following items:

Projects	50%
Class Participation	25%
Lab Assn's	20%
Notebook	5%
Total	100%

Final Grades will be assessed as follows:

100-90%	A
89-80%	B
79-70%	C
69-60%	D
<60%	F

Projects: Students will complete 3 projects; 1) employment opportunity search; 2) job application and resume and 3) mock interview.

Participation: Students will be graded on class participation, including discussions and professionalism.

Lab Assn's: The introduction of topics and subsequent lecture material will culminate with an in-class assignment to be completed in the "lab" portion of each class meeting. If student is unable to complete the assignment in the allotted time, work must be completed before the next class meeting.

Notebook: Student will maintain a notebook, throughout, with all handouts and projects to turn in for grading during the exam.

Other Info

- Wear only appropriate clothing in the laboratory. Not allowed are loose flowing sleeves or blouses, bulky jewelry, scarves, shorts, miniskirts, bare feet, sandals and open toe shoes. Required are tight long sleeves or short sleeves, slacks or mid-length skirts and regular shoes or sneakers.

- Attendance is required and roll will be taken daily. Students should come to class ready to participate in classroom discussion and activities. The instructor is not responsible for dropping a student for lack of attendance. If the student stops attending class, student will receive an 'F' in the course if student does not drop the course.

- Students are expected to do their own work on exams and assignments, unless otherwise stated. For example, some lab exercises may be completed in a group setting. Cheating will not be tolerated and will result in an automatic F on the assignment or exam. Consult the West Hills College Catalog for further details regarding college policies on cheating and/or plagiarism.

- Assignments will be due at the first five minutes of lecture as assigned; no homework will be accepted after this time. This applies for any situation except a college authorized absence.

- Students will not be allowed to make up lab activities or exams unless PRIOR ARRANGEMENTS are made with the instructor. Instructor will determine whether or not make up opportunities are appropriate on an individual basis.

- Students with learning disabilities or challenges are encouraged to notify the instructor so that additional resources can be made available.

- Cell phones, pagers, and other electronic devices must be turned off during class.

- AGMM courses meet in lecture and classroom and shop laboratory settings. The lecture environment is standard classroom table and chair seating. The classroom laboratory – approximately 80% of laboratory time – in mixed standard classroom and a 20 station computer environment in which students sit in chairs to use the computer, moving frequently to either the standard laser printer. The field laboratory – approximately 20% of the laboratory time – is conducted in the shop requiring the student to move throughout the area making using and adjusting equipment and machinery, and operating various types of equipment.

- Employment opportunities include application of maintenance mechanic skills in manufacturing/processing plants or in other operations. Success requires the employee to:

  - Use muscles to lift, push, pull or carry heavy objects.
  - Move two or more limbs together to complete job tasks.
  - Make quick, precise adjustments to machine controls.
  - Use one or two hands to grasp, move or assemble objects.
  - Use muscles for extended periods without getting tired.
  - Use stomach and lower back muscles to support the body for long periods.
  - Coordinate movement of several parts of the body, such as arms and legs, while moving in the job setting.
  - Quickly and repeatedly bend, stretch, twist, or reach with the body, arms and legs.
  - Use muscles to jump, sprint, or throw objects.
  - See object details, whether they are nearby or far away.
  - Operate shop equipment.
  - Ability to climb on and off machinery equipment.

- "If you have a verified need for an academic accommodation or materials in alternate media (i.e. Braille, large print, electronic text, etc.) per the Americans with Disabilities Act or Section 504 of the Rehabilitation Act, please contact you instructor as soon as possible."

- **INSTRUCTOR ACCOMMODATION RESPONSIBILITIES**

  It is the instructor's responsibility to comply with the DSPS policies and procedures. The following are the instructor requirements for testing accommodations:

  1. Please notify the DSPS program if you feel any additional accommodations would be necessary for the student.
  2. Place test in a sealed envelope and deliver it either to the DSPS Department or DSPS lab. Do not allow the student to deliver the test.
  3. **Please indicate test conditions (open book, notes permitted, etc.).**
  4. **Please indicate the deadline for administration of the test.**
  5. Upon completion of the exam, we will place the test in a sealed envelope in your mailbox.

  Please contact our program if you have any questions. Thank you for your continued cooperation with the DSPS Program

- **STUDENT ACCOMODATION RESPONSIBIITIES**

  It is the student's responsibility to comply with the DSPS policies and procedures. The following are the student requirements for testing accommodations:

  1. Test proctoring may be provided to a student who has an educational limitation and would benefit from this service.
  2. Please discuss this service with the DSPS office. The DSPS staff will review your request and your educational plan; then make an appropriate accommodation.
  3. Test proctoring will be provided at time and a half of your regular examination length. Make proctoring arrangements with each instructor prior to the test dates. Students should inform the instructor to forward the exam to the DSPS lab. If possible, proctoring should take place the same day of the exam; if not, the exam must be taken within 2 days of the regularly scheduled time. After 2 days, the exam will be returned to the instructor.
  4. Appear promptly at the designated time for proctoring with the necessary testing supplies (pencils, pens, scantrons, essay books, etc.) All other materials must be left at the door.
  5. Plan your testing time carefully as you will not be allowed to leave during the testing time and return later to finish.
  6. Do not discuss the classroom tests with other students.
  7. The coordination of the proctoring services is the sole responsibility of the DSPS staff.
  8. Failure to comply with the above procedures may result in the termination of this service.

Tentative Schedule (Instructor holds the right to change without notice)

AGMM 52C Tentative Schedule

		Lecture/Lab	Assignment Due
T	**2/1**	Syllabus, Course Overview, Introductions	Syllabus signature page
W	**2/2**	Job Seeking Skills	
Th	**2/3**	Job Seeking Skills	
M	**2/7**	Applications	Job Search
T	**2/8**	Applications	
W	**2/9**	Resumes	Job Application
Th	**2/10**	Resumes	
M	**2/14**	Mock Interviews	Resumes
T	**2/15**	**Mock Interviews**	Notebook/Interview

THE FINAL EXAM IS SCHEDULED FOR: February 15, 2011

AGMM 52C – Job Preparation
Signature Page

I, _____, have read and understand the syllabus for AGMM 52C-Job Preparation. . Including the following grading policy:

Projects	_____%
Class Participation	_____%
Lab Assn's	_____%
Notebook	_____%

I have read and understand the following policy on cheating and plagiarism:

Cheating will not be tolerated and will _____.

I have read and understand the following policy on attendance:

If the student stops attending class, student will _____.

By signing and returning this document I acknowledge my rights and responsibilities for this course.

_____
Student Signature

_____
Date

West Hills College Coalinga
Agenda Routing Form

Check the appropriate box, fill in name and date.

☒ **Originating Faculty**

Name: Clint Cowden
Course Packet has been reviewed and approved for Curriculum Agenda Date:11/5/07
Comments:

☒ **Curriculum Committee Representative**

Name: Clint Cowden
Course Packet has been reviewed and approved for Curriculum Agenda Date:11/5/07
Comments:

☒ **Technical Review Committee (TRC)**

Name:Maggie Discont
Course Packet has been reviewed and approved for Curriculum Agenda Date:3/21/08
Comments:

☒ **Chief Instructional Officer (CIO)**

Name: *Jill Stearns*
Course Packet has been reviewed and approved for Curriculum Agenda Date:3.26.08
Comments:

West Hills College Coalinga
New Course Packet

Course Prefix, Number & Title: **AG 52C Job Preparation (MM 52C)**
Faculty Originator: **Clint Cowden**
Date: **11/5/07**

Checklist:

- ☒ **New Course Proposal Form**
- ☒ **Course Outline**
- ☐ **Distance Education Statement**
- ☒ **Learning Resources Statement**
- ☒ **Adopted Textbook Form**
- ☐ **Prerequisite Form A**
- ☐ **Prerequisite Form B**
- ☐ **Prerequisite Form C**
- ☐ **Limitations on Enrollment Justification**

Signatures:

_____ Date_____ Originating Faculty (required)	_____ Date_____ Articulation Officer (required if transferable)
_____ Date_____ Curriculum Instructional Area Representative (required)	_____ Date_____ Dean of Learning Resources
_____ Date_____ Dean of Student Learning (required)	
_____ Date_____ College Curriculum Committee Chair (approved)	Date_____ West Hills Community College District Board of Trustees (approved)

☒ **This curriculum packet has been discussed with faculty in the Instructional Area**

NEW COURSE PROPOSAL

West Hills College Coalinga

Faculty Originator: **Clint Cowden** Instructional Area: **AG/BUS/CIS/CWEE** Date: **11/5/07**

TO BE COMPLETED BY INITIATING FACULTY MEMBER

EXACT CATALOG LISTING:
Course Prefix & Number: **AG 52C**
Course Title: **Job Preparation**

Units: **0.5**
Semester Lecture Hours: Semester Lab Hours: **27**

Transferability (attach evidence):
CSU: ☐ UC: ☐ Private: ☐

1. Yes ☐ No ☒ Is the course part of a new major? If so, *explain.*

2. Yes ☐ No ☒ Is the course intended for transfer? (Check all that apply.)
(See the Articulation Officer.)
Elective ☐ General Education ☐ Major Requirement ☐
(Submit requests for General Education separately.)

3. Yes ☐ No ☒ Is the course part of the Associate Degree?
Elective ☐ General Education ☐ Major Requirement ☐

4. Yes ☐ No ☒ Is the course part of a Certificate Program? If so, state the certificate:

5. Yes ☒ No ☐ Is the course vocational?
6. Yes ☐ No ☒ Has an advisory committee been involved? Attach minutes.

7. Room Space Requirements: (Consider # of stations, safety regulations prescribed by law, etc.)
600 sq. ft. vocational type building
8. Staffing Implications: (As a result, what other course may not be offered?)

9. Equipment Requirements:

10. Learning Resources: (Will this course require special collections or additions to current holdings?) **No**

11. Estimated Costs:

Start Up: Staffing:	$ 3000	Supplies:	$	Equipment:	$
On-Going: Staffing:	$ 3000	Supplies:	$	Equipment:	$

12. Material Fees: $ *Justification*
13. Yes ☒ No ☐ Is special funding available?
14. Yes ☒ No ☐ Evidence of meeting needs of District ethnic demographics?
15. Yes ☐ No ☒ Are there special safety regulations. If so, *explain.*
16. Yes ☐ No ☒ Requires additional Information Technology Services resources. If so, *explain.*

COURSE OUTLINE
West Hills College Coalinga

Date: **11/5/07**

Instructional Area: **AG/BUS/CIS/CWEE**

Course Prefix & Number: **AG 52C**

Course Title: **Job Preparation**

Units: **0.5**

Grading option (select one): ☒ Standard Grading ☒ Credit/No Credit
☐ Standard Grading/Credit/No Credit

Materials Fee $ _____ *Justification:*

Semester Lecture Hours: _____ Semester Lab Hours: **27**

How many times may this course be taken for credit? (repeatability) 1

1. PREREQUISITE(S): None

   and/or

   ADVISORY(S):

2. CATALOG DESCRIPTION: This course guides students in preparing resumes, portfolios, and improving employment- seeking skills for careers within the agricultural maintenance mechanic industry.

3. INSTRUCTIONAL OBJECTIVES (Use measurable outcomes only-course that allow repeatability must specify objectives for each time the course can be repeated):
   Upon completion of the course the student will be able to:
   A. formulate and develop a paper resume and portfolio
   B. analyze and evaluate potential employment opportunities
   C. develop written and oral employment opportunity interview skills
   D. display attitudes for successful employment and interpersonal relationships to industry standards as determined by the instructor.

4. COURSE CONTENT AND SCOPE (Instructional topics or units):
   A. Importance of human relations and attitude in employment
   B. Building and maintaining a positive attitude
   C. Productivity in employment
   D. Succeeding in a new job or assignment
   E. Absenteeism and human relations
   F. Goal setting, attitude, promotion opportunities
   G. Mock interviews
   H. Topical Outline
      1. Describe yourself as the best person for the job
      2. Understand what you are looking for in a position
      3. Understand and describe your strengths
      4. Understanding your short and long term objectives

5. Job interviews
6. Dress for success
7. The four P's of interviewing
8. The handshake
9. Preparing for a Job Fair
10. Identify your mission and goals
11. Identify your life goals
12. Workplace ethics
13. Positive work habits
14. Resume worksheets, self-assessments
15. Interview preparation and techniques
16. Mock interviews
17. Job search strategies
18. Career goals and finding a job

5. INSTRUCTIONAL METHODOLOGIES (instructor initiated learning strategies):
The class is organized as lecture-only with an integral lab component to provide for both the informational and skill needs required for successful completion of the class. The lab assignments will be carefully coordinated to both demonstrate and reinforce the lecture concepts.

6. MULTIPLE METHODS OF EVALUATION (measurements of student achievement):
A. Unit exams consisting of objective and essay type questions
B. Quizzes
C. Classroom discussion and participation
D. Oral presentations
E. Graded problem solving sets
F. Laboratory skill demonstrations
G. Written assignments

7. WRITING ASSIGNMENTS/PROFICIENCY DEMONSTRATION:
A. Students will be given exams that include essay questions.
B. Students will be required to demonstrate laboratory skills.

8. ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING
(use detail when describing student assignments and state in cognitive terms):
Students will be given written and practical exams demonstrating students' ability to apply material learned in lecture and laboratory. For example students will perform mock job interviews.

9. ASSIGNMENTS, METHODOLOGIES, OR OTHER EXAMPLES OF HOW CULTURAL PLURALISM IS ADDRESSED:
Students will work together in surveying teams and compile their information to be compared with other like teams. Instructor will open discussions of topics such as how members of other countries prepare for employment.

10. REQUIRED EXTRA CLASS ASSIGNMENTS:
None

LIBRARY/LEARNING RESOURCES STATEMENT
West Hills College Coalinga

Course Prefix, Number & Title: **AG 52C Job Preparation**

Instructional Area: **AG/BUS/CIS/CWEE**

Faculty Originator: **Clint Cowden** Date: **11/5/07**

The holdings of the L/LRC collection in the subject area(s) related to the proposed new/revised course/discipline have been reviewed.

The L/LRC has sufficient resources presently available for support of this course/discipline in the following areas:

- ☒ Books
- ☒ Reference Materials
- ☒ Media
- ☒ Electronic Resources

Additional items have been recommended for purchase for support in this course/discipline in the following areas:

- ☐ Books
- ☐ Reference Materials
- ☐ Media
- ☐ Electronic Resources

Comments:

Signature:

_____ Date_____

Librarian (required)

ADOPTED TEXTBOOK FORM

West Hills College Coalinga

Course Prefix, Number & Title: **AG 52C Job Preparation** Instructional Area: **AG/BUS/CIS/CWEE**

Faculty Originator: **Clint Cowden** Date: **11/5/07**

1. Recommended textbooks: All transfer-level courses require 11-12th grade level or above.

   A. Title: **Industrial Maintenance**
   Edition: **2nd** ISBN #: **0-8269-3609-1**
   Author(s): **Denis Green, Jonathan F. Cosse**
   Publisher: **American Technical Publishers, Inc.**
   Required ☒ Optional ☐
   Readability level: **10.2** (Attach readability materials to original.)

   B. Title: _____
   Edition: _____ ISBN #: _____
   Author(s): _____
   Publisher: _____
   Required ☐ Optional ☐
   Readability level: _____ (Attach readability materials to original.)

2. Supplemental text(s):

   A. Title: _____
   Edition: _____ ISBN #: _____
   Author(s): _____
   Publisher: _____
   Required ☐ Optional ☐
   Readability level: _____ (Attach readability materials to original.)

   B. Title: _____
   Edition: _____ ISBN #: _____
   Author(s): _____
   Publisher: _____
   Required ☐ Optional ☐
   Readability level: _____ (Attach readability materials to original.)

3. Additional Textbooks:

   A. Title: _____
   Edition: _____ ISBN #: _____
   Author(s): _____
   Publisher: _____
   Required ☐ Optional ☐
   Readability level: _____ (Attach readability materials to original.)

   B. Title: _____
   Edition: _____ ISBN #: _____
   Author(s): _____
   Publisher: _____
   Required ☐ Optional ☐
   Readability level: _____ (Attach readability materials to original.)

Readability

Industrial Maintenance, 2nd Ed. Green, Denis and Jonathan F. Gosse. American Technical Publishers, Inc: Homewood, Illinois. (2006).

Page 39

Electrical shock occurs when a person contacts two conductors of a circuit or when the body becomes part of an electrical circuit. Electrical shock causes muscle spasms that can topple a victim from a ladder or cause the person to be locked to the electrical source. Severe electrical shock can cause heart and lungs to stop functioning.

Page 133

Changes in measured voltage are the best indication that contacts are actually opening or closing. Contacts may not open or close even though the contact operator works properly. An operator is the device that is pressed, pulled, or rotated by the individual operating the circuit. The contacts may be out of position or melted together, or they may have melted away.

Page 220

In a hot water heating system, hot water produced in the boiler is used to transport heat energy to building spaces. Hot water supplied commonly ranges from 180 degrees F to 220 degrees F. Water is heated in the boiler and circulated in the system by the circulating pump. Branch lines direct hot water to the heating unit(s). At the heating unit(s), heat is transferred to building spaces. The water is then circulated back to the boiler to repeat the cycle. A compression tank allows water to expand in the system without increasing the overall system pressure. Water is added to the system by the makeup water supply line.

Page 308

When installing mechanical drive systems, the shafts to be connected by the drive system must be aligned to an acceptable tolerance. For example, a belt or chain drive system requires a lesser tolerance than a gear drive system, and a flexible coupling requires a lesser tolerance than a rigid coupling. Misalignment may be parallel, angular, or a combination of parallel and angular. Parallel and angular misalignment should be checked using a dial indicator, laser, or specialized equipment. Misalignment must be checked when installing or performing routine maintenance on any mechanical drive system. The mechanical drive system experiences premature failure if angular and parallel misalignment occurs.

Readability Statistics

Counts	
Words	357
Characters	1850
Paragraphs	9
Sentences	25
Averages	
Sentences per Paragraph	5.0
Words per Sentence	13.9
Characters per Word	5.0
Readability	
Passive Sentences	40%
Flesch Reading Ease	46.4
Flesch-Kincaid Grade Level	10.2

OK

3.

Gradebook

CRPSCI-19-C01 California Water (2013 Fall)

Gradebook

+ New Gradebook Item | Open Full Gradebook | Gradebook Weights | Gradebook Categories | Final Grades | Export Gradebook | Email Grades | Export Gradebook (CSV) | Rubrics | Attendance Tracker | Import to Attendance Tracker [Sample CSV] Competencies

Display Order Category Ascending Save

Item	Category	Date	Grade	Edit	Delete
Course Syllabus Quiz	Unit Quiz	01/12/2013	Grade	Edit	Delete
Online Orientation Quiz	Unit Quiz	01/14/2013	Grade	Edit	Delete
California Water Quiz	Unit Quiz	01/19/2013	Grade	Edit	Delete
Water Rights Law Quiz	Unit Quiz	04/08/2013	Grade	Edit	Delete
California Water Supply Test	Unit Quiz	02/10/2013	Grade	Edit	Delete
Irrigation Systems Quiz	Unit Quiz	02/26/2013	Grade	Edit	Delete
Cadillac Desert 3	Homework		Grade	Edit	Delete
Cadillac Desert 4 Homework	Homework		Grade	Edit	Delete
Water Rights Law Homework	Homework		Grade	Edit	Delete
Water Conservation Homework	Homework		Grade	Edit	Delete
Bay Delta Homework Assignment	Homework		Grade	Edit	Delete
Cadillac Desert 2 Homework	Homework		Grade	Edit	Delete
California Water Homework	Homework	01/19/2013	Grade	Edit	Delete
Cadillac Desert 1 Homework	Homework		Grade	Edit	Delete
California Water Supply Homework	Homework	02/10/2013	Grade	Edit	Delete
Irrigation Systems Homework	Homework	02/26/2013	Grade	Edit	Delete
CRPSCI 19 Final Exam	Exam	05/20/2013	Grade	Edit	Delete
CRPSCI 19 Spring 2013 Midterm Exam	Exam	03/13/2013	Grade	Edit	Delete
Introduction Discussion	Discussion Board		Grade	Edit	Delete
Water Conservation Discussion	Discussion Board		Grade	Edit	Delete
Bay Delta Plan Discussion	Discussion Board		Grade	Edit	Delete
Bay Delta Video Discussion	Discussion Board		Grade	Edit	Delete
Irrigation Association Webpage Discussion	Discussion Board		Grade	Edit	Delete
Water Use Discussion	Discussion Board		Grade	Edit	Delete
California Water Discussion	Discussion Board		Grade	Edit	Delete
Irrigation Systems Wiki	Wiki		Grade	Edit	Delete
Water Issues Final Draft	Water Issues Paper		Grade	Edit	Delete

Water Issues Paper Topic Selection	Water Issues Paper	Grade	Edit	Delete
Water Issues Rough Draft	Water Issues Paper	Grade	Edit	Delete

CRPSCI-19-C01 California Water (2013 Fall)

Gradebook Weights

Gradebook Home

Category Weights

Total Percent Must Equal 100 to activate weighting.
Current Total: 100

Unit Quiz	25
Homework	15
Exam	25
Discussion Board	18
Wiki	2
Water Issues Paper	15

Item Weights

Total Percent for a category must equal 100 to activate item weighting.

Wiki	0
Irrigation Systems Wiki	0
Water Issues Paper	0
Water Issues Rough Draft	0
Water Issues Final Draft	0
Water Issues Paper Topic Selection	0
Unit Quiz	0
Course Syllabus Quiz	0
Water Rights Law Quiz	0
Irrigation Systems Quiz	0
California Water Supply Test	

	0
California Water Quiz	0
Online Orientation Quiz	0
Homework	0
Water Rights Law Homework	0
Water Conservation Homework	0
Bay Delta Homework Assignment	0
Cadillac Desert 4 Homework	0
Cadillac Desert 3	0
Cadillac Desert 2 Homework	0
California Water Homework	0
California Water Supply Homework	0
Irrigation Systems Homework	0
Cadillac Desert 1 Homework	0
Exam	0
CRPSCI 19 Spring 2013 Midterm Exam	0
CRPSCI 19 Final Exam	0
Discussion Board	0
Introduction Discussion	0
California Water Discussion	0
Bay Delta Plan Discussion	0
Irrigation Association Webpage Discussion	0
Water Conservation Discussion	0
Water Use Discussion	0
Bay Delta Video Discussion	0

Save

Last Name	First Name	Id	Course Syllabus Quiz	Online Orientation Quiz	California Water Quiz	Water Rights Law Quiz	California Water Supply Test	Irrigation Systems Quiz	Cadillac Desert 3	Cadillac Desert 4 Homework
[redacted]	[redacted]	140048	100	0	90.67	0	96.67	80	0	0
[redacted]	[redacted]	191423	100	100	65.83	0	0	63.33	100	100
[redacted]	[redacted]	204500	100	100	97.33	70	96.67	93.33	100	100
[redacted]	[redacted]	229648	100	100	82.5	0	100	80	70	0
[redacted]	[redacted]	221796	100	100	71.33	35.6	76.67	60	100	100
[redacted]	[redacted]	231714	100	100	72.5	78.4	76.67	76.67	100	100
[redacted]	[redacted]	230620	100	100	79.33	71.6	93.33	70	100	100
[redacted]	[redacted]	231647	100	100	42	0	0	0	0	0
[redacted]	[redacted]	9695	100	100	94	0	0	60	0	0
[redacted]	[redacted]	204771	100	100	95	72	100	96.67	80	80
[redacted]	[redacted]	176591	100	100	93.33	72	98.33	96.67	100	100
[redacted]	[redacted]	60871	100	100	100	24	100	100	100	0
[redacted]	[redacted]	89452	100	100	92.5	79.2	85.67	86.67	100	100
[redacted]	[redacted]	66056	100	100	76.5	80	91.67	70	100	100
[redacted]	[redacted]	154220	100	100	85.33	82	93.67	76.67	100	100
[redacted]	[redacted]	198152	100	100	90	0	24.17	63.33	100	100
[redacted]	[redacted]	201068	100	100	46.5	58	57.5	46.67	100	100
[redacted]	[redacted]	134806	100	100	100	48.8	96.67	93.33	100	100
[redacted]	[redacted]	230967	83.3	100	44.33	0	0	0	0	0
[redacted]	[redacted]	232417	95.8	100	89.33	69.6	93.33	73.33	100	100
[redacted]	[redacted]	225934	100	100	80	0	78.33	90	0	0
[redacted]	[redacted]	218915	100	100	91.83	87.2	96.67	66.67	100	100
[redacted]	[redacted]	154465	100	100	90	68	93.33	60	100	100
[redacted]	[redacted]	226262	100	100	94.67	72	98.33	90	100	100
[redacted]	[redacted]	231599	100	100	91.67	92	99.67	96.67	100	100
[redacted]	[redacted]	127770	100	100	90.67	80	91.67	63.33	100	0
[redacted]	[redacted]	223993	100	100	91.83	79.2	93.33	100	100	100
[redacted]	[redacted]	161283	100	100	92.67	78.8	96.67	90	100	100
[redacted]	[redacted]	20221	100	100	76	92	86.67	46.67	100	100
[redacted]	[redacted]	196158	100	100	79.67	0	53.33	0	0	0

Last Name	First Name	Id	Water Rights Law Homework	Water Conservation Homework	Bay Delta Homework Assignment	Cadillac Desert 2 Homework	California Water Homework	Cadillac Desert 1 Homework	California Water Supply Homework
[redacted]	[redacted]	140048	0	0	0	100	96.86	100	93.1
[redacted]	[redacted]	191423	0	0	0	100	57.5	100	0
[redacted]	[redacted]	204500	100	100	100	100	81.1	100	96.55
[redacted]	[redacted]	229648	100	100	0	70	89.24	70	92.24
[redacted]	[redacted]	221796	88	0	88	100	98.37	0	96.12
[redacted]	[redacted]	231714	100	100	0	100	75.76	100	90.95
[redacted]	[redacted]	230620	100	100	100	100	85.06	100	92.24
[redacted]	[redacted]	231647	0	0	0	0	0	0	0
[redacted]	[redacted]	9695	0	0	0	0	99.42	100	98.28
[redacted]	[redacted]	204771	100	100	0	80	94.19	80	96.55
[redacted]	[redacted]	176591	100	100	0	100	97.44	100	93.1
[redacted]	[redacted]	60871	0	0	0	0	99.42	0	98.28
[redacted]	[redacted]	89452	100	0	100	100	85.52	100	90.86
[redacted]	[redacted]	66056	100	100	100	100	90.17	100	100
[redacted]	[redacted]	154220	100	100	100	100	93.66	100	94.83
[redacted]	[redacted]	198152	0	100	100	100	83.14	100	100
[redacted]	[redacted]	201068	0	0	0	100	35.87	100	81.03
[redacted]	[redacted]	134806	0	100	80	100	98.84	100	94.83
[redacted]	[redacted]	230967	0	0	0	0	45.06	0	31.72
[redacted]	[redacted]	232417	0	0	0	100	85.93	100	83.62
[redacted]	[redacted]	225934	0	0	0	0	88.95	0	0
[redacted]	[redacted]	218915	100	100	100	100	92.73	100	94.83
[redacted]	[redacted]	154465	100	100	0	100	91.34	100	93.1
[redacted]	[redacted]	226262	100	100	92	100	89.53	100	92.67
[redacted]	[redacted]	231599	100	100	100	80	89.53	0	91.38
[redacted]	[redacted]	127770	0	0	100	100	87.79	100	79.31
[redacted]	[redacted]	223993	100	0	100	100	86.92	100	93.1
[redacted]	[redacted]	161283	0	0	0	100	90.17	100	96.38
[redacted]	[redacted]	20221	100	100	100	100	90.81	100	87.07
[redacted]	[redacted]	196158	0	0	0	100	88.14	100	77.59

Last Name	First Name	Id	Irrigation Systems Homework	CRPSCI 19 Final Exam	CRPSCI 19 Spring 2013 Midterm Exam	Introduction Discussion	Water Conservation Discussion	Bay Delta Plan Discussion	Bay Delta Video Discussion
[redacted]	[redacted]	140048	98.11	0	96.67	0	100	0	0
[redacted]	[redacted]	191423	60.38	0	54.58	100	0	0	0
[redacted]	[redacted]	204500	99.06	95	88.29	100	100	100	100
[redacted]	[redacted]	229648	81.13	25	90	100	100	0	0
[redacted]	[redacted]	221796	95.28	0	49.04	100	0	0	0
[redacted]	[redacted]	231714	78.3	87	70.83	100	112.5	100	100
[redacted]	[redacted]	230620	84.91	94	79	100	100	100	100
[redacted]	[redacted]	231647	0	0	0	100	100	0	0
[redacted]	[redacted]	9695	72.64	0	0	100	0	0	0
[redacted]	[redacted]	204771	86.79	98	95.54	100	100	100	100
[redacted]	[redacted]	176591	98.11	99	91.46	100	100	100	100
[redacted]	[redacted]	60871	82.08	80	97.29	100	100	0	0
[redacted]	[redacted]	89452	77.36	45	79.67	100	0	100	100
[redacted]	[redacted]	66056	98.11	96	88.96	100	100	100	100
[redacted]	[redacted]	154220	73.58	97	95.67	100	100	100	100
[redacted]	[redacted]	198152	54.72	70	56.5	100	100	100	100
[redacted]	[redacted]	201068	63.21	0	55.5	100	100	100	0
[redacted]	[redacted]	134806	100	85	74.25	100	100	100	100
[redacted]	[redacted]	230967	0	0	0	112.5	100	0	0
[redacted]	[redacted]	232417	76.42	91	88.79	100	0	0	0
[redacted]	[redacted]	225934	98.11	0	84.08	100	112.5	0	0
[redacted]	[redacted]	218915	84.91	100	97.5	112.5	100	100	100
[redacted]	[redacted]	154465	84.91	94	84.13	100	100	100	100
[redacted]	[redacted]	226262	97.17	60	79.46	100	100	100	100
[redacted]	[redacted]	231599	100	100	95	100	100	106.67	100
[redacted]	[redacted]	127770	0	96	67.67	100	100	100	100
[redacted]	[redacted]	223993	100	48	76.63	100	0	100	100
[redacted]	[redacted]	161283	68.87	95	82.29	100	0	0	0
[redacted]	[redacted]	20221	78.3	91	61	100	100	100	100
[redacted]	[redacted]	196158	0	0	0	100	0	0	0

Last Name	First Name	Id	Irrigation Association Webpage Discussion	Water Use Discussion	California Water Discussion	Irrigation Systems Wiki	Water Issues Final Draft	Water Issues Paper Topic Selection	Water Issues Rough Draft
[redacted]	[redacted]	140048	170	100	100	360	0	0	0
[redacted]	[redacted]	191423	0	0	100	100	0	0	0
[redacted]	[redacted]	204500	100	100	112.5	410	100	100	100
[redacted]	[redacted]	229648	0	100	100	100	100	100	90
[redacted]	[redacted]	221796	0	100	100	100	0	0	0
[redacted]	[redacted]	231714	170	100	100	210	0	100	0
[redacted]	[redacted]	230620	100	100	100	100	100	100	100
[redacted]	[redacted]	231647	0	100	100	100	0	0	0
[redacted]	[redacted]	9695	0	0	100	100	0	0	0
[redacted]	[redacted]	204771	100	100	100	100	0	100	0
[redacted]	[redacted]	176591	100	100	100	100	0	100	0
[redacted]	[redacted]	60871	100	100	162.5	250	0	0	0
[redacted]	[redacted]	89452	0	100	162.5	100	100	100	0
[redacted]	[redacted]	66056	130	100	150	100	100	100	100
[redacted]	[redacted]	154220	100	100	100	360	100	100	100
[redacted]	[redacted]	198152	100	100	125	100	100	100	100
[redacted]	[redacted]	201068	0	100	100	100	0	0	0
[redacted]	[redacted]	134806	150	100	100	100	0	0	0
[redacted]	[redacted]	230967	0	100	100	100	0	0	0
[redacted]	[redacted]	232417	100	100	162.5	100	100	100	100
[redacted]	[redacted]	225934	0	100	125	100	0	0	0
[redacted]	[redacted]	218915	100	100	100	310	100	100	0
[redacted]	[redacted]	154465	0	100	100	100	100	100	100
[redacted]	[redacted]	226262	100	100	100	150	90	100	0
[redacted]	[redacted]	231599	100	100	100	360	100	100	100
[redacted]	[redacted]	127770	0	100	162.5	100	100	100	100
[redacted]	[redacted]	223993	100	100	162.5	100	100	100	0
[redacted]	[redacted]	161283	0	100	100	100	100	100	100
[redacted]	[redacted]	20221	100	100	100	100	60	100	90
[redacted]	[redacted]	196158	0	100	100	100	0	0	0

Last Name	First Name	Id	Final
[redacted]	[redacted]	140048	54
[redacted]	[redacted]	191423	35.45
[redacted]	[redacted]	204500	102.31
[redacted]	[redacted]	229648	70.52
[redacted]	[redacted]	221796	45.81
[redacted]	[redacted]	231714	82.74
[redacted]	[redacted]	230620	92.49
[redacted]	[redacted]	231647	22.37
[redacted]	[redacted]	9695	27.45
[redacted]	[redacted]	204771	84.64
[redacted]	[redacted]	176591	85.48
[redacted]	[redacted]	60871	69.16
[redacted]	[redacted]	89452	77.52
[redacted]	[redacted]	66056	96.59
[redacted]	[redacted]	154220	101.12
[redacted]	[redacted]	198152	79.75
[redacted]	[redacted]	201068	47.52
[redacted]	[redacted]	134806	76.75
[redacted]	[redacted]	230967	23.24
[redacted]	[redacted]	232417	82.78
[redacted]	[redacted]	225934	45.25
[redacted]	[redacted]	218915	96.39
[redacted]	[redacted]	154465	89.04
[redacted]	[redacted]	226262	90.38
[redacted]	[redacted]	231599	101.83
[redacted]	[redacted]	127770	84.9
[redacted]	[redacted]	223993	81.33
[redacted]	[redacted]	161283	79.96
[redacted]	[redacted]	20221	86.73
[redacted]	[redacted]	196158	29.08

4.

Recruitment Program

WEST HILLS COMMUNITY COLLEGE DISTRICT

West Hills College Coalinga | North District Center, Firebaugh | West Hills College Lemoore | Naval Air Station Lemoore

May 24, 2014

Dear Prospective Student:

Thank you for your interest in the Precision Agriculture Program at West Hills Community College in Coalinga, California. Enclosed in this packet is a short PowerPoint presentation describing our college and program, literature about our program, virtual Coalinga campus tour DVD video, and an off campus housing list. Additional information about West Hills College can be found on our website at www.westhillscollege.com.

Academic scholarships are available and the application is provided in the packet. Scholarships are open to anyone interested in the Precision Agriculture program.

You have chosen one of the fastest growing career fields in California and the #1 Precision Agriculture program in California. With starting yearly salaries in the range of $25-50,000 after only a 10 month program, the future is bright for graduates of the West Hills College Precision Agriculture program. West Hills motto, once you go here you can go anywhere," is also true with the Precision Agriculture program, many of our students are continuing their higher education at universities, such as California Polytechnic State University, San Luis Obispo, California State University, Fresno and California State University, Chico.

The Precision Agriculture program is not only academics and hands-on experience; students participate in a wide range of extracurricular activities including, rodeo, agriculture ambassadors, student farming enterprise projects, industry conferences, seminars and field trips.

I encourage you to visit campus anytime, if you call in advance, we can set up a tour. I will be more than happy to answer any questions you have.

We are sincerely interested in recruiting and retaining outstanding students who wish to excel in the Precision Agriculture program, so if there is anything I can do to help you in your search for a college, please don't hesitate to ask.

Best Regards,

Clint Cowden

Clint Cowden
Precision Agriculture Instructor • (559) 934-2701 • clintcowden@westhillscollege.com

Available Housing In and Around Coalinga

Apartments

Coalinga

Palm Coast Apartments
187 East Cherry Lane
(559) 935-9262
2 bedrooms for $525/month
$500/deposit

Peppertree Apartments
760 East Elm
(559) 935-3117
Across the street from the Coalinga campus
3 bedrooms $725/month
$600/deposit

Westwood Apartments
301 W. Polk
(559) 935-1581
Has a waiting list
30% of monthly income

Coaling Station B
250 Truman Ave
(559) 935-2029
3 bedroom 775/mo. 500 dep.
2bedroom 595/mo. 450/dep
2 bedroom 2 bath 625/mo. 475/dep
1 bedroom 525/mo. 400 dep.

Huron

Huron Plaza
16525 So. 11th St
(559) 945-2333
Accepting applications on 2, 3, & 4 bedrooms

Avenal

Pleasant Valley Manor
1017 Dome Ave
(559) 386-4039
2 bedroom for $457/month
$467/deposit

Houses

Coalinga

B & B Realty
(559) 935-1600
Prices Range from: $550-$875/month
$1000/deposit

Rodeo Realty
(559) 935-2985
Prices Range from $600-$1000/month
$1000/deposit

Interest Form

Please fill out and hand in or mail back to:
Farm of the Future, 9900 Cody St, Coalinga, CA 93210

Name_____ Address_____

_____ City_____ Zip Code_____

Phone_____ Email_____

Best time to contact you_____ Current Grade_____

When would you be interested in attending: this fall ___ next year ___ other___

Interest Form

Please fill out and hand in or mail back to:
Farm of the Future, 9900 Cody St, Coalinga, CA 93210

Name_____ Address_____

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Phone_____ Email_____

Best time to contact you_____ Current Grade_____

When would you be interested in attending: this fall ___ next year ___ other___

Interest Form

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Farm of the Future, 9900 Cody St, Coalinga, CA 93210

Name_____ Address_____

_____ City_____ Zip Code_____

Phone_____ Email_____

Best time to contact you_____ Current Grade_____

When would you be interested in attending: this fall ___ next year ___ other___

WEST HILLS COLLEGE PRECISION AGRICULTURE SCHOLARSHIP APPLICATION

Please return to:
Precision Agriculture Scholarship
Farm of the Future
9900 Cody Street, Coalinga, CA 93210
Deadline: July 15, 2014

Name _____
Address _____
_____
City _____
State _____
Zip _____

Home Phone _____
e-mail address _____

Academic and Extracurricular Accomplishments (list awards, honors, recognition, titles, etc.) Use additional paper if necessary.

_____
_____
_____
_____
_____
_____
_____
_____

Briefly describe your future goals and your intended course of study.

_____
_____
_____
_____

Briefly describe the goals you have pertaining to Precision Agriculture

_____
_____
_____
_____

Grade point average in High School _____
(please provide verification)

Please describe your Precision Agriculture experience. (This could include agriculture, computer, mechanical, welding, electrician, heavy equipment, etc.)

List the names and phone numbers of three people who would verify your character and ability. (Use a separate sheet of paper if necessary)

Dear Applicants:
You will note that the deadline is July 15, 2014, however I would suggest that you complete this form and return it ASAP so that we have adequate time to go over each one thoroughly.

Because these scholarships are based upon a number of things including skills pertaining to Precision Agriculture, experience and scholastic performance it is very important that you:

1. Make arrangements for a personal interview, either in person or over the phone. (We are available most weekdays. It would be good to call and make an appointment with a college counselor at the same time.)
2. Fill out this form and return it on time.

Sincerely:
Joy Cowden

Please send to:

Precision Agriculture Scholarship
Farm of the Future
9900 Cody Street
Coalinga, CA 93210
(559) 934-2701
clintcowden@westhillscollege.com

Farm of the Future

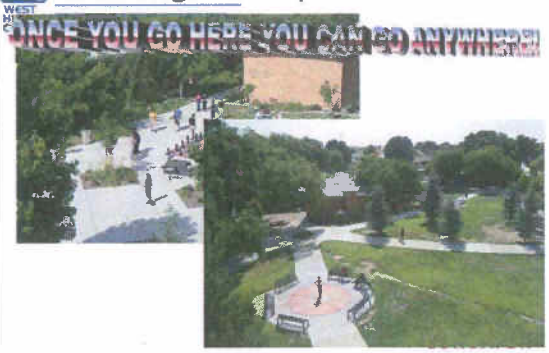
West Hills Community College
Coalinga

WEST HILLS COLLEGE COALINGA

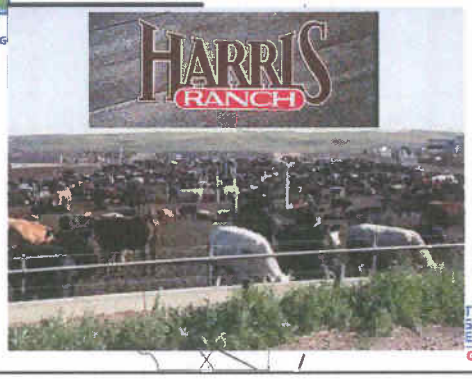
West Hills College

- Coalinga
- Lemoore
- Firebaugh

Coalinga Campus



Where is Coalinga?



Farm of the Future

Precision Agriculture

- What is Precision Agriculture?
  - Information intensive management of farming to promote higher yields, lower production costs and enhance the environment
  - Instead of farming an entire field as one unit, fields are broken into smaller, more manageable units
  - A grower develops a data bank for each location including information on soils, fertility, crop conditions, yield and GPS specific location

WEST HILLS COLLEGE COALINGA

Precision Agriculture Program

Your future begins here, today!

- Learn satellite communications using the GPS
  - Map the exact coordinates of a location
  - Be able to return to that spot +/- 2 inches
- Learn to prepare and read maps using GIS
  - Use satellite and aerial imagery on desktop and handheld computers

WEST HILLS COLLEGE COALINGA

Education Opportunities

- Begin your life-long education at West Hills College
  - 10 months = certificate
  - 24 months = Associate of Science Degree
  - Prepare for university transfer

WEST HILLS COLLEGE COALINGA

Program Curriculum

Fall Semester

15 units

Spring Semester

Issues

15 units

WEST HILLS COLLEGE COALINGA

Employment Opportunities

- GPS a
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WEST HILLS COLLEGE COALINGA

Equipment and Facilities

- For your learn by doing experience

Student Projects

How to Apply

1. Apply for Admission
2. Apply for Financial Aid
3. Placement Test and Orientation
4. Meet with a Counselor
5. Register for Classes
6. Pay Tuition and Fees

Directions are available at:
www.westhillscollege.com/coalinga/admission/admission.asp

WEST HILLS COLLEGE COALINGA

Apply for Admissions

- **Eligibility Requirements** → a student must satisfy one of the following requirements:
  1. High school graduation.
  2. Successful completion of the California High School Equivalency Examination or G.E.D.
  3. Attainment of adult status-18 years of age.
  4. Recommendation of the principal of high school student is attending and parental permission.

WEST HILLS COLLEGE COALINGA

Apply for Admission

~~Students must~~ apply online

- The Web-site is:
  www.cccapply.org/Applications/California_Community_College/apply/West_Hills_College.html
- Students should provide an email address
  - This is how results of the application will be sent to back to you (usually within 5 minutes of when you submit)
  - Please write the email address and password down as well as any other passwords (This is the largest problem I have trying to help students, they can't remember their passwords)
- You must print, sign and return the last page of the application to the admissions office

WEST HILLS COLLEGE COALINGA

Apply for Financial Aid

- You have to apply for admission before you can apply for financial aid
- I have enclosed paper FAFSA (Free Application for Federal Student Aid), but it is much quicker and easier to apply online at: www.fafsa.ed.gov
- It is important to apply for financial aid even if you think you won't qualify

WEST HILLS COLLEGE COALINGA

Placement Test and Orientation

- Open lab environment → Students can come into the lab, log into the assessment program and take the English and Math placement tests.
- WHC Coalinga requires students to take all FOUR tests in order to be placed in the appropriate levels of English and Math.
  1. Reading Comprehension (30 minutes)
  2. Sentence Structure & Grammar (20 minutes)
  3. Sentence/Syntax Skills (15 minutes)
  4. Math (45 minutes) (Students will choose level of math at the time of the test).

WEST HILLS COLLEGE COALINGA

Meet with a Counselor

- If you have any questions about which courses to take or any other questions about the college contact either the counseling center
  - Email at
    askacounselorcoalinga@whccd.edu
  - Call
    - 1-800-266-1114
- Or if you have specific questions about the Agriculture Department call or email Joy
  - joycowden@whccd.edu
  - 1-559-934-2708

WEST HILLS COLLEGE COALINGA

Register for Classes

- Register online only at
  https://my.westhillscollege.com/students.html
- Use the username and password provided when you applied
  - Your username is usually your first and last name (i.e. joycowden)
  - If you forget your password you can have it emailed to your email account
- Select the term and course categories

Pay Tuition and Fees

- Fees are due at the time of registration
- You can either pay online through a secure server
  http://my.westhillscollege.com
- Or pay in person

Ag Ambassadors

Overview

The Agriculture Ambassadors is an organization made up of students whose purpose is to act as a public relations branch of the Farm of the Future Agriculture Program at West Hills College Coalinga. The Ag Ambassadors recruit throughout the state of California, from the California/Oregon border to the California/Mexican border and everywhere in between.

When recruiting at high schools three goals drive the endeavors of the group by:

- First and foremost, encouraging high school students to pursue higher education and attend college;
- Promoting agriculture and encouraging students to pursue a career in the field of Agriculture;
- Finally, if they are going to attend college in the field of Agriculture then why not attend West Hills College?

The Ag Ambassadors offer two options when recruiting at high schools:

- Short Presentation: 15-20 minute classroom discussion informing students about the benefits of college, a career in agriculture and WHCC's available programs.
- Class Takeover: 10-15 minute classroom discussion informing students about the benefits of college, a career in agriculture and WHCC's available programs followed by a hands-on lab exercise utilizing some of the technology that we use in our everyday class work.

"Once you go here, you can go anywhere"

Welding Technology

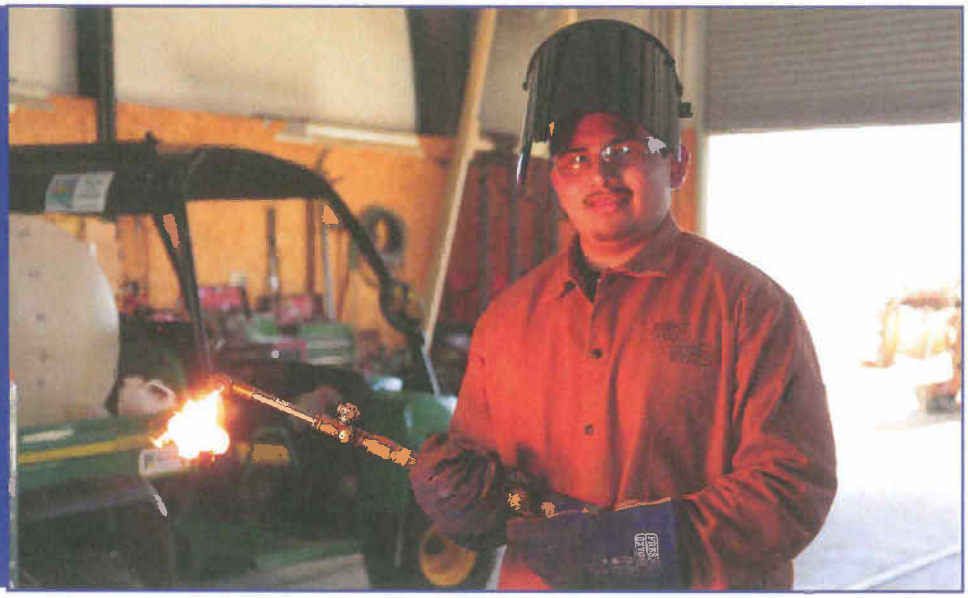
Four courses to help you become job-ready

Start Dates & Times

WT 70 - TBD
WT 71 - TBD
WT 72 - TBD
WT 73 - TBD

Monday - Friday
8 a.m. to 5 p.m.

Farm of the Future
518 W. Gale Avenue.
Coalinga CA 93210



These four courses teach basic through advanced welding to help you get American Welding Society (AWS) Certified and find a job in the industrial, welding or agricultural industries. Some of the things you'll learn:

- Introduction to Welding and Safety
- Oxyfuel, Plasma Art, and Air Carbon Cutting and Gouging
- Metal Preparation and Weld Quality
- Shielded Metal Arc Welding (SMAW)
- Beads and Fillet Welds and Joint Fit-up and Alignment
- Advanced Shielded Metal Arc Welding
- V-Groove and Open Root V-Groove Welds
- Metallurgy and Common Weld Symbols
- Welding Detail Drawings
- Pre-Heating and Post-Heating of Materials

For more information contact:
Farm of the Future at (559) 934-2700 or
e-mail: farm@whccd.edu

WEST HILLS COLLEGE
COALINGA

Once you go here, you can go anywhere™
westhillscollege.com
300 Cherry Lane, Coalinga, CA 93210

Industrial Maintenance Technology

Four courses to help you become job-ready

Start Dates & Times

IMT 60 - TBD
IMT 61 - TBD
IMT 62 - TBD
IMT 70 - TBD

Monday - Friday
8 a.m. to 5 p.m.

Farm of the Future
518 W. Gale Avenue.
Coalinga CA 93210

These four courses teach basic skills and advanced training to help you get a job in the industrial, welding or agricultural industries. Here are just some of the things you'll learn:

- Construction Mechanics
- Hand and Power Tools
- Construction Drawings
- Fasteners and Anchors,
- Oxyfuel Cutting
- Valves, Pumps and Drivers
- Piping Systems
- Belt and Chain Drives
- Hydrostatic and Pneumatic Testing
- Bearings and Couplings
- Steam Systems

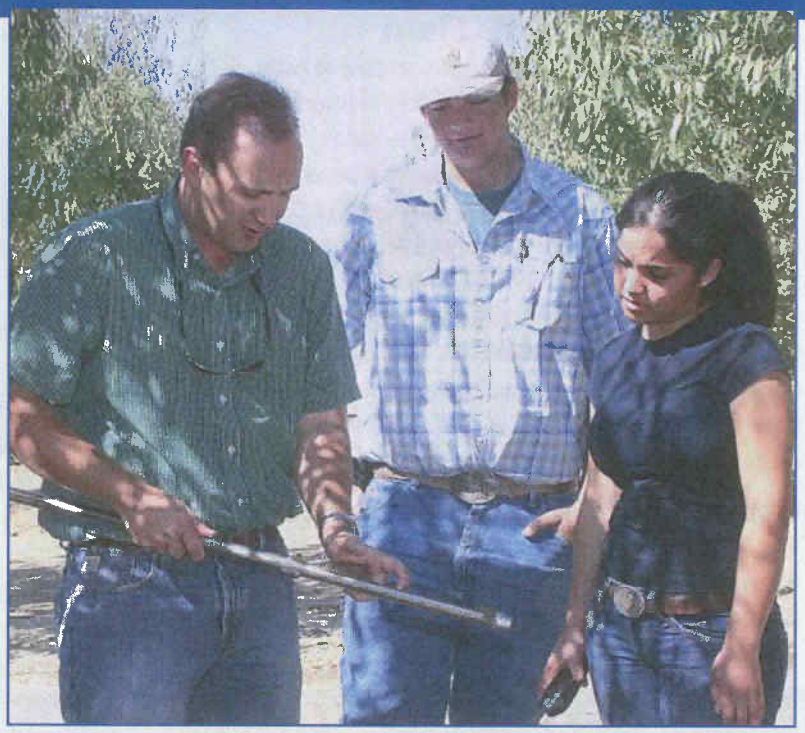
For more information contact:

Farm of the Future at (559) 934-2700 or
e-mail: farm@whccd.edu

WEST HILLS COLLEGE
COALINGA

Once you go here, you can go anywhere™
westhillscollege.com
300 Cherry Lane, Coalinga, CA 93210

Become a Pest Control Adviser. Find a job.



What Does a PCA Do?

Pest Control Advisers (PCAs) are licensed professional production consultants who serve California agriculture producers. PCAs specialize in pest management, but they are also an important resource in a wide range of production concerns related to plant health.

A PCA is licensed by the State of California to engage in the following activities:

- Provide pest management recommendations, which must be in writing.
- Hold self as an authority on any agricultural use.
- Solicit sales of products or services for agricultural use.

PCA specialties are diverse and may help maintain highway vegetation; solve weed congestion in public waterways; assist in pest-free greenhouses, golf courses, turf and landscape; or ensure the growth of healthy, abundant food, fiber and ornamentals from over 9.9 million acres of California farm and public lands.

Licensed pest control advisers provide written recommendations that must address 13 specific areas, including worker safety, environmental impact and a detailed plan for the use of pest management materials. (Source: http://capca.com/definition)

What are the Education Requirements for a PCA?

WHCC prepares students for the California Department of Pesticide Regulations (CDPR) Agricultural Pest Control Adviser (PCA) exam. Forty-three units of coursework are offered to fulfill the Option 3 education requirement to take the PCA exam. Whether you are a first time student looking for a career or you are looking to change your career, these courses can help you towards a high paying, high growth job. Courses are college transferrable and align with California's C-ID, which means they are transferrable to colleges throughout the state.

Courses include:

- Weeds and Poisonous Plants (Crop Health)
- Fertilizers and Soil Amendments (Crop Health)
- Entomology (Pest Management Systems and Methods)
- California Pest Control Laws and Regulations (Pest Management Systems and Methods)
- Integrated Pest Management (Pest Management Systems and Methods)
- Support courses: Irrigation, Soils, Precision Agriculture, Plant Science

Successfully complete the coursework and 24 months of applicable work experience and you'll be eligible to take the state test to become a licensed PCA, which is the path to a good job. Fourteen different courses are offered in Crop Health, Pest Management Systems and Methods, Production Systems, and Physical and Biological Sciences. Job opportunities in this field exist now and are growing. You'll take classes at WHCC's new Farm of the Future.

For more information please contact Clint Cowden, Ag Science Tech at 559-816-9465

WEST HILLS COLLEGE
COALINGA

Once you ***go here,*** *you can* ***go anywhere***™

westhillscollege.com• 300 Cherry Lane, Coalinga, CA 93210

The Graying of America Means Job Growth in This Field

The graying of America is on a collision course with the feeding of America. "One of the key elements in California's ability to feed millions is the state's 4,100 licensed Pest Control Advisers."[1] There is a severe shortage of qualified employees. Terry Stark of the California Association of Pest Control Advisers said a survey revealed that **only 17% of today's PCAs are 44 or younger while 35% are 45 to 55 and almost 40% of its members are over 55.** "The opportunities for crop protection professionals over the next five to 10 years are endless," said Steve Alexander of Helena Chemical Company in Fresno, CA.[2]

Our West Hills College Facilities

The Farm of the Future operates a 230 acre diversified farm on which more than $600,000 has been invested in irrigation technology and management equipment. In addition, students will have access to a Precision Agriculture

inventory exceeding $300,000 of computers, software, and field data loggers, which will have supporting use in this program.

New $10 million Farm facilities were completed in the fall of 2012, including a farm shop with equipment and computer laboratories. During the previous eight years, West Hills Community College District has invested more than $3.1 million in resources for the Farm of the Future. Local donations and federal and state grants have generated an additional $4.7 million, for a total investment approaching $18 million.

Farm of the Future

Located in Coalinga, CA, West Hills College is ideally located in California's Central Valley. California is the largest producer of goods of all the states and the largest agricultural state in America. Our students study and learn in the center of agriculture. Nine of the nation's top 10 agriculturally productive counties are in California, and six are located in the Central Valley. Learning in an area which produces twenty-five percent of the nation's food allows students to learn real-world skills applicable in today's job market. Being centrally located allows students opportunities for field trips and internships with some of the largest growers in the nation.

Your Future Begins Here Today

- Acquire units to meet the education requirement for the CDPR's Agricultural Pest Control Advisers license
- Learn skills for employment as a crop consultant
- Learn information needed to pass the PCA exam
- Gain relevant work experience to prepare for a career as a PCA
- Prepare for university transfer

Employment Opportunities

- Agricultural chemical sales
- Self-employed agricultural consultant
- Agricultural consulting firms
- Large-scale farm manager
- Agricultural researcher
- Agricultural chemical equipment sales
- Chemical applicator

1. *http://westernfarmpress.com/pest-control-adviser-workforce-aging-dwindling*
2. *http://westernfarmpress.com/management/california-pathway-pca-program-looking-lot-good-men-women-0*

WEST HILLS COLLEGE
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Once you ***go here,*** *you can* ***go anywhere***™

westhillscollege.com• 300 Cherry Lane, Coalinga, CA 93210

West Hills College Coalinga

Farm of the Future

"Helping to change our technical, economic, social, and cultural environment"

Precision Agriculture Center

Learn to use global positioning satellite systems (GPS) to manage crop operations. Use geographic information system (GIS) software to create interwoven maps of your crop, orchard, vineyard, soil, and water. Improve crop productivity. Learn GPS equipment operation and maintenance. Farm today as the industry will in the future.

Heavy Equipment Operation

Learn operation of tractors, backhoes, earthmovers, motor graders and other construction equipment. Use approved equipment maintenance for your safety and long life of machinery. Learn surveying, soil compaction requirements, welding, first aid and participate in the class construction project.

For further information contact
Farm of the Future
559-934-2700

Allen Farm

- ✦215 acres of agricultural student enterprise projects for hands-on experience
- ✦Almonds
- ✦Row and field crops, livestock and horse facilities and wildlife habitat
- ✦Irrigation and drainage instruction
- ✦Demonstrations for students and growers

WEST HILLS
COMMUNITY COLLEGE DISTRICT

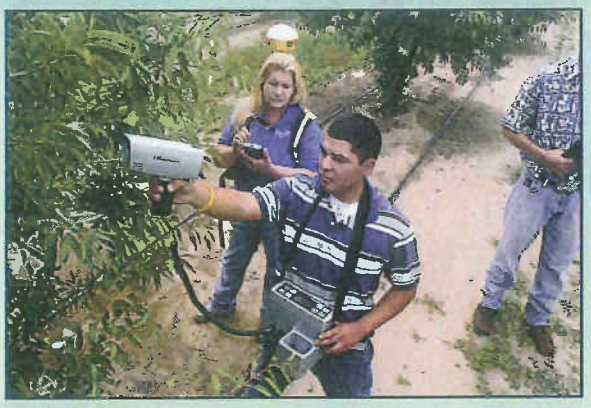
www.westhillscollege.com

Farm of the Future

West Hills College is located in Coalinga, California. We are the only college west of the Mississippi to offer a full-fledged Precision Agriculture Program.

Precision Ag is information intensive management of farming to promote higher yields, lower production costs and enhance the environment.

At West Hills College we believe in student operated farming. All students are eligible to manage their own enterprise projects.



Being part of a farming community, students are presented with opportunities to be involved with real-world aspects of farming.

850 acres and $4 million worth of equipment and technology are available for your learning by doing experiences.

Come to West Hills College and become a part of The Farm of the Future - YOUR FUTURE!

Our Partners Include

Allen Farms
Harris Farms
CSU, Fresno
Cantu Farming
Clark Brothers Farming
Western Farm Service
Beeline
Trimble
John Deere
Cal Poly, San Luis Obispo
Wilbur Ellis Company
Associated Feeds
Paramount Farming Company
CA Land Imp. Contractors
Mouren Farming
Pucheu Brothers Ranch
Stone Land and Cattle
Woolf Farming Company
McKean Farms
Viets Farming
Sequoia Packing Company
Granite Construction
Farm Pump and Irrigation
Precision Agri-Lab
Britz Fertilizers
Sheely Farms
Fowler Nursery
Global Organics
Topcon
NTECH Industries, Inc.
Ag Management Solutions
HELENA Chemical

www.westhillscollege.com

Know anyone who wants to be a PCA?

West Hills College Coalinga is offering courses which meet the education requirement for California Department of Pesticide Regulation's Agriculture Pest Control Adviser's (PCA) license.

Course		Units
Crop Health (9 Units)		
AET 21	Ag-Irrigation Management	3
AET 22	Irrigation Evaluation and Design Principles	3
AET 23	Advanced Irrigation Design	3
CRPSCI 32	Weeds and Poisonous Plants	3
CRPSCI 36	Fertilizers and Soil Amendments	3
Total Crop Health		**15**
Pest Management Systems and Methods (6 Units)		
CRPSCI 44	Economic Entomology	3
CRPSCI 46	Integrated Pest Management	3
CRPSCI 45	California Pest Control Laws and Regulations	2
Total Pest Mgmt Systems and Methods		**8**
Production Systems (6 Units)		
CRPSCI 6	Introduction to Precision Agriculture	3
CRPSCI 7	Advanced Precision Agriculture	3
Total Production Systems		**6**
Physical and Biological Sciences (12 Units)		
CRPSCI 19	California Water	3
CRPSCI 1	Introduction to Plant Science	3
SLSCI 21	Soils	4
BIO 10/CHEM 2A	Fundamentals of Biology/Introductory Chemistry	3
Total Physical and Biological Science		**13**
TOTAL UNITS		**42**

West Hills College Pest Control Adviser Curriculum Aligned with CDPR Requirements

www.westhillscollege.com

9800 Cody St, Coalinga, CA 93210 joycowden@whccd.edu (559) 934-2708

PCA Course Descriptions

CRPSCI 32 is the study of the classification, identification, and life cycle of common and poisonous weeds in California production areas and grasslands and their effects on animals and humans including management practices such as prevention, mechanical, biological, and chemical methods. Weeds establishment and chemical resistance will also be discussed. Laboratory required. (C-ID AG-PS 132L)

CRPSCI 36 is the study of the composition, value, selection, and use of fertilizer materials and soil amendments within the context of soil, plant, and fertilizer relationships. Application practices currently being used in California will be discussed. Laboratory required. (C-ID AG-PS 136L)

CRPSCI 44 is the study of the insects and mites of economic importance to agriculture including morphology, taxonomy, identification, life cycles, hosts, habitat relationships, and control methods. Collection and labeling of specimens will be required. Laboratory required. (C-ID AG-PS 144L)

CRPSCI 45 covers the laws and regulations concerning pest control in California. This course is intended to cover the material needed to pass the laws and regulations section for the California Department of Pesticide Regulations Pest Control Adviser examination.

CRPSCI 46 studies the origin, history, and management measures for insect, plant pathogen, weed, and other pests of field crops, pest biology and life cycles are studied to demonstrate the use of various Integrated Pest Management (IPM) technologies for economic crop production. Pesticide regulations, application, formulations, and materials for specific uses are covered. Laboratory required. (C-ID AG-PS 156L)

PEST CONTROL ADVISER

Gain the knowledge and skills necessary to work in this rewarding field in Agriculture. West Hills College Coalinga offers a program that provides:

- Immediate access to training and education
- Short-term courses to qualify you to take the State Exam
- Real-world and hands-on learning experience

What Are the Education Requirements for a PCA?

WHCC prepares students for the California Department of Pesticide Regulations (CDPR) Agricultural Pest Control Adviser (PCA) exam. Forty-two units of coursework are offered to fulfill the Option 3 education requirement to take the PCA exam. Whether you are a first time student looking for a career or you are looking to change your career, these courses can help you towards a high paying, high growth job. Courses are college transferrable and align with California's C-ID, which means they are transferrable to colleges throughout the state.

What Does a PCA Do?

Pest Control Advisers (PCAs) are licensed professional production consultants who serve California agriculture and horticulture producers. PCAs specialize in pest management, but they are also an important resource to producers in a wide range of production concerns related to plant health.

A PCA is licensed by the State of California to provide written recommendations and a detailed plan for the use of pest management materials. A PCA is a recognized authority on any agricultural use.

PEST CONTROL ADVISER

Why West Hills College Coalinga?

West Hills College Coalinga offers courses which meet the education requirement for the Agricultural Pest Control Adviser (PCA) license through the California Department of Pesticide Regulation (CDPR). Successfully complete the coursework and 24 months of applicable work experience and you'll be eligible to take the state test to become a licensed PCA, which is the path to a good job.

- Fourteen different courses are offered in:
- Crop Health
- Pest Management Systems and Methods
- Production Systems
- Physical and Biological Sciences

Job opportunities in this field exist now and are growing. You'll take classes at WHCC's state-of-the-art Farm of the Future. Nine of the nation's top 10 agriculturally productive counties are in California, and six are located in the Central Valley. Learning in an area which produces twenty-five percent of the nation's food allows students to learn real-world skills applicable in today's job market. Being centrally located allows students opportunities for field trips and internships with some of the largest growers in the nation. Our Farm of the Future operates a 213-acre diversified farm on which millions of dollars have been invested to provide students with an authentic learning experience.

Your Future Begins Here Today

- Acquire units to meet the education requirement for the CDPR's Agricultural Pest Control Advisers license
- Learn skills for employment as a crop consultant
- Learn information needed to pass the PCA exam
- Gain relevant work experience to prepare for a career as a PCA
- Prepare for university transfer

WEST HILLS COLLEGE COALINGA

Farm of the Future
West Hills Community College District
9900 Cody St., Coalinga CA 93210
David Castillo, Interim Director
(559) 000-0000
www.westhillscollege.com

WELDING TECHNOLOGY

Become certified and job-ready in this growing field. Develop hands-on skill in a series of short-term compressed courses. West Hills College Coalinga offers a compressed program that teaches you:

- Immediate access to training and education to become certified in welding
- Short-term courses to qualify you to learn rapidly and go to work sooner
- Real-world and hands-on learning experience

What Does a Welding Tech Do?

Welding Techs have knowledge, understanding and hands-on skills to perform all facets of welding and are in demand in the industrial, welding or agricultural industries. It all starts at WHCC by learning welding basics:

- Oxy-Acetylene
- Torch Cutting
- SMAW
- SMAW Certification
- Brazing
- MIG
- TIG
- Plasma Cutting

A certified welder has prepared for certification through the study of the welding procedures and standards established by the American Welding Society (AWS). The training begins with core skills and an introduction to welding and moves on to:

- Shielded Metal Arc Welding (SMAW) and basic instruction in beads, joint fit-up and alignment
- Advanced SMAW including groove welds, backing, v-groove and open root v-groove welds
- Metallurgy and weld symbols and reading welding detail drawings
- Gas Metal Arc Welding (GMAW)
- Flux Cored Arc Welding (FCAW)
- Welding Plates and Pipes
- And much more

WELDING TECHNOLOGY

What Are the Educational Requirements for Certification?

WHCC prepares students for the job market by providing basic skills training, followed by Beginning and a number of Advanced courses at which students get hands-on experience at our state of the art Farm of the Future facility in Coalinga, CA. You'll prepare for certification and be on the road to an exciting career with many job opportunities both regionally and elsewhere.

Whether you are a first time student looking for a career or you are looking to change your career, these courses can help you towards a high paying, high growth job. Financial Aid is available for those who qualify.

Courses are college transferrable and align with California's C-ID, which means they are transferrable to colleges throughout the state.

Your Future Begins Here Today

- Acquire the necessary skills to go to work upon completion
- Gain relevant work experience to prepare for a career as a Certified Welder

WEST HILLS COLLEGE
COALINGA

Farm of the Future
West Hills Community College District
9900 Cody St., Coalinga CA 93210
David Castillo, Interim Director
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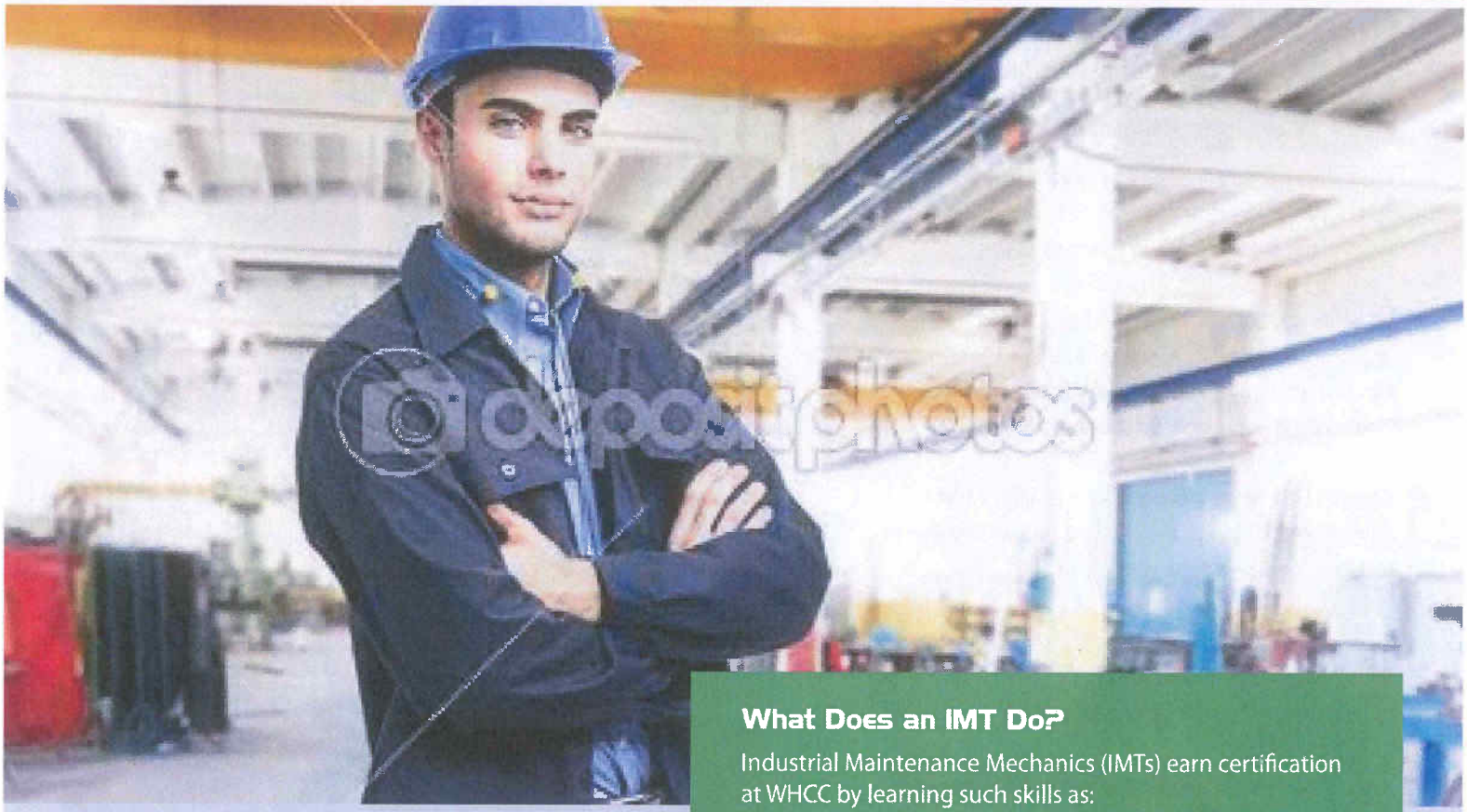
www.westhillscollege.com

INDUSTRIAL MAINTENANCE TECHNOLOGY



Become job-ready in this growing field. Develop hands-on skill in a series of short-term compressed courses. West Hills College Coalinga offers a compressed program that teaches you:

- Immediate access to training and education
- Short-term courses to qualify you to learn and go to work
- Real-world and hands-on learning experience

What Does an IMT Do?

Industrial Maintenance Mechanics (IMTs) earn certification at WHCC by learning such skills as:

- Electrical Control Systems
- Wiring
- Hydraulics
- Pneumatics
- Power Tools
- Hand Tools
- Safety Skills

An IMT knows construction mathematics, understands construction drawings, and can install, repair or maintain such systems as:

- pumps and drivers, valve
- piping systems including copper, plastic and ferrous metal
- pressure steam systems
- distillation towers and vessels
- heaters, furnaces and heat exchangers
- cooling towers bearings and couplings
- belt and chain drives
- mechanical seals
- and much more

INDUSTRIAL MAINTENANCE TECHNOLOGY

What Are the Educational Requirements for Certification?

WHCC prepares students for the job market by providing basic skills training, followed by Levels I, II and III in which students get hands-on experience at our state of the art Farm of the Future facility in Coalinga, CA.

Whether you are a first time student looking for a career or you are looking to change your career, these courses can help you towards a high paying, high growth job. Financial Aid is available for those who qualify.

Courses are college transferrable and align with California's C-ID, which means they are transferrable to colleges throughout the state

Your Future Begins Here Today

- Acquire the necessary skills to go to work upon completion
- Gain relevant work experience to prepare for a career as an IMT

WEST HILLS COLLEGE
COALINGA

Farm of the Future
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FARM OF THE FUTURE
STRATEGIC PLAN
2012-2017

WEST HILLS COLLEGE
COALINGA

Mission

West Hills College Coalinga is committed to achieving student learning through the provision of educational, cultural, and economic development opportunities to our current and future students and the local and global communities that we serve.

Vision

West Hills College Coalinga strives to become a premiere interactive learner-centered community college recognized for its contribution to educational, social, cultural, and economic vitality.

TABLE OF CONTENTS

WEST HILLS COLLEGE
COALINGA

LETTER FROM THE PRESIDENT

For over eighty years, West Hills College Coalinga has improved the lives of the people of the San Joaquin Valley. We have earned a reputation for leading innovation in instructional practice and our dedication to educational excellence is well documented. Commitment to our mission and vision has allowed us to confidently express our motto, "Once you go here, you can go anywhere".

This dynamic new plan will guide our efforts and chart our course for the next five years. These are exciting times for the college as we sharpen our vision and commit all of our resources to the delivery of life-changing learning opportunities and expanding partnerships that will improve the economic health of our region. The 2012-2017 Strategic Plan reflects our goal to be a "labor-market-responsive college. "We are charting a course anchored by strengthened partnerships with business and industry, bringing a renewed sense of entrepreneurship to the development of new programs designed for the business community and the student.

In order to sustain and grow the Valley economic base, we have to educate more students. Our faculty, administration and staff understand the importance of having agriculture and ag-related jobs in our community. This plan will help us help our students as they seek to gain the skills and knowledge needed to secure a high demand job—one with a career path that has a capacity for creating wealth for themselves and our community.

Kindest Regards,

Carole Goldsmith, Ed.D.
President
West Hills College Coalinga

For more information about Farm of the Future, contact:

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Agriculture and Industrial Science (AIS) DEPARTMENT

Vision

"The Agriculture and Industrial Science Programs at the Farm of the Future will be an international model, emphasizing education and technical training using sustainable practices and resource management. They will specialize in integrated food, fiber, energy and environmental systems-serving our communities, region, State and global partners."

Mission

"WHCC Agriculture and Industrial Science Programs at the Farm of the Future provide exemplary education and training for students utilizing regional strengths, emerging technologies and applied learning, empowering those we serve to be competitive in the global economy."

2005

Sale of the Old College Farm Site

2009

Vince Mott CIMIS Weather Station Donation

2010

Bob Viets and RCO Endowed Scholarships Established

HISTORY OF THE FARM OF THE FUTURE STRATEGIC PLANNING PROCESS

In July 2000, the first Farm of the Future strategic planning workshop was held involving members of the WHCCD Board of Trustees, representatives from the agriculture industry, government, K-12, community leaders, university educators, and WHCCD faculty and staff. The purpose of the retreat was to crystallize initial thinking about the design and development of the Farm of the Future and related programs and services at West Hills College Coalinga.

In December 2000, West Hills College District Board of Trustees approved the initial strategic plan, creating the Farm of the Future, recognizing the changing technical, economic, social, and cultural environment that students and the agricultural industry relate to the local and global society.

The second strategic planning retreat, held in July 2002, reviewed progress on the strategic plan, and confirmed the positive progress made at the Farm of the Future with recommendations to continue work using the 2000 strategic plan as a guideline.

In October 2010, a third strategic planning retreat was held to review the existing plan in preparation to update it to reflect the changing needs of our communities, industries that we serve, new industries in our region, and most importantly our students. The meeting involved community members, civic leaders, industry members, representatives from Cal Poly SLO and CSU Fresno, and staff and faculty from WHCC and WHCCD. The Eaton Cummings Group (ECG), the same consulting team that conducted the previous two workshops, facilitated the planning workshop, providing experience and history to the process.

The outcomes of the strategic planning retreat, follow up meetings with advisory groups, and input from faculty and staff have resulted in the 2012-2017 strategic plan. It includes revised vision, mission, and goals. Most importantly, the plan includes performance indicators with measurable outcomes to determine achievements.

The Farm of the Future is located on 230 acres in Coalinga and was donated in 2001 by the Allen family (special thanks to Mrs. Dorothy Allen). To date, the West Hills Community College District has invested more than $25 million in on site infrastructure.

2011

New Ag/Industrial Science Facilities Groundbreaking

2012

Classes Begin In New Facilities at Farm of the Future

2013

Farm and Rodeo Arena Dedication

COMPREHENSIVE EFFECTIVENESS MODEL

As a result of input from the strategic planning process three goals emerged that form the focus for the next next five years. The three goals incorporate measurable outcomes that will provide evidence in support of achieving the goals. The comprehensive effectiveness model provides a visual representation of how mission, goals and indicators are aligned and connected.

STRATEGIC GOAL #1

Utilize program review, other assessments, and employer engagement to ensure the vitality, viability, and sustainability of Agriculture and Industrial Science programs at the Farm of the Future.

Program review includes an assessment of enrollment, productivity, student success, and program relevance. The outcomes for program review also provide an opportunity to make recommendations for improvement and changes as a result of the data and information, internally and externally.

Performance Indicators

- Timely and useful program review completions
- Regular and effective employer engagement

Base Line Information for Goal 1

Agriculture and Industrial Science (AIS) Program Review Record

AIS Program	2010-2011	2011-2012	2012-2013
Agriculture Science and Technology	Completed and Approved		Pending Spring 2013
Heavy Equipment Operation			Pending Spring 2013
Industrial Maintenance Technology			Program Launch Spring 2013
Welding Technology			Program Launch Spring 2013
Pest Control Adviser			Program Launch Spring 2013

STRATEGIC GOAL #2

Expand programs in the Agriculture and Industrial Science fields.

Utilizing input from employers and advisory groups, and leveraging external resources, WHCC will explore and develop new program and course offerings that support the mission of the college and meet community and industry needs. New program considerations include, but are not limited to:

- Pest Control Adviser (PCA)
- Environmental Science
- Animal Science
- Alternative and Clean Energy
- Water Management
- Range Management
- Agri-business
- Industrial Electrical

Performance Indicators

- Number of new degree programs
- Number of new certificate programs

STRATEGIC GOAL #3

Increase internship opportunities and employment placement for Agriculture and Industrial Science students.

Utilizing industry partners, workforce development agencies, professional organizations, and advisory committee members, WHCC will develop relationships that lead to work experience, internships and employment of students.

Performance Indicators

- Number of internships developed
- Number of internship partners
- Number of internships completed
- Employment placement rates

COLLEGE COURSES CONNECT TO JOBS

Agriculture and Industrial Sciences

Welding Technology	Irrigation	Precision Agriculture	Heavy Equipment Operation	Pest Control Adviser (PCA)	Industrial Maintenance Technology
Educational and Professional Certifications					
• AWS D1.1 Structural Welding Code-Steel • MSSC Certification • NCCER Certification • ASME Sec. IX Boiler and Pressure Vessel • API 1104 Pipeline and Facilities	• Irrigation Association's Certified Irrigation Designer (CID) • Irrigation Association's Certified Landscape Irrigation Auditor • Irrigation Association's Certified Agricultural Irrigation Specialist (CAIS) • Irrigation Association's Certified Golf Irrigation Auditor	• Agriculture Science and Technology AS Degree (+ GE units) • Precision Agriculture Certificate (28 units) • Precision Agriculture Local Certificate (17 units)	• Heavy Equipment Operation Certificate	• California Department of Pesticide Regulation's Agricultural Pest Control Adviser (PCA) • California Department of Pesticide Regulation's Qualified Applicator License (QAL) • Certified Crop Adviser (CCA)	• MSSC Certification • NCCER Certification
Employment Opportunities					
• Pipeline Welder • Structural Steel Welder • CWI (requires work experience and AWS exam) • Welder/Fabricator	• Certified Irrigation Designer • Certified Landscape/Golf Course Auditor • Golf Course Superintendent • Ag Irrigation Consultant	• GPS/GIS Technician • Crop Consultant • Dealer/Manufacturer Representative • Private Applicator	• Heavy Equipment Operator • Construction Grade Checker • Field Mechanic • Equipment Construction Foreman	• Chemical Dealer/Distributor • Private Agricultural Consultant • Coorporate Farm Manager • Private Applicator	• Industrial Plant Mechanic • Agricultural Plant Mechanic • Mobile Equipment Mechanic • Sanitation Maintenance Technician

Training and education designed for the real world is what you'll find at the Farm of the Future at West Hills College Coalinga. Our Agriculture and Industrial Science Department prepares students for jobs that exist. Here are some testimonials from former students who found good jobs in Agri-business.

"Attending the Precision Ag program at WHCC provided me with the guidance and knowledge to move on to a four year college. Working in the industry allowed me to get on track."

Mike Howard,
Pest Control Adviser,
Wilbur-Ellis, Chowchilla, CA

"The time I spent at West Hills College in the Precision Ag program has been very beneficial and the lessons learned there have been useful in my everyday life."

Kerri Birdwell,
Pacific Coast Field Support Technician,
Ag Leader Technology, Iowa

"Attending West Hills College gave me the motivation to move forward and better my education. At the end of the program, I went on to attend Fresno State. Before attending WHC, I worked for my family tire business and had it not been for the training at West Hills, I would probably still be there."

John Silvera,
Pest Control Adviser,
Wilbur-Ellis, Shafter, CA

"Being involved in the Precision Ag program has provided me with hands-on training and given me the experience I needed to work with the public. The knowledge I obtained at West Hills has also given me the communication skills to succeed in my line of work."

Mike Dow,
Sales Rep/Pest Control Adviser,
Helena Chemical Company, Hanford, CA

"The Precision Ag program provided me with the opportunity of learning new and different techniques for crop growing. In my profession now, I currently refer to the GIS Sector in my company, which allows me to pinpoint where the crops came from and weed out the good from the bad."

Brent McKinsey,
Ranch Manager,
Mission Ranches, King City, CA

HOW YOU CAN HELP

Providing training for those headed to careers in agriculture has been a mainstay of West Hills College Coalinga since agriculture classes were first taught at the college in the early 1950s. Along the way, industry partners have helped guide the program to serve students from throughout the nation and the world. Today, more than ever, the college needs the support of industry partners.

To maintain our proud history here in the Central Valley, we moved our rodeo grounds to the Farm of the Future. Our students can participate in a team sport that has long been part of the agricultural lifestyle and tradition.

How Can You Help?

Become an advisory committee member. Your vision of how we shape agricultural education for the future is critical.

Support for programs. California's six-year-long budget crisis means funding for education has been pushed back 10 years. If we are to continue to offer training in specialized curriculum, private sector support will be critical. A contribution would endow a chair that allows us to hire an expert instructor. We have identified the need for instructors to train pest control advisers and in the areas of animal science, alternative energy and welding technology.

Support for students. Endowments that establish annual scholarships or one that that would endow a scholarship in perpetuity are invited. We are in need of a travel budget for recruiting purposes.

Support for facilities. Our investment in new facilities has been focused on a new shop building, the rodeo arena, a second water well, an irrigation system, roads and other infrastructure improvements. Long-term plans call for on-site classrooms and an enclosed arena. Naming opportunities exist for each of these.

Support for equipment, tools and supplies. To offer a trained workforce ready to meet the needs of employers these donations are critical—whether as outright gifts or as long-term loans. Some examples include:

- The use of a tractor during your downtime will allow students to experience different equipment with varying guidance systems. Our use can be scheduled around your heavy usage periods.
- A one span linear irrigation system for use on our student project fields.

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www.westhillscollege.com

Once you go here, you can go anywhere™

WEST HILLS
COMMUNITY COLLEGE DISTRICT

WEST HILLS magazine

Winter 2013

Solar Farm

Harnessing the Sun to Cut Energy Costs at West Hills College

Living the Good Life in Small Town America

Once You Go Here, You Can Go Anywhere ... And They Did

WEST HILLS
magazine

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WEST HILLS
COMMUNITY COLLEGE DISTRICT

Once you go here, you can go anywhere

Allow Me to Introduce Our Magazine

I'm pleased to introduce to you our new magazine, designed to inform and educate readers in our district about how we are doing with respect to our responsibilities, both fiscal and educational. (There will be a print version as well as an online version.)

This first issue of the magazine will answer questions you may have about West Hills Community College District, which covers some 3,500 square miles in Fresno and Kings counties and is home to West Hills College Coalinga, West Hills College Lemoore and the North District Center. The two separate community colleges and the educational center are governed from our district office in Coalinga. Each year, we educate more than 6,000 students.

As you look through the table of contents on the opposite page, you'll get an idea of the many ways in which we impact our community. In Coalinga, Lemoore, Firebaugh, and many other small towns in the region including Huron and Avenal, we help put the community in community college.

There's a new solar field ready to come online. It will pay for itself in a short time, and continue to save the district money long after that. This field will help expand our Farm of the Future operation, which you'll be able to read about when you turn the page.

Be sure to see the stories about a pair of our students, Katelyn Vargas and Matthew Warren. They're just two of the many success stories on our campuses, where we grow and nurture future farmers and research scientists and change countless other lives.

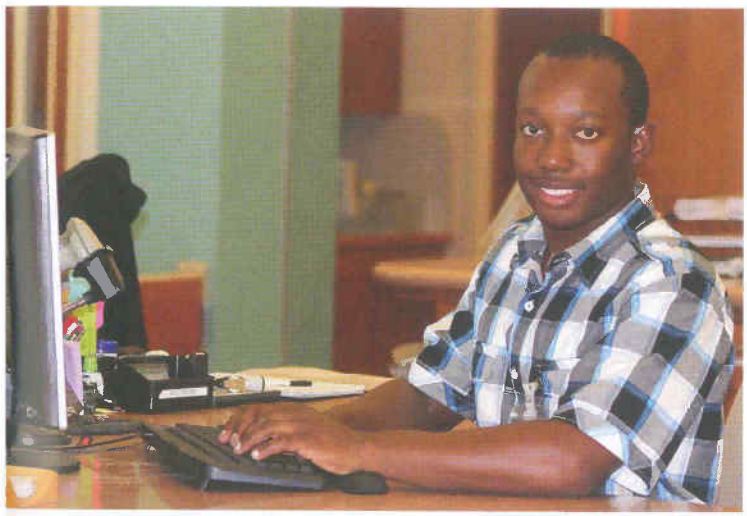
If you wish to be part of our growth and expansion, you can help by contacting our college foundation. There are endowment funds to fund or expand programs at our Farm of the Future as well as for the popular President's Scholars program, which gives local high school seniors a path to a bachelor's degree by starting here at West Hills. It's a tax-deductible opportunity to help the new generation of students who are coming to our campuses.

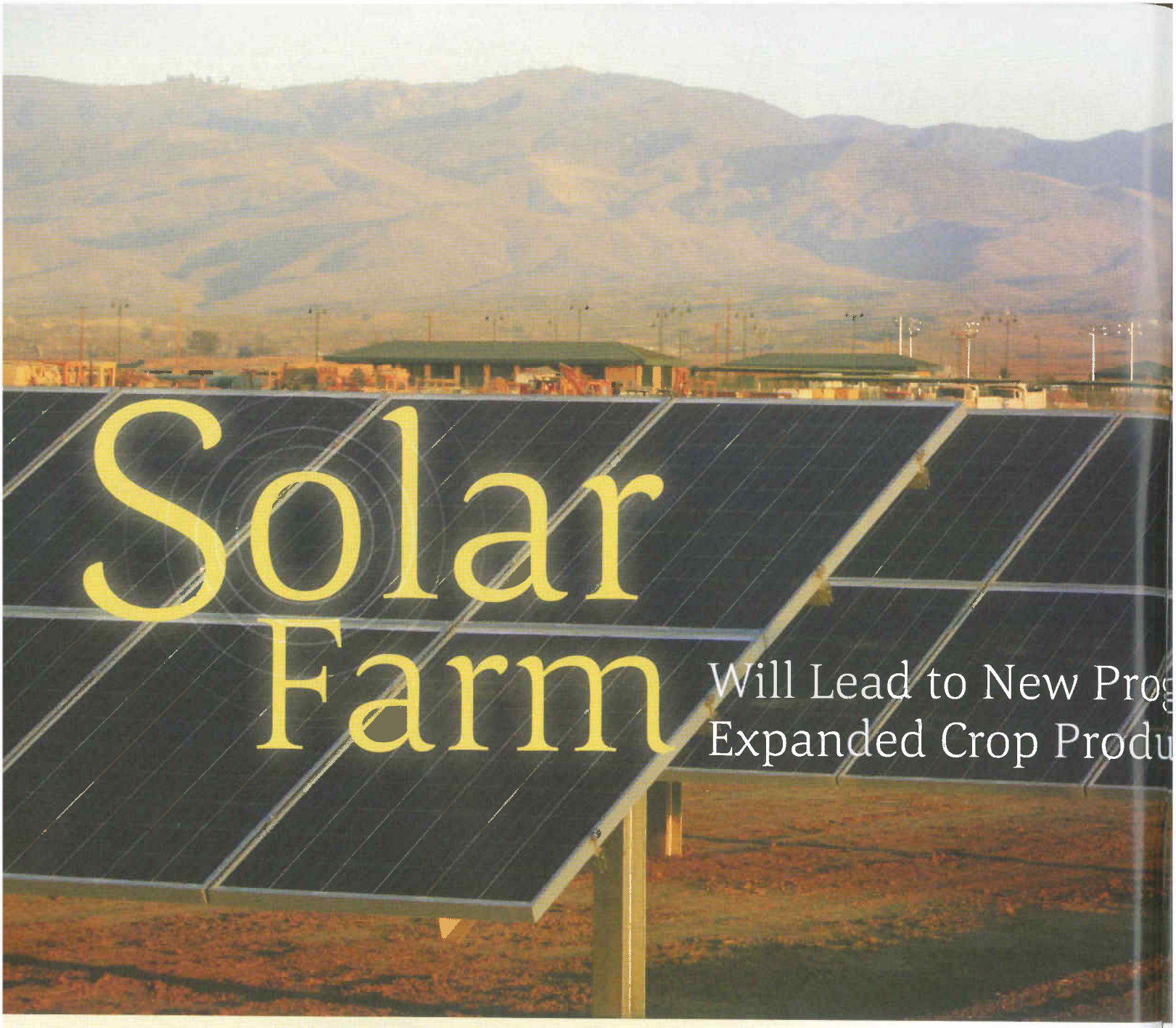
In these pages you'll learn that we are proactive at being good stewards of our public and private funds, relentlessly focused on innovative ways to help students stay in school and reach their goals, and constantly striving to serve and improve the communities we touch.

Very truly yours,

Frank Gornick, Chancellor
West Hills Community College District

table of contents





Solar Farm

Will Lead to New Prog
Expanded Crop Produ

Construction is all but completed on a $2.5 million solar power project in a 4.5 acre section of the 213 acre Farm of the Future at West Hills College Coalinga. The "net zero" project is designed to pay for all the power needs for the farm operation, including classroom buildings and shops – as well as the recently completed rodeo complex.

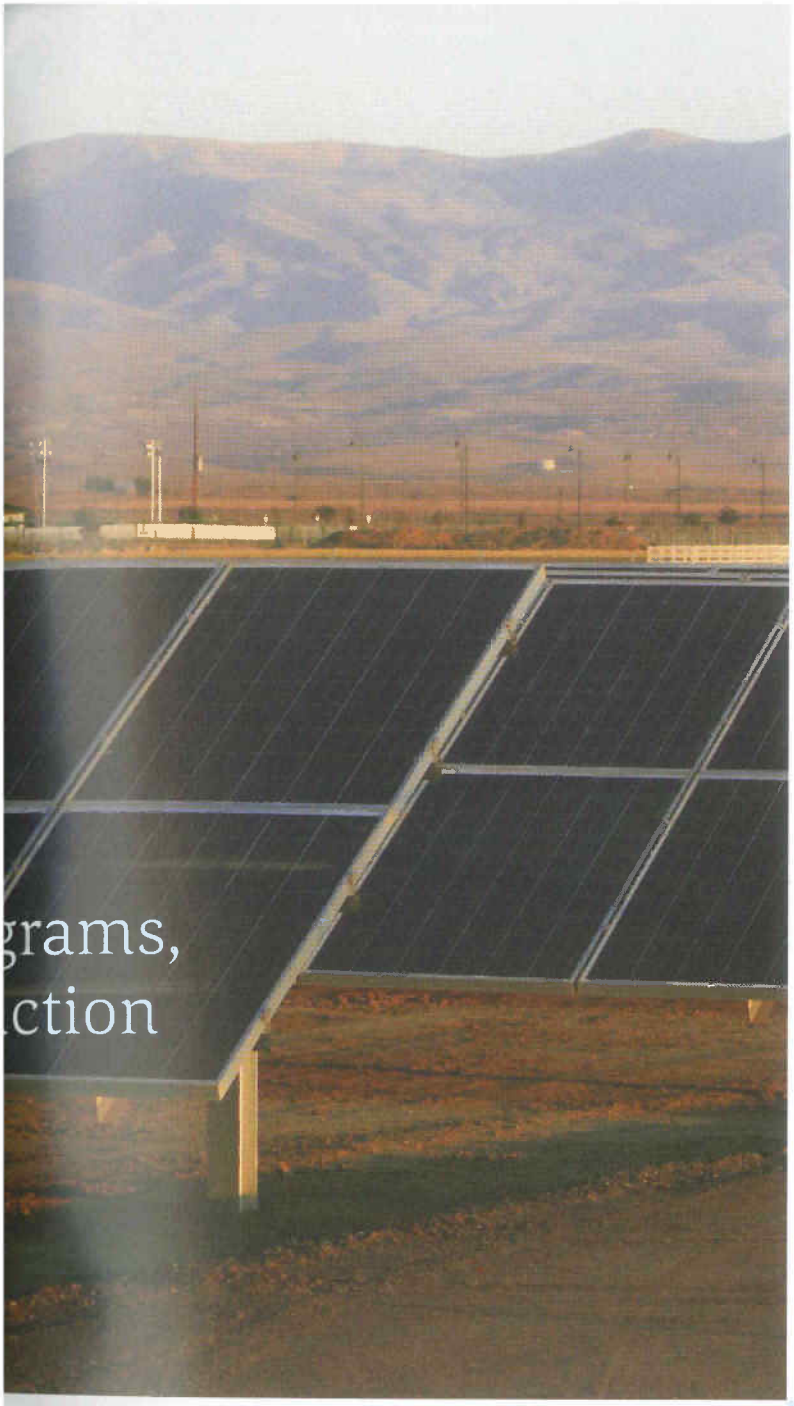
The project will lower the cost of pumping water for crops at the Farm, and lead to further expansion there.

The power should go on in January, according to Chris Addington, AP Architects, who said final touches are nearly finished at the facility. The January date is an estimate from PG&E, which has to perform some critical power line work before the systems can be energized.

A study shows the college can expect to save more than $4.8 million in electrical energy costs over the next two decades, once the initial cost is paid for in energy savings.

The implementation of solar energy production at this location will allow West Hills College to further expand its agriculture education programs at the Farm.

The project is partly funded by Measure C, a bond issue approved by local voters. The college will take out a loan for the balance, or $1.8 million. The energy savings add up to more



than the monthly payments, including 2.8 percent in interest, according to the cost analysis performed by AP. The project is expected to pay for itself in the seventh year.

Addington estimates that well pumps currently operate at less than 50 percent capacity, due to high energy costs and peak demand rates. With on-site solar power generation, the pumps can operate at maximum capacity which will increase crop production. AP also factored in the cost of increased energy needs for the newly completed Farm of the Future buildings and rodeo grounds, as well as future facilities at the site. The Farm of the Future generates income from the sale of crops, including corn, wheat, almonds and pistachios.

Visionary Project Becomes Reality

The Farm of the Future is a visionary project launched a decade ago after the Allen family of Coalinga donated the acreage for use as an educational facility.

With new infrastructure in place, much of it underground, a shop and classroom building and a rodeo complex with several outbuildings, West Hills College Coalinga is focusing on expanding the Farm. Several recent developments promise to push the project into what WHCC President Carole Goldsmith calls a new "foundational" stage. The immediate goals include bringing in new courses and programs and putting resources behind the farm to achieve additional college goals for the Farm.

For the fall semester, WHCC has hired three new faculty members and appointed an interim director of the Farm.

The new faculty members have strong backgrounds in agriculture and a wide range of expertise.

Tim Ellsworth, Ph.D., teaches agriculture technology, geology and environmental science. His expertise is in soil science with a focus on precision agriculture and nutrient management. He has 23 years as a professor and an international reputation.

Sherri Freeman is from a Fresno cattle family and has been teaching for 17 years. She developed a new agriculture program at a San Diego County high school and received her advanced degree at Cal Poly Pomona. She is currently working on her doctorate.

Norman Oilar has been teaching agriculture mechanics, animal science, ag business and natural resources

since 1996. He worked for 25 years in the construction business and has taught welding at both the high school and community college level. He has a master's degree in Agriculture Education from Cal Poly, San Luis Obispo.

The three new faculty members join an experienced, dedicated and highly educated team.

Merlin Welch, who runs the heavy equipment program at WHCC; Bruce Hunt, the head rodeo coach whose teams have won 10 regional championships and placed often in national competition; and Chris Chaney, who is the welding instructor at Farm of the Future. Clint Cowden continues to run Precision Agriculture, an academy-style program, which he helped create in 2003. David Castillo became interim director of the WHCC Farm of the Future in summer 2013. Since 2007, he has served WHCCD as director of the Westside Institute of Technology and several other programs.

Money for scholarships and industry support through internships are the Foundation's twin goals.

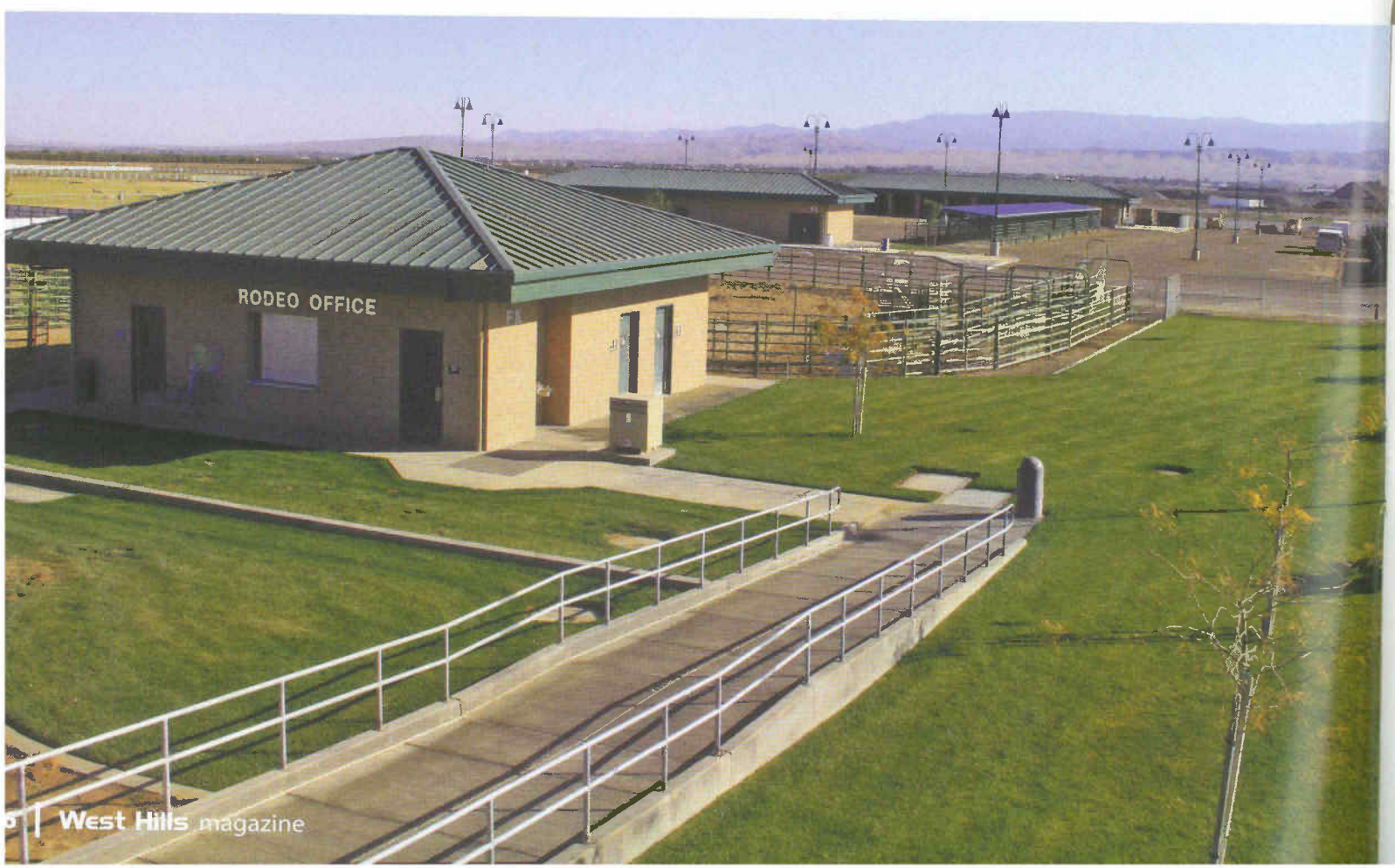
Foundation Seeking More Partnerships
to Help Grow the Farm

WHCCD Chancellor Frank Gornick and Foundation Executive Director Frances Squire are leading a $4 million endowment for the Farm, to guarantee continued growth and expansion of the program. Additional money for scholarships and industry support in providing internships are the twin goals. "Our desire is to create a facility here that can serve as a showcase for agriculture education in the Central Valley of California," said Gornick.

Harris Ranch, an outfit that put Coalinga on the map, has been supportive in the planning of operations at the Farm of the Future, helping WHCC make it what it is today.

Partnerships are the key that will unlock that door, according to Squire. "An endowment will allow us to expand and offer specialized classes, despite what happens year to year with the state budget," she said.

This past year, the Farm partnered with two agricultural giants in the region. Topcon Precision Agriculture, a subsidiary of Topcon Positioning Systems, an international $1 billion company, has provided WHCC with "the use of



Above: Students at WHCC's Farm of the Future gather in front of one of several computerized learning devices that are provided by various industry partners. Jose Machado, a rodeo student studying to become a licensed pest control adviser, is seated. Standing are Ashlynn 'Stormy' Baxley, Precision Ag and rodeo student, Jason Stevens, welding student, and Clint Cowden, instructor.

a state-of the-art simulation machine that allows students to get experience operating heavy equipment without burning diesel," said Goldsmith, the college president. The student sits in a unit with a large screen and hand controls; when it's turned on, the screen lights up and displays, say, a pile of dirt which the student then has to pick up and move and deposit in another location, all on screen. The screen records mistakes and even calculates the dollar amount of the damage caused if the student gets it wrong.

Paramount Farms, a division of Roll Global, one of the largest agriculture outfits in California with over 125,000 acres of nut trees in production, yielding 450,000 pounds of nuts annually, recently chose WHCC for a summer agriculture academy.

This summer, 50 eighth grade students from nearby Kettleman City and Avenal, home to many of Paramount's farm workers, lived in dorms on the WHCC campus for two weeks and – in between working out at the gym and swimming in the municipal pool – learned valuable hands-on lessons about agriculture careers. "We opened up the opportunity for them to see that ag careers were much more diverse than the farm worker jobs many of them were familiar with, and that they could make a good living in agriculture if they stayed in school," said Stephanie Droker, vice president, student services at WHCC.

School children of Paramount's farm workers lived on campus and learned that education leads to good careers in agriculture.

At left, the newly completed rodeo facilities, one of the finest among western colleges.

COLLEGE TEAM BRINGS IN $100 MILLION IN GRANTS FOR STUDENTS, CAMPUSES AND COMMUNITIES

Cathy Barabe got her start as a grant writer by writing one for an automotive training program at Fresno City College, a condition of the part-time employment she was seeking. "In effect," she said, "they told me, write the grant and if we get it, we'll hire you to coordinate it."

She got it, they hired her, and now, 28 years later, she has retired from West Hills Community College District where she served as director of grants for 13 years and holds what must be a world record. In this small 6,000-student college district 70 miles south of Fresno, she has written grants that brought in more than $100 million.

"I'm sure it's at least that much," she estimates as she swivels in her chair, refers to an Excel file on her screen and traces her finger along the column to the bottom of the page. The total is $106 million and change, an average of more than $8 million dollars a year since 1999.

How'd she do it? Not all by herself, she says. "I had a really good team."

That would be Maria Cavazos, her assistant who worked beside her from day one, and more recently Anita Wright, former director of special grants since 2010, and Joy Cowden, coordinator of special grants, who joined the team in 2006. Together with college leadership that green-lighted the process, they've created a grant culture at West Hills and been a formidable force.

Obviously, these people shared a tremendous work ethic. "When I came, we had few grants," Barabe said. "We got busy and wrote and took them to the Fresno County Department of Human Resources. They had 14 grants available and we came in with all of them. They said they'd never seen that before. We got two and that started things rolling."

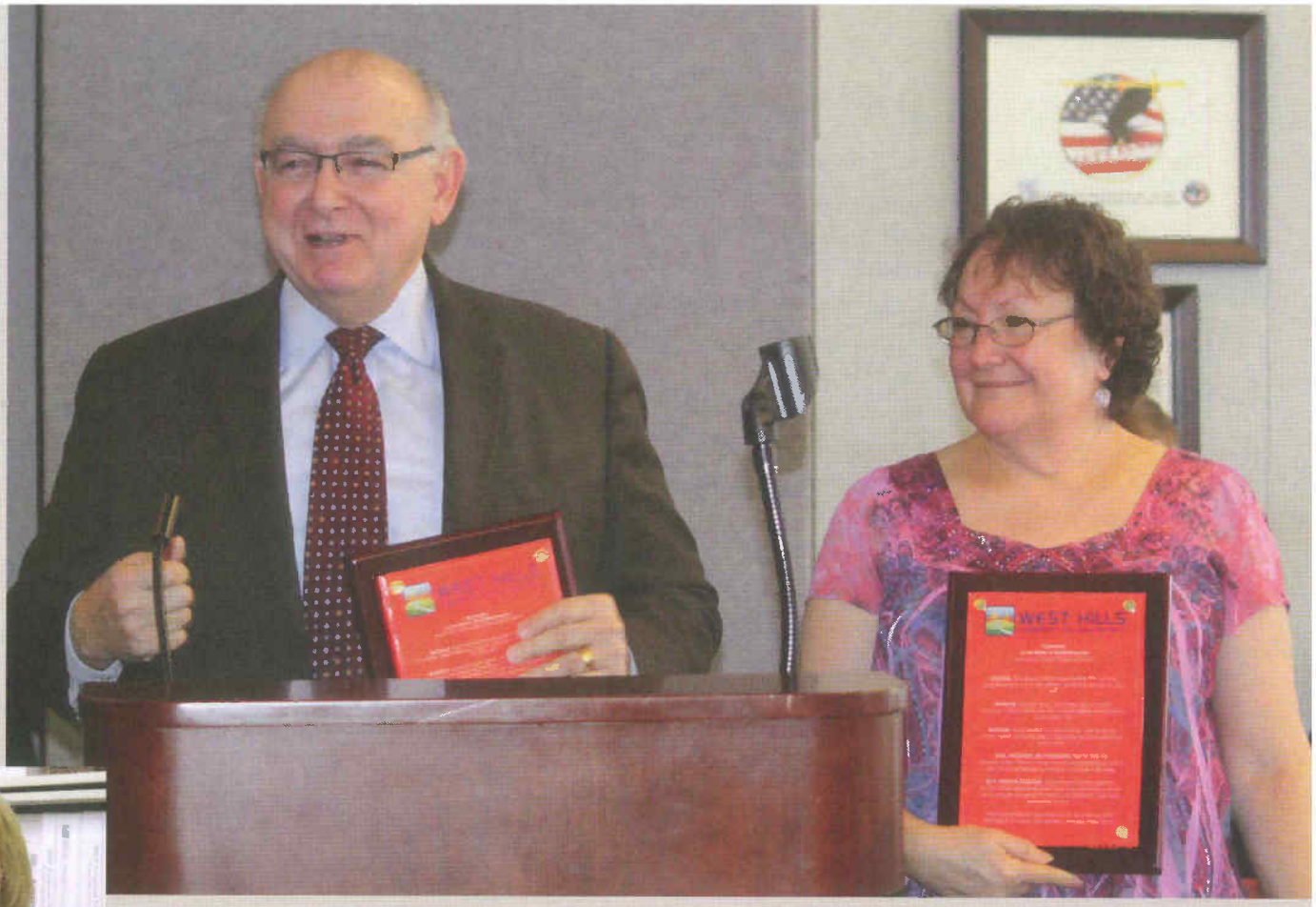
Chancellor Frank Gornick, who started at WHCCD in 1994 as president and superintendent of what was then a one-college district, hired Barabe as a full-time grant writer. To say he's been impressed with her performance is an understatement. "This is a record that is probably unmatched in the history of community colleges," Gornick said. "In bringing in those hundreds of millions of dollars, Barabe provided educational opportunities for both the students and the communities served by our district's two colleges (in Coalinga and Lemoore, two farming communities located on either side of Interstate 5) in what's often referred to as the middle of nowhere.

They write fewer grants these days, averaging one a week, sometimes two or three, because the grant world has changed. "Grants have gotten larger, but there are fewer of them," Barabe said. She points to the big one: $19.9 million from the Department of Labor for job training in the Central Valley, a grant written by the entire team on behalf of a consortium of 13 Central Valley colleges. Similar grants were awarded in other parts of the country but only one in California and West Hills is the lead college on that TAACCCT grant. The far-reaching grant funds colleges in their effort to streamline the job-training programs throughout this region – which consists largely of farm workers who face high seasonal unemployment rates and whose annual income is way below the national average. It's a fertile agricultural area dotted with large corporate farms and oil companies. There are jobs here that go begging, not because everyone is already working. "It's because employers can't find people who are trained for the jobs that are available," said Gornick. "This grant is designed to change that."

Carole Goldsmith, recently named president of West Hills College Coalinga, ran the workforce development office at WHCCD and worked with Barabe for years. She was the lead writer on the C6 Grant – the informal moniker given to the Department of Labor job training program created by the $19.9 million grant. Barabe is so successful at winning grants because "she thinks regionally and on a statewide basis," Goldsmith said. "Her work focuses on the students because she thinks about the families involved. She is leaving a legacy to these communities and to the state. You don't always get that with grants officers. She was raising funds before it came to be in vogue."

'We're America's bread basket ... and yet we have communities and people who have a hunger not just for food but also for education.'

Carole Goldsmith, WHCC President



The Board of Trustees of WHCCD created a new student award named in honor of the former grant director, Cathy Barabe, who will be forever known as the Hundred Million Dollar Woman. The Cathy Barabe Student Engagement Award will be presented annually to a student who "exemplifies the spirit and dedication" demonstrated by Barabe "in assisting the communities we serve," reads a resolution presented to Barabe by Chancellor Frank Gornick (above).

Interim Director of Grants Anita Wright (top) and Maria Cavazos, who worked with former grants director Cathy Barabe from day one along with Joy Cowden (not pictured) comprise the team that created a grants culture and brought in more than $100 million. Grants helped fund regional child development centers. A $19.9 million DOL grant led to training programs such as the psychiatric technician program.

Goldsmith said a sense of what the community needs is part of why Barabe and her team have raised so much money. "We're America's bread basket, the world's, and yet we have communities and people who have a hunger not just for food but also for education. And their needs were not being met. When I was at Fresno Unified (School District) she was working on a grant for K-12s as well as other community colleges, not just her own, and that was something that hadn't been done before. It's one thing that made me want to go to work at West Hills. I owe my professional career, my life really, to Cathy Barabe. One third of the people who work in the college district are here because of a grant she wrote, including me. She's transformed people's lives. She's an angel of God. I love her to death."

A similar grant was awarded to West Hills to create a psychiatric technician training course. The need exists because California built a brand new State Hospital near Coalinga in the last decade. "The grant to build our psych tech program means that hundreds of people are now employed as a result, and the economic impact on our community has been huge," said Barabe.

She is most proud of a series of grants that built child development centers in several rural communities in the valley. "We expanded a small facility in Coalinga and created an 11,000-square-foot child care center," she said. "It used to serve 75 kids, now it's 200." Similar child development centers, all bearing the name of West Hills College, dot the regional landscape in communities such as Huron, Mendota, Firebaugh, San Joaquin and Avenal – where there are three facilities, two of them at elementary schools.

"These centers are extremely important because they free up parents to attend classes which lead to better jobs and more job security," Gornick said. "And it puts our name in every community we

serve, which in time boosts our enrollments. We now have graduates who became teachers and now are teaching at the very child development center they attended when they were children."

This kind of outreach to neighboring communities has meant sometimes the college wrote grants that benefited the cities themselves. One example is a HUD grant that built a workforce training center for at-risk kids in tiny Huron, population 6,800. Barabe also found another grant that beautified downtown Huron, an example of the team's holistic approach.

"I grew up near there, at Five Points," said Cavazos, who used to travel to Huron as a kid and thought it looked a bit run down. "We got a grant for a main street beautification project for Huron, and now it's so beautiful. If a community looks attractive, people want to live there. It now includes a hands-on learning facility which provides workforce training for at-risk kids. If you can change one child, that's one that's not lost."

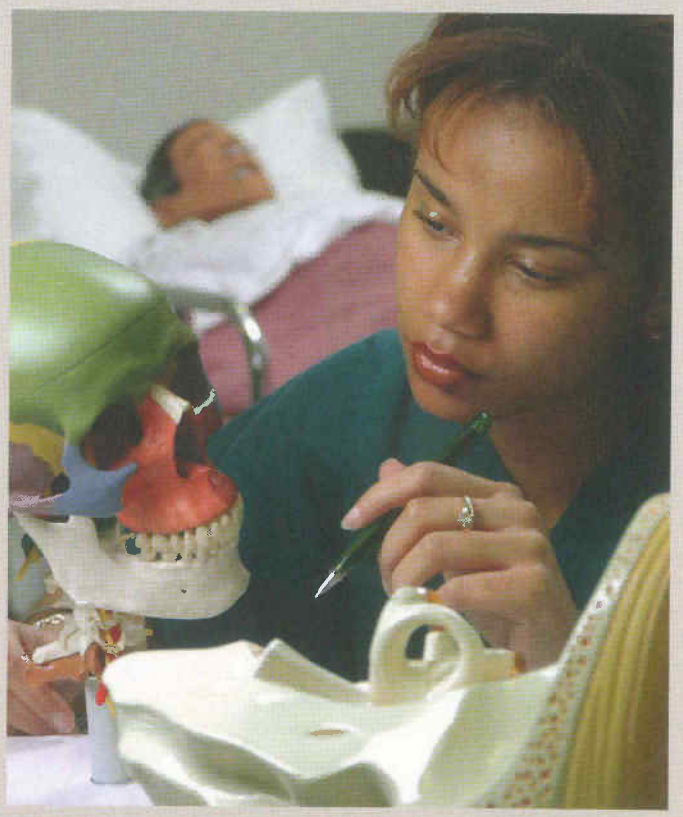
Barabe chimed in: "Another benefit is that now Huron is willing and eager to collaborate with the college. It has changed the tone of the region, ended the isolation, and brought about a spirit of cooperating where the cities see themselves as a valley, a region."

Is all this the kind of thing a college is supposed to do? "Yes," said Gornick. "That's exactly what we're supposed to do."

Barabe retired several months ago but has stayed under a contract to work some limited hours part time. Wright, now interim director of grants, said Barabe "understood and believed that with grant funded programs, the district could be a catalyst for change in our communities. She worked diligently to locate funding to bring innovative academic and career technical education programs to our campuses. She also searched for funding to improve and beautify our rural communities. She had a profoundly positive impact on our campuses and our service area."

Under Wright's guidance, the "grants culture" continues. Recently the college was awarded a $3.2 million Title V Grant for Technology that will help upgrade equipment to better serve students and will also fund a handful of new jobs. "And we continue to be very busy," she said. "In recent months we've applied for more than $40 million in grants and we're waiting to hear how some of those turn out."

Because of grants awarded to the district, WHC has opened child development centers in nearby cities including Huron, Firebaugh, Mendota, Avenal and San Joaquin. The district was also able to expand its child development center in Coalinga which used to serve 75 children; it now provides care and learning to 200.



More than 690 students have been trained in the WHCC psychiatric technician program and placed in rewarding jobs at facilities such as Coalinga State Hospital which opened in 2005. The training course was made possible because of a proactive effort by the WHCCD grants team, which applied for and was awarded a grant to launch the job training program.

Praised for High Standards

Academic Senate
for California Community Colleges
LEADERSHIP EMPOWERMENT VOICE

RECEIVED
SEP 23 2013
CHANCELLOR'S OFFICE

Sept. 19, 2013

Frank Gornick, Chancellor
West Hills District
9900 Cody Street
Coalinga, CA 93210

Dear Frank,

On behalf of the Academic Senate for California Community Colleges, we want to thank you for your generous hospitality and warm welcome for us while visiting the district during the Board of Governors' meeting this month. We were so impressed with everyone we met while in the district, and you have reason to be proud. From the food to the tour to the welcoming atmosphere, we feel lucky to have been able to join the Board in visiting the campuses and local community.

Your students are equally lucky to have such dedicated faculty, staff and administrators working tirelessly for their success. We saw beautiful spaces and excellent facilities, but what really stands out are the wonderful people in the district. Your commitment to find solutions for your community are evident and all of you should be commended for the work you do. While some people might think that colleges that are far from urban areas might not be sophisticated or modern, we found all of you to be setting the bar quite high for all our colleges in the state.

Please share our thanks and congratulations with all of your employees. We will recommend a visit to your district for anyone interested in how governance can work well, how a stable administration makes a positive difference for student success, how faculty are creating innovative solutions for students and communities, and how pistachio nuts seem to make the world a bit more sweet and salty at the same time.

Sincerely,

Beth Smith
President, ASCCC

David Morse
Vice President, ASCCC

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West Hills received high praise from the Academic Senate for California Community Colleges after they visited the district in September. Their leadership was at Lemoore to attend the meeting there of the CCC system's Board of Governors. In the highlighted section of the letter (above), they lauded WHCCD for setting the bar high for rural community colleges in California.

GOLDEN EAGLE ARENA

DRAWS CROWDS FOR COMMUNITY EVENTS

After the Golden Eagle Arena at West Hills College Lemoore was completed in 2011, the grand opening drew major media attention – not only because of the new landmark campus building built with $20 million in bond issue funds, but also because of its first guest speaker, Gov. Sarah Palin of Alaska.

At the time, Palin had yet to announce whether she would run in the 2012 presidential election after being the vice presidential running mate to Sen. John McCain in 2008. But the media buzz generated by her speaking engagement was what the college hoped for in turning the arena into a central hub for community events.

"This event probably single handedly put West Hills Lemoore on the map," said Don Warkentin, president of WHCL. "It set the stage for the arena to become a venue for cultural and civic events, and to say the least, provided free advertising for the college."

The arena contains 52,000 square feet and can seat up to 2,400 people. The facility includes equipment and laundry rooms, three conference rooms, four locker rooms, two team rooms and a fitness center with an aerobics room. It also holds coaches' offices and a training room.

It is home to Golden Eagles basketball games and campus dances. But student activities aside, the arena is also host to major community events like the recent Jose Ramirez professional boxing match, billed as a homecoming of sorts for the Avenal-based fighter who is a former Olympian and now a pro boxer with a 7-0 record.

The boxing match was labeled the "Fight for Water," a nod to one of its co-sponsors, the Latino Water Coalition. Ramirez is a member of the coalition, and they used the event as a forum in part to draw attention to water allocation needs in the Central Valley.

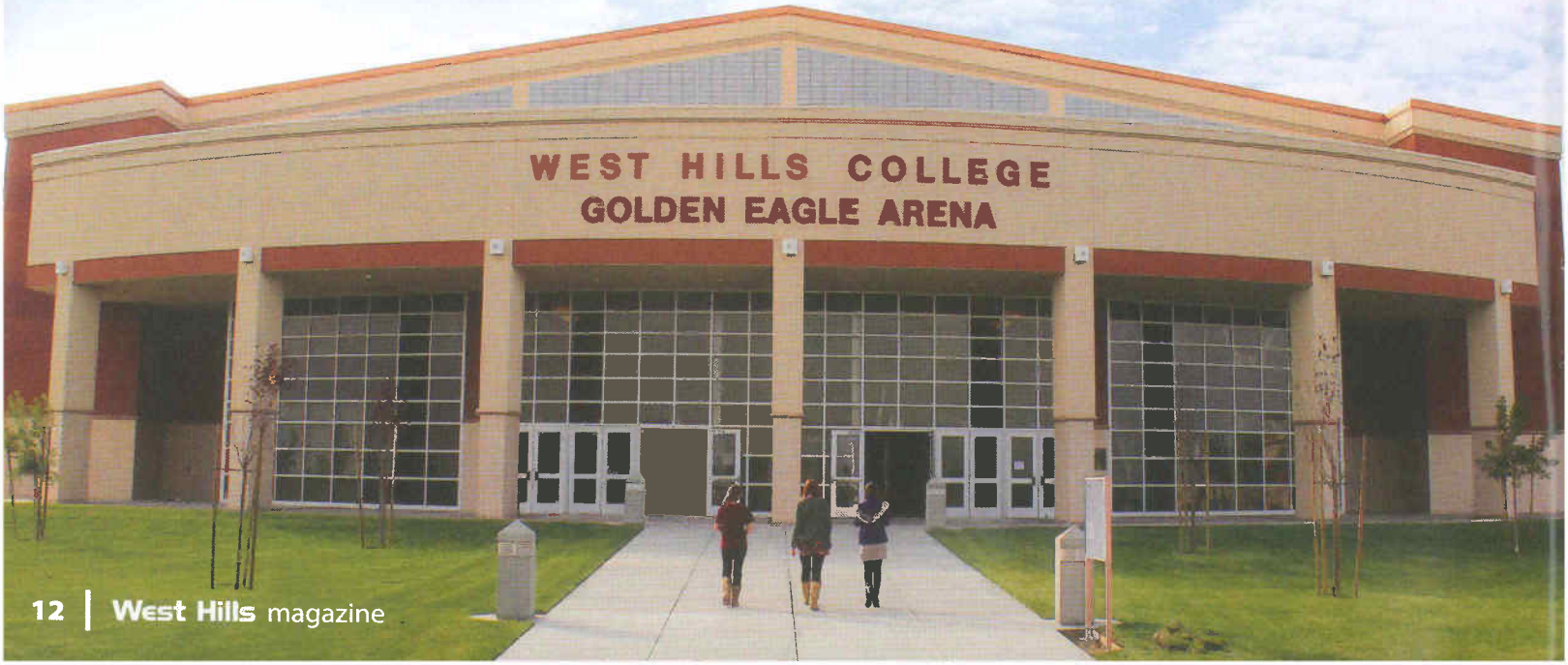
"The Golden Eagle Arena is truly becoming a community venue as demonstrated by the variety of national speakers who have graced our arena," said Warkentin.

Other public figures, such as former first lady Laura Bush and educator, activist and author Dr. Cornel West were invited to speak at the arena. In September 2013, Honor Flight screened its new documentary in the arena, which also included a live introduction by guest speaker Congressman David Valadao.

Entertainers Lorrie Morgan and Pam Tillis played concerts there as well as Little Joe y La Familia and Lady Tremaine Hawkins. WHCL held its 10th anniversary dinner in the arena and it was also

'The stage has been set for the arena to become a venue for cultural and civic events.'

Don Warkentin, WHCL President



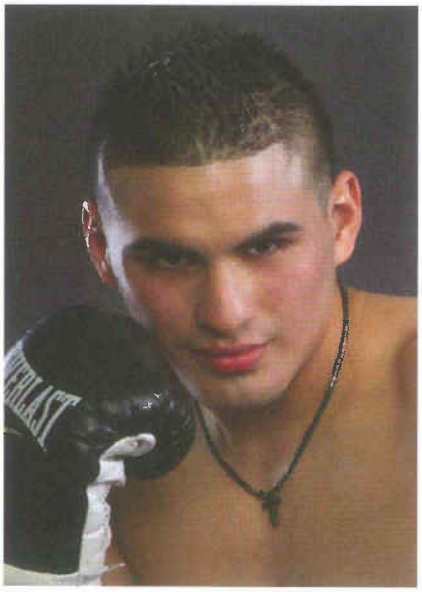
In 2013 the Arena hosted the California Community College Athletic Association wrestling championships, which attracted college teams from throughout California. The Arena was originally envisioned as a facility for sporting events but since its completion in 2011, a variety of other special events have also been held there, including noted public speakers, concerts, and local and regional fund raising dinners.

the venue for WHC Coalinga's 80th anniversary dinner.

In December 2012, WHCL hosted the California Community College Wrestling Championships at which WHCL placed third. The women's basketball team also won their first-ever home game in the arena against Alan Hancock College last year.

Those events were only the beginning. The Lemoore Chamber of Commerce will hold its annual dinner there in January, and the arena has been booked by the National Rifle Association for its annual fundraising dinner in March; the NRA used the facility for last year's dinner and loved the facility and its location.

"All of the feedback that we have received concerning the arena has been very positive," said Warkentin. "People are just amazed that such a quality facility is right here in Lemoore and in the West Hills Community College District. It has a state-of-the-art sound system, and there is not a bad seat in the house."



The Golden Eagle Arena has welcomed a diverse group of guests for public events, such as professional boxer Jose Ramirez, philosopher and author Cornel West, and former Gov. Sarah Palin of Alaska.

Coalinga Student Earns Prestigious International Ag Internship

Katelyn Vargas hopes to gain a broader understanding of international agriculture "while sharing with the rest of the world my love for the 300 agricultural commodities grown and raised in my backyard," she says. That's what she'll be doing as an International Ag Intern for the U.S. State Department.

She grew up in rural Turlock, Calif., and while her parents weren't farmers, Katelyn Vargas joined Future Farmers of America (FFA) in high school and was soon showing livestock at the county fair. Now, several years later, she's just been accepted to a prestigious internship program with the U.S. State Department where she'll do agricultural research and report to a Foreign Service officer based in Madrid, Spain.

Vargas, 20, is in her third year at West Hills College Coalinga, studying agriculture science and technology and earning credits for transfer next fall. She'll receive an AS degree when she graduates in May. She plans to apply to a number of four-year schools, including UC Davis, Iowa State, and Cornell University, and major in international agriculture.

The internship fits perfectly into her plans. "It gives me experience with the State Department, and if I major in international agriculture, there's a possibility I might work for them some day," she said.

The unique program is called the Virtual Student Foreign Service (VSFS) and in the age of computers, email and smart phones it is also an "e-Internship," which means she won't go to

Madrid but will remain in the Central Valley and report to the U.S. Embassy there.

"Interns will conduct some preliminary research to identify some of the myths and misperceptions that U.S. agriculture faces in the EU and other markets," she was told in an acceptance letter from the Madrid Virtual Intern Program.

"I hope to gain a broader understanding of international agriculture while sharing with the rest of the world my love for the 300 agricultural commodities grown and raised in my backyard," Vargas said. She'll do that by doing local research and providing Madrid with written information, videos and blogs. "I'll be going on a lot of regional field trips," she said. The unpaid, one-year internship is a coveted position. From hundreds of applications, only three were chosen: the other two are also women, fourth year students at UC Davis and Princeton, respectively. Vargas is the youngest and also the only one chosen from a community college.

Clint Cowden, agriculture and industrial science instructor at WHCC's Farm of the Future, has nothing but praise for her. "Katie has been an exemplary student and a real leader among her peers," he said. "She's someone you can always count on to be there, to help with recruiting and events. Being accepted for this internship is a significant honor and she has really earned it. She epitomizes our college slogan, that if you go here, you can go anywhere."

Vargas has been president of the WHCC Agriculture Ambassadors, which recruits students to the Ag Science program at the college's Farm of the Future and promotes higher education. She's also been active in organizing and participating in ag-related events, such as the FFA convention this year and as a Topcon Precision Agriculture intern and a representative at the World Ag Expo event held in Tulare.

She also served as a Resident Assistant at the campus dorm that houses foreign students, where she had the opportunity to work with and advise students from Brazil, Vietnam, Korea, Japan and Russia.

When Vargas got the news that she'd been accepted into the program, she said, "I'm excited about getting my foot in the door. I really wanted this internship. It will make me more familiar with the work I want to do and it gives me something to push toward. I'm hoping it will also help me get into the college I want."

Wixon is editor of West Hills Magazine and Director of Marketing/Consultant at WHCCD.

Story by Tom Wixon
Photos by Dennis Gallegos

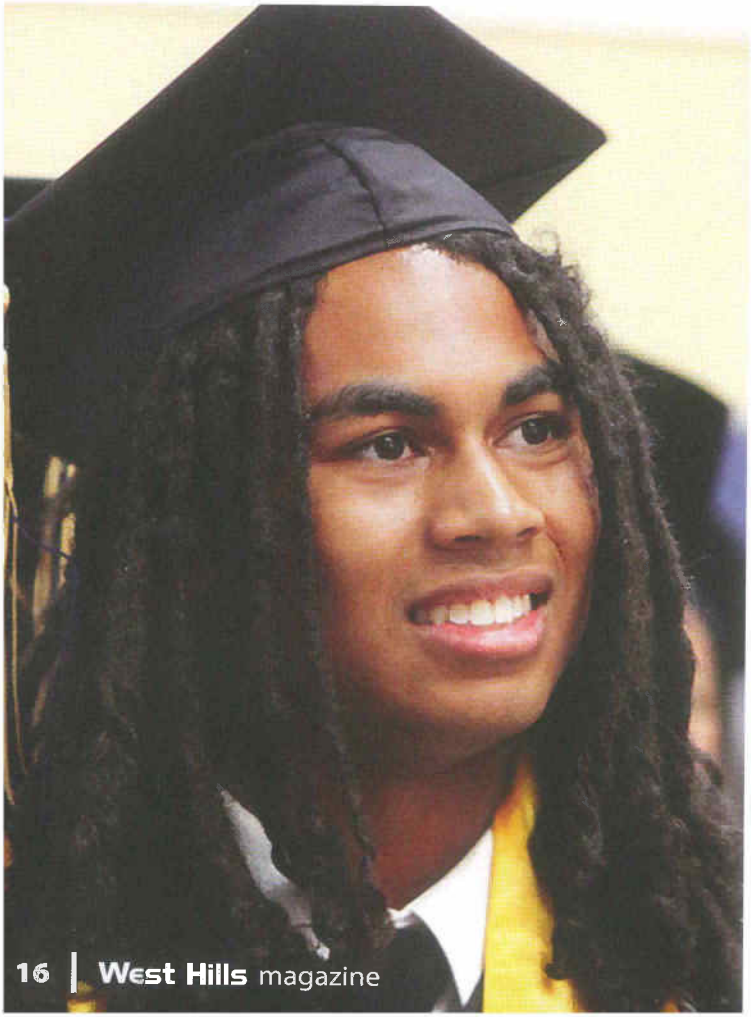
'I'm excited about getting my foot in the door.'

Which Came First, the Chicken or the Avian Flu?

Former WHC Lemoore Student Makes It His Life's Work to Find Out

Matthew F. Warren has a passion you might not be familiar with: He's into birds and immunology.

You've heard of the bird flu? Warren, who graduated from West Hills College Lemoore and is now in his second year at UC Davis, is studying to be an avian immunologist. Studying birds (including chickens) and the ability of their immune systems to fend off disease is what he does.



He's good at it. Earlier this year he won a national award for a presentation he made to MANRRS (Minorities in Agriculture, Natural Resources and Related Sciences). He won first place and $300, received a lot of recognition, and was asked by the Dean of Agriculture at UCD to present his winning research at Davis' undergraduate research conference. He was the subject of a photo shoot and was featured on UCD's website.

Warren was in Sacramento to present his research after one of his professors urged him to enter the national contest. His presentation was "The Analysis of Bacterial Killing Assay Using Chicken Plasma Samples." Warren explains:

"I was collecting blood from chickens and separating the plasma, and analyzing how efficient it was at killing bacteria. The point was, how effective were specific chickens at killing the bacteria and defending against it, based on their different levels of antibodies in their immune system?"

In 2011, Warren was a student at WHCL. Now he's finishing up his bachelor's degree requirements at a university recognized as one of the best for agricultural studies. He plans to graduate in June 2014 with a degree in animal sciences with an emphasis in avian sciences. His goal is to go on to grad school for a master's in immunology and pursue research.

Warren's parents, Charlie and Celia Warren, live in Lemoore. Matthew had a military upbringing (his father is a retired Petty Officer First Class, U.S. Navy), and it shows in conversation. When interviewed, Matthew's replies are sprinkled with yes-sirs and he is prone to agree with you by saying, "Roger that."

Warren says his parents have always encouraged him to succeed academically. "My father grew up in a family that valued hard work and dedication, and he instilled that in me. He told me he'd

Matthew Warren is on a path to become an avian immunologist, and it all started at West Hills College Lemoore. He graduated from WHCL in 2011 and transferred to the University of California, Davis where he's pursuing an Animal Science degree.

Photo Credit: Gregory Urquiaga, UC Davis

support me in any way he could for my college education, as long as I was willing to see it through to the end. My mother wanted all of us to be successful and made sure that my siblings and I all went to college. She encouraged us not to give up."

He's certainly disciplined, according to his instructors and administrators at WHCL. "Matthew has definitely established a very impressive list of accomplishments in a short period of time since leaving West Hills College Lemoore," said Dave Bolt, vice president, academic services. "Matthew has many more ambitious educational and career plans for himself. If they all work out we will be reading more about his successes in a few short years."

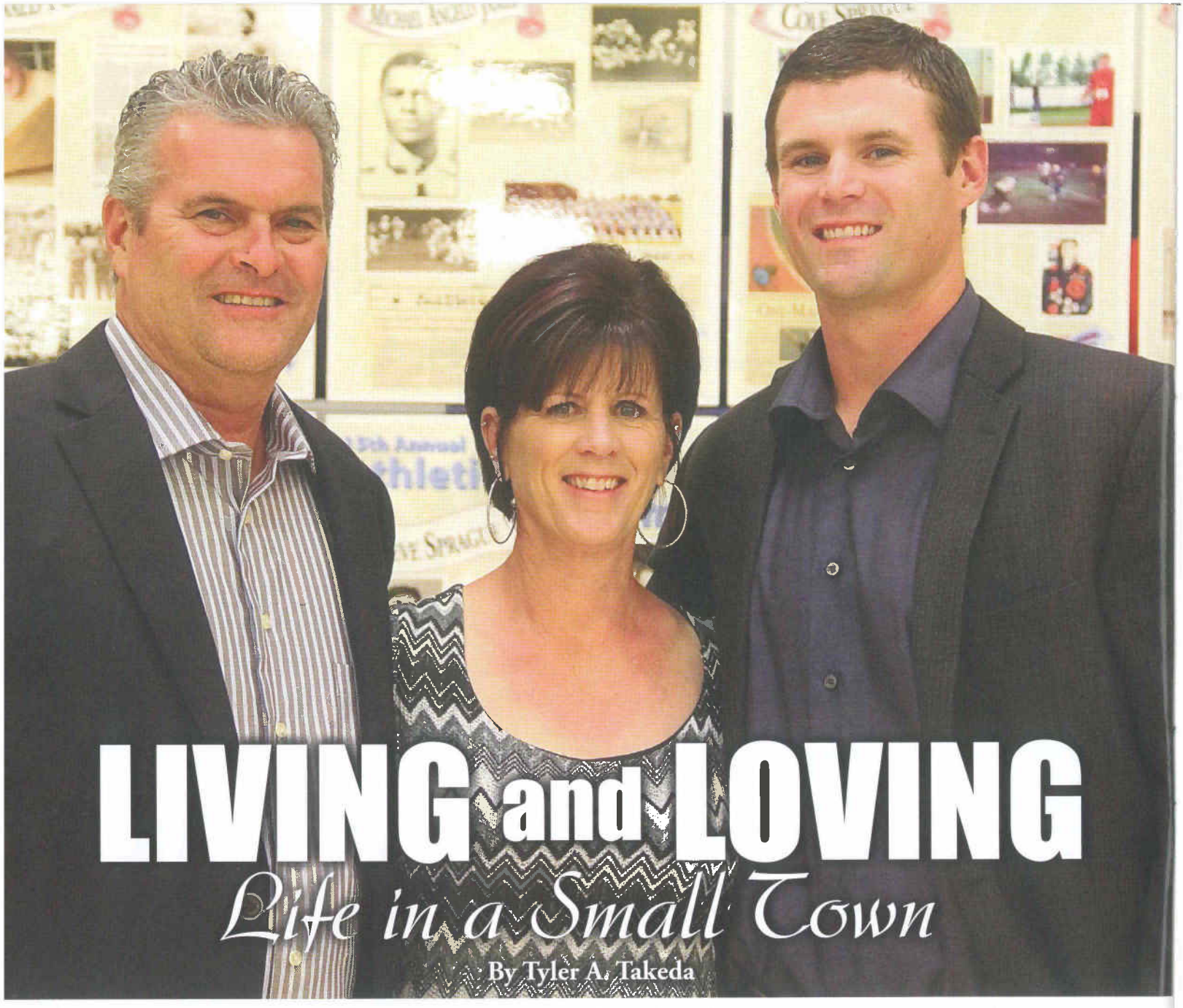
Warren was on campus recently between classes at Davis and visited Brian Abela, his chemistry instructor and a close friend and mentor, as well as Kurt Sterling, his microbiology instructor, and Vera Kennedy, his honor society advisor. They were great mentors at Lemoore and he's quick to credit them for the path he's on.

Ironically, the winning presentation he made in April was based not just on research but oral presentation skills, which Warren says he did not always possess. He said Kennedy is responsible for pointing that out to him when he went to college in Lemoore.

"She gave me advice about having more of a social life in order to be successful in my career. She said my old habits of being a bookworm and not being very social were going to be taxing to my personal growth at this level, so I'd better try to change them."

A link to an online article about Warren is on the UC Davis web page: www.ucdavis.edu/one/stories/students/warren.html.

His parents encouraged him to succeed academically and to never give up.



LIVING and LOVING

Life in a Small Town

By Tyler A. Takeda

After a series of coaching jobs, Mark Arce came here 12 years ago as the men's basketball coach and became immersed in the community. His wife, Sharon, works at Coalinga High School and their oldest son, Brett, is an assistant for the WHCC team.

For years he moved from town to town for a series of coaching jobs but the West Hills College men's basketball coach Mark Arce has found a home in Coalinga.

This season he's entering his 12th year as the coach of the West Hills College Coalinga Falcons and has no intention of finding another coaching position.

"I think I'm settled," he said. "I don't see any moves in the future for me. I think this is where I'm going to finish up. With coaching, you never know, though. I'm not actively looking. I've had some opportunities, but I like it here so much."

Since coming to Coalinga 12 years ago, Arce has immersed himself into the Coalinga culture. With his wife teaching at the high school and all three of his children attending Coalinga schools, he feels they are true Coalingans.

"It seems like we've grown up here and, in many ways, we have. Our kids went to school here and this is the longest we've been anywhere. I just feel like I'm part of the community."

Mark and Sharon, who celebrated their 33rd anniversary in July, have three children — Brett, 23, Megan, 21 and Troy, 17. Brett graduated from West Hills College and then recently graduated from Stony Brook University and will coach offensive line for the football team and help his father with the basketball team.

One of the community events that Arce participates in is the

annual Coaches vs. Cancer fundraiser during basketball season. Every community college in the state participates in the fundraiser and WHCC is one of the top fundraising schools.

"That's a big deal," Arce said. "The thing is that it's fun to do these activities. It's a part of our social life that we look forward to every year. It's more recreational than anything. We enjoy the people we are around with what we do here. It's a positive thing."

He also actively fundraises for his program, holding a fundraiser that has a standing-room-only crowd in February. He is also involved with Coalinga High School and helps out at the annual Thanksgiving feast for the WHCC students. "The fundraiser is one of the highlights of the year for the community," Arce said. "One of the greatest things is when we feed the students for Thanksgiving. That's one of the most moving events that I've ever been involved in. I'm so glad to be able to participate in that."

In addition to his activities, Arce is proud of how his children have grown up to be a positive influence on younger people.

"I'm proud of the positive environment Coalinga has been for them," he said. "I'm looking forward to where Troy will end up in college. I hope he follows his brother and sister and comes here for a couple of years. It was pretty good for them and I would like to have the opportunity to coach him. He's a pretty darn good point guard."

Arce is also proud of the positive impact his wife has had at Coalinga High and proud of the great friends he has made. He is also one of the founding members of the Save Our Sports foundation, which helped raise funds to keep Coalinga High School athletics going.

With all of his activities, Arce still finds the time to do what he is paid to do — teach and coach.

On a normal day, Arce is up at 5:30 a.m. and teaches a weight lifting class at 8 a.m. He practices from 9 a.m. to 12 p.m. and then is off to Firebaugh two days to teach two health classes and a physical education class. The other days, he has a health class at WHCC.

In the evening he is back at his office making calls, recruiting or watching film. However, he does find time to head to Coalinga High School football and basketball games to watch Troy.

With Arce, there is no summer "vacation." He spends his summers teaching summer school and recruiting. This season, he is also the interim athletic director at WHCC while long-time athletic director Mark Gritton takes time off to coach the football team.

"I'm helping to do all the stuff for next year," Arce said. "We've recently hired a new baseball coach and an equipment manager."

On top of that, Arce was out every weekend this summer attending football or basketball camps with Troy.

Arce notes that Gritton has been his right-hand man at most of his events, but also said that he couldn't have done anything without the help of numerous other people.

"None of us would do our jobs without Gina Tollison (WHCC athletics administrative assistant)," he said. "She keeps all of us organized."

"I tell people all the time, you don't know how good it is until you live here or spend a bit of time here. I like that you don't sit at a stoplight forever. I like that I can be at work in five minutes. I like that it's safe. I like that the community will do anything to help...

One of the highlights for Arce was the opportunity to coach his son in basketball and that was topped when Brett helped his father last year on the coaching staff. Brett will do the same this year.

"It's really cool and it's really been fun," Arce said. "Maybe getting the opportunity to coach Troy next year is pretty exciting. It wouldn't be a bad thing to play at a higher level, but if he played for me, it would be pretty good."

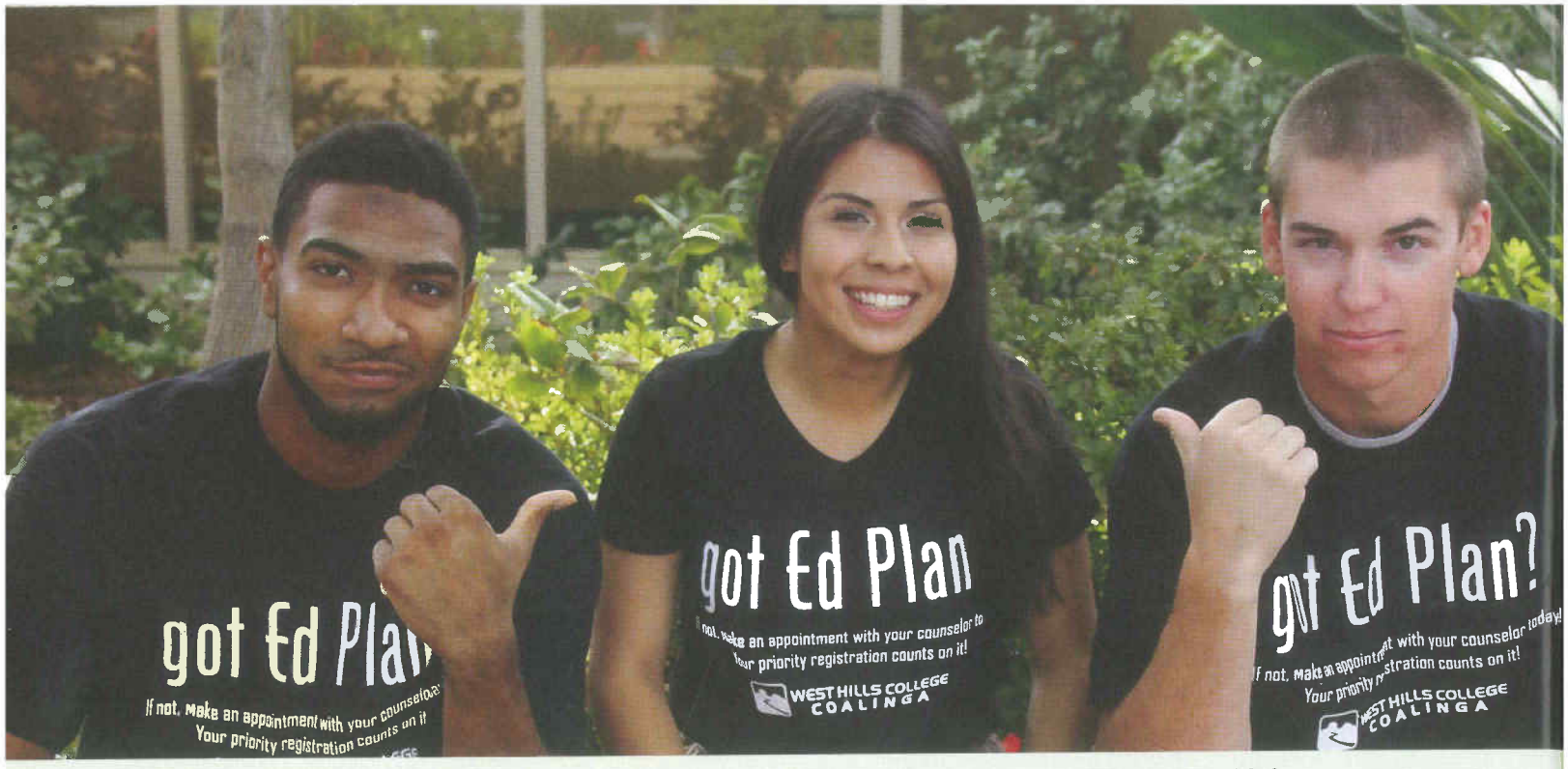
Arce couldn't think of a better community to raise his three kids in.

"We have been to a lot of places, but this is my favorite spot," he said. "It's been unique. I tell people all the time, you don't know how good it is until you live here or spend a bit of time here. I love the mountains. I like the location. I like that you don't sit at a stoplight forever. I like that I can be at work in five minutes. I like that it's safe. I like that the community will do anything to help anybody. I've never been anywhere like that where people will come out of the woodwork to help people in need."

Arce uses the quaintness of Coalinga as a major selling point in recruiting players to West Hills.

"The players really help spread the word about us and Coalinga," he said. "We get kids from everywhere. The biggest selling point for here is that it's small and the community is involved with our program. We have the best game atmosphere in the conference and the best in the state, for sure. The fact that you can walk from one end of the town to the other and it's safe is another selling point. We're in the center of the state and we can play all over the state and increase exposure for the players. Most of our sophomores graduate and go to a university. It's an easy sell."

Tyler Takeda is the sports editor and editor of the Madera Tribune and the Coalinga Recorder. A version of this story originally appeared in a special section of the Coalinga Recorder. Used by permission.



Dametric Sanders, Isavel Cancino and William Woelk help spread awareness that students need to have an ed plan to qualify for priority registration.

Education Plans Popular With

Randy Williams was a student at West Hills College Lemoore for one month before his counselor encouraged him to get a student educational plan back in 2011. He didn't hesitate to take advantage of an opportunity he knew would set him up for academic success.

Williams noticed a substantial difference after working with his counselor to create the plan, which mapped out all the classes he needed to take and when. It left him feeling more confident and less stressed during registration each semester.

"It was better for me to create an ed plan instead of just taking classes that I didn't need and wasting money," said Williams. "And ever since I've had the ed plan, I haven't had any problems. I've been able to stay on track and get on with meeting my goals."

Williams followed the plan exactly and is now preparing to graduate on time and transfer to a four-year university. His story is mirrored by a number of other students who feel better prepared by having an ed plan.

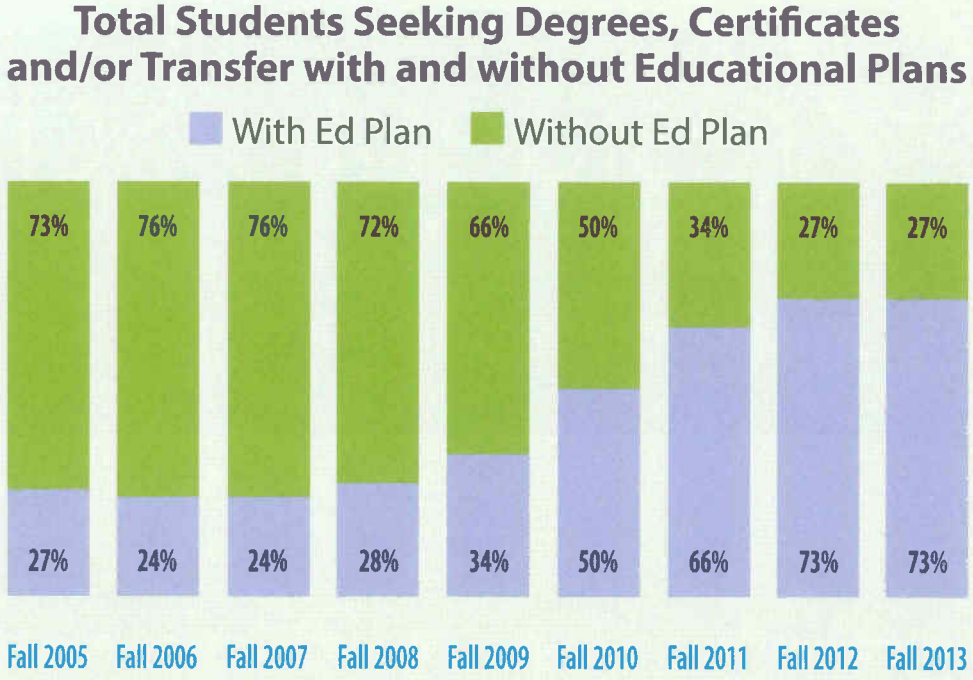
Freshman at WHC Coalinga and President's Scholar Cesar Rodriguez said he had no academic plan before he enrolled in college. Because President's Scholars are required to have an ed plan as part of the program, Rodriguez said it helped him figure out what he needed to do to be successful in college.

"Before I came to West Hills, I didn't exactly know what I was going to do," he said. "I was kind of just wondering and thinking, I'd get general ed done and then see what I do after that. I know what I'm going to do now, and I don't have to worry."

Long before the state recently began to insist on them, West Hills Community College District introduced ed plans to students as part of its commitment to student success. When ed plans were first introduced at WHCCD in 2005, 27 percent of students had one and 73 percent went without. Data from 2013 shows a flip in those percentages: Now, 73 percent of students have an ed plan and only 27 percent go without.

"Students who know what they need and have a plan are more successful than students without one," said Erin Corea, outreach counselor at WHCC. "We have been doing this for a long time, so keeping up with the mandate has been fairly easy for us."

Joel Ruble, director of categorical programs at WHCL, said he has seen an increase in student success and retention since the college improved its education planning process.



Students and Improve Success

"When a student makes informed decisions about their direction in education, they are more likely to commit the resources necessary to achieve those goals," said Ruble. "I think that the process of planning for one's education creates a generally better prepared student who will retain and succeed at greater rates. Our data reflects these increases."

Ed plans are now a requirement for students who desire priority registration, which allows them to register at an earlier date than students without ed plans and helps them get into the classes they need sooner. WHCCD found that not only are ed plans essential for student success, but students are eager to take advantage of this tool that helps them stay on track.

WHCC student Dominique Hill said students should consider getting one. It made her college journey smoother, and she said it gave her a head start on finishing her associate's degree quickly. Because she plans to transfer after graduation this May, the ed plan eliminated the guesswork in choosing classes that would transfer to her desired school.

"I never thought I would make it to college, and once I made it here, I knew I needed a plan for my future," she said.

WHC students like Dominique Hill are finding that having an ed plan takes the uncertainty out of the college experience. An ed plan, required for priority registration, maps out all the courses students need in order to graduate as well as which classes are transferrable to their desired university.

President's Scholars Program

Opens the Door for Local High School Seniors

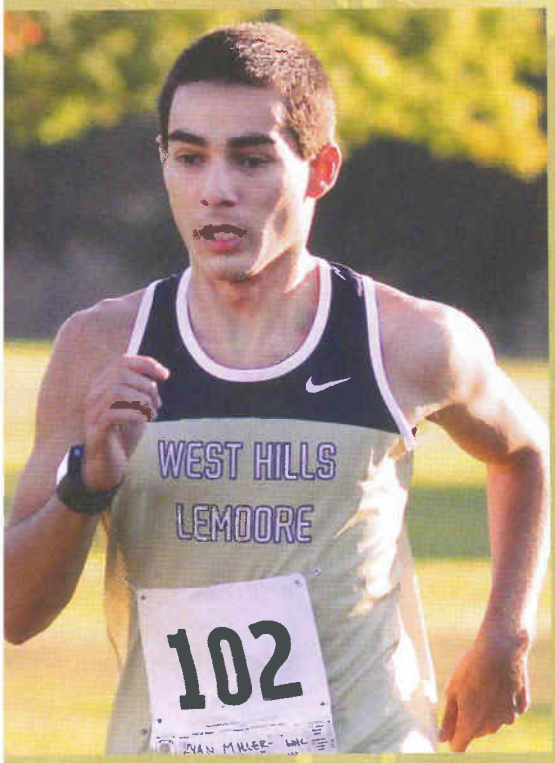
By Amy Seed

When Georgia Oxford started thinking about college, she wasn't sure she'd be able to afford it, let alone graduate on time.

Her parents' income was enough to disqualify her for financial aid, and medical bills due to an off-road vehicle accident and a chronic illness made affording college a stretch.

Oxford said the accident and resulting emergency room costs put a damper on her plans to attend college. That's when she found out about the President's Scholars Program at West Hills College Coalinga and received a scholarship to cover two years' tuition. "The scholarship actually let me get my degree," said Oxford. "Without it I probably wouldn't have been able to."

Oxford is now preparing to graduate in May with a liberal arts degree with plans to transfer and become an elementary school teacher. She is just one of over 400 students who entered the West Hills Community College District as a President's Scholar in the last 10 years. More than 90 students enrolled in the program this past July, the largest number ever.



Ryan Miller is a President's Scholar and cross country runner at WHCL.

The largest ever contribution was made by Brian and Dixie Welborn, who donated $500,000 after their deaths in 2009.

The scholarship program was founded in 1996 and is overseen by the West Hills Community College Foundation, which raises money to provide these scholarships every year. As a President's Scholar, students receive a scholarship for two years, $250 per semester for books and priority registration to ensure they get into the required classes.

For these students, class waiting lists do not exist, and they will never have to delay graduation because they couldn't get into a class they needed. This is a growing problem for UC and CSU students who try to enroll in lower division courses.

"Our growth's just been explosive," said Frances Squire, director of the WHCCF. "Students are realizing that they can do their first two years as a President's Scholar, have priority registration, and get those classes."

This year, the Foundation launched a drive to secure $1 million in endowments to support the program. Educational Employees Credit Union (EECU), based in Fresno with branches throughout the region, recently made a $100,000 pledge over five years. The largest ever contribution was made by Brian and Dixie Welborn, who designated a share of their estate to the Foundation in the form of $500,000 after their deaths in 2009.

In order to qualify for the program, high school students must maintain a 3.5 or higher GPA throughout all four years. They must also have four semesters of California Scholarship Federation eligibility and fill out a Free Application for Federal Student Aid (FAFSA).

For high school students who meet these qualifications and are considering applying to WHC, there's good news: at this time no qualifying applicants are turned down. As recognition of this program grows, an increasing number of high school students apply each year.

The vast majority of these students come from Hanford High School, Coalinga

President's Scholars, Fall 2000-Fall 2013

President's Scholars enroll at West Hills College from three primary areas: Hanford, Coalinga and Lemoore. In recent years, an increasing number of President's Scholars have come from Hanford area high schools, which now draw the most applicants for the popular program which provides free tuition, money for books, and priority registration for those who qualify.

High School	Students
Hanford High School	119
Coalinga High School	104
Lemoore Union High School	86
Hanford West High School	43
Avenal High School	31
Faith Christian Academy	21
Kings Christian High School	18
Laton High School	13
Mendota High School	10
Corcoran High School	9
Lemoore Middle College	8
Tranquillity Union High School	7
Sierra Pacific High School	6
Firebaugh High School	6

President's Scholar Carmen Velazquez is in her second year at WHCC.

High School and Lemoore Union High School. Each of these schools brought in over 80 students to WHC between 2000 and 2013.

So while the program attracts more students to the district, students aren't the only ones to benefit. Squire, the foundation director, said the program has done several things for the college, including increasing its number of full-time students.

"These top students know they can come here, get their first two years for virtually no cost and then they can save money, go on, and a lot of them will qualify for financial aid as well," said Squire. "If they save that money, then they're more set for their four-year degree."

Scott Terrell couldn't agree more. With the money he saved by attending WHC Lemoore as a President's Scholar, he was able to transfer to CSU Fullerton debt-free last May.

"If it were not for the president's scholarship, I would have had to attend school completely reliant on loans," said Terrell. "I was able to finish all of my lower division requirements with no debt, and also work two jobs at the same time to save up for when I transferred."

Along with a two-year scholarship, President's Scholars are set up for academic success. They are required to attend orientation, take placement tests and put together a student education plan with their counselor. This plan maps out all the courses each student needs to take and is organized by semesters.

Statistics show course success and retention rates for President's Scholars are significantly higher than the general student population. The success rate for President's Scholars sits between 80-90 percent while the rest of students in the district average between 60-70 percent.

Of 370 President's Scholars to enroll at WHC from 2001-2011, 73 percent, or 270 students, received a degree or certificate from WHC or transferred to a four-year university.

"In a time when mediocrity seems to be the norm in our society, it was so refreshing to have hard work and success recognized in this way," said Terrell. "I will be eternally grateful for receiving this honor, which allowed me to start my education in a financially smart way."

Amy Seed is the assistant to the director of marketing and public information at West Hills CCD and a former newspaper reporter.

'... students receive a scholarship for two years, $250 per semester for books and priority registration ...'

WHCCD Has Strong Fiscal Position, and It's No Accident

Q&A WITH THE CFO

From left to right: Tammy Weatherman (associate vice chancellor of business services), Ken Stoppenbrink (deputy chancellor) Debbie Gore (grant accounting supervisor) and Anne Jorgens (budget services supervisor)

The economic fallout of what's called the Great Recession has heavily impacted many of California's 72 community college districts. Several institutions have suffered financially and are now working their way out of calamity. This is not a new problem; back in 1986, a state study showed that 25 percent of the then roughly 100 colleges were having moderate to serious financial problems.

West Hills Community College District, which governs two Central Valley colleges, West Hills College Coalinga and West Hills College Lemoore, and a thriving Center in Firebaugh, is on solid financial footing.

"Over the past several years the West Hills Community College District (WHCCD) has engaged in a very conservative path for fiscal stability," said Ken Stoppenbrink, deputy chancellor. He served as the head of human resources at the district until 2004, when he became vice chancellor, business services, and the district's chief financial officer. "The positive results of these actions were no accident but rather due to a conscious effort to position our fiscal house to weather financial shortfalls from the state's budget mismanagement."

The CFO said the cooperation of faculty and staff made it possible for the district to draw the line on spending and maintain healthy reserves over the past five years.

"A lot of the credit goes to faculty and staff for the collegial way in which they approached the problem we all shared, namely that we didn't have the revenues we used to have and something had to give. We could not have achieved what we did without the sacrifices they were willing to make."

"West Hills College is very fortunate to have a cooperative spirit working within the district," according to Mark McKean, president, board of trustees. "That spirit has resulted in a healthy financial position that has allowed the college to forge ahead with new and innovative ideas while many districts have had to focus on financial survival."

Keith Brock, president of CSEA, the employee's union, agreed. "During the fiscal crunch, our negotiation team worked with the district (on furlough) agreements, in order to avoid layoffs. The entire association membership voted to accept furloughs rather than see our members laid off. As employees retired or left for other jobs during this time, many members accepted additional duties and responsibilities to allow those positions to remained unfilled until funding improved."

Ken Sowden led the negotiation team for the faculty association. "We acknowledged that the budgetary challenges were due to circumstances which originated at the state level," he said. "Our willingness to endure increased class size and accept temporary furlough days played a big part in helping the district regain fiscal health. Certificated, classified and administrative personnel all acted in concert toward this end, which illustrates our ability to put differences aside and work together to support and serve our students."

We asked Stoppenbrink, who oversees a budget of $128.1 million a year, to outline some actions the district took to keep its fiscal boat afloat in hard times. The questions, and his answers (in italics), are below:

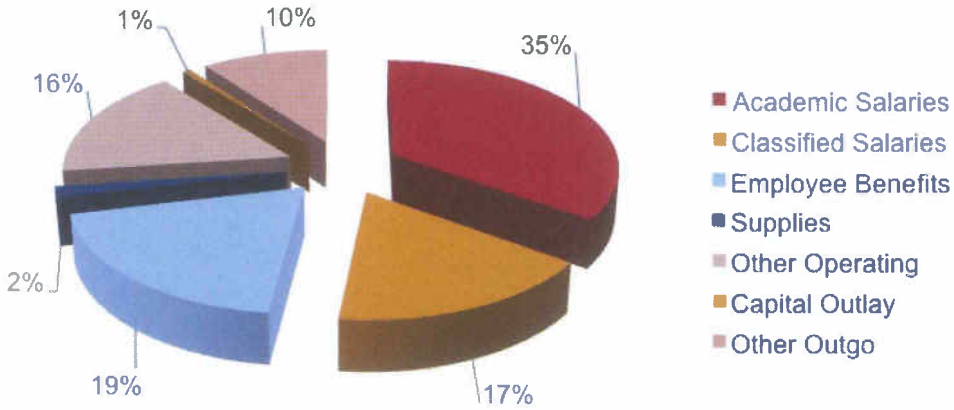
Q: What steps have you taken to protect the district's legally required reserve fund?

A: In many cases we did not fill vacant positions or waited several months to fill them, in some cases up to two years. We also implemented furloughs and cut expenses which cut costs and helped increase reserves.

Q: Does WHCCD have a "rainy day fund" for emergencies or to cover budget shortfalls?

A: Yes. The Capital Outlay account was used to set aside additional resources to be used to fund scheduled maintenance projects or to transfer funds back into the general fund when the state began cutting funds to the community college system. The district uses this fund as its rainy day reserve when necessary.

Expenditures by Account Type



WHCCD's strong financial position is demonstrated in this chart. The total expenditures for faculty and staff salaries combined with employee benefits is 71 percent of the budget. Statewide comparisons show that many college budgets devote considerably more to those same costs, in some cases 90 percent or above.

What other financial tools have you been able to use to safeguard the budget?

Other means of strengthening our fiscal stability included the use of the new market tax credit program (NMTC), which provides tax credit incentives to private companies, typically banks, to invest in local communities and at the same time provides resources to participating agencies. Some projects under consideration for this method of funding include the Student Center in Lemoore and a new instructional center building in Firebaugh.

What's being done about "unfunded liabilities" that haunt some college districts?

Like many of the districts in the state, WHCCD has a post-employment retirement health benefit provided in their collective bargaining agreements. This creates a liability that must be funded and there must be a plan in place to fund it. Some districts haven't kept up, but ours has set aside these funds each year and those investments are in an irrevocable trust. Based on the current forecast of budgeted plus investment earnings, this liability should be fully funded by 2017.

How has the college spent its general obligation bonds that were passed by voters?

The district has issued GO bonds for the past 14 years. In 1998 there was an issue of $19 million. In 2008 there were three bonds authorized for a total of $55.4 million of which $30.4 million has been expended so far. These dollars provided necessary facilities upgrades and new buildings to continue to support the mission of the district and colleges.

IN MEMORIAM

West Hills College Trustee Bill Henry

Bill Henry, a longtime valley educator and sitting member of the Board of Trustees of West Hills Community College District, died Friday, Nov. 1 at the age of 71.

The one-time community college student served for 26 years on the WHCCD board, starting in November 1987. He lived in Lemoore with his wife, Paddy. He went to college at Fresno City College; California State University, Fresno; and Fresno Pacific University.

"His positive attitude, perceptive questioning and good sense of humor were always present at the Trustee meetings," said WHCCD Chancellor Frank Gornick. "He was a member of a cohesive team whose members have served an average of 24 years. He was part of unique group that operated more like a family than a governing body. He will be greatly missed by his fellow trustees and colleagues. More than a board member, he was a friend to all of us at West Hills."

Henry was active in community affairs and his affiliations included the Kiwanis Club of Lemoore and the Tulare Kings All-Star Football Game Committee. He served on the board of the West Hills Community College Foundation. He was previously named Lemoore Citizen of the Year.

Former WHCC Coach and Hall of Fame Inductee Robert Hobbs

Bob Hobbs, a former West Hills College Coalinga instructor and coach, died Thursday, Oct. 31 in Merced at the age of 73.

Hobbs became an instructor, football coach and head baseball coach at WHCC in 1965. He was named the athletic director three years later and was also inducted into the Hall of Fame twice. Hobbs worked at WHCC until 1971 when he accepted a job at Cuesta College and later a job coaching football at Merced College. He retired in 2002.

Hobbs not only loved athletics, but he loved working with youth. He was known as a mentor to many and could rarely walk around town without hearing, "Hey Coach," with a bear hug to follow.

He was active with the Youth Accountability Board and was a member of the Elks for close to 50 years. He became a charter member of Merced Sunrise Rotary Club in 1985 and became club president in 1999. His involvement continued as he served as the district governor of District 5220 for the 2006-2007 term. Bob was a member of Central Presbyterian Church and was a fourth generation resident of Merced County.

WEST HILLS
COMMUNITY COLLEGE DISTRICT

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Coalinga, CA 93210

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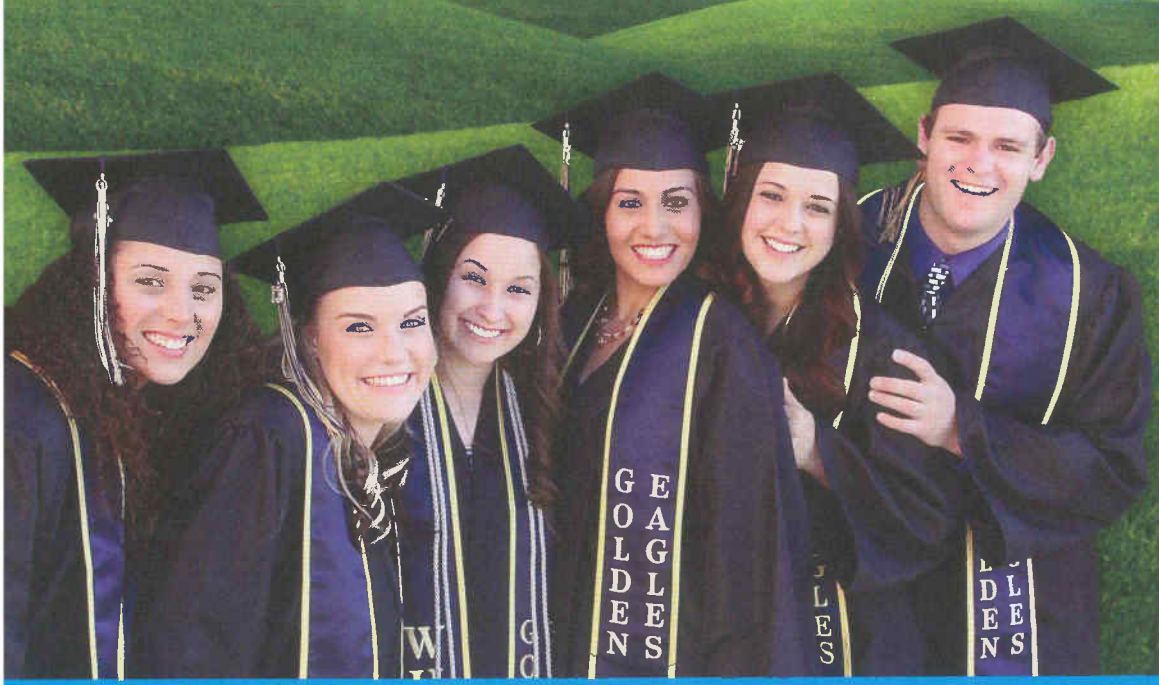
An Investment in Education Pays Off!



When you support education, everybody wins.

- Students acquire training and skills.
- Employers have access to a strong workforce.
- Society benefits from an educated citizenry.

Please consider a tax-deductible gift. There are many ways to give. To learn how, visit our website:

www.whcgift.org

WEST HILLS COMMUNITY COLLEGE FOUNDATION

9900 Cody St., Coalinga, CA 93210 (559) 934-2134
Email: FrancesSquire@whccd.edu
WestHillsCollege.com

5.

Graduate Follow-Up Survey

WHC - Precision Agriculture Graduate Survey

Summary | Design Survey | Collect Responses | Analyze Results

Edit Survey

Preview Survey | Send Survey »

To change the **look** of your survey, select a theme below.

WHCCD ▼ | Edit Theme | Create Custom Theme

TITLE & LOGO Edit Title | Edit Logo | Edit Layout

WEST HILLS COMMUNITY COLLEGE DISTRICT

WHC - Precision Agriculture Graduate Survey

+ Add Page

PAGE 1 Edit Page Options ▼ | Add Page Logic | Move | Copy | Delete

Show this page only

Welcome - Informational Data

+ Add Question ▼

Q1 Edit Question ▼ | Move | Copy | Delete

*** 1. Please give us a little information about you.**

First Name:

Last Name:

ZIP/Postal Code:

Email Address:

+ Add Question ▼ | Split Page Here

Q2 Edit Question ▼ | Move | Copy | Delete

2. What is the zipcode of your home town?

+ Add Question ▼ | Split Page Here

Q3 Edit Question ▼ Add Question Logic Move Copy Delete

3. Where did you live while you attended WHC?

Dorms

On-Farm

Off-Campus in Coalinga

Parents in Coalinga

Out of Town

+ Add Question ▼

+ Add Page

PAGE 2 Edit Page Options ▼ Add Page Logic Move Copy Delete Show this page only

About the Program

+ Add Question ▼

Q4 Edit Question ▼ Add Question Logic Move Copy Delete

1. Which program did you enroll in?

Precision Ag

Heavy Equipment

+ Add Question ▼ Split Page Here

Q5 Edit Question ▼ Add Question Logic Move Copy Delete

2. How did you hear about the program?

Recruitment at Ag function

Recruitment at highschool

Family/Friend

WHC Counselor

Other (please specify)

+ Add Question ▼ Split Page Here

Q6 Edit Question ▼ Move Copy Delete

3. Why did you choose the program?

+ Add Question ▼ Split Page Here

Q7 Edit Question ▼ Move Copy Delete

4. What were your expectations before WHC?

+ Add Question ▼ Split Page Here

Q8 Edit Question ▼ Add Question Logic Move Copy Delete

5. Did your expectaions change?

Yes

No

How and why?

+ Add Question ▼ Split Page Here

Q9 Edit Question ▼ Move Copy Delete

6. How would characterize the equipment?

	Up-to-Date	Used in Field
GPS Equipment	▼	▼
GIS Software	▼	▼

+ Add Question ▼ Split Page Here

Q10 Edit Question ▼ Add Question Logic Move Copy Delete

7. Would you recommend any equipment/software changes or updates?

Yes

No

What and Why?

+ Add Question ▼

+ Add Page

PAGE 3 Edit Page Options ▼ Add Page Logic Move Copy Delete Show this page only

Precision Ag Courses

+ Add Question ▼

Q11 Edit Question ▼ Add Question Logic Move Copy Delete

1. Which courses did you take?

AG 10-Intro to Ag

AG 11-Ag Sales and Service

AG 15X-Work Experience

AGBUS 15-Computer Applications

CRPSCI 1-Intro to Plant Science

CRPSCI 6-Intro to Precision Ag

CRPSCI 7-Advanced Precision Ag

CRPSCI 19-Water Management

SLSCI 21-Soils

GEOG 4-Intro to GIS

+ Add Question ▼ Split Page Here

Q12 Edit Question ▼ Move Copy Delete

2. Please rate the quality of the following courses. 1 being the least through 5 being the most.

	Usefullness	Enjoyment	Practical Knowledge	Theoretical Knowledge	Difficulty
AG 10 - Intro to Ag	▼	▼	▼	▼	▼
AG 11 - Ag Sales and Communication	▼	▼	▼	▼	▼
AG 15x - Work Experience	▼	▼	▼	▼	▼

AGBUS 15 - Computer Applications	▼	▼	▼	▼	▼
CRPSCI 1 - Intro to Plant Science	▼	▼	▼	▼	▼
CRPSCI 6 - Intro to Precision Ag	▼	▼	▼	▼	▼
CRPSCI 7 - Advanced Precision Ag	▼	▼	▼	▼	▼
CRPSCI 19 - Water Management	▼	▼	▼	▼	▼
SLSCI 21 - Soils	▼	▼	▼	▼	▼
GEOG 4 - Intro to GIS	▼	▼	▼	▼	▼

Comments

+ Add Question ▼ Split Page Here

Q13 Edit Question ▼ Move Copy Delete

3. What changes if any would you make to the classes listed above and why?

+ Add Question ▼ Split Page Here

Q14 Edit Question ▼ Add Question Logic Move Copy Delete

4. Are there any other classes that you would have found helpful that were not offered?

Yes

No

List and Explain:

+ Add Question ▼ Split Page Here

Q15 Edit Question ▼ Add Question Logic Move Copy Delete

5. Did you complete the certificate?

Yes

No

+ Add Question ▼ Split Page Here

Q16 Edit Question ▼ Add Question Logic Move Copy Delete

6. Did you take any additional courses while in the program?

Yes

No

+ Add Question ▼ Split Page Here

Q17 Edit Question ▼ Move Copy Delete

7. Which additional courses did you take?

+ Add Question ▼ Split Page Here

Q18 Edit Question ▼ Add Question Logic Move Copy Delete

8. Do you feel that the basic skills learned in class prepared you for life after college? Check if the answer is yes.

Math

Writing

Speaking

+ Add Question ▼

+ Add Page

PAGE 4 Edit Page Options ▼ Add Page Logic Move Copy Delete Show this page only

+ Add Question ▼

Q19 Edit Question ▼ Add Question Logic Move Copy Delete

***1. How would you currently characterize yourself?**

currently enrolled in the Precision Agriculture program at WHC

were enrolled, but did not complete the certificate program

completed the certificate program

+ Add Question ▼ Split Page Here

Q20 Edit Question ▼ Add Question Logic Move Copy Delete

2. Did you complete your A.A./A.S.?

Yes

No

+ Add Question ▼ Split Page Here

Q21 Edit Question ▼ Move Copy Delete

3. When did you complete your A.A./A.S.?

+ Add Question ▼ Split Page Here

Q22 Edit Question ▼ Add Question Logic Move Copy Delete

4. Did you complete your B.A./B.S.?

Yes

No

+ Add Question ▼ Split Page Here

Q23 Edit Question ▼ Move Copy Delete

5. When did you complete your B.A./B.S?

+ Add Question ▼

+ Add Page

PAGE 5 Edit Page Options ▼ Add Page Logic Move Copy Delete Show this page only

After Completing the Precision Agriculture Certificate...

+ Add Question ▼

Q24 Edit Question ▼ Add Question Logic Move Copy Delete

1. After completing the Precision Agriculture certificate program, which best characterizes your next step

Continued transfer/A.A. requirements at West Hills College

Continued transfer/A.A. requirements at another community college

Transfered to a 4-year university

Entered the workforce

Other (please specify)

+ Add Question ▼ Split Page Here

Q25 Edit Question ▼ Add Question Logic Move Copy Delete

2. Did you complete courses to transfer?

Yes

No

+ Add Question ▼ Split Page Here

Q26 Edit Question ▼ Add Question Logic Move Copy Delete

3. Which courses transferred?

AG 10-Intro to Ag

AG 11-Ag Sales and Service

AG 15X-Work Experience

CRPSCI 1-Intro to Plant Science

CRPSCI 6-Intro to Precision Ag

CRPSCI 7-Advanced Precision Ag

CRPSCI 19-Water Management

SLSCI 21-Soils

GEOG 4-Intro to GIS

+ Add Question ▼ Split Page Here

Q27 Edit Question ▼ Add Question Logic Move Copy Delete

4. Did you complete any internships while at WHC?

Yes

No

+ Add Question ▼ Split Page Here

Q28 Edit Question ▼ Move Copy Delete

5. What type of internship did you complete?

+ Add Question ▼ Split Page Here

Q29 Edit Question ▼ Add Question Logic Move Copy Delete

6. What was the pay-scale of the internship that you obtained?

Minimum Wage

Just Above Minimum

2x minimum

More than 2x

+ Add Question ▼ Split Page Here

Q30 Edit Question ▼ Add Question Logic Move Copy Delete

7. How was your internship obtained?

WHC Professor

Career Counselor/Job Board

Word of Mouth (Classmate)

Other

Specify:

+ Add Question ▼

+ Add Page

PAGE 6 Edit Page Options ▼ Add Page Logic Move Copy Delete Show this page only

West Hills College

+ Add Question ▼

Q31 Edit Question ▼ Add Question Logic Move Copy Delete

1. Are you planning on transferring to a four-year university?

Yes

No

Already have

+ Add Question ▼ Split Page Here

Q32 Edit Question ▼ Add Question Logic Move Copy Delete

2. Plese select the university you plan to transfer to, are currently enrolled or have graduated from?

Cal Poly - SLO

Fresno State

UC Davis

CSU Chico

Other (please specify)

+ Add Question ▼ Split Page Here

Q33 Edit Question ▼ Add Question Logic Move Copy Delete

3. Please choose your intended major.

Agricultural Engineering

Agricultural Systems Managment (Ag Engineering Technology)

Crop/Plant Science

Ag Business

Animal Science

Other (please specify)

+ Add Question ▼ Split Page Here

Q34 Edit Question ▼ Add Question Logic Move Copy Delete

4. When transferring to a four year university who helped you in the transition?

WHC Counselor

University Counselor

Instructor

Self

Other (please specify)

+ Add Question ▼ Split Page Here

Q35 Edit Question ▼ Move Copy Delete

5. Where you satisfied with the help that you received? Why or why not?

+ Add Question ▼

+ Add Page

PAGE 7 Edit Page Options ▼ Move Copy Delete Show this page only

Workforce

+ Add Question ▼

Q36 Edit Question ▼ Add Question Logic Move Copy Delete

1. Please choose the category that best describes your current or intended job?

Production Agriculture

Government

Education

Consultant

Other (please specify)

+ Add Question ▼ Split Page Here

Q37 Edit Question ▼ Add Question Logic Move Copy Delete

2. Please choose the salary bracket that best describes your starting annual salary. (To convert hourly to annual multiply your hourly rate by 2000)

< $20,000

$21,000 - $30,000

$31,000 - $40,000

$41,000 - $50,000

$51,000 - $60,000

$61,000 - $70,000

$71,000 - $80,000

> $80,000

+ Add Question ▼ Split Page Here

Q38 Edit Question ▼ Add Question Logic Move Copy Delete

3. What type of hours do you work?

Full-Time

Part-Time

Make your own schedule

Other (please specify)

+ Add Question ▼ Split Page Here

Q39 Edit Question ▼ Add Question Logic Move Copy Delete

4. Please select working conditions:

Outside

Inside

Both

Elaborate

+ Add Question ▼ Split Page Here

Q40 Edit Question ▼ Move Copy Delete

5. How did the precision ag program assist in your current or intended position in the workforce?

+ Add Question ▼ Split Page Here

Q41 Edit Question ▼ Add Question Logic Move Copy Delete

6. Would you condider yourself successful?

Yes

No

Somewhat

+ Add Question ▼

+ Add Page

Back to My Surveys

Preview Survey Send Survey »

Add Users WHC_Ag

Home My Surveys Survey Services Plans & Pricing + Create Survey

WHC - Heavy Equipment Graduate Survey

Summary | Design Survey | Collect Responses | Analyze Results

Edit Survey

Preview Survey | Send Survey »

To change the **look** of your survey, select a theme below.

WHCCD ▼ Edit Theme Create Custom Theme

TITLE & LOGO Edit Title Edit Logo Edit Layout

WEST HILLS COMMUNITY COLLEGE DISTRICT

WHC - Heavy Equipment Graduate Survey

+ Add Page

PAGE 1 Edit Page Options ▼ Add Page Logic Move Copy Delete Show this page only

Welcome - Informational Data

+ Add Question ▼

Q1 Edit Question ▼ Move Copy Delete

***1. Please give us a little information about you.**

First Name:

Last Name:

ZIP/Postal Code:

Email Address:

+ Add Question ▼ Split Page Here

Q2 Edit Question ▼ Move Copy Delete

2. What is the zipcode of your home town?

+ Add Question ▼ Split Page Here

Q3 Edit Question ▼ Add Question Logic Move Copy Delete

3. Where did you live while you attended WHC?

Dorms

On-Farm

Off-Campus in Coalinga

Parents in Coalinga

Out of Town

+ Add Question ▼

+ Add Page

PAGE 2 Edit Page Options ▼ Add Page Logic Move Copy Delete Show this page only

About the Program

+ Add Question ▼

Q4 Edit Question ▼ Add Question Logic Move Copy Delete

1. Which program did you enroll in?

Precision Ag

Heavy Equipment

+ Add Question ▼ Split Page Here

Q5 Edit Question ▼ Add Question Logic Move Copy Delete

2. How did you hear about the program?

Recruitment at Ag function

Recruitment at highschool

Family/Friend

WHC Counselor

Other (please specify)

+ Add Question ▼ Split Page Here

Q6 Edit Question ▼ Move Copy Delete

3. Why did you choose the program?

+ Add Question ▼ Split Page Here

Q7 Edit Question ▼ Move Copy Delete

4. What were your expectations before WHC?

+ Add Question ▼ Split Page Here

Q8 Edit Question ▼ Add Question Logic Move Copy Delete

5. Did your expectaions change?

Yes

No

How and why?

+ Add Question ▼ Split Page Here

Q9 Edit Question ▼ Add Question Logic Move Copy Delete

6. How would characterize the equipment?

Explain

+ Add Question ▼ Split Page Here

Q10 Edit Question ▼ Add Question Logic Move Copy Delete

7. Would you recommend any equipment/software changes or updates?

Yes

No

What and Why?

+ Add Question ▼

+ Add Page

PAGE 3 Edit Page Options ▼ | Add Page Logic | Move | Copy | Delete

Show this page only

3

+ Add Question ▼

Q11 Edit Question ▼ | Move | Copy | Delete

1. Please rate the quality of the course. 1 being the least through 5 being the most.

	Usefullness	Enjoyment	Practical Knowledge	Theoretical Knowledge	Difficulty
Heavt Equipment	▼	▼	▼	▼	▼

Comments

+ Add Question ▼ | Split Page Here

Q12 Edit Question ▼ | Move | Copy | Delete

2. What changes if any would you make to the class listed above and why?

+ Add Question ▼ | Split Page Here

Q13 Edit Question ▼ | Add Question Logic | Move | Copy | Delete

3. Are there any other classes that you would have found helpful that were not offered?

Yes

No

List and Explain:

+ Add Question ▼ Split Page Here

Q14 Edit Question ▼ Add Question Logic Move Copy Delete

4. Did you complete the certificate?

Yes

No

+ Add Question ▼ Split Page Here

Q15 Edit Question ▼ Add Question Logic Move Copy Delete

5. Did you take any additional courses while in the program?

Yes

No

+ Add Question ▼ Split Page Here

Q16 Edit Question ▼ Move Copy Delete

6. Which additional courses did you take?

+ Add Question ▼ Split Page Here

Q17 Edit Question ▼ Add Question Logic Move Copy Delete

7. Do you feel that the basic skills learned in class prepared you for life after college? Check if the answer is yes.

Heavy Equipment Operation

Grade Management

Service and Repair

+ Add Question ▼

+ Add Page

PAGE 4 Edit Page Options ▼ Add Page Logic Move Copy Delete Show this page only

+ Add Question ▼

Q18 Edit Question ▼ Add Question Logic Move Copy Delete

*** 1. How would you currently characterize yourself?**

Currently enrolled in the Heavy Eqipment program at WHC

were enrolled, but did not complete the certificate program

completed the certificate program

+ Add Question ▼ Split Page Here

Q19 Edit Question ▼ Add Question Logic Move Copy Delete

2. Did you complete your A.A./A.S.?

Yes

No

+ Add Question ▼ Split Page Here

Q20 Edit Question ▼ Move Copy Delete

3. When did you complete your A.A./A.S.?

+ Add Question ▼ Split Page Here

Q21 Edit Question ▼ Add Question Logic Move Copy Delete

4. Did you complete your B.A./B.S.?

Yes

No

+ Add Question ▼ Split Page Here

Q22 Edit Question ▼ Move Copy Delete

5. When did you complete your B.A./B.S?

+ Add Question ▼

+ Add Page

PAGE 5 Edit Page Options ▼ Add Page Logic Move Copy Delete Show this page only

After Completing the Heavy Equipment Certificate...

+ Add Question ▼

Q23 Edit Question ▼ Add Question Logic Move Copy Delete

1. After completing the Heavy Equipment certificate program, which best characterizes your next step

Continued transfer/A.A. requirements at West Hills College

Continued transfer/A.A. requirements at another community college

Transfered to a 4-year university

Entered the workforce

Other (please specify)

+ Add Question ▼ Split Page Here

Q24 Edit Question ▼ Add Question Logic Move Copy Delete

2. Did you complete any internships while at WHC?

Yes

No

+ Add Question ▼ Split Page Here

Q25 Edit Question ▼ Move Copy Delete

3. What type of internship did you complete?

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Q26 Edit Question ▼ Add Question Logic Move Copy Delete

4. What was the pay-scale of the internship that you obtained?

Minimum Wage

Just Above Minimum

2x minimum

More than 2x

+ Add Question ▼ Split Page Here

Q27 Edit Question ▼ Add Question Logic Move Copy Delete

5. How was your internship obtained?

WHC Professor

Career Counselor/Job Board

Word of Mouth (Classmate)

Other

Specify:

+ Add Question ▼

+ Add Page

PAGE 6 Edit Page Options ▼ Add Page Logic Move Copy Delete Show this page only

West Hills College

+ Add Question ▼

Q28 Edit Question ▼ Add Question Logic Move Copy Delete

1. Are you planning on transferring to a four-year university?

Yes

No

Already have

+ Add Question ▼ Split Page Here

Q29 Edit Question ▼ Add Question Logic Move Copy Delete

2. Plese select the university you plan to transfer to, are currently enrolled or have graduated from?

Cal Poly - SLO

Fresno State

UC Davis

CSU Chico

Other (please specify)

+ Add Question ▼ Split Page Here

Q30 Edit Question ▼ Add Question Logic Move Copy Delete

3. Please choose your intended major.

Agricultural Engineering

Agricultural Systems Managment (Ag Engineering Technology)

Crop/Plant Science

Ag Business

Animal Science

Other (please specify)

+ Add Question ▼ Split Page Here

Q31 Edit Question ▼ Add Question Logic Move Copy Delete

4. When transferring to a four year university who helped you in the transition?

WHC Counselor

University Counselor

Instructor

Self

Other (please specify)

+ Add Question ▼ Split Page Here

Q32 Edit Question ▼ Move Copy Delete

5. Where you satisfied with the help that you received? Why or why not?

+ Add Question ▼

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PAGE 7 Edit Page Options ▼ Move Copy Delete Show this page only

Workforce

+ Add Question ▼

Q33 Edit Question ▼ Add Question Logic Move Copy Delete

1. Please choose the category that best describes your current or intended job?

heavy construction

Agri-Construction

equipment Maintenance

Other (please specify)

+ Add Question ▼ Split Page Here

Q34 Edit Question ▼ Add Question Logic Move Copy Delete

2. Please choose the salary bracket that best describes your starting annual salary. (To convert hourly to annual multiply your hourly rate by 2000)

< $20,000

$21,000 - $30,000

$31,000 - $40,000

$41,000 - $50,000

$51,000 - $60,000

$61,000 - $70,000

$71,000 - $80,000

> $80,000

+ Add Question ▼ Split Page Here

Q35 Edit Question ▼ Add Question Logic Move Copy Delete

3. What type of hours do you work?

Full-Time

Part-Time

Make your own schedule

Other (please specify)

+ Add Question ▼ Split Page Here

Q36 Edit Question ▼ Add Question Logic Move Copy Delete

4. Please select working conditions:

Outside

Inside

Both

Elaborate

+ Add Question ▼ Split Page Here

Q37 Edit Question ▼ Move Copy Delete

5. How did the Heavy Equipment program assist in your current or intended position in the workforce?

+ Add Question ▼ Split Page Here

Q38 Edit Question ▼ Add Question Logic Move Copy Delete

6. Would you condider yourself successful?

Yes

No

Somewhat

+ Add Question ▼

+ Add Page

Back to My Surveys

Preview Survey Send Survey »

6.

Graduate Follow-Up Survey Results

WHC - Precision Agriculture Graduate Survey

SurveyMonkey

1. Please give us a little information about you.

	Response Percent	Response Count
First Name:	100.0%	50
Last Name:	100.0%	50
ZIP/Postal Code:	100.0%	50
Email Address:	80.0%	40
answered question		50
skipped question		0

2. What is the zipcode of your home town?

	Response Count
	50
answered question	50
skipped question	0

3. Where did you live while you attended WHC?

	Response Percent	Response Count
Dorms	8.2%	4
On-Farm	10.2%	5
Off-Campus in Coalinga	**65.3%**	**32**
Parents in Coalinga	10.2%	5
Out of Town	16.3%	8
	answered question	**49**
	skipped question	**1**

4. Which program did you enroll in?

	Response Percent	Response Count
Precision Ag	**100.0%**	**45**
Heavy Equipment	4.4%	2
	answered question	**45**
	skipped question	**5**

5. How did you hear about the program?

	Response Percent	Response Count
Recruitment at Ag function	20.0%	9
Recruitment at highschool	15.6%	7
Family/Friend	**37.8%**	**17**
WHC Counselor	15.6%	7
Other (please specify)	22.2%	10
	answered question	**45**
	skipped question	**5**

6. Why did you choose the program?

	Response Count
	40
answered question	**40**
skipped question	**10**

7. What were your expectations before WHC?

	Response Count
	38
answered question	**38**
skipped question	**12**

8. Did your expectaions change?

	Response Percent	Response Count
Yes	**53.8%**	**21**
No	46.2%	18
	How and why?	24
	answered question	**39**
	skipped question	**11**

9. How would characterize the equipment?

Up-to-Date

	Yes	NO	Response Count
GPS Equipment	**80.0% (32)**	20.0% (8)	40
GIS Software	**92.7% (38)**	7.3% (3)	41

Used in Field

	Yes	NO	Response Count
GPS Equipment	**82.1% (32)**	17.9% (7)	39
GIS Software	**92.5% (37)**	7.5% (3)	40
		answered question	**41**
		skipped question	**9**

10. Would you recommend any equipment/software changes or updates?

	Response Percent	Response Count
Yes	48.8%	21
No	**51.2%**	**22**
	What and Why?	20
	answered question	**43**
	skipped question	**7**

11. Which courses did you take?

	Response Percent	Response Count
AG 10-Intro to Ag	69.0%	29
AG 11-Ag Sales and Service	31.0%	13
AG 15X-Work Experience	38.1%	16
AGBUS 15-Computer Applications	90.5%	38
CRPSCI 1-Intro to Plant Science	**92.9%**	**39**
CRPSCI 6-Intro to Precision Ag	76.2%	32
CRPSCI 7-Advanced Precision Ag	76.2%	32
CRPSCI 19-Water Management	73.8%	31
SLSCI 21-Soils	73.8%	31
GEOG 4-Intro to GIS	40.5%	17
	answered question	**42**
	skipped question	**8**

12. Please rate the quality of the following courses. 1 being the least through 5 being the most

Usefullness

	1	2	3	4	5
AG 10 - Intro to Ag	6.7% (2)	16.7% (5)	**36.7% (11)**	13.3% (4)	26.7% (
AG 11 - Ag Sales and Communication	0.0% (0)	7.1% (1)	14.3% (2)	28.6% (4)	**50.0% (**
AG 15x - Work Experience	**25.0% (4)**	12.5% (2)	18.8% (3)	18.8% (3)	**25.0% (**
AGBUS 15 - Computer Applications	0.0% (0)	0.0% (0)	7.5% (3)	30.0% (12)	**62.5% (**
CRPSCI 1 - Intro to Plant Science	0.0% (0)	0.0% (0)	17.9% (7)	28.2% (11)	**53.8% (**
CRPSCI 6 - Intro to Precision Ag	0.0% (0)	0.0% (0)	6.3% (2)	18.8% (6)	**75.0% (**
CRPSCI 7 - Advanced Precision Ag	0.0% (0)	0.0% (0)	6.3% (2)	9.4% (3)	**84.4% (**
CRPSCI 19 - Water Management	0.0% (0)	0.0% (0)	3.2% (1)	22.6% (7)	**74.2% (**
SLSCI 21 - Soils	0.0% (0)	0.0% (0)	6.7% (2)	13.3% (4)	**80.0% (**
GEOG 4 - Intro to GIS	5.9% (1)	0.0% (0)	11.8% (2)	17.6% (3)	**64.7% (**

Enjoyment

	1	2	3	4	5
AG 10 - Intro to Ag	3.3% (1)	3.3% (1)	33.3% (10)	16.7% (5)	**43.3% (**
AG 11 - Ag Sales and Communication	0.0% (0)	0.0% (0)	21.4% (3)	28.6% (4)	**50.0% (**
AG 15x - Work Experience	25.0% (4)	12.5% (2)	12.5% (2)	18.8% (3)	**31.3% (**
AGBUS 15 - Computer Applications	2.6% (1)	5.1% (2)	30.8% (12)	25.6% (10)	**35.9% (**
CRPSCI 1 - Intro to Plant Science	0.0% (0)	0.0% (0)	28.2% (11)	**35.9% (14)**	**35.9% (**
CRPSCI 6 - Intro to Precision Ag	0.0% (0)	0.0% (0)	9.4% (3)	12.5% (4)	**78.1% (**
CRPSCI 7 - Advanced Precision Ag	0.0% (0)	0.0% (0)	9.4% (3)	12.5% (4)	**78.1% (**
CRPSCI 19 - Water Management	0.0% (0)	3.2% (1)	12.9% (4)	35.5% (11)	**48.4% (**

SLSCI 21 - Soils	0.0% (0)	3.3% (1)	20.0% (6)	26.7% (8)	**50.0% (**
GEOG 4 - Intro to GIS	5.9% (1)	0.0% (0)	11.8% (2)	35.3% (6)	**47.1% (**

Practical Knowledge

	1	2	3	4	5
AG 10 - Intro to Ag	10.0% (3)	3.3% (1)	**33.3% (10)**	20.0% (6)	**33.3% (**
AG 11 - Ag Sales and Communication	0.0% (0)	0.0% (0)	7.1% (1)	28.6% (4)	**64.3% (**
AG 15x - Work Experience	25.0% (4)	6.3% (1)	18.8% (3)	18.8% (3)	**31.3% (**
AGBUS 15 - Computer Applications	2.5% (1)	0.0% (0)	20.0% (8)	27.5% (11)	**50.0% (**
CRPSCI 1 - Intro to Plant Science	5.1% (2)	2.6% (1)	10.3% (4)	38.5% (15)	**43.6% (**
CRPSCI 6 - Intro to Precision Ag	0.0% (0)	3.1% (1)	3.1% (1)	12.5% (4)	**81.3% (**
CRPSCI 7 - Advanced Precision Ag	0.0% (0)	3.1% (1)	3.1% (1)	15.6% (5)	**78.1% (**
CRPSCI 19 - Water Management	0.0% (0)	0.0% (0)	3.2% (1)	29.0% (9)	**67.7% (**
SLSCI 21 - Soils	0.0% (0)	0.0% (0)	6.7% (2)	23.3% (7)	**70.0% (**
GEOG 4 - Intro to GIS	5.9% (1)	5.9% (1)	5.9% (1)	35.3% (6)	**47.1% (**

Theoretical Knowledge

	1	2	3	4	5
AG 10 - Intro to Ag	10.7% (3)	3.6% (1)	32.1% (9)	17.9% (5)	**35.7% (**
AG 11 - Ag Sales and Communication	0.0% (0)	0.0% (0)	15.4% (2)	23.1% (3)	**61.5% (**
AG 15x - Work Experience	26.7% (4)	13.3% (2)	13.3% (2)	13.3% (2)	**33.3% (**
AGBUS 15 - Computer Applications	7.7% (3)	0.0% (0)	12.8% (5)	30.8% (12)	**48.7% (**
CRPSCI 1 - Intro to Plant Science	2.6% (1)	0.0% (0)	10.5% (4)	28.9% (11)	**57.9% (**
CRPSCI 6 - Intro to Precision Ag	0.0% (0)	0.0% (0)	3.2% (1)	16.1% (5)	**80.6% (**
CRPSCI 7 - Advanced Precision Ag	0.0% (0)	0.0% (0)	9.7% (3)	6.5% (2)	**83.9% (**

CRPSCI 19 - Water Management	0.0% (0)	0.0% (0)	3.3% (1)	26.7% (8)	**70.0% (**
SLSCI 21 - Soils	0.0% (0)	0.0% (0)	3.4% (1)	24.1% (7)	**72.4% (**
GEOG 4 - Intro to GIS	6.3% (1)	0.0% (0)	12.5% (2)	25.0% (4)	**56.3% (**

Difficulty

	1	2	3	4	5
AG 10 - Intro to Ag	24.1% (7)	27.6% (8)	**37.9% (11)**	0.0% (0)	10.3% (
AG 11 - Ag Sales and Communication	7.7% (1)	7.7% (1)	**30.8% (4)**	**30.8% (4)**	23.1% (
AG 15x - Work Experience	26.7% (4)	**33.3% (5)**	13.3% (2)	6.7% (1)	20.0% (
AGBUS 15 - Computer Applications	12.8% (5)	5.1% (2)	**41.0% (16)**	17.9% (7)	23.1% (
CRPSCI 1 - Intro to Plant Science	2.6% (1)	5.3% (2)	**36.8% (14)**	21.1% (8)	34.2% (
CRPSCI 6 - Intro to Precision Ag	3.2% (1)	6.5% (2)	25.8% (8)	29.0% (9)	**35.5% (**
CRPSCI 7 - Advanced Precision Ag	0.0% (0)	6.5% (2)	22.6% (7)	29.0% (9)	**41.9% (**
CRPSCI 19 - Water Management	0.0% (0)	3.3% (1)	30.0% (9)	**33.3% (10)**	**33.3% (**
SLSCI 21 - Soils	0.0% (0)	6.9% (2)	10.3% (3)	20.7% (6)	**62.1% (**
GEOG 4 - Intro to GIS	0.0% (0)	6.3% (1)	**31.3% (5)**	**31.3% (5)**	**31.3% (**

Com

answered qu

skipped qu

13. What changes if any would you make to the classes listed above and why?

	Response Count
	16
answered question	**16**
skipped question	**34**

14. Are there any other classes that you would have found helpful that were not offered?

	Response Percent	Response Count
Yes	16.2%	6
No	**83.8%**	**31**
	List and Explain:	6
answered question		**37**
skipped question		**13**

15. Did you complete the certificate?

	Response Percent	Response Count
Yes	**73.8%**	**31**
No	26.2%	11
answered question		**42**
skipped question		**8**

16. Did you take any additional courses while in the program?

	Response Percent	Response Count
Yes	46.3%	19
No	56.1%	23
answered question		41
skipped question		9

17. Which additional courses did you take?

	Response Count
	19
answered question	19
skipped question	31

18. Do you feel that the basic skills learned in class prepared you for life after college? Check if the answer is yes.

	Response Percent	Response Count
Math	73.2%	30
Writing	73.2%	30
Speaking	80.5%	33
answered question		41
skipped question		9

19. How would you currently characterize yourself?

	Response Percent	Response Count
currently enrolled in the Precision Agriculture program at WHC	19.0%	8
were enrolled, but did not complete the certificate program	9.5%	4
completed the certificate program	**71.4%**	**30**
	answered question	**42**
	skipped question	**8**

20. Did you complete your A.A./A.S.?

	Response Percent	Response Count
Yes	31.7%	13
No	**68.3%**	**28**
	answered question	**41**
	skipped question	**9**

21. When did you complete your A.A./A.S.?

	Response Count
	13
answered question	**13**
skipped question	**37**

22. Did you complete your B.A./B.S.?

	Response Percent	Response Count
Yes	7.9%	3
No	92.1%	35
answered question		38
skipped question		12

23. When did you complete your B.A./B.S?

	Response Count
	8
answered question	8
skipped question	42

24. After completing the Precision Agriculture certificate program, which best characterizes your next step

	Response Percent	Response Count
Continued transfer/A.A. requirements at West Hills College	19.5%	8
Continued transfer/A.A. requirements at another community college	7.3%	3
Transfered to a 4-year university	26.8%	11
Entered the workforce	**36.6%**	**15**
Other (please specify)	9.8%	4
	answered question	**41**
	skipped question	**9**

25. Did you complete courses to transfer?

	Response Percent	Response Count
Yes	**50.0%**	**18**
No	**50.0%**	**18**
	answered question	**36**
	skipped question	**14**

26. Which courses transferred?

	Response Percent	Response Count
AG 10-Intro to Ag	41.2%	7
AG 11-Ag Sales and Service	23.5%	4
AG 15X-Work Experience	23.5%	4
CRPSCI 1-Intro to Plant Science	**82.4%**	**14**
CRPSCI 6-Intro to Precision Ag	52.9%	9
CRPSCI 7-Advanced Precision Ag	70.6%	12
CRPSCI 19-Water Management	70.6%	12
SLSCI 21-Soils	**82.4%**	**14**
GEOG 4-Intro to GIS	29.4%	5
	answered question	**17**
	skipped question	**33**

27. Did you complete any internships while at WHC?

	Response Percent	Response Count
Yes	44.7%	17
No	**60.5%**	**23**
	answered question	**38**
	skipped question	**12**

28. What type of internship did you complete?

	Response Count
	17
answered question	**17**
skipped question	**33**

29. What was the pay-scale of the internship that you obtained?

	Response Percent	Response Count
Minimum Wage	29.4%	5
Just Above Minimum	**35.3%**	**6**
2x minimum	29.4%	5
More than 2x	17.6%	3
answered question		**17**
skipped question		**33**

30. How was your internship obtained?

	Response Percent	Response Count
WHC Professor	**66.7%**	**12**
Career Counselor/Job Board	0.0%	0
Word of Mouth (Classmate)	22.2%	4
Other	16.7%	3
	Specify:	5
	answered question	**18**
	skipped question	**32**

31. Are you planning on transferring to a four-year university?

	Response Percent	Response Count
Yes	33.3%	14
No	**40.5%**	**17**
Already have	26.2%	11
	answered question	**42**
	skipped question	**8**

32. Plese select the university you plan to transfer to, are currently enrolled or have graduated from?

	Response Percent	Response Count
Cal Poly - SLO	25.9%	7
Fresno State	**44.4%**	**12**
UC Davis	0.0%	0
CSU Chico	14.8%	4
Other (please specify)	14.8%	4
	answered question	**27**
	skipped question	**23**

33. Please choose your intended major.

	Response Percent	Response Count
Agricultural Engineering	3.2%	1
Agricultural Systems Managment (Ag Engineering Technology)	22.6%	7
Crop/Plant Science	**32.3%**	**10**
Ag Business	22.6%	7
Animal Science	3.2%	1
Other (please specify)	16.1%	5
	answered question	**31**
	skipped question	**19**

34. When transferring to a four year university who helped you in the transition?

	Response Percent	Response Count
WHC Counselor	21.1%	4
University Counselor	10.5%	2
Instructor	**52.6%**	**10**
Self	36.8%	7
Other (please specify)	15.8%	3
	answered question	**19**
	skipped question	**31**

35. Where you satisfied with the help that you received? Why or why not?

	Response Count
	13
answered question	**13**
skipped question	**37**

36. Please choose the category that best describes your current or intended job?

	Response Percent	Response Count
Production Agriculture	**40.5%**	**15**
Government	13.5%	5
Education	8.1%	3
Consultant	10.8%	4
Other (please specify)	27.0%	10
	answered question	**37**
	skipped question	**13**

37. Please choose the salary bracket that best describes your starting annual salary. (To convert hourly to annual multiply your hourly rate by 2000)

	Response Percent	Response Count
< $20,000	**22.2%**	**8**
$21,000 - $30,000	**22.2%**	**8**
$31,000 - $40,000	**22.2%**	**8**
$41,000 - $50,000	11.1%	4
$51,000 - $60,000	8.3%	3
$61,000 - $70,000	2.8%	1
$71,000 - $80,000	8.3%	3
> $80,000	2.8%	1
	answered question	**36**
	skipped question	**14**

38. What type of hours do you work?

	Response Percent	Response Count
Full-Time	**41.7%**	15
Part-Time	22.2%	8
Make your own schedule	33.3%	12
Other (please specify)	19.4%	7
answered question		**36**
skipped question		**14**

39. Please select working conditions:

	Response Percent	Response Count
Outside	42.9%	15
Inside	11.4%	4
Both	**45.7%**	**16**
	Elaborate	12
answered question		**35**
skipped question		**15**

40. How did the precision ag program assist in your current or intended position in the workforce?

	Response Count
	23
answered question	**23**
skipped question	**27**

41. Would you condider yourself successful?

	Response Percent	Response Count
Yes	**85.0%**	**34**
No	0.0%	0
Somewhat	22.5%	9
answered question		**40**
skipped question		**10**

WHC - Heavy Equipment Graduate Survey

SurveyMonkey

1. Please give us a little information about you.

	Response Percent	Response Count
First Name:	100.0%	24
Last Name:	100.0%	24
ZIP/Postal Code:	100.0%	24
Email Address:	95.8%	23
answered question		24
skipped question		0

2. What is the zipcode of your home town?

	Response Count
	22
answered question	22
skipped question	2

3. Where did you live while you attended WHC?

	Response Percent	Response Count
Dorms	4.5%	1
On-Farm	0.0%	0
Off-Campus in Coalinga	18.2%	4
Parents in Coalinga	18.2%	4
Out of Town	**63.6%**	**14**
	answered question	**22**
	skipped question	**2**

4. Which program did you enroll in?

	Response Percent	Response Count
Precision Ag	0.0%	0
Heavy Equipment	**100.0%**	**5**
	answered question	**5**
	skipped question	**19**

5. How did you hear about the program?

	Response Percent	Response Count
Recruitment at Ag function	0.0%	0
Recruitment at highschool	0.0%	0
Family/Friend	**80.0%**	**4**
WHC Counselor	0.0%	0
Other (please specify)	20.0%	1
	answered question	**5**
	skipped question	**19**

6. Why did you choose the program?

	Response Count
	4
answered question	**4**
skipped question	**20**

7. What were your expectations before WHC?

	Response Count
	3
answered question	**3**
skipped question	**21**

8. Did your expectaions change?

	Response Percent	Response Count
Yes	25.0%	1
No	**100.0%**	**4**
	How and why?	0
	answered question	**4**
	skipped question	**20**

9. How would characterize the equipment?

	Response Percent	Response Count
Completely out-of-date	0.0%	0
Out-of-date but still useful	25.0%	1
Average	**50.0%**	**2**
New-Indusrty Standard	25.0%	1
	Explain	1
	answered question	**4**
	skipped question	**20**

10. Would you recommend any equipment/software changes or updates?

	Response Percent	Response Count
Yes	33.3%	1
No	66.7%	2
What and Why?		1
answered question		**3**
skipped question		**21**

11. Please rate the quality of the course. 1 being the least through 5 being the most.

Usefullness

	1	2	3	4	5
Heavt Equipment	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	**100.0% (1)**

Enjoyment

	1	2	3	4	5
Heavt Equipment	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	**100.0% (1)**

Practical Knowledge

	1	2	3	4	5
Heavt Equipment	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	**100.0% (1)**

Theoretical Knowledge

	1	2	3	4	5
Heavt Equipment	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	**100.0% (1)**

Difficulty

	1	2	3	4	5
Heavt Equipment	0.0% (0)	**100.0% (1)**	0.0% (0)	0.0% (0)	0.0% (0)

Commer

answered questi

skipped questi

12. What changes if any would you make to the class listed above and why?

	Response Count
	0
answered question	**0**
skipped question	**24**

13. Are there any other classes that you would have found helpful that were not offered?

	Response Percent	Response Count
Yes	0.0%	0
No	**100.0%**	**1**
	List and Explain:	0
	answered question	**1**
	skipped question	**23**

14. Did you complete the certificate?

	Response Percent	Response Count
Yes	**100.0%**	**1**
No	0.0%	0
	answered question	**1**
	skipped question	**23**

15. Did you take any additional courses while in the program?

	Response Percent	Response Count
Yes	0.0%	0
No	**100.0%**	**1**
	answered question	**1**
	skipped question	**23**

16. Which additional courses did you take?

	Response Count
	0
answered question	**0**
skipped question	**24**

17. Do you feel that the basic skills learned in class prepared you for life after college? Check if the answer is yes.

	Response Percent	Response Count
Heavy Equipment Operation	**100.0%**	**1**
Grade Management	0.0%	0
Service and Repair	0.0%	0
	answered question	**1**
	skipped question	**23**

18. How would you currently characterize yourself?

	Response Percent	Response Count
Currently enrolled in the Heavy Eqipment program at WHC	0.0%	0
were enrolled, but did not complete the certificate program	0.0%	0
completed the certificate program	**100.0%**	**1**
	answered question	**1**
	skipped question	**23**

19. Did you complete your A.A./A.S.?

	Response Percent	Response Count
Yes	**100.0%**	**1**
No	0.0%	0
	answered question	**1**
	skipped question	**23**

20. When did you complete your A.A./A.S.?

	Response Count
	1
answered question	**1**
skipped question	**23**

21. Did you complete your B.A./B.S.?

	Response Percent	Response Count
Yes	0.0%	0
No	**100.0%**	**1**
	answered question	**1**
	skipped question	**23**

22. When did you complete your B.A./B.S?

	Response Count
	0
answered question	**0**
skipped question	**24**

23. After completing the Heavy Equipment certificate program, which best characterizes your next step

	Response Percent	Response Count
Continued transfer/A.A. requirements at West Hills College	0.0%	0
Continued transfer/A.A. requirements at another community college	0.0%	0
Transfered to a 4-year university	0.0%	0
Entered the workforce	**100.0%**	**1**
Other (please specify)	0.0%	0
	answered question	**1**
	skipped question	**23**

24. Did you complete any internships while at WHC?

	Response Percent	Response Count
Yes	0.0%	0
No	100.0%	1
	answered question	1
	skipped question	23

25. What type of internship did you complete?

	Response Count
	0
answered question	0
skipped question	24

26. What was the pay-scale of the internship that you obtained?

	Response Percent	Response Count
Minimum Wage	0.0%	0
Just Above Minimum	0.0%	0
2x minimum	0.0%	0
More than 2x	0.0%	0
	answered question	0
	skipped question	24

27. How was your internship obtained?

	Response Percent	Response Count
WHC Professor	0.0%	0
Career Counselor/Job Board	0.0%	0
Word of Mouth (Classmate)	0.0%	0
Other	0.0%	0
	Specify:	0
	answered question	**0**
	skipped question	**24**

28. Are you planning on transferring to a four-year university?

	Response Percent	Response Count
Yes	0.0%	0
No	**100.0%**	**1**
Already have	0.0%	0
	answered question	**1**
	skipped question	**23**

29. Plese select the university you plan to transfer to, are currently enrolled or have graduated from?

	Response Percent	Response Count
Cal Poly - SLO	0.0%	0
Fresno State	0.0%	0
UC Davis	0.0%	0
CSU Chico	0.0%	0
Other (please specify)	0.0%	0
	answered question	**0**
	skipped question	**24**

30. Please choose your intended major.

	Response Percent	Response Count
Agricultural Engineering	0.0%	0
Agricultural Systems Managment (Ag Engineering Technology)	0.0%	0
Crop/Plant Science	0.0%	0
Ag Business	0.0%	0
Animal Science	0.0%	0
Other (please specify)	0.0%	0
	answered question	**0**
	skipped question	**24**

31. When transferring to a four year university who helped you in the transition?

	Response Percent	Response Count
WHC Counselor	0.0%	0
University Counselor	0.0%	0
Instructor	0.0%	0
Self	0.0%	0
Other (please specify)	0.0%	0
	answered question	**0**
	skipped question	**24**

32. Where you satisfied with the help that you received? Why or why not?

	Response Count
	0
answered question	**0**
skipped question	**24**

33. Please choose the category that best describes your current or intended job?

	Response Percent	Response Count
heavy construction	0.0%	0
Agri-Construction	0.0%	0
equipment Maintenance	0.0%	0
Other (please specify)	**100.0%**	**1**
	answered question	**1**
	skipped question	**23**

34. Please choose the salary bracket that best describes your starting annual salary. (To convert hourly to annual multiply your hourly rate by 2000)

	Response Percent	Response Count
< $20,000	**100.0%**	**1**
$21,000 - $30,000	0.0%	0
$31,000 - $40,000	0.0%	0
$41,000 - $50,000	0.0%	0
$51,000 - $60,000	0.0%	0
$61,000 - $70,000	0.0%	0
$71,000 - $80,000	0.0%	0
> $80,000	0.0%	0
	answered question	**1**
	skipped question	**23**

35. What type of hours do you work?

	Response Percent	Response Count
Full-Time	**100.0%**	**1**
Part-Time	0.0%	0
Make your own schedule	0.0%	0
Other (please specify)	0.0%	0
	answered question	**1**
	skipped question	**23**

36. Please select working conditions:

	Response Percent	Response Count
Outside	0.0%	0
Inside	0.0%	0
Both	**100.0%**	**1**
	Elaborate	1
	answered question	**1**
	skipped question	**23**

37. How did the Heavy Equipment program assist in your current or intended position in the workforce?

	Response Count
	1
answered question	**1**
skipped question	**23**

38. Would you condider yourself successful?

	Response Percent	Response Count
Yes	0.0%	0
No	0.0%	0
Somewhat	**100.0%**	**1**
	answered question	**1**
	skipped question	**23**

WEST HILLS COMMUNITY COLLEGE DISTRICT

WHCCD Exit Survey For Graduating Students 2006 - 2009

October 2009

WHCCD Office of Institutional Effectiveness & Planning

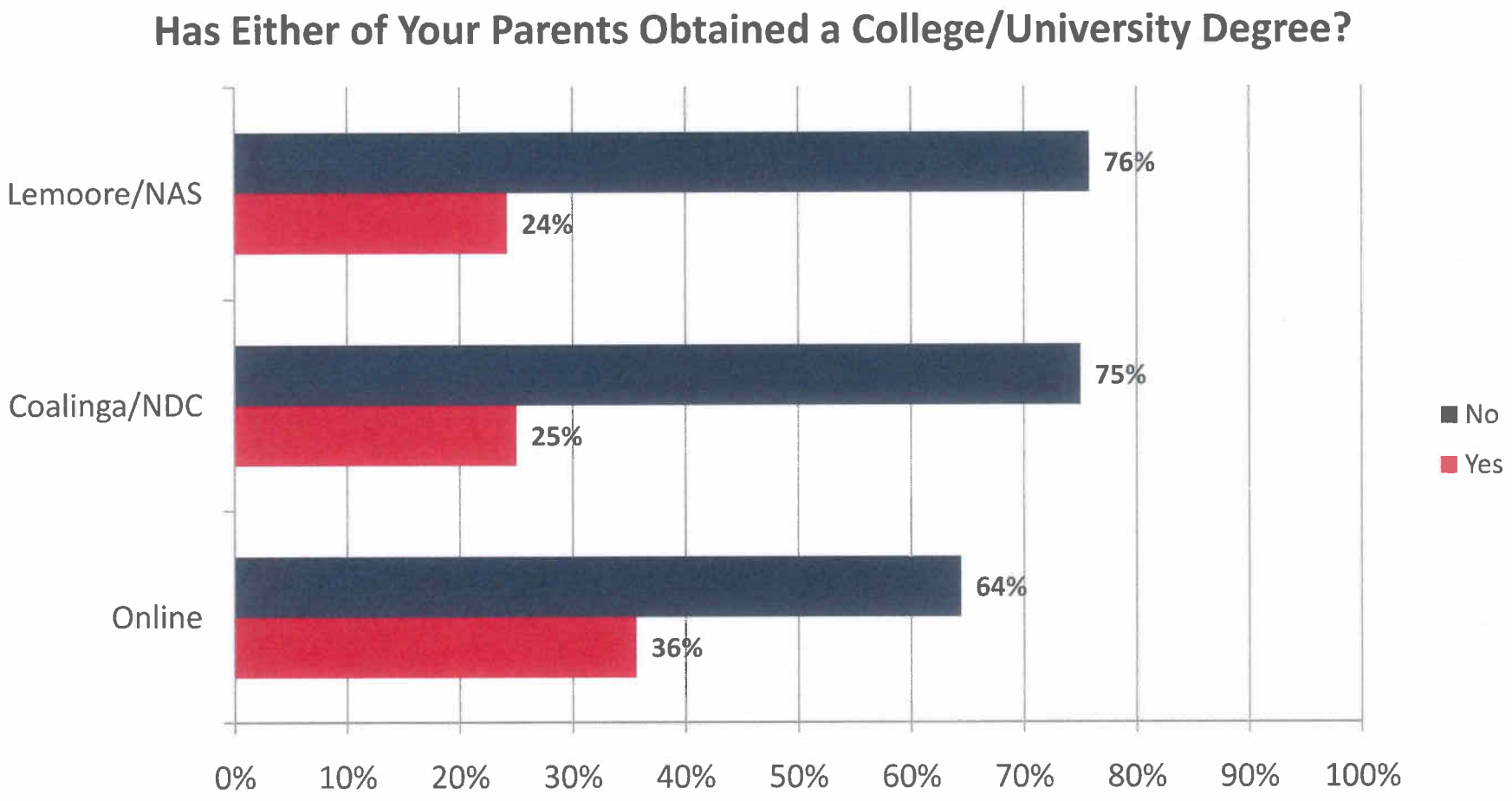
Responses by Year and Student's Primary Location

Year	Coalinga/ NDC	Lemoore	NAS	Online	Total	Total Graduates (Unduplicated)	Participation %
2006	45	92	1	11	149	531	28.1%
2007	45	114	3	22	184	491	37.5%
2008	28	88	1	9	126	567	22.2%
2009	80	140	1	32	253	537	47.1%
Total	**198**	**434**	**6**	**74**	**712**	**2,126**	**33.5%**

Margin of Error +/- 3%

WEST HILLS COMMUNITY COLLEGE DISTRICT

WHCCD Exit Survey For Graduating Students: 2006-2009



WHC Exit Survey For Graduating Students: 2006-2009

What are your plans after graduation?

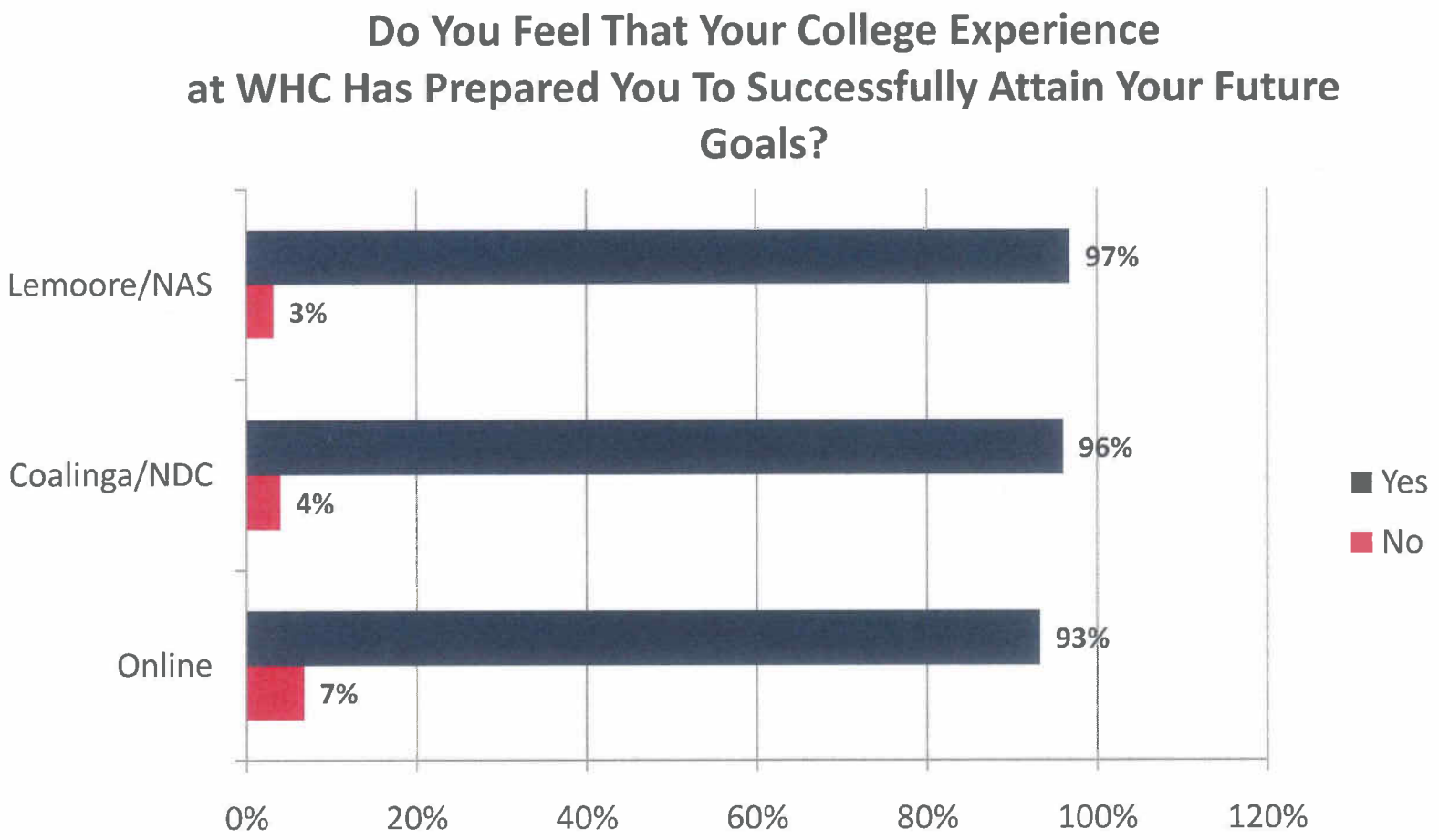
Coalinga/NDC	Overall Average	TOTAL Respondents (4 yrs.)
Transfer to a university	37%	72
Both(Transfer & Work)	34%	66
Work	17%	33
Other	13%	25

Lemoore/NAS	Overall Average	TOTAL Respondents (4 yrs.)
Transfer to a university	40%	173
Both (Transfer & Work)	38%	167
Work	12%	53
Other	10%	44

Online	Overall Average	TOTAL Respondents (4 yrs.)
Both (Transfer & Work)	41%	30
Transfer to a university	32%	24
Work	16%	12
Other	11%	8

WHC Exit Survey For Graduating Students: 2006-2009

OVERALL



WHC Exit Survey For Graduating Students: 2006-2009

If you intend to seek employment upon graduating; what is the status of your job search?

Coalinga/NDC	Overall Average	TOTAL Respondents (4 yrs.)
Currently looking for a job	41%	75
Employed but looking for a new job or promotion	25%	45
Recently employed	21%	38
Other	10%	18
Conducting an internship	3%	5

Lemoore/NAS	Overall Average	TOTAL Respondents (4 yrs.)
Currently looking for a job	28%	104
Employed but looking for a new job or promotion	29%	110
Recently employed	22%	83
Other	18%	67
Conducting an internship	3%	11

Online	Overall Average	TOTAL Respondents (4 yrs.)
Employed but looking for a new job or promotion	37%	23
Other	25%	16
Recently employed	22%	14
Currently looking for a job	16%	10
Conducting an internship	0%	0

WHC Exit Survey For Graduating Students: 2006-2009

Scoring

Unless otherwise noted, all of the multiple choice questions in the survey were weighted using the scale below:

Very Satisfied	**= 5**
Satisfied	**= 4**
Neutral	**= 3**
Dissatisfied	**= 2**
Very Dissatisfied	**= 1**
Does Not Apply	**= NA**

WEST HILLS COMMUNITY COLLEGE DISTRICT

WHC Exit Survey For Graduating Students: 2006-2009

If applicable, please indicate your level of satisfaction with the following student programs.

4.0 – 5.0 = Satisfied → Very Satisfied
3.0 – 3.99 = Neutral → Satisfied
2.0-2.99 = Dissatisfied → Neutral

Coalinga/NDC	Overall Average	TOTAL Respondents (4 yrs.)
EOPS	4.49	178
Work Experience Program	4.40	171
CAMP	4.18	166
SSS	4.10	170
Athletics	4.05	161
CalWorks	4.00	165
Learning Communities	3.93	159
DSP&S	3.75	163
Veterans Program	3.32	158
Active Military Program	3.24	158

Lemoore/NAS	Overall Average	TOTAL Respondents (4 yrs.)
Learning Communities	4.45	67
Work Experience Program	4.37	67
SSS	4.30	57
Veterans Program	4.28	72
Active Military Program	4.28	40
DSP&S	4.25	52
EOPS	4.23	108
CalWorks	4.11	47
CAMP	4.02	42
Athletics	3.81	42

Online	Overall Average	TOTAL Respondents (4 yrs.)
Veterans Program	4.80	10
Active Military Program	4.67	12
Athletics	4.50	4
DSP&S	4.50	6
Work Experience Program	4.50	8
Learning Communities	4.44	9
EOPS	4.40	10
CalWorks	4.33	3
CAMP	4.33	3
SSS	4.25	8

WHC Exit Survey For Graduating Students: 2006-2009

4.0 – 5.0 = Satisfied → Very Satisfied
3.0 – 3.99 = Neutral → Satisfied
2.0-2.99 = Dissatisfied → Neutral

If applicable, please indicate your level of satisfaction with the following student services.

Coalinga/NDC	Overall Average	TOTAL Respondents (4 yrs.)
Counseling/Advising	4.42	187
Admissions/Registration	4.21	188
Financial aid	4.18	187
Placement Testing	4.06	178
College Orientation	4.13	182
Career Center/Job Placement	3.79	168
Residence Halls	3.57	171
Cafeteria/Food services	3.41	174

Lemoore/NAS	Overall Average	TOTAL Respondents (4 yrs.)
Admissions/Registration	4.31	418
Financial aid	4.31	326
Counseling/Advising	4.30	419
College Orientation	4.26	320
Placement Testing	4.21	332
Residence Halls	4.14	97
Career Center/Job Placement	3.87	158
Cafeteria/Food services	3.45	213

Online	Overall Average	TOTAL Respondents (4 yrs.)
Counseling/Advising	4.55	67
College Orientation	4.50	48
Admissions/Registration	4.46	72
Financial aid	4.36	45
Residence Halls	4.33	6
Placement Testing	4.32	47
Cafeteria/Food services	4.20	15
Career Center/Job Placement	3.91	11

WHC Exit Survey For Graduating Students: 2006-2009

If applicable, rate your satisfaction of the following student resources.

4.0 – 5.0 = Satisfied → Very Satisfied
3.0 – 3.99 = Neutral → Satisfied
2.0-2.99 = Dissatisfied → Neutral

Coalinga/NDC	Overall Average	TOTAL Respondents (4 yrs.)
Student Email	4.33	194
Online Courses	4.26	188
Classrooms	4.25	193
Computer Labs	4.14	193
Library	4.14	196
Campus Technology	4.04	185
Study Rooms/Areas on Campus	3.96	185
Bookstore	3.95	193
Tutoring	3.92	185
Child Care	3.87	173
Parking Lots	3.53	194

Lemoore/NAS	Overall Average	TOTAL Respondents (4 yrs.)
Library	4.58	417
Classrooms	4.58	419
Computer Labs	4.55	387
Campus Technology	4.52	394
Online Courses	4.37	384
Study Rooms/Areas on Campus	4.35	350
Student Email	4.34	423
Child Care	4.19	79
Bookstore	4.19	427
Parking Lots	4.17	417
Tutoring	4.16	178

Online	Overall Average	TOTAL Respondents (4 yrs.)
Online Courses	4.69	72
Classrooms	4.50	48
Library	4.49	49
Computer Labs	4.42	38
Student Email	4.37	71
Campus Technology	4.34	47
Study Rooms/Areas on Campus	4.27	33
Tutoring	4.27	11
Parking Lots	4.26	54
Bookstore	4.21	67
Child Care	3.40	5

WHC Exit Survey For Graduating Students: 2006-2009

4.0 – 5.0 = Satisfied → Very Satisfied
3.0 – 3.99 = Neutral → Satisfied
2.0-2.99 = Dissatisfied → Neutral

Please rate your satisfaction regarding the college environment in the following areas.

Coalinga/NDC	Overall Average	TOTAL Respondents (4 yrs.)
Campus Safety/Security	4.04	194
College reputation amongst students and the community	4.03	188
Student Social Life	3.94	188
Cultural Activities	3.87	187

Lemoore/NAS	Overall Average	TOTAL Respondents (4 yrs.)
College reputation amongst students and the community	4.33	395
Campus Safety/Security	4.29	408
Cultural Activities	4.10	312
Student Social Life	3.95	332

Online	Overall Average	TOTAL Respondents (4 yrs.)
Campus Safety/Security	4.32	47
College reputation amongst students and the community	4.26	54
Student Social Life	4.12	25
Cultural Activities	4.10	30

WHC Exit Survey For Graduating Students: 2006-2009

4.0 – 5.0 = Satisfied → Very Satisfied
3.0 – 3.99 = Neutral → Satisfied
2.0-2.99 = Dissatisfied → Neutral

Please rate the following areas regarding instruction.

Coalinga/NDC	Overall Average	TOTAL Respondents (4 yrs.)
Your overall experience at WHC	4.41	191
Your overall experience in your area of study	4.33	193
Availability of faculty to answer questions outside of the classroom	4.25	192
Quality of instruction in your area of study	4.24	192
Types of degrees and certificates offered	4.09	194
Content offered in your area of study	4.03	189
Courses offered at times convenient to you	4.02	193

Lemoore/NAS	Overall Average	TOTAL Respondents (4 yrs.)
Your overall experience at WHC	4.59	425
Your overall experience in your area of study	4.47	430
Quality of instruction in your area of study	4.44	429
Availability of faculty to answer questions outside of the classroom	4.38	423
Types of degrees and certificates offered	4.31	429
Content offered in your area of study	4.30	426
Courses offered at times convenient to you	4.17	429

Online	Overall Average	TOTAL Respondents (4 yrs.)
Your overall experience in your area of study	4.58	71
Your overall experience at WHC	4.56	70
Quality of instruction in your area of study	4.49	72
Availability of faculty to answer questions outside of the classroom	4.46	69
Courses offered at times convenient to you	4.39	72
Content offered in your area of study	4.32	71
Types of degrees and certificates offered	4.29	72

7.

Advisory Committee Meeting Agenda

WEST HILLS COLLEGE COALINGA

Agenda

Date Wednesday, Dec 18
Time 6:15 PM – 7:00 PM
Location Room FB03

Area/Position	Person	Present	
		Yes	No
President	Kerri Birdwell		
Vice President	Kurt Quade		
Secretary	Brock Taylor		
	Elliot Dozier		
	Jason Letterman		
Non-Voting	Chris Chaney		
Non-Voting	Clint Cowden		
Non-Voting	Tim Ellsworth		

1.0 Call to order
- 1.1 **Call to order at**
- **1.2 Additions to the Agenda**

2.0 Public Comments
- **2.1**

3.0 Minutes
- **3.1** Minutes for April 2011

4.0 Administrative Report
- **4.1**

5.0 Area Reports
- **5.1 Irrigation/Water**
- **5.2 Precision Agriculture**
- **5.3 Soil Science**
- **5.4 Ag Systems Management**
- **5.5 Welding/Fabrication**
- **5.6 Pest Control/CCA**
- **5.7 West Side Agriculture**
- **5.8 Other**

6.0 Old Business
- **6.1** Ag Science and Technology AS
- **6.2** PCA Classes

8.0 New Business

8.1	Ag 12
8.2	CrpSci 1
8.3	AET 10- Surveying
8.4	AET 11 – Advanced Surveying with GIS
8.5	AET 15 – CAD for Agriculture
8.6	AET 16 – CAD Applications for Land Management in Agriculture
8.7	AET 21 – Ag – Irrigation Management
8.8	AET 22 – Irrigation Evaluation and Design Principles
8.9	AET 23 – Advanced Irrigation Design
8.10	AET 24 – Drip and Micro Irrigation Design and Management
8.11	AET 40 – Material Joining
8.12	AET 45 – Design and Fabrication 1
8.13	AET 46 – Advanced Design and Fabrication
8.14	AET 47 – Material Removal
8.15	AG 11 – Agricultural Sales and Communication
8.16	CrpSci 19 – California Water
8.17	CrpSci 2 – Plant Science Theory
8.18	CrpSci 32 – Weeds and Poisonous Plants
8.19	CrpSci 36 – Fertilizers and Soil Amendments
8.20	CrpSci 44 – Economic Entomology
8.21	CrpSci 45 – California Pest Control Laws and Regulations
8.22	CrpSci 46 – Integrated Pest Management
8.23	CrpSci 6 – Introduction to Precision Agriculture
8.24	CrpSci 7 – Advanced Precision Agriculture
8.25	SlSci 21 – Soils
8.26	WT 70 – Introduction to Certified Welding
8.27	WT 72 – Advanced SMAW
8.28	WT 73 – Introduction to Metallurgy and Weld Symbols
8.29	WT 75 – SMAW Pipe Welding
8.30	Irrigation Design Cert
8.31	Applications of Precision Agriculture Cert
8.32	Crop Health Cert
8.33	Crop Production Cert
8.34	Precision Agriculture Fundamentals Cert
8.35	TMC Plant Science AS-T
8.36	DQPP
8.37	Internships
8.38	Externships
8.39	Student Job Placement

9.0 Announcements

9.1

10.0 Adjournment

10.1 Meeting adjourned at

8.

Advisory Committee Meeting Minutes

WEST HILLS COLLEGE COALINGA

FOF Advisory Committee Meeting Agenda and Minutes

Date Wednesday, Dec 18
Time 6:15 PM – 7:00 PM
Location Room FB03

Area/Position	Person	Present	
		Yes	No
President	Kerri Birdwell	X	
Voting member	Brock Taylor	X	
Voting member	Elliot Dozier	X	
Voting member	Phil Smith	X	
Voting member	Kurt Quade	X	
	Justin Letterman	X	
Non-Voting	David Castillo	X	
Non-Voting	Chris Chaney	X	
Non-Voting	Clint Cowden	X	
Non-Voting	Tim Ellsworth	X	

1.0 Call to order

1.1 **Call to order at 6:13 PM**
1.2 Additions to the Agenda

2.0 Public Comments

2.1

3.0 Minutes

3.1 Minutes for April 2011

4.0 Administrative Report

4.1 N/A

5.0 Area Reports

5.1 Irrigation

5.2 Precision Agriculture

5.3 Soil Science

5.4 Ag Systems Management

5.5 Pest Control

5.6 West Side Agriculture

5.7 Other

6.0 Old Business

6.1 Ag Science and Technology AS
6.2 PCA Classes

8.0 New Business

8.1	Ag 12
8.2	CrpSci 1
8.3	AET 10
8.4	AET 11
8.5	AET 15
8.6	AET 16
8.7	AET 21
8.8	AET 22
8.9	AET 23
8.10	AET 24
8.11	AG 11
8.12	CrpSci 19
8.13	CrpSci 2
8.14	CrpSci 32
8.15	CrpSci 32
8.16	CrpSci 36
8.17	CrpSci 44
8.18	CrpSci 45
8.19	CrpSci 46
8.20	CrpSci 49
8.21	CrpSci 6
8.22	CrpSci 7
8.23	SISci 21
8.24	Irrigation Design Cert
8.25	Applications of Precision Agriculture Cert
8.26	Crop Health Cert
8.27	Crop Production Cert
8.28	Precision Agriculture Fundamentals Cert
8.29	TMC Plant Science AS-T
8.30	Internships
8.31	Externships
8.32	Student Job Placement

The next meeting will be a brief consultation meeting to review CrpSci 7 and will occur at the February 11-13, 2014 World Ag Expo in Tulare.

The meeting was called to order by Kerri at 6:13 PM. Kerri asked what the purpose of tonight's meeting. Clint explained the need for the meeting was to have the committee review course materials and programs, provide input on the same, and, if acceptable, approve these courses and programs. If the materials are not acceptable, the committee is charged with providing guidance

and direction to improve the program. It was explained that the advisory committee approval was required prior to obtaining approval from three subsequent review boards which include the WHCC academic senate committee, the California Community College senate, and the state chancellor's office.

The discussion noted that items 8.3 – 8.25 listed above have already been approved by the latter three review boards. Thus, Elliot moved that discussion of these items be tabled. This was approved by Kurt and voting was unanimous to table these items.

The discussion then focused on Ag 12 and CrpSci 1.

With regard to Ag 12, Brock asked if the class also teaches harvest equipment concepts, which he was told by Clint it does not. Clint pointed out that Ag 12 is taught currently at Cal Poly SLO and Merced College. He also pointed out that there is an advanced class that teaches students in regards to harvest equipment.

Elliot made a motion to accept the class as described, Jason seconded the motion and everyone voted unanimously to approve the motion.

The discussion than focused on CrpSci 1.

Clint pointed out that if this class is approved by the committee, it will be sent to the previously mentioned subsequent review boards (e.g., WHCC academic senate, etc.) for approval as a GE course. Brock moved to accept class, Jason seconded the move, and the vote was unanimous in favor.

Committee discussion switched to focus on the Irrigation Design program.
Clint explained the purpose of the Program and the importance of certificates to serve CTE for people who do not intend to proceed to a 4 year institution but who do want gain greater depth. This program provides a national level certificate and qualify people for a job at $18/hr and put them on a pathway for a career.

Kurt makes motion to approve program, Brock seconds the motion and the committee voted and approved the motion.

Discussion then turned to the Applications of Precision Ag Program. It was explained that the Advanced GPS class is much more focused than the Intro course on guidance systems, remote sensing, etc.

Kerri mentioned that the program is lacking and needs instruction on installation of machinery guidance systems.

Clint pointed out that this was prior course content in CrpSci 7. He felt that this material should be covered in that course. Even though CrpSci 7 is currently approved by all required approval committees, it needs to be revised to include instruction in the installation of guidance systems.

The Committee decided to approve program but recommended revision of CrpSci 7. The committee decided to review a revised CrpSci 7 course description at the World Ag Expo Farm show in February. The instruction could focus on aftermarket or plug and play equipment. David asked if we could use a video or two to train students on this topic. Kerri suggested the need to teach variable rate seeding and variable rate application installations as well as guidance systems, etc. Suggestion was made by Kerri to consider a 1 unit course that focused on installation only.

Brock made a motion to accept the program, Kurt seconded the motion which was unanimously approved.

The topic then switched to the Crop Health Cert. It was noted that all of the courses in this certificate are hybrid courses in that they include online lecture and face-2-face labs.

Clint explained that these certification programs provide a useful means of capturing educational success if students complete the certificate. In the past, students have completed the coursework, obtained gainful employment, and yet this success has not been recognized by the college. These certificates provide a means of identifying such success.

The aim of these certificates is to develop programs that prepare students for Pest Control Advisor and Certified Crop Advisor exams. Kurt moved that we approve this program, Brock seconded the motion and the committee unanimously supported the motion.

The discussion than focused on the Crop Production Certificate. The program focuses on the PCA plus Ag Business. Elliot moved to accept the program. Brock seconded the motion. Jason asked where is the WHCC service area? Clint mentioned that Salinas growers frequent the area in the winter for vegetable production and suggested that realistically it may be an 85 mile radius. Kerri asked for a vote on the motion, which vote was unanimous.

The next topic of discussion was the Precision Ag Fundamentals Certificate. This was explained as being an introductory certificate that has good job placement but perhaps the lowest pay among the programs discussed tonight. There are many targeted potential students for this certificate including an employer who wants his farm manager to obtain continuing education credits, a city FFA student who knows nothing about agriculture, and a student who wants to pursue a plant science BS degree. Kurt moved that we approve this certificate, Elliot seconded the motion, and the vote was unanimous in favor.

A brief discussion ensued regarding the correlation among programs and between courses within programs in terms of content introduction, practice and demonstration. The review of correlation followed the Degree Qualifications Profile Project (DQPP, http://www.dqpp.org/) outlinie.

Jason made a motion to discuss items 8.37 – 8.39. Clint challenged the committee to provide externship opportunities for Clint and Tim to follow an industry professional 4 or 5 days over a month or two. A similar request was made for student internships. A discussion ensued to provide internships that coordinate between industry professional, faculty and student with a

signed learning agreement that includes learning objectives, reporting requirements, and a structure to for students to receive academic credit. A similar structure could apply to externship efforts that would identify learning objectives for the externship experiences.

Elliot made a motion to adjourn the meeting, Kurt seconded the motion and the voting was in favor of adjourning the meeting.

The meeting was adjourned at 8:30 PM.

9.

Advisory Committee Handbook

West Hills Community College

Advisory Committee Manual

Guidelines for College
Advisory Committees

May 2008

9900 Cody Street
Coalinga, Ca 93210
559 – 934 – 2000

Table of Contents

Enhancing Advisory Committee Effectiveness

If the board of trustees and administration are the "brains" of community and technical colleges providing professional-technical programs, advisory committees are the central nervous system. When they operate well, the accurately sense internal and external environments, process information, and provide valuable guidance to the "brain" so that it can make good decisions. When they do not operate well, the college students enrolled in these programs, and employers who eventually hire the students suffer.

Overview

The primary purpose of professional-technical education advisory committees is to promote collaboration between specific educational programs and businesses, industry and labor in preparing individuals to enter and succeed in their chosen career. Advisory committees historically have been a vary effective means of making the educational deliver system respond to the needs of a constantly changing labor market.

Advisory committees are made up of volunteer who give of their time, talent, and expertise to help improve and update professional-technical programs. These committees usually serve specific occupational training programs in comprehensive high colleges, skills center, technical and community colleges.

Professional-technical advisory committees have three major roles. They advise the administration and the board of trustees, assists programs staff, and provide support and advocacy for quality education and training. Working cooperatively with program administrators and instructors, advisory committees can significantly help strengthen and improve the programs they serve. Sine they are "advisory" by design, these committees do not have administrative or legislative authority.

Types of Advisory Committees

Advisory committees are appointed by the administration of a college to provide direction for professional-technical of vocational programs. **Program advisory** committees can be formed or single program, a group or cluster of related programs or career pathways. Regional committees are encouraged for the purpose of coordination and development of articulate/integrated secondary and postsecondary programs. If program cluster our regional advisory committees are used, care must be given to ensure that every occupational program area is adequately represented. Clustering of advisory committee is highly recommended to enable balance representation that minimizes the burden of excessive meeting for private sector members.

Some colleges establish a General Advisory Committee to assist the administration in making policy recommendations to the board, undertake long-term assignments, and to develop and carry out a strategic plan. Task forces may be formed by the administration or bard to undertake specific assignments such as capital construction/remodeling projects and usually remain active only one to three years.

Establishment of Advisory Committees

Appointment Process. Advisory committee members are appointed by the administration of the college, in writing, for a specific tern of one, two, or thee years. A member may be appointed, when deemed appropriate by the administration, for a maximum service of six years. (Note: There may be extenuating circumstances when the administration would choose to appoint a member for additional terms. But these appointments should be limited to very special cases. A three-year rotational process provides for continuous flow of new talent and ideas to the committee. Written documentation of all appointments must be kept on file.

Membership Composition. The strength of an advisory committee is reflected in the diversity of its membership. Consideration must be given in the makeup of the committee represented. Advisory committees must be composed of equal numbers of employers and employees to maintain a balance of interest. When the occupation being taught is apprenticeable and a local Join Apprenticeship and Training Council (JATC) is active in the geographical area, at least one labor and one management member of the JAT should be invited to participate on the committee.

Consideration should also be give to include representatives of local professional associations related to the occupational area, organized or non-organized employee organizations, and county/state labor councils.

Committee Administration

Constitution and Bylaws. A written constitution should be developed for each advisory committee and included as part of official policy guidelines of the college. Once approved, it can only be amended by the governing board. Constitutions usually include the name of the committee, relationship to the governing board, purpose, membership, organizational structure, and procedural rules or bylaws.

Bylaws are rules that address the operation of the committee, selection of officers, appointment of subcommittees, responsibilities of members, and establishment of the annual plan of action. Because of the rules of the operation

may need to change as the program work of committee membership changes, the by laws should be revisited at the beginning of each academic year.

Chair and Program Administrator. The chair of the advisory committee must be elected from the private sector membership of the committee and must represent business, industry, labor, or a non-profit agency. The name and position of the committee chair should be noted on the committee roster on file.

The committee chair, program administrator, and program instructor(s), working in partnership, are responsible for facilitating the work of the committee. The program administrator and instructor(s) serve as consultants to the committee. However, they are not voting members and do not count towards the constitution of a quorum. Typically, the program administrator acts as the liaison to the board regarding the committee's activities. The program administrator also is responsible for providing logistical support for the committee's work.

Committee Recommendations and Reports. The committee chair and program administrator are responsible for keeping the administration, board, and appropriate staff fully informed of the committee activities. **Minutes of all meetings should be available at all times and kept on file for the previous three years**. A written report of achievements and recommendations should be provided to the administration and board at the end of each college year (See following checklist for sample report format.).

Committee Charge. In addition to the general committee charge, which outlines the committee's scope of activities, the administration or board may charge the committee with specific work (i.e., achieving industry certification for the program). The committee chair and program administrator are responsible for keeping the work of the committee focused on the charge and aligned with the college's strategic plan.

Meeting Frequency. Most colleges require that professional-technical advisory committees hold a minimum of two meetings each college year. Effective advisory committees meet quarterly, and quite often monthly, to complete their plan of action. A complete and up-to-date roster of committee membership should be maintained at all times. Members not attending at least 50 percent of the scheduled meetings should be replaced to maintain a viable committee. In order for the meeting to count as an "official" meeting, at least a quorum (50 percent) of the voting members must be present.

Committee Responsibilities. Committees are directly responsible to the board of trustees through the administration of the institution. Committees may not determine policy, commit to expenditure of fund, perform administrative functions and may not express opinions or represent positions in the name of the college, unless specifically authorized by the board or administration. In recommending activities that may involve expenditure of funds, the committee should provide a detailed description, rationale, and budget for consideration by the administration and board for inclusion in the institution budget.

Member Responsibilities. Members are expected to fully participate in committee activities by attending committee meetings and conducting business by telephone, e-mail, and written communications. Members are expected to do following:

- Act in good faith and in accordance with what they believe to be in the best interest of students, the program, or college, and their profession or occupation.
- Discharge their responsibilities diligently and not delegate them to other committee members or staff
- Publicly disclose any actual or perceived conflicts of interest and not vote on such committee matters.

State Ethics Laws & Responsibilities. Although state ethics laws are directed toward state and public employees, advisory committee members are indirectly affected by the law through their relationship with college employees. For example, the ethics laws govern all actions and working relationships of state employees with current or potential customers, government representatives, the media and others. In these relationships, state and public employees must observe the highest standards of ethical conduct. Each employee is expected to place the college's best interest above his or her own self-interest in al education, business, and other matters and decisions, where there is an actual, potential or appearance of conflict of interest. Paramount in the public trust that obligates college administrators, instructors, and advisory members in fulfilling their responsibilities is the principle that **their position may not be used for personal gain or private advantage within any relationship.**

Checklists for the

Advisory Committee Chair

The following checklists are provided as quick references to help the chair of the advisory committee effectively lead his or her committee.

Qualities of the Effective Advisory Chair

Knowledge

- Has extensive background/work experience in the occupational area.
- Demonstrate active participation and interest in professional association relating to occupation.
- Commands prestige and respect from within the industry or profession.

Communication Skills

- Demonstrates ability to communicate with committee members, instructors, administrators and other groups.
- Demonstrates willingness to listen (communication is not solely talking).

Participation

- Demonstrates active participation and interest in the program and college.
- Thinks in terms of program goals and the best interest of students.

Leadership

- Commands attention and inspires others
- Demonstrates ability to create a positive work atmosphere.
- Controls without dominating
- Understands how the committee fits into the overall educational process.

Administrative skills

- Demonstrates willingness to take initiative.
- Demonstrates ability and willingness to carry out responsibilities.
- Supports orderly procedures for conducting work.
- Understands the role of the instructors and administration.

Responsibilities of the Chair

- Attends all meetings.
- Accepts and supports the committee's purpose and charge.
- Plans committee meetings and agenda with administrations and/or instructors.
- Exercises leadership.
- Maintains records and relevant information on committee work. The chair must be sufficient informed to interact knowledgeably with other committee members, instructors, and the administration.
- Moves members towards consensus and decision-making.
- Evaluates committee efforts and communicates accomplishments to the committee and college administration.

Making Early Contact with Committee Members

- Sends a welcome/orientation letter, cosigned by the program by the program administrator and/o program instructors.
- Provides the committee with its charges and goals, in context with the college's strategic plan.
- Provide the date, time and location of the first committee meeting, even if tentative, and calendar of future meeting dates, even if tentative.
- Review recent accomplishments of the advisory committee so those new and continuing members can put that in context of work to be done.
- Include an RSVP sheet for committee participation and for attendance at the advisory meeting if the date is set. Some chairpersons my wish to solicit agenda items. If this is done, the first requirement of the committee is to validate these agenda items in terms of the purpose of the committee and the charge provided them by the college and program administrator.

Developing and Structuring the Meeting Agenda

- Provide in advance of the meeting, and agenda listing beginning and ending times for the meeting, the meeting location, room number, a list of committee members and topics to be discussed and/or acted upon.
- Sequence agenda items thoughtfully. Start the meeting with agenda topic that unify the committee; this sets the stage for working together. Make the first few items quick-action items to establish movement. Early in the meeting is a good time to discuss topics that require mental energy, creativity, and clear thinking. Don not put difficult topics back-to-back – people need a break. If the meeting will last more than two hours, build in breaks at logical places. End the meeting with topics that will unify the committee; people like to leave meetings feeling that they are a part of a productive team.
- Do not over schedule the meeting. Provide sufficient but not too much time for each topic. Some chairpersons like timed agendas; other do not. A good approach is to show key times on the agenda. Having these "markers" lets members know the general pace of discussion the chair anticipates for the meeting.
- Provide at least minimal written background information for each agenda item.
- Indicate whether the item is for discussion only or if the action is expected
- Identify the person who is representing each item.

The Chairperson's Role as Facilitator

- Be a facilitator of meetings; "don't hold court." The advisory committee belongs to the program and the college, not the char.
- Set the tone for the meeting by briefly stating the purpose of the advisory committee. This is also a good time to highlight recent student or program successes
- Guide, mediate, probe, and stimulate discussion. Let *others* thrash out ideas; advisory committees are not formed to validate the thinking of the chair, administration, or program instructors.
- Encourage discussion that challenges status quo of the program, but not the personalities of the instructors or administration. Good decisions are made when the committee examines all sides of an issue, but not when members personalize the debate. Emotional discussion of an idea is good, but and emotional reaction to a person is bad. When emotions are too high, return the floor to a neutral person, seek a purely factual answer, or take a break.
- Prevent one-sided debate.
- Deal with dysfunctional behaviors. Don't let a person who is blocking constructive discussion ruin the advisory meeting for everyone else. Strategies for dealing with this behavior include confronting the person privately in a caring manner, pointing out the effect of the behavior, and suggesting alternative behaviors.
- Keep discussion on track; periodically restate the issue and the goal of the discussion.
- Monitor participation; control talkative members and draw out silent members.
- Use well-placed questions, seek points of information and clarification, and periodically summarize to keep the discussion board focused.
- Be sensitive to the feelings of the members. Look for visual and verbal cue to determine if a member is not happy with the discussion, and then deal with this.
- Keep the group focused on the central question and moving toward a decision. Call on the newest members first to express their views; discussions tend to close down after long-term members express strong views.
- Seek consensus, but unanimity is not required. Sometimes, trying to get every member to completely agree compromises ideas.
- Close the meeting by recapping achievements of the committee.

Tips for Presiding Over a Meeting

- Start the Meeting on time!
- Review the business to be conducted
- Recognize members who are entitled to talk; discourage breaking in

- Restate the issue to be voted on before calling for a vote, and explain the consequence of the vote.
- Put all issues to a fair vote; don't make assumptions about how committee members feel.
- Announce the results of actions taken and explain the follow through to be taken and by whom.
- Help expedite business. Don't let discussions drift or go on too long.
- Stay with the agenda. Seek full committee's agreement to change the agenda once it has been announced.
- Close the meeting on time; seek the committee's agreement regarding extending the time if necessary.

Parliamentary Procedure

- Most advisory committees do not use, or are required to operate using parliamentary procedure; however, the objectives and principles of parliamentary procedure should be employed.
- The objective of parliamentary procedure includes expediting business, maintaining order, ensuring fairness and equity for all, and accomplishing the objectives for which the group is organized.
- The principles of parliamentary procedure include courtesy and justice for al, rule of the majority while respecting the rights of the minority, partiality to none, protection of the absentee, and taking one item of business at time.

Notes:

Checklists for the Program Administrator And Instructor(s)

The following checklists are provided as quick references to help the program administrator and instructors work effectively with their advisory committee.

Role of the Program Administrator

- Be a valuable resource to the advisory committee, not the "authority figure." Note that too large an administrative role reduces the value of the committee and reduces the motivation of the volunteer members. Too small of an administrative role results in the committee drifting aimlessly and operating ineffectively.
- Be sure the committee understands its purpose and charge.
- Provide a brief summary of written background information to the committee such as the college's strategic plan goals, list of program offerings, current enrollment and enrollment trends for the college program, recent program equipment purchases and facilities changes, staffing changes, current fiscal year program budget, changes required gy legislation or college policy, state ethics law requires relating to advisory committees, etc.
- Be thoroughly familiar with all aspects of the committee's work, subjects under discussion, and the college and state's policies related to the committee work.
- Answer questions, offer suggestions and raise questions.
- Coordinate administrative and clerical support

Responsibilities of the Program Administrator to the Committee Chair

- Make early contact with the committee chair and provide orientation.
- Ensure that the chair executes his or her leadership duties.
- Maintain contact with the chair.
- Provide administrative support to the committee throughout the year. The level of support should be agreed on by the chair, program administrator, and program instructor(s) during orientation.
- Help the chair prepare meeting agendas.
- Help the chair prepare and distribute minutes of the committee meetings.
- Provide on-sit support for committee meetings.
- Help prepare an annual advisory committee report to the board.

Orientation of the Chair

(Note: This orientation may be provided individually by the program administrator and program instructor(s) to each advisory committee chairs or through a joint meeting of all program committee chairs and instructors.)

- Review the purpose of the advisor committee, its relationship to the educational process of the college, and its charge for the year. Link to the college's strategic plan whenever possible.
- Identify lines of authority. Review and clarify the bounds of the advisory committee's activities and authority. Review relevant college policies,

practices and procedures that affect the committee. Note where the work of other committees/groups may overlap with or affect the committee (i.e. college accreditation, program industry certification, etc.).

- Clarify the chairperson's role and duties, and emphasize the importance of this position (see previous section, Checklist for the Committee Chair).
- Review all ongoing committee projects, continuing activities, and assignments of individual committee members. Identify the level of staff assistance/clerical support available.
- Identify focus areas for committee activities.
- Determine the process to be used during the year for handling the committee's work.
- Provide the following background information: a committee roster (and perhaps the previous year's); minutes of previous meetings; background on recent committee activities and accomplishments; a list of college administrators and the board of trustees, program instructors, support staff, and other people with whom the chair is likely to interact.

Managing the Advisory Committee Meeting

- Each advisory committee sets the number of times it will meet each year. This will be determined by the scope of the committee's plan of action. Some committees may meet two or three times a year. Others may meet more often to carry out their activities
- The program administrator and instructor(s) should arrange for refreshments (optional), necessary secretarial/support staff. And make copies of handout materials in advance of the meeting.
- The committee chair, program administrator and instructor(s) should arrive early to check room set up and distribute meeting materials.
- They should go over all agenda items before the meeting begins.
- The program administrator or a program instructor should sit next to the committee chair to ensure the meeting stays on schedule, that all members participate in the discussion, and that the meeting adjourn on time.
- Imm3ediately after adjournment, the chair and program administrator should meet briefly to agree on what follow-up actions are required and who is responsible – the chair, program administrator, program instructor(s), or another committee members.

Minutes of the Advisory Committee Meeting

- Include the date, time and place of the meeting. Note the chairperson's name, members present and absent, and other key people in attendance.
- Note all formal motions and passage or defeat
- Not all decisions reached, including motions passed and follow – up actions to be taken, with deadlines for implementation.

- Include a brief summary of discussions. Do not attribute comments to embers, except possibly where formal motions are introduced (attribution for motions is not required).
- Provide information of the time and place of the next meeting.
- Review of the meeting minutes by the committee chair should be completed prior to distribution to committee members.
- Distribute the minutes to all committee members, including those who did not attend, within two weeks of the meeting
- In most instances, meeting minutes do not require formal approval by the committee. A good approach is to send the meeting minutes out immediately after the meeting with a statement to contact the chair or program administrator if errors are noted.

Sample Timeline for Committee Work

June 1: College administration appoints new committee members. (Most advisory committee members are appointed for three-year terms and may be re-appointed to a second term. Replacement of members is usually made through a system of staggered terms. The benefit of having one-third new members each year is that it provided new ideas and a smooth transition for the committee.

June 15: Program administrator and committee chair contact new members to provide orientation.

Aug. 15: Letter from chair and program administrator is sent to committee members announcing the tentative calendar of meetings for the year.

Three weeks before fist committee meeting: Chair, program administrator and/or instructors develop committee meeting agenda.

Two weeks before meeting: Program administrator mail agenda to committee members.

One week after meeting: Program administrator/instructor(s) draft meeting minutes and forwards to chair for his or her approval.

Not more than three weeks after meeting: Program administrator mails meeting minutes to all committee members

Sample Report to the Board of Trustees and Administration

Date:

Purpose: This annual report is submitted to bring the board and administration up to date on key committee work and to tie the work of the committee to the strategic plan/purpose of the college.

(Note: Do not exceed one page, front and back. This report is not intended to be exhaustive. If an individual board member so requests, he or she will be provided the minutes of the meeting addressing the topics in question.)

1. Committee Name:

   Chair:

   Chair Elect:

   Program Administrator:

   Program Instructor(s):

(Note: Use phrases only in responding to each of the following sections (2-5). In brackets preceding each phrase, indicate the GOAL number and OBJECTIVE number for the committee's plan of action that ties to the activity (for example, [2;1]). Also note where activity ties to a specific galas of the college's strategic plan.)

2. Specific committee tasks, goals, and key issues for the current year.
   [ ]
   [ ]
   [ ]
   [ ]
   [ ]
3. Current year key accomplishments sine last annual report to the board and administration.
   [ ]
   [ ]
   [ ]
   [ ]
   [ ]
4. Specific recommendations to the board and /or program changes with significant financial or staffing impact.
   [ ]
   [ ]
   [ ]
   [ ]
   [ ]

5. Goals/activities planned for the next year.
   [ ]
   [ ]
   [ ]
   [ ]
   [ ]
6. Past meeting dates:

Position
Descriptions

Advisory Committee Chair Position Description

Basic Function

Consistent with the college's policies and procedures, the committee chair guides the committee in its wok outlined by the plan of action and charge from the board of trustees and administration

Responsibilities

- With program administrator, instructor(s), and other committee members, develops a plan of action that will allow the committee to effectively and efficiently discharge its responsibilities for the year.
- Approves meeting minutes before their distribution.
- Works with program administrator and instructor(s) to ensure that the work of the committee is carried out between meetings.
- Approves reports on committee activities, including recommendations for action by the board of trustees and/or administration regarding curriculum, facilities, equipment, or staffing changes.
- Reports to the committee on decisions of the board of trustees or administration that affect the committee's work activities.
- Where appropriate, make policy recommendations to the board of trustees and/or administration

Advisory Committee Member Position Description

Basic Function

Reports to the committee chair. Actively participates in the work of the committee; provides thoughtful input to the deliberations of the committee; focuses on the best interests of students, the occupation represented, the college, and the committee rather than on personal or constituent interests; and works toward fulfilling the committee's goals.

Responsibilities

- Reviews all relevant material before committee meetings. Makes contributions and voices objective opinions on issue.
- Attends committee meetings.
- Carries out individual assignments made by the committee chair.
- Informs the committee of recent changes to the occupation representing regarding employment opportunities and wage rates, certification/licensure requirements, federal/state laws, emerging practices/trends, new equipment, etc.
- Works as part of the committee and college instructional team to ensure that the committee develops recommendations that help students and staff responsible for the program.
- Represents the committee in meetings of professional associations and groups.
- Promotes clarity within the committee on the committee's role and how it supports and fits within the interests of the occupation or profession.

Program Administrator Position Description

Basic Function

Serves as an informed resource person to the chair and members of the committee and as a link to the college's administration and board of trustees. Assist the chair in facilitating committee discussions and actives that address the committee's charge. Works with the chair to ensure that all committee work is consistent with the college's policy and procedures and goals of the program.

Responsibilities

- Provides thorough orientation for each new committee chair and assists the char in providing orientation for new and continuing committee members each year.
- Works with the committee to develop a plan of action that will allow the committee to effectively carry out its responsibilities for the year.
- Works with the chair and instructor(s) to develop agendas and conduct effective meetings of the committee.
- Provides administrative and secretarial/support staff for planning and execution of all committee meetings.
- Makes sure minutes of advisory meetings are drafted for review and approval by the committee chair.
- Works with the committee chair, other committee members, and program instructor(s) to ensure that the work of the committee is carried forth between meetings.
- Facilitates communication of committee activities, including requests for information and/or recommendations to the college's administration and board of trustees.
- Reports to the committee on decisions of the administration, board of trustees, legislature, or state agencies that may impact the work of the committee.
- Where appropriate, assist the committee in proposing activities and services that will improve student learning within the program.

Program Instructor Position Description

Basic Function

Serves as an informed resource person to the chair, program administrator, and members of the committee. Provides information to the committee regarding curriculum, instructional practices, adequacy of facilities and equipment, student recruitment/ placement, student success, student organization activities, professional development activities, etc. Assists in facilitating committee discussions and activities addressing the plan of action.

Responsibilities

- Participate in providing a thorough orientation for each new committee chair and members concerning all aspects of the program.
- Works with the committee to develop a plan of action that will allow the committee to effectively and efficiently carry out its responsibilities for the year.
- Works with the program administrator and chair to develop agendas and conduct effective meetings of the committee.
- Provides necessary support for planning and execution of all committee meetings.
- Works with the program administrator, committee chair, and other committee members, to ensure that the work of the committee is carried forth between meetings.
- Facilitates communication of committee activities including requests for information.
- Where appropriate, assist the committee in proposing activities and services that will improve student learning within the program.

Notes:

Checklists for Advisory Committee Functions and Activities

The following checklist of suggested committee activities and duties are provided as quick references to help the committee effectively perform their responsibility.

Advisory Committee Functions and Activities

The following advisory committee activities and duties are not meant to be all-inclusive but are suggested areas of review and discussion. Each advisor committee develops its plan of action based on the needs of the program.

Curriculum Advice

- Review local, state, and regional labor market data to ensure that the occupational program is in demand, that it produces a livable family wage, and enough openings exist so as to provide a high probability of future employment for students completing the program.
- Advise as to industry standards, certification, or licensure requirements required by the program area.
- Assist with development of skills standards as appropriate
- Identify the academic competencies, employability and technical skills required for successful entry into the occupation.
- Identify new technologies to include in the program.
- Advise as to the types and balance of instruction relating to basic academic skills, production work, and/or realistic enterprise tasks to be accomplished to ensure effective and efficient use of instructional time.
- Review instructional materials for technical accuracy. Recommend those that are most appropriate to the program (i.e., textbooks, periodicals, trade, publications, audiovisual materials, computer software, on-line/internet technical assistance or leaning systems, etc.).
- Assist in conducting special events that benefit students, the institution, and local businesses (i.e., hosting industry training seminars and workshops, manufacturing or product seminars, open house events, etc.)
- Recommend procedures for developing, implementing, and evaluating work-based learning opportunities for students.

Facilities and Equipment Review

- Conduct evaluation as to the adequacy of the physical facilities and condition of equipment and prepare recommendations for necessary changes.
- Assist in obtaining instructional equipment and supplies through donations, loans, demonstrations, grants, gifts or at reduced purchase prices.
- Advise in development of plans for new construction or remodeling of existing facilities.
- Review annual budgetary request for equipment and supplies. Make recommendations and assist in the development of bid or purchase specifications when appropriate

Instructional Quality Improvement

- Advise in the development of qualification for the hiring of instructors and serve on interview panels when appropriate.
- Advise in the development of evaluation mechanisms and procedures that will assist in determining the success of the instructional program. Conduct outcome assessments (i.e. survey of student success 1, 3, or 5 years after completing program) and recommend appropriate changes to ensure continuous improvement of student learning.
- Recommend instructional practices that will promote the development of safe instructional environment and instill safe working attitudes and habits in students.
- Suggest criteria for evaluating instructor competence.
- Recommend strategies to ensure that instructor(s) improve instructional techniques, maintain/obtain industry certification, and state-of-the-art proficiency in the use of technology related to their program.
- Recommend/develop standards and minimum basic academic skills qualifications for entry into the program.
- Advise administration and board regarding program continuation, modification or elimination as determined by review of outcomes.

Instructional Delivery Review

- Review state and national initiatives, directives, or legislation for their impact on the program. Make recommendations on incorporation of the required changes.
- Assist in securing qualified substitute instructors, guest speakers, or workshop presenters for the program.

Student Employment Assistance

- Organize employer/student conferences.
- Notify instructor(s) of job openings for students.
- Facilitate students in obtaining work-based learning experiences, internships, clinical rotations, or cooperative work experiences.
- Assist students in developing job interview and resume development skills.
- Recommend employability skills curriculum content expected for success I the occupational area.
- Hire graduates/completers of the program.

Public Relations

- Recommend/facilitate/conduct and awards program for students that will encourage excellence and price in achievement (i.e., special recognition, scholarships, etc.).
- Present programs to local civic and service groups.
- Recommend/develop a marketing plan for increasing community awareness and vale of the program (i.e. facilitating/obtaining sponsored media advertisements, etc.).
- Recommend/develop measures supported by business and industry to increase awareness of the program through local and state professional trade associations.
- Participate in and promote special college events elated to the program.
- Talk to legislators regarding the needs of the program and college.
- Arrange for a tour of the program by legislators and other elected officials.
- Promote, support, or influence legislation that will impact the program.

Student Organizations

- Assist in developing competitive skill events.
- Serve as judges for competitive skill events.
- Sponsor or collect contributions of equipment and supplies for skill events.
- Arrange for display/demonstration space to promote student organizations as special events.

Performance Measures for Determining Advisory Committee Effectiveness

The following checklists provide a basis for helping determine the effectiveness of advisory committees in the performance of their responsibilities.

Performance Measures for Effective Advisory Committees:

#1 Understand the Mission and Goals of the College and Program.

- ✓ Know why the program exists.
- ✓ Understand the quality of student he program is producing.
- ✓ Have developed a clear, concise committee purpose statement.
  (Sample purpose statement: "to represent the interests of health occupations by reviewing and advising on curriculum, determining equipment and facilities needs, assisting with improving learning opportunities for students, and serving as an advocate for quality instruction.")

#2 Know What Must be Done to Achieve the Mission.

- ✓ Identify the "critical success factors"
- ✓ Academic Competencies
- ✓ Employability Skills
- ✓ Technical Skills
- ✓ Search for Improvement opportunities – confront status quo.

#3 Scan Internal and External Environments

Internal Factors:

- ✓ Administrative and board commitment to quality programs.
- ✓ Programs/ related programs offered by the institution.
- ✓ Adequacy of facilities and equipment.
- ✓ Instructor background and qualifications.
- ✓ Resources available (financial and support).
- ✓ Student access and recruitment.

External Factors

- ✓ Labor market needs, trends, and directions.
- ✓ Occupational licensing/certification requirements.
- ✓ Success of program graduates/completers.
- ✓ Community perceptions
- ✓ Programs in other colleges.

#4 Envision the Future

- ✓ Project requirements 3-5 years.
- ✓ Prioritize things that must be done to make program respond.
- ✓ List barriers (real and perceived).
- ✓ Enlist others: industry experts, academic instructors, and community.

#5 Develop Plan of Action to Address Identified Gaps.

- ✓ Set clear, measurable short/long-term goals.
- ✓ Specify logical implementation strategies and measurable objectives.
- ✓ Assign tasks.
- ✓ Establish timelines
- ✓ Plan small wins
- ✓ Develop specific recommendations for continuous improvement.

#6 Monitor Progress Towards Recommendations.

- ✓ Regularly meet with students, instructors, employers, and administrators/board to determine achievement.
- ✓ Get support – use influence of local business, labor legislators, and community.

#7 Encourage the Heart – Students, Instructors, and Administrators.

- ✓ Celebrate accomplishments – value the victories
- ✓ Champion the cause of professional-technical education.

Technical Assistance

Supervisory staff of the state agency responsible or oversight or professional technical, vocational-technical, or occupational education are available to provide technical assistance upon request to local community and technical colleges desiring help in increasing the effectiveness of their advisory committees. State agencies, as part of the local program evaluation process, also conducted a review of program advisory committee administration and activities to ensure compliance with their establsih3d policies and procedures, Each community and technical college is encouraged to create a local policy and procedures handbook or meet the needs of their campus programs.

10.

Department Calendar of Activities

WEST HILLS COLLEGE DISTRICT
INSTRUCTIONAL CALENDAR
2013-2014

2013 SUMMER SESSIONS

May 27 – August 14, 2013	Instruction Begins/Ends
July 4	Independence Day Observed

2013 FALL SEMESTER

August 15	Th	Faculty Flex Day, No Classes
August 16	F	Professional Dev Days, No Classes
August 19	M	Instruction Begins
September 2	M	Labor Day, No Classes
October 18	F	Last Day to Petition to Graduate
October 21	M	Second 9-week Classes Begin
November 11	M	Veteran's Day Observed, No Classes
November 15	F	Last Day to Withdraw with a W
November 28-29	Th-F	Thanksgiving, No Classes
December 16-20	M-F	Finals Week
December 20	F	End of Fall Semester

Total Instructional Days: 87

2014 SPRING SEMESTER

January 7	T	Professional Dev Days, No Classes
January 8	W	Professional Dev Days, No Classes
January 9	Th	Faculty Flex Day, No Classes
January 10	F	Professional Dev Days, No Classes
January 13	M	Instruction Begins
January 20	M	Martin Luther King Day, No Classes
February 14	F	Lincoln's Day Observed, No Classes
February 17	M	Washington's Day Observed, No Classes
March 14	F	Last Day to Petition to Graduate
March 17	M	Second 9-week Classes Begin
April 11	F	Last Day to Withdraw with a W
April 14-18	M-F	Spring Recess
May 19-23	M-F	Finals Week
May 22	Th	Lemoore Commencement
May 23	F	Coalinga Commencement
May 23	F	End of Spring Semester

Total Instructional Days: 88

Approved by the Board of Trustees: 12/10/13

2013 -- First Quarter

	July	August	September	Notes
1				
2		DPR Mtng Tom Babb		
3		Delta Water Summit		
4				
5			FOF Staff Mtng	
6				
7				
8	Farm Direction Mtng			
9	Paramount Visit		Farm Tour	
10		USDA FAS – Macedonia Group	DQPP Mtng	
11			Farm Pump Mtng/PV Const. Mtng	
12		USDA FAS – Macedonia Group	Pre-Ag Mtng	
13		USDA FAS – Macedonia Group	DQPP Mtng	
14		USDA FAS – Macedonia Group		
15				
16		USDA FAS – Chinese Delegation		
17		USDA FAS – Chinese Delegation		
18	ET Adjunct Meeting	USDA FAS – Chinese Delegation	SJ River Restoration Mtng	
19		USDA FAS – Chinese Delegation	FFA Field Day Mtng	
20		USDA FAS – Chinese Delegation	CTE Area Mtng	
21		USDA FAS – Chinese Delegation	IPM Lab	
22		USDA FAS – Chinese Delegation	IPM Lab	
23	BOT Mtng – PEP Academy	USDA FAS – Chinese Delegation		
24	FOF Webpage Discussion	USDA FAS – Chinese Delegation	14 SP Schedule/Curriculum Mtng	
25		USDA FAS – Chinese Delegation	SJ River Mtng/Coalinga FFA Mtng	
26		USDA FAS – Chinese Delegation	C6 Convergence	
27		USDA FAS – Chinese Delegation	DQPP Mtng	
28		USDA FAS – Chinese Delegation	IPM Lab/Farm Strategic Plan Mtng	
29		USDA FAS – Chinese Delegation	IPM Lab	
30				
31	PV Discussion/SJ River Restoration			

2013 -- Second Quarter

	October	November	December	Notes
1				
2	Duty Day Mtng	AET 21 Lab	Avenal HS Academy Mtng	
3	Ag Curriculum Mtng	AET 21 Lab	Pump Control Training	
4		Articulation Mtng		
5				
6			Recruiting at Avenal HS	
7	GED Adjunct Interview	Draft Ag Plan Mtng/Adj Interview	IPM Lab	
8		DQPP Mtng/CTE Area Mtng		
9				
10			DQPP Mtng	
11			I-Help Interview Mtng	
12		PCA Program Mtng	Curriculum/Farm Plan Mtng	
13		Well Controls Mtng/Ag Awards		
14		FFA FD Mtng/Emerg. Response		
15	DQPP Mtng/Avenal HS Mtng	FFA FD Mtng/Paramount Mtng		
16				
17				
18			**Advisory Committee Meeting**	
19	AET 21 Lab	Sec Ag @ FSU/Wilbur-Ellis Mtng		
20	AET 21 Lab	Commitment to Complete Mtng		
21		FFA FD Mtng/Paramount Mtng		
22	Fresno County FB Mtng/Dinner	Transition Success Symposium		
23		**FFA Field Day**		
24	AP 4050 Mtng			
25		Filming for VSFS eInternship		
26	AET 21 Lab	FFA FD Mtng/Boy Scout Council		
27	AET 21 Lab	Master Ed Planning Mtng		
28				
29				
30				
31	Master Ed Planning Mtng/Irr Conf.			

2014 -- Third Quarter

	January	February	March	Notes
1			AET 22 Lab	
2		CRPSCI 44 Lab	AET 22 Lab	
3		Contract Ed Mtngs		
4		CTE Conference		
5		Drought Workforce Conference	Fresno Compact Awards	
6				
7			FFA FD Mtng	
8	Curriculum Mtng/DQPP Mtng	AET 22 Lab	**FFA Field Day**	
9		AET 22 Lab		
10		TopCon Mtng/Farm Show	SPEARS Contract Ed Mtng	
11	**Coalinga FFA Field Day**	Farm Show	CCAOE Mtng	
12		Farm Show	CCAOE Mtng	
13		Farm Show	CCAOE Mtng	
14		Farm Show	CCAOE Mtng	
15				
16			CRPSCI 44 Lab	
17	TopCon Conference Call		FFA FD Mtng/Rodeo Coach Comm.	
18	AET 22 Lab			
19	AET 22 Lab	Urban Water Institute	Agrian Mtng	
20		Urban Water Institute	Transfer Center Advisory	
21		Urban Water Institute		
22			AET 22 Lab	
23	Bennett&Bennett Contract Ed	CRPSCI 44 Lab	AET 22 Lab	
24		Avenal HS Orchard Mtng		
25			DQPP Mtng/New Faculty Lunch	
26		Irrigation Grant Discussion		
27		FFA FD Mtng/Simplot Mtng	Rodeo Coach Interviews	
28	FFA FD Mtng/DQPP Mtng		Rodeo Inter/Ag Across Class. Mtng	
29				
30				
31				

2014 -- Fourth Quarter

	April	May	June	Notes
1				
2			DOL College Lead Conf Call	
3				
4				
5		DOL College Lead Conf Call		
6	CRPSCI 44 Lab			
7		Commit to Complete Mtng		
8		CDFA Grant Mtng		
9	Ag Faculty Mtng			
10		Castro Investiture – CSUF		
11		CRPSCI 44 Lab		
12	AET 22 Lab			
13	AET 22 Lab			
14		Presidents Mtng/Faculty BBQ		
15		Faculty Evaluation Mtng		
16				
17				
18			Online Training Conference	
19		DOL College Lead Conf Call	Online Training Conference	
20			Online Training Conference	
21		Enrollment Discussion	Online Training Conference	
22		Faculty Evaluation Mtng	Online Training Conference	
23		**Graduation**	Paramount Academy	
24	Ag Scholarship Review		Paramount Academy	
25	VTEA Mtng	CRPSCI 44	Paramount Academy	
26	AET 22 Lab		Paramount Academy	
27	AET 22 Lab		Paramount Academy	
28			Paramount Academy	
29	Title V Mtng		Paramount Academy	
30	Title V Mtngs/Transfer Mtng		Paramount Academy	
31				

Additional Events, Dates, or Deadlines – At-A-Glance

1ST QUARTER		EVENT	DATE
	July	Paramount PEP Academy Report to the Board of Trustees	7/23/14
	August	USDA FAS – MOA Chinese Delegation – Pesticide Utilization	8/16-29/14
	September	Farm of the Future Staff Meeting	9/5/14
2ND QUARTER		**EVENT**	**DATE**
	October	Fresno County Farm Bureau Salute to Agriculture Banquet	10/22/14
	November	Fall FFA Field Day	11/23/14
	December	Ag Curriculum and Farm Planning Meeting	12/12/14
3RD QUARTER		**EVENT**	**DATE**
	January	Coalinga FFA Field Day	1/11/14
	February	World Ag Expo	2/10-14/13
	March	Spring FFA Field Day	3/8/14
4TH QUARTER		**EVENT**	**DATE**
	April	Ag Faculty Meeting	4/9/14
	May	WHCC Graduation	5/23/14
	June	Paramount Academy	6/23/14-7/3/14

July 2013

July 2013

Su	Mo	Tu	We	Th	Fr	Sa
	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			

August 2013

Su	Mo	Tu	We	Th	Fr	Sa
				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
Jun 30 - Jul 6	**Jun 30**	**Jul 1**	2	3	4	5	6
Jul 7 - 13	7	8	9	10	11	12	13
Jul 14 - 20	14	15	16	17	18	19	20
Jul 21 - 27	21	22	23	24	25	26	27 6:00pm 7:00pm Grumpy's band
Jul 28 - Aug 3	28	29	30	31	**Aug 1**	2	3

August 2013

August 2013

Su	Mo	Tu	We	Th	Fr	Sa
				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

September 2013

Su	Mo	Tu	We	Th	Fr	Sa
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					

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Jul 28 - Aug 3	**Jul 28**	**29**	**30**	**31**	**Aug 1**	**2**	**3**
Aug 4 - 10	**4**	**5** 2:30pm 3:00pm Meet with Joy re: Chinese delegation (Ken's Office) - Stoppenbrink, Ken	**6**	**7**	**8** 9:00am 10:00am Call union bank	**9**	**10**
Aug 11 - 17	**11**	**12** Macedonian Group (Fr	**13**	**14** FAS Chinese Exchange Delegation	**15**	**16**	**17**
Aug 18 - 24	**18** FAS Chinese Exchange Delegation	**19**	**20**	**21**	**22** 7:00am 8:00am USDA FAS Chinese Delegation Meeting 11:45am 12:45pm Lunch at Harris	**23** 10:00am 11:00am Meet and Greet the Chinese Ministry of Agriculture Delegation (Farm Bu	**24**
Aug 25 - 31	**25** FAS Chinese Exchange Delegation	**26**	**27**	**28**	**29**	**30**	**31**

September 2013

September 2013

Su	Mo	Tu	We	Th	Fr	Sa
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8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

October 2013

Su	Mo	Tu	We	Th	Fr	Sa
		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
Sep 1 - 7	**Sep 1**	2	3	4	5	6	7
			4:00pm 5:00pm Do test for unit 2 CRPSCI 2 and CRPSCI 45 and CRPSCI 6		8:00am 9:00am Picture Day		
Sep 8 - 14	8	9	10	11	12	13	14
		Central & Northern California Community College		10:00am 11:00am NSF ATE Discussion/Planning Meeting (Merced College Business Resource Center Co			
Sep 15 - 21	15	16	17	18	19	20	21
			9:00am 9:30am Past NSF Comments		9:30am 10:30am USDA/CTE Transitions (Grants Office) - Gore, Debbie		
Sep 22 - 28	22	23	24	25	26	27	28
			5:00pm 6:00pm Soccer Practice (Game field)	8:00am 8:30am NSF ATE Discussion (CCC 12:00pm 12:30pm Meet Bruce's CWEE 1:00pm 2:00pm Discuss ATE with Becky and	8:00am 8:30am Get the Gator Tag Info	8:30am 9:30am Meeting about Fastlane (Grants Offi 3:00pm 4:00pm NSF ATE grant Discussion (Stu's Office) - Van	8:30am 3:00pm WHCC Ag Planning @ Piccadilly Inn Airport - Merlot Room (5115 E. McKinley Avenue) - Goldsmith
Sep 29 - Oct 5	29	30	**Oct 1**	2	3	4	5
		8:30am 10:00am NSF ATE Grant Discussion (Conference Call) - Becky Barabe					

October 2013

October 2013

Su	Mo	Tu	We	Th	Fr	Sa
		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		

November 2013

Su	Mo	Tu	We	Th	Fr	Sa
					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

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Sep 29 - Oct 5	**Sep 29**	**30**	**Oct 1**	**2**	**3**	**4**	**5**
			8:30am 10:00am NSF ATE Grant Discussion (Conference Call) - Becky Barabe		8:00am 8:30am GRANT SIREN-ALERT For FY 2014 (USDA SPECA Secondary Education Postsecondary agric		
Oct 6 - 12	**6**	**7**	**8**	**9**	**10**	**11**	**12**
				4:30am 5:30am Cheer meeting	9:00am 10:00am FW: EDA IMCP - Project Meeting #1 (Lyles Center Board Room, 5010 N. Woodrow Ave, Suite 200, Fres		
Oct 13 - 19	**13**	**14**	**15**	**16**	**17**	**18**	**19**
				11:30am 4:30pm FCA Minimum Day	12:00pm 1:00pm Flip Your Classroom Webinar	3:30pm 4:30pm Soccer	
Oct 20 - 26	**20**	**21**	**22**	**23**	**24**	**25**	**26**
		8:00am 8:30am GRANT SIREN US DEP ED TRIO SSS (GRANTS OFFICE 402) - Cavazos, Maria E.	11:00am 1:00pm Hair Appt	8:30am 9:30am CTE Transitions (Grants 402) - Cavazos, Maria E.			Balloons
Oct 27 - Nov 2	**27**	**28**	**29**	**30**	**31**	**Nov 1**	**2**
		3:45pm 4:45pm Cory and Colby hair	5:00pm 6:00pm Soccer 6:00pm 7:00pm PTG mtng (Tara's office) - Cowden, Joy		11:30am 4:30pm FCA Minimum Day		

November 2013

November 2013

Su	Mo	Tu	We	Th	Fr	Sa
					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

December 2013

Su	Mo	Tu	We	Th	Fr	Sa
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
Oct 27 - Nov 2	**Oct 27**	**28**	**29**	**30**	**31**	**Nov 1**	**2**
						11:30am 4:30pm FCA Minimum Day	
Nov 3 - 9	**3**	**4**	**5**	**6**	**7**	**8**	**9**
			4:00pm 4:30pm Pick up kids			2:15pm 2:30pm Mystery Reader	10:00am 11:00am Soccer
Nov 10 - 16	**10**	**11**	**12**	**13**	**14**	**15**	**16**
			1:00pm 2:00pm CTE Transitions Meeting (James' Office) - Co 6:00pm 7:00pm PTG mtng (Tara's office) - Cowden, Joy				11:00am 12:00pm Soccer 11:30am 12:30pm Setup for dinner auc 5:00pm 10:00pm Dinner Auction (Harr
Nov 17 - 23	**17**	**18**	**19**	**20**	**21**	**22**	**23**
		3:00pm 4:00pm Travel request	9:00am 10:30am Secretary of Ag (Fresno State Satellite Student Union)	12:00pm 1:00pm Horse Judging Meeting (FOF Office)		8:30am 4:30pm Symposium for Transitions (Visalia Holiday Inn)	10:00am 11:00am Soccer
Nov 24 - 30	**24**	**25**	**26**	**27**	**28**	**29**	**30**

December 2013

December 2013

Su	Mo	Tu	We	Th	Fr	Sa
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				

January 2014

Su	Mo	Tu	We	Th	Fr	Sa
			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
Dec 1 - 7	**Dec 1**	**2**	**3**	**4**	**5**	**6**	**7**
		1:30pm 2:00pm Meeting with Dr. Gornick (Dr. Gornick's Office)		11:00am 11:30am Health Careers Broadband Conference Call (Grant's Office)	3:00pm 7:00pm Water Summit (Modesto)	Water Summit (Modes 10:00am 12:00pm Focus on Contract Education/Webinar (12:00pm 8:00pm Brentwood (Brentwo	8:00am 12.00pm Water Summit (Modesto)
Dec 8 - 14	**8**	**9**	**10**	**11**	**12**	**13**	**14**
		10:00am 12:00pm Meet with Oscar After School Programs				10:00am 11:00am WHC Women's Brunch	
Dec 15 - 21	**15**	**16**	**17**	**18**	**19**	**20**	**21**
					5:00pm 8:00pm Zoo Lights (Fresno Chaffee Zoo)	FCA No School	
Dec 22 - 28	**22**	**23**	**24**	**25**	**26**	**27**	**28**
		FCA Christmas Break					
Dec 29 - Jan 4	**29**	**30**	**31**	**Jan 1, 14**	**2**	**3**	**4**
	FCA Christmas Break						

January 2014

January 2014

Su	Mo	Tu	We	Th	Fr	Sa
			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	

February 2014

Su	Mo	Tu	We	Th	Fr	Sa
						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	

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Dec 29 - Jan 4	**Dec 29**	30	31	**Jan 1, 14**	2	3	4
				FCA Christmas Break			
Jan 5 - 11	5	6	7	8	9	10	11
		11:00am 1:00pm Graduate Meeting (Dr Kellogg's Office) - Cowden, Joy	11:00am 1:00pm Contract Ed Meeting (DO conference room) - Dis-Ofc Conference Room				
Jan 12 - 18	12	13	14	15	16	17	18
					9:30am 12:00pm AB 86 Certificate of Eligibility		
Jan 19 - 25	19	20	21	22	23	24	25
		FCA No School			11:00am 1:00pm HSI Eligibility Workshop (Online Webinar)	12:15pm 1:15pm Look for key fob 4:30pm 5:30pm Look for key fob	5:00pm 8:00pm Football and Cheer Banquet (Elks Lodge)
Jan 26 - Feb 1	26	27	28	29	30	31	**Feb 1**

February 2014

February 2014

Su	Mo	Tu	We	Th	Fr	Sa
						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	

March 2014

Su	Mo	Tu	We	Th	Fr	Sa
						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
Jan 26 - Feb 1	**Jan 26**	27	28	29	30	31	**Feb 1**
Feb 2 - 8	2	3	4	5	6	7	8
		2:00pm 3:00pm USDA SPECA grant with Avenal High School. (Stu's office) - Van Horn, Stuart	10:00am 12:00pm USDA career information session (Grants Office) - Wright, Anita	11:00am 1:00pm USDA Grant Writing Webinar 11:00am 1:00pm Grant Writing Webinar: USDA Peer Review	10:00am 11:00am USDA AFRI Meeting with Dr. Ellsworth (Di 1:00pm 3:00pm California Career Pathways Trust Gran		
Feb 9 - 15	9	10	11	12	13	14	15
		10:00am 11:00am Industry-Driven Regional Collaborative-Economically Distressed Areas RFA Bidder's C		8:00am 12:00pm SAVE THE DATE BRUSTEIN & MANESAVIT (WHCCD) - Cavazos, Maria E.	10:30am 11:00am Wisdom Teeth Extraction (Hanford) - Cowden, Joy		
Feb 16 - 22	16	17	18	19	20	21	22
		FCA No School					6:00pm 9:00pm Rodeo Dinner (Elks Lodge)
Feb 23 - Mar 1	23	24	25	26	27	28	**Mar 1**
			9:00am 10:30am Eye Appointment (Dr. White's Coalinga) - Cowden, Joy			12:00pm 1:00pm AB86 Technical Assistance Webinar (Grants Office 402) - Cavazos, Maria E.	

March 2014

March 2014

Su	Mo	Tu	We	Th	Fr	Sa
						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					

April 2014

Su	Mo	Tu	We	Th	Fr	Sa
		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			

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
2/23 - 28	**Feb 23**	24	25	26	27	28	**Mar 1**
3/2 - 7	2	3	4	5 2:30pm 3:00pm Sports Physical (Dr. Griffins Office)	6 10:30am 12:00pm USDA Foreign Agriculture Service 1:00pm 2:00pm GoToTraining - Cal-	7	8 WHCC FFA Field Day
3/9 - 14	9	10 11:30am 12:30pm 2014 Rural Development REAP Funding Cycle (Webinar - See conference call infor	11 7:00am 7:30am Bunny Pictures (FCA)	12	13 8:00am 8:30am Egg Drop Contest	14 11:30am 4:30pm FCA Minimum Day 2:00pm 3:30pm Hair (Omni)	15 9:00am 1:00pm Track Meet (Clovis East High School) - Cowden, Joy
3/16 - 21	16	17	18	19	20	21 WHC College Rodeo (WHC) 12:00pm 2:00pm 3rd Quarter Awards (FCA)	22 9:00am 10:00am Track Meet (Clovis)
3/23 - 28	23	24	25	26	27 Make Every Last Drop	28 FCA Track at Hanford	29
3/30 - 4/4	30	31	**Apr 1**	2	3	4	5

April 2014

April 2014

Su	Mo	Tu	We	Th	Fr	Sa
		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			

May 2014

Su	Mo	Tu	We	Th	Fr	Sa
				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
Mar 30 - Apr 5	**Mar 30**	31	**Apr 1**	2	3	4	5
			7:30am 10:00am Work 12:00pm 1:30pm AGED 520 (10-100 (Ag Bldg)) - Cowden, Joy	7:00am 5:00pm Work	7:30am 10:00am Work 12:00pm 1:30pm AGED 520 (10-100 (Ag Bldg)) - Cowden, Joy	8:00am 11:00am AGED 522 (AE Annex 08A) - Cowden, Joy 2:00pm 5:00pm Work 2:00pm 3:00pm Irrigation project wit	7:00am 5:00pm Work
Apr 6 - 12	6	7	8	9	10	11	12
	12:00pm 5:00pm Mateo's Birthday Party	Terra Nova Testing 8:00am 12:00pm AGED 522 (AG Annex 8A) - Cowden, Joy 2:00pm 6:00pm Work	7:30am 10:00am Work 12:00pm 1:30pm AGED 520 (10-100 (Ag Bldg)) - Cowden, Joy	7:00am 5:00pm Work 2:30pm 3:00pm Sacramento Field Trip Meeting (FCA)	7:30am 10:00am Work 12:00pm 1:30pm AGED 520 (10-100 (Ag Bldg)) - Cowden, Joy	8:00am 11:00am AGED 522 (AE Annex 08A) - Cowden, Joy 2:00pm 5:00pm Work	Cal Poly Open House Clint has AET 22 Lab 7:00am 5:00pm Work
Apr 13 - 19	13	14	15	16	17	18	19
		FCA Easter Break 8:00am 12:00pm AGED 522 -Class cancelled (AG Annex 8A) - Cowden, Joy 2:00pm 5:00pm Work	7:30am 10:00am Work 12:00pm 1:30pm AGED 520 (10-100 (Ag Bld 3:00pm 4:00pm Meeting with Dr. Kel	7:00am 5:00pm Work	7:30am 10:00am Work 12:00pm 1:30pm AGED 520 (10-100 (Ag Bldg)) - Cowden, Joy	8:00am 11:00am AGED 522 (AE Annex 08A) - Cowden, Joy 2:00pm 5:00pm Work	7:00am 5:00pm Work
Apr 20 - 26	20	21	22	23	24	25	26
	FCA Easter Break Easter	8:00am 12:00pm AGED 522 (AG Annex 8A) - Cowden, Joy 2:00pm 5:00pm Work	7:30am 10:00am Work 12:00pm 1:30pm AGED 520 (10-100 (Ag Bldg)) - Cowden, Joy	7:00am 5:00pm Work	7:30am 10:00am Work 12:00pm 1:30pm AGED 520 (10-100 (Ag Bldg)) - Cowden, Joy 3:00pm 7:00pm Qualifier Track Meet	7:30am 3:30pm Track @ King City 8:00am 11:00am AGED 522 (AE Annex 08A) 2:00pm 5:00pm Work 4:00pm 5:00pm BMCC I	Clint has AET 22 Lab 7:00am 5:00pm Work 5:30pm 10:00pm Retirement Dinner (Harris Ranch)
Apr 27 - May 3	27	28	29	30	**May 1**	2	3
		8:00am 12:00pm AGED 522 (AG Annex 8A) - Cowden, Joy 2:00pm 5:00pm Work	7:30am 10:00am Work 12:00pm 1:30pm AGED 520 (10-100 (Ag Bldg)) - Cowden, Joy	Sacramento/San Francis 7:00am 5:00pm Work			

May 2014

May 2014

Su	Mo	Tu	We	Th	Fr	Sa
				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

June 2014

Su	Mo	Tu	We	Th	Fr	Sa
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					

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Apr 27 - May 3	**Apr 27**	**28**	**29**	**30**	**May 1**	**2**	**3**
					Sacramento/San Francisco Trip (Sacramento/San Fra 7:15am 8:15am Breakfast 7:30am 10:00am Work 8:00am 9:00am On the 12:00pm 1:30pm AGED	8:00am 11:00am AGED 522 (AE Annex 08A) - Cowden, Joy 2:00pm 5:00pm Work	7:00am 5:00pm Work
May 4 - 10	**4**	**5**	**6**	**7**	**8**	**9**	**10**
		8:00am 12:00pm AGED 522-Tulare Union and Dinuba (AG Annex 8A) - Cowden, Joy 2:00pm 5:00pm Work	7:30am 10:00am Work 12:00pm 1:30pm AGED 520 - Mr Beard Reaction Paper (10-100 (Ag Bldg)) - Cowden, Joy	Online Training Sympo 7:00am 5:00pm Work	7:30am 10:00am Work 12:00pm 1:30pm AGED 520 (10-100 (Ag Bldg)) - Cowden, Joy	8:00am 11:00am AGED 522 (AE Annex 08A) - Cowden, Joy 2:00pm 5:00pm Work	7:00am 5:00pm Work 2:00pm 6:00pm Joseph I Castro, President CSU, Fresno - The Investiture - Cowden, Clint
May 11 - 17	**11**	**12**	**13**	**14**	**15**	**16**	**17**
		8:00am 12:00pm AGED 522 - Soldering Clint & Surveying Joy (AG Annex 8A) - Cowden, Joy 2:00pm 5:00pm Work	7:30am 10:00am Work 12:00pm 1:30pm AGED 520 (10-100 (Ag Bldg)) - Cowden, Joy	6:00am 7:00am Grantor External Web Portal UAT Introduction Op 7:00am 5:00pm Work 12:00pm 2:00pm Talent Show (FCA)	7:30am 10:00am Work 12:00pm 1:30pm AGED 520 (10-100 (Ag Bldg)) - Cowden, Joy 7:00pm 9:00pm Sports Award Banquet (FCA	8:00am 3:00pm Roller Towne (Visalia) 8:00am 11:00am AGED 522 (AE Annex 08A) - Cowden, Joy 2:00pm 5:00pm Work	7:00am 5:00pm Work
May 18 - 24	**18**	**19**	**20**	**21**	**22**	**23**	**24**
		8:00am 12:00pm AGED 522- Unit Plan Due (AG Annex 8A) - Cowden, Joy 2:00pm 5:00pm Work	7:30am 10:00am Work 11:30am 1:00pm AGED 520 - local field trip Nipomo 11:30 meet (10-100 (Ag Bldg)) - Cowden, Joy	7:00am 5:00pm Work	7:30am 10:00am Work 12:00pm 1:30pm AGED 520 -Dr Sabol (10-100 (Ag Bldg)) - Cowden, Joy	8:00am 11:00am AGED 522 (AE Annex 08A) - Cowden, Joy 2:00pm 5:00pm Work 4:00pm 7:00pm coalinga graduation	7:00am 5:00pm Work
May 25 - 31	**25**	**26**	**27**	**28**	**29**	**30**	**31**
		FCA No School	7:30am 10:00am Work 10:00am 12:00pm FCA Elementary Awards 12:00pm 1:30pm AGED 520 (10-100 (Ag Bldg)) - Cowden, Joy	FCA Last Day of Schoo 7:00am 5:00pm Work 5:30pm 6:30pm Cheer Meeting	7:30am 10:00am Work 12:00pm 1:30pm AGED 520 -THS Field Trip (10-100 (Ag Bldg)) - Cowden, Joy	8:00am 11:00am AGED 522 -Joy Horse (AE Annex 08A) - Cowden, Joy 2:00pm 5:00pm Work	7:00am 5:00pm Work

June 2014

June 2014

Su	Mo	Tu	We	Th	Fr	Sa
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					

July 2014

Su	Mo	Tu	We	Th	Fr	Sa
		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
Jun 1 - 7	Jun 1	2	3	4	5	6	7
		8:00am 12:00pm AGED 522 (AG Annex 8A) - Cowden, Joy 2:00pm 5:00pm Work	GRANT SIREN USDA W 7:30am 10:00am Work 12:00pm 1:30pm AGED 520 (10-100 (Ag Bldg)) - Cowden, Joy	7:00am 5:00pm Work	7:30am 10:00am Work 12:00pm 1:30pm AGED 520 (10-100 (Ag Bldg)) - Cowden, Joy	8:00am 11:00am AGED 522 - Clint Surveying (AE Annex 08A) - Cowden, Joy 2:00pm 5:00pm Work	7:00am 5:00pm Work
Jun 8 - 14	8	9	10	11	12	13	14
Jun 15 - 21	15	16	17	18	19	20	21
				Online Education Training Conference (San Diego)			
Jun 22 - 28	22	23	24	25	26	27	28
	Online Education Trainir						
Jun 29 - Jul 5	29	30	Jul 1	2	3	4	5

11.

Professional Growth and Development Activities

Agriculture Professional Development
Joy Cowden

Trainings, Conferences and Workshops Attended

2013-14

- Tom Vilsack Discussing the Farm Bill and Water Issues, Fresno, CA
    - Fresno State University Satellite Union
    - November 19, 2013
- California Ag Teachers Association, Mid-Winter Institute, Modesto, CA
    - Double Tree Inn
    - December 5-7, 2013
- Symposium for Transition Success, California Community College Academic Senate, Visalia, CA
    - Visalia Holiday Inn and Convention Center
    - November 22, 2014
- USDA Foreign Agriculture Service - People's Republic of China Scientific Education Exchange Program Grant Coordinator and Lead, Washington, D.C.; Clemson, SC; Central Valley, CA
    - USDA Office and EPA Office, Washington, D.C.
    - Clemson University, Clemson, SC
    - Central Valley, CA
    - August 16-29, 2013
- Cal EPA Meeting to align curriculum with PCA requirements, Sacramento, CA
    - CalEPA Office, Sacramento, CA
    - August 2, 2014
- Delta Water Summit, Fresno, CA
    - Fresno State Satellite Union
    - August 3, 2014
- California Career Technical Education Stakeholder's Forum, Sacramento, CA
    - Capitol, Sacramento, CA
    - August 2, 2014
- Brustein and Manasevit Grant Management Training, Coalinga, CA
    - West Hills College, Coalinga, CA
    - February 12, 2014
- 2014 Online Teaching Conference, San Diego, CA
    - San Diego, CA
    - June 19-22, 2014
- 12-24 Grant Writing Webinars and Conference Calls for Department of Labor, Department of Agriculture, Department of Education, California Community College Chancellor's Office and Private Grant Applications
    - I participate in 1-3 grant writing webinars per month

12.

CATA Membership

CATA Membership
Joy Cowden

I have been a CATA member in the past, but I do not have my membership card. I will not be teaching next year so I will apply for Associate Membership. The following page is my application for Associate Membership for the 2014-2015 year.

CALIFORNIA AGRICULTURAL TEACHERS' ASSOCIATION
MEMBERSHIP APPLICATION

NAME: Cowden, Joy, F
Last, First, MI

HOME ADDRESS: 951 Chianti Circle

CITY/STATE/ZIP CODE: Coalinga, CA 93210

TELEPHONE NUMBER: _____ CELL: (559) 380-7276

WORK NUMBER: (559) 935-2708 FAX: (559) 934-2836

E-MAIL ADDRESS: joycowden@whccd.edu

CATA REGION: San Joaquin CATA SECTION: W Fresno Madera SCHOOL: West Hills College
CATA has my permission to distribute my home address and telephone number to other ag teachers. Yes X No _____ Signature: _____

Regular Dues - $140	
Ag Teachers less than ½ time (FTE) - $70	
Installment Billing – at least $26*	
Associate - $15	$15.00
New Teacher - $70	
Life Membership - $1,400.00	
Optional - ACTE Dues - $80	
Optional - NAAE Dues - $60	
SUB TOTAL DUES	$15.00
Optional - Contribution to CATA Scholarship Fund	
$10 ___ $25 ___ $50 ___ $100 ___ Other _____	
TOTAL (Please make check payable to CATA.)	$15.00

Important Tax Notice to CATA Members

Contributions or gifts to CATA are not deductible as charitable contributions for income tax purposes. However, CATA dues may be tax deductible as an ordinary and necessary business expense. Please consult your tax advisor.

Charge my dues to: VISA _____ Master Card _____

Card # _____ Expiration Date _____ CVS_____

Signature: _____

Installment dues are $140 + service charge of $16 = Total $ 156
Installment dues for New Teachers are $70 + service charge of $8 = Total $ 78
Service charge is for Installment Dues ONLY

Please note that members electing to pay monthly are agreeing to pay the full amount whether or not they decide to pay off their dues early.
Signature: _____

Mail to: California Agricultural Teachers' Assn.
P.O. Box 834
Elk Grove, CA 95759-0834

Receipt No. _____
Member Card No. _____

01.02.01
Rev: 2014

13.

Wish-List

Farm of the Future Agriculture Department Wish List 2014-2015

Description	Number required/ 24 students	Unit Price	Total		
Boreal Digital/Analog Stereomicroscope	6	$ 1,425.00	$ 8,550.00		
Gravity Convection Oven	1	$500	$500		
Mettler-Toledo XA1502S Precision Balance	2	$3,153	$6,306		
Mettler-Toledo XA503S Precision Balance	1	$4,048	$4,048		
Metrohm 915 - 916 Ti Touch Colorimetric/Volumetric Titrator	1	$10,700	$10,700		
Metrohm 807 Dosing Unit for Titrator	1	$2,517	$2,517		
Metrohm Flat Membrane Electrode	1	$503	$503		
Metrohm Optrode - Optical Sensor for Colorimetric Titration	1	$2,755	$2,755		
Metrohm Titrator Installaion	1	$1,330	$1,330		
Orion Star A211 pH Benchtop Meter	2	$782	$1,564		
Fisher Scientific™ accuT pH™ Rugged Bulb pH Combination Electrode	2	$257	$514		
Campbell Scientific Soil Moisture & Water Potential Equipment	1	$22,000	$22,000		
Boreal Advanced Polarizing Microscope	6	$ 969.00	$ 5,814.00		
				Sub-Total	$ 67,101.00
Biotronette Environmental Chamber	2	6600	13200		
Growlab® Classroom Gardening Center	2	770	1540		
Hydroponic Garden	6	260	1560		
GrowLab® DeskTop Plant Stand	6	280	1680		
Mini Plant Press	12	13	156		
Electric Timer for Plant Centers	6	40	240		
Plant Heating Mat	6	42	252		
Wall Thermometer with Humidity Gauge	2	10	20		
Garden Trowel	6	10	60		
Miscellaneous Garden tools	6	60	360		
Sweep Nets	6	75	450		
Hand lens	6	30	180		
Pins	6	30	180		
Spreader board	6	10	60		
Lable Block	6	10	60		
Monocot and Dicot Flower Buds (cs) qs Microscope Slide	6	8	48		
Monocot and Dicot Leaves (cs) qs Microscope Slide	6	9	54		
Monocot and Dicot Roots (wm) f & fg Microscope Slide	6	9	54		
Monocot and Dicot Stems (cs) qs Microscope Slide	6	8	48		
Monocot and Dicot Leaf Epidermis (wm) fs & fg Microscope Slide	6	7	42	Sub-Total	$ 20,244.00
Heavy-Duty Metal Service Cart	1	$ 384.00	$ 384.00		
Rectangular Supports 6 1/2" X 11"	50	$ 18.75	$ 937.50		
Round Jaw Utility Clamp 7"	30	$ 17.95	$ 538.50		
Adjustable Rod Clamp Holder	30	$ 15.75	$ 472.50		
Large Storage Containers	10	$ 18.50	$ 185.00		
Student-Grade Lime Glass 100 ml Cylinders (12 per unit)	8	$ 80.52	$ 644.16		
Pyrex® Single-Scale 1000 ml Precision Cylinders	10	$ 73.62	$ 736.20		
Water Still	1	$ 1,586.50	$ 1,586.50		
Economy Erlenmeyer Flask 250 ml (48 per unit)	2	$ 182.40	$ 364.80		
Polypropylene Analytical Funnels: 65 mm X 65 mm(36 per unit)	3	$ 100.08	$ 300.24		
Microwave Oven	2	$ 257.95	$ 515.90		
Porcelain Mortar & Pestle	25	$ 32.95	$ 823.75		
Six-Well, Six-Peg Polyethylene Test Tube Rack	30	$ 8.25	$ 247.50		
Wall-Mount Drying Rack	2	$ 114.00	$ 228.00		
Glassware Draining Rack	2	$ 88.00	$ 176.00		
Thermolyne® Hot Plate/Stirrers Magnetic	4	$ 490.00	$ 1,960.00		
Digital Thermometer	4	$ 22.75	$ 91.00		
Infrared Thermometer - adjustable	2	$ 128.95	$ 257.90		
Rectangular Storage Containers with Covers, Large	30	$ 17.50	$ 525.00		
Pyrex® Test Tubes - 20ml (72 per unit)	10	$ 48.96	$ 489.60		
Stoddard Test tube Clamps	30	$ 10.25	$ 307.50		
Wraparound Safety Spectacles	50	$ 7.65	$ 382.50		
Goggle Cabinet & Sterilizer - 40 Cap.	1	$ 741.60	$ 741.60		
VWR Education First Aid Kits	1	$ 46.50	$ 46.50		
Distilled Water Bottles	25	$ 4.05	$ 101.25		
Glass Dropping Bottle	1	$ 21.48	$ 21.48		
6" Rulers	50	$ 0.45	$ 22.50		
Munsell Soil Color Chart	6	$ 159.00	$ 954.00		
Glass Dropping Bottles	2	$ 20.40	$ 40.80		
Soil Sieve Set	10	$ 30.00	$ 300.00		
Streak Plates - White	10	$ 3.20	$ 32.00		
Streak plates - Black	10	$ 3.20	$ 32.00		
Fast Release Pi-Pump (10 ml)	15	$ 22.95	$ 344.25		
Pyrex Reusable Mohr-Type Pipets, (10 ml)	30	$ 11.93	$ 357.90		
Economy Polypropylene Funnels	1	$ 24.80	$ 24.80		
Micropipetes	15	$ 360.00	$ 5,400.00		
				Sub-Total	$ 40,817.13

Description	Number required/ 24 students	Unit Price	Total		
500 ML Wide Mouth Bottle with Glass Stopper	1	$ 46.40	$ 46.40		
				Sub-Total	$ 46.40
Clipper Seed Cleaner w all attachements	1	$ 2,499.00	$ 2,499.00		
Seedburo Wheat, Rye & Oats Sieve Set	5	$ 286.75	$ 1,433.75		
Small Spouted Sample Pan	12	$ 62.25	$ 747.00		
Triangular Spouted Sample Pan	12	$ 15.80	$ 189.60		
				Sub-Total	$ 4,869.35
Soil Grinder	1	$ 4,307.75	$ 4,307.75		
				Sub-Total	$ 4,307.75
Deluxe Mohs Rock Hardness Pick Set	12	$ 62.10	$ 745.20		
				Sub-Total	$ 745.20
2-Way Radio and SPTT Heasd Sets (Motarola)	30	$ 70.00	$ 2,100.00		
				Sub-Total	$ 2,100.00
Ward's Natural Science					
P.O. Box 92912					
Rochester, New York 14692					
800-962-2660					
Sargent-Welch					
777 East Park Drive					
Tonawanda, NY 14150-6708					
800-676-2540					
Seedburo Equipment Company					
2293 S. Mt Prospect Road					
Des Plaines, IL 60018					
800-284-5779					
NASCO - Modesto					
P.O. Box 101					
Salida, California 95368					
800-558-9595					
Amateur Geologists					
694 Tuttle Creek Rd					
PO Box 1076					
Lone Pine, CA 93545-1076					
866-762-5742					
Bass Pro Shop					
1356 Bass Pro Dr					
Manteca, CA 95337					
209-825-8400					
				Sub-Total of All	**$ 140,230.83**
				Tax	**$ 11,747.84**
				Shipping	
				Total	**$ 151,978.67**

14.

Operating Budget

WEST HILLS COMMUNITY COLLEGE DISTRICT
FY 14-15 TENTATIVE Budget Worksheet
FARM OPERATIONS

ACCOUNT NUMBER W39.GLA.ACCT.NUM	COST.CENTER	EXPENDITURE CATEGORY	FY 12-13 ADOPTED	FY 12-13 ACTUALS	FY 13-14 ADOPTED	FY 14-15 TENTATIVE
34-000-000000-39790-110	Farm Operations	Beginning Balance	$ (57,225)	$ (126,895)	$ (126,895)	$ (126,895)
34-000-693000-48820-110	Farm Operations	Local Revenue	$ -	$ -	$ -	$ -
34-000-693000-48843-110	Farm Operations	Local Revenue	$ (8,580)	$ -	$ -	$ -
34-073-693000-48843-110	Farm Operations	Local Revenue	$ (38,700)	$ (25,888)	$ (61,750)	$ (61,750)
34-074-693000-48843-110	Farm Operations	Local Revenue	$ -	$ (620)	$ -	$ -
34-077-693000-48843-110	Farm Operations	Local Revenue	$ -	$ -	$ -	$ -
34-079-693000-48843-110	Farm Operations	Local Revenue	$ (46,800)	$ (61,238)	$ (96,790)	$ (96,790)
34-000-693000-48851-110	Farm Operations	Facility Rent	$ -	$ (5,000)	$ -	$ -
34-000-693009-48854-110	Farm Operations	Equipment Rent HE	$ (12,000)	$ -	$ -	$ -
34-000-693000-48890-110	Farm Operations	Local Revenue	$ -	$ -	$ -	$ -
34-000-693000-48914-110	Farm Operations	Local Revenue	$ (2,000)	$ (6,786)	$ (7,700)	$ (7,700)
34-000-693000-48981-110	Farm Operations	Other Financing-Transfer	$ -	$ -	$ (28,711)	$ (28,711)
34-000-693000-48981-110	Farm Operations	Other Financing-Transfer	$ (350,000)	$ (350,000)	$ (350,000)	$ (350,000)
34-000-693000-48981-110	Farm Operations	Transfer in (indirect)	$ -	$ (64,194)	$ -	$ -
		REVENUES:	**$ (515,305)**	**$ (640,620)**	**$ (671,846)**	**$ (671,846)**
34-000-693000-51210-110	Farm Operations	Non-Instr Sal Reg/Contrct	$ 136,822	$ 130,409	$ 130,306	$ 130,306
34-000-693000-51230-110	Farm Operations	Non-Instr Sal Reg/Contrct	$ -	$ -	$ -	$ -
34-000-693000-51430-110	Farm Operations	Non-Instr Sal Reg/Contrct	$ -	$ -	$ -	$ -
34-000-693000-52120-110	Farm Operations	Non-Instr Sal, Reg	$ 25,722	$ 25,822	$ 27,304	$ 27,304
34-000-693000-52140-110	Farm Operations	Non-Instr Sal, Reg	$ 14,176	$ 12,611	$ 15,319	$ 15,319
34-000-693000-52140-110	Farm Operations	Non-Instr Sal, Reg	$ -	$ -	$ 26,892	$ 26,892
34-000-693000-52320-110	Farm Operations	Non-Instr Sal, Other	$ -	$ -	$ -	$ -
34-000-693000-52330-110	Farm Operations	Non-Instr Sal, Other	$ -	$ -	$ -	$ -
34-000-693000-52350-110	Farm Operations	Non-Instr Sal, Other	$ 18,000	$ 20,672	$ 19,000	$ 19,000
34-000-693000-52360-110	Farm Operations	Non-Instr Sal, Other	$ 25,000	$ 32,184	$ 36,500	$ 36,500
34-000-693000-52370-110	Farm Operations	Non-Instr Sal, Other	$ -	$ 27	$ -	$ -
34-000-693000-53122-110	Farm Operations	STRS Fund	$ -	$ 932	$ -	$ -
34-000-693000-53131-110	Farm Operations	STRS Fund	$ 11,288	$ 11,230	$ 10,750	$ 10,750
34-000-693000-53132-110	Farm Operations	STRS Fund	$ -	$ -	$ -	$ -
34-000-693000-53222-110	Farm Operations	PERS Fund	$ 3,072	$ 2,947	$ 3,124	$ 3,124
34-000-693000-53322-110	Farm Operations	OASDI Fund	$ 2,682	$ 2,398	$ 4,416	$ 4,416
34-000-693000-53331-110	Farm Operations	OASDI Fund	$ 10,467	$ 1,943	$ 1,889	$ 1,889
34-000-693000-53332-110	Farm Operations	OASDI Fund	$ -	$ -	$ -	$ -
34-000-693000-53422-110	Farm Operations	Health/Welfare Bnfts	$ 15,649	$ 16,119	$ 16,897	$ 16,897
34-000-693000-53431-110	Farm Operations	Health/Welfare Bnfts	$ 16,492	$ 14,979	$ 17,676	$ 17,676
34-000-693000-53432-110	Farm Operations	Health/Welfare Bnfts	$ -	$ -	$ -	$ -
34-000-693000-53522-110	Farm Operations	State Unemplmt Ins	$ 757	$ 773	$ 64	$ 64
34-000-693000-53531-110	Farm Operations	State Unemplmt Ins	$ 1,382	$ 1,497	$ 65	$ 65
34-000-693000-53532-110	Farm Operations	State Unemplmt Ins	$ -	$ -	$ -	$ -
34-000-693000-53622-110	Farm Operations	W/C Insurance	$ 1,124	$ 1,412	$ 1,927	$ 1,927
34-000-693000-53631-110	Farm Operations	W/C Insurance	$ 2,052	$ 2,106	$ 1,956	$ 1,956
34-000-693000-53632-110	Farm Operations	W/C Insurance	$ -	$ -	$ -	$ -
34-000-693000-53722-110	Farm Operations	APPLE (Alt Retmt Sys)	$ 1,845	$ 1,041	$ 3,665	$ 3,665
34-000-693000-54310-110	Farm Operations	Instr Supplies	$ -	$ 5,957	$ 8,700	$ 8,700
34-000-693009-54310-110	Farm Operations	Instr Supplies	$ -	$ 996	$ 2,600	$ 2,600
34-000-693000-54360-110	Farm Operations	Instr Supplies	$ 100	$ -	$ -	$ -
34-000-693000-54530-110	Farm Operations	Non-Instr Supplies	$ 15,000	$ 35,580	$ 36,300	$ 36,300
34-000-693000-54531-110	Farm Operations	Non-Instr Supplies	$ 800	$ -	$ 300	$ 300
34-000-693000-54535-110	Farm Operations	Non-Instr Supplies	$ 1,350	$ 1,365	$ 2,800	$ 2,800
34-077-693000-54535-110	Farm Operations	Non-Instr Supplies	$ -	$ -	$ -	$ -
34-000-693000-54538-110	Farm Operations	Non-Instr Supplies	$ -	$ -	$ -	$ -

ACCOUNT NUMBER		EXPENDITURE	FY 12-13	FY 12-13	FY 13-14	FY 14-15
W39.GLA.ACCT.NUM	COST.CENTER	CATEGORY	ADOPTED	ACTUALS	ADOPTED	TENTATIVE
34-000-693000-54560-110	Farm Operations	Non-Instr Supplies	$ 450	$ -	$ 500	$ 500
34-000-693000-54580-110	Farm Operations	Non-Instr Supplies	$ 10,000	$ 12,566	$ 17,500	$ 17,500
34-000-693009-54580-110	Farm Operations	Non-Instr Supplies	$ 11,000	$ -	$ 2,000	$ 2,000
34-000-693000-54590-110	Farm Operations	Non-Instr Supplies	$ 12,000	$ 17,834	$ 6,700	$ 6,700
34-000-693000-55110-110	Farm Operations	Consultant Services	$ 15,000	$ 10,230	$ -	$ -
34-000-693000-55211-110	Farm Operations	Travel and Conference	$ 850	$ -	$ 450	$ 450
34-000-693000-55212-110	Farm Operations	Travel and Conference	$ -	$ -	$ -	$ -
34-000-693000-55213-110	Farm Operations	Travel and Conference	$ -	$ -	$ -	$ -
34-000-693000-55214-110	Farm Operations	Travel and Conference	$ 750	$ -	$ -	$ -
34-000-693000-55223-110	Farm Operations	Travel and Conference	$ -	$ 148	$ -	$ -
34-000-693000-55230-110	Farm Operations	Travel and Conference	$ -	$ -	$ -	$ -
34-000-693000-55250-110	Farm Operations	Travel and Conference	$ 5,000	$ -	$ 7,600	$ 7,600
34-000-693000-55260-110	Farm Operations	Travel and Conference	$ 200	$ 678	$ 150	$ 150
34-000-693000-55310-110	Farm Operations	Dues and Membership	$ 200	$ 492	$ 400	$ 400
34-000-693000-55510-110	Farm Operations	Utilities/Housekpg	$ 2,800	$ 2,723	$ 2,200	$ 2,200
34-000-693000-55520-110	Farm Operations	Utilities/Housekpg	$ 200	$ 1,509	$ 100	$ 100
34-000-693000-55530-110	Farm Operations	Utilities/Housekpg	$ 38,000	$ 27,152	$ 50,000	$ 50,000
34-000-693000-55540-110	Farm Operations	Utilities/Housekpg	$ 1,000	$ 999	$ 1,000	$ 1,000
34-000-693000-55550-110	Farm Operations	Utilities/Housekpg	$ 1,400	$ 4,475	$ 1,600	$ 1,600
34-000-693000-55560-110	Farm Operations	Utilities/Housekpg	$ -	$ 31,989	$ -	$ -
34-000-693000-55610-110	Farm Operations	Contracts/Lease/Maint	$ -	$ -	$ 550	$ 550
34-000-693000-55612-110	Farm Operations	Contracts/Lease/Maint	$ 5,500	$ 3,977	$ 11,400	$ 11,400
34-000-693009-55612-110	Farm Operations	Contracts/Lease/Maint	$ 1,000	$ -	$ -	$ -
34-000-693000-55614-110	Farm Operations	Contracts/Lease/Maint	$ -	$ 2,298	$ 250	$ 250
34-000-693000-55620-110	Farm Operations	Contracts/Lease/Maint	$ 22,000	$ 28,038	$ 49,200	$ 49,200
34-000-693000-55640-110	Farm Operations	Contracts/Lease/Maint	$ 10,000	$ 11,984	$ 15,100	$ 15,100
34-000-693000-55730-110	Farm Operations	Operating Expns/Other	$ -	$ 2,150	$ 1,600	$ 1,600
34-000-693000-55750-110	Farm Operations	Operating Expns/Other	$ 100	$ -	$ -	$ -
34-000-693000-55970-110	Farm Operations	Other Expenses	$ -	$ 64,194	$ -	$ -
34-000-693000-55990-110	Farm Operations	Other Expenses	$ -	$ -	$ 800	$ 800
34-000-693000-55995-110	Farm Operations	Other Expenses	$ -	$ -	$ -	$ -
34-000-693000-56416-110	Farm Operations	Equipment	$ -	$ -	$ -	$ -
34-000-693000-56419-110	Farm Operations	Equipment	$ -	$ -	$ -	$ -
34-000-693000-56439-110	Farm Operations	Equipment	$ -	$ -	$ -	$ -
34-000-693000-57920-110	Farm Operations	Contingencies	$ 74,075	$ 94,185	$ 134,296	$ 134,296
		EXPENSES:	**$ 515,305**	**$ 640,620**	**$ 671,846**	**$ 671,846**
		Difference:	**$ -**	**$ -**	**$ -**	**$ -**

15.

District Budget Process

WEST HILLS COMMUNITY COLLEGE DISTRICT

Board Policy 6200
Budget Preparation

Reference: *Education Code Section 70902(b)(5); Title 5, 58300 et seq.*

Each year, the Vice Chancellor of Business Services shall present to the Board a budget prepared in accordance with Title 5 and the California Community Colleges Budget and Accounting Manual. The schedule for presentation and review of budget proposals shall comply with state laws and regulations, and provide adequate time for Board study.

Utilizing the budget process for resource allocation, along with the budget preparation process, the colleges shall submit an annual budget to the Vice Chancellor of Business Services. Each college shall develop a budget based on its college procedures and college governance process.

Budget development shall meet the following criteria:

- The annual budget shall support the master and educational plans (including the facilities, technology and strategic plans)of the District and colleges.
- Assumptions upon which the budget is based are presented to the Board for review.
- Due dates for budget development are identified in the budget preparation procedure (Administrative Procedure 6200) which includes dates for presentation of the tentative budget, required public hearing(s), Board study session(s), and approval of the final budget. At the public hearings, interested persons may appear and address the Board regarding the proposed budget or any item in the proposed budget.
- Unrestricted general reserves shall be at least/greater than 5%. (California Community Colleges System Office Memorandum of October 25, 2005)
- Changes in the assumptions upon which the budget was based shall be reported to the Board in a timely manner.
- Budget projections address long term goals and commitments.

See Administrative Procedure 6200

Board approval date: 11/17/09

WEST HILLS COMMUNITY COLLEGE DISTRICT

Administrative Procedure 6200
Budget Preparation

Reference: *Accreditation Standard III.D; Education Code Section 70902(b)(5); Title 5, Sections 58300 et seq.*

Budget preparation shall include:

- A statement of philosophy that includes that budget planning supports institutional goals and is linked to other institutional planning efforts.

- A budget calendar that includes presentation of the tentative and final budgets. The tentative budget shall be presented no later than July 1 [Title 5, Section 58305(a)], and the final budget no later than September 15 [Title 5, Section 58305(c)]. A public hearing on the budget shall be held on or before September 15 [Title 5, Section 58301]. (See Appendix A)

- Two copies of the adopted budget to be submitted to the California Community Colleges Chancellor's Office on or before September 30 [Title 5, Section 58305(d)].

- One copy of the adopted budget to be submitted to the Fresno County Office of Education on or before September 30.

- Budget development processes, including consultation with appropriate groups.

- Criteria and institutional guidelines for the financial planning and budgeting.

- Submission of appropriate forms (311s) to the California Community Colleges Chancellor's Office.

Board approval date: 11/17/09

APPENDIX A

CALENDAR FOR BUDGET DEVELOMENT FOR THE WEST HILLS COMMUNITY COLLEGE DISTRICT

DATE	ITEM	RESPONSIBILITY
Mid January – April 10	Distribute Budget Worksheet forms to College President. College Presidents shall initiate college budget development process. Vice Chancellor shall distribute forms to district office Department managers. Open hearings and meetings will be held at each College and District Office. Submit college's proposed budget worksheets and priority lists to the Vice Chancellor Submit district office's proposed budget worksheets and priority lists to Vice Chancellor	Vice Chancellor College Presidents Vice Chancellor College Presidents Chancellor College Presidents Chancellor
Second week of April	Executive Cabinet to review budget submittals.	Executive Cabinet
April 15th	Vice Chancellor will notify Superintendent of Schools of newspaper publication, date, location and time of public display of proposed budget document.	Vice Chancellor
May Board Meeting	Vice Chancellor presents latest tentative budget information to Board of Trustees.	Vice Chancellor
Ten days prior to June Board Meeting	Copies of the proposed Tentative budget shall be placed in the District Office, College Libraries, Centers, and the President's offices for public view.	Vice Chancellor
June Board Meeting	At the June Board of Trustees meeting, the Board will hold a public hearing and will review and approve the proposed Tentative budget.	Board of Trustees
Before June 30th	Vice Chancellor will forward copy of approved Tentative budget to the Superintendent of Schools, Fresno County and the Chancellor, California Community Colleges.	Vice Chancellor
Before July 25th	All recommendations from Colleges and District to amend Tentative budget to be submitted to Vice Chancellor.	College Presidents Chancellor
Ten days before August Board Meeting	Copies of the proposed Tentative budget shall be placed in the District Office, College Libraries, Centers, and the President's offices for public view.	Vice Chancellor
August Board Meeting	At the August Board meeting, the Board will hold a public hearing and will review and approve the proposed Adopted budget.	Board of Trustees
Immediately after August Board Meeting	Vice Chancellor will forward copy of approved Adopted budget to the Superintendent of Schools, Fresno County and the Chancellor, California Community Colleges.	Vice Chancellor

WEST HILLS COMMUNITY COLLEGE DISTRICT

Board Policy 6225
Resource Allocation

Reference: *Education Code Section 84362;*
CCR, Title V Section 51025

The Chancellor shall develop and maintain an administrative procedure for resource allocation that is reviewed on a regular basis, at least once every three years, to maintain viable and comprehensive colleges within the West Hills Community College District.

Board approval date: 4/26/11

WEST HILLS COMMUNITY COLLEGE DISTRICT

Administrative Procedure 6225
Resource Allocation

Reference: *Education Code Section 84362;*
CCR, Title V Section 51025

Philosophy

All the communities within the district have made significant contributions to the welfare of our colleges and centers. In recognition of the contributions and confidence in the actions of the West Hills Community College District, the Board of Trustees has determined that it will maintain a district office, viable and comprehensive colleges in the cities of Coalinga and Lemoore with current educational centers in Firebaugh and the Lemoore Naval Air Station. The Board believes that because of our geographic location and distribution of our cities, the ability to maintain access to higher education opportunities is essential for our communities and citizens to grow and prosper. In keeping with this overall philosophy, the Board has implemented the following principles to maintain access to higher education:

- The district shall maintain standards of design, construction and reconstruction of new facilities which will be followed and applied at all locations.
- The district shall maintain standards in the use and application of technology at all locations.
- The district shall develop long term plans in education, construction and fiscal resources.
- The district shall develop energy efficiency and conservation goals

The purpose of the resource allocation procedure is to provide an understandable, clear methodology to the practice of allocating resources to the cost centers of the district and to realize the Board's objective in extending the educational opportunity to all citizens of the district. This procedure, along with the budget definitions (see Appendix A), provides the necessary information for the development of comprehensive budgets for the district and individual college operations.

If at any time there are circumstances beyond the control of the district, such as a major earthquake, the fiscal condition of the state, or other events that disrupt or minimize the operations of the district, these circumstances may dictate a different course of action than those outlined in this procedure.

Allocation Fundamentals (Distribution of Fiscal and Human Resources)

1. The district receives a base allocation from the State Chancellor's Office:

    a. Based on prior year FTES (Full Time Equivalent Students)
    b. Based on the state's ability to fund growth and COLA (Cost of Living Adjustment)

2. Each college receives a base allocation:

    a. Based on prior year expenditures
    b. Based on the college's ability to achieve their FTES goal
    c. Based on the state's ability to fund growth and COLA

3. The percentage of growth achieved by each college at the end of a fiscal year will be a determining factor in the amount of resources realized by each college. Student retention and success may also be a factor in the amount of resources realized by each college.

4. Resources will be allocated to maintain the viability and comprehensiveness of both colleges and their educational centers.

5. Resources will be allocated to colleges for the purpose of prioritizing and planning the human resources, support programs and academic programs desired by the colleges which are determined by the internal planning processes at the college level.

6. The District Office receives a base allocation based on:

    a. Prior year expenditures
    b. Budget development
    c. Ability to fund growth and COLA

Cost Centers

The cost centers of the district will be the colleges and the District Office.

Approval Process

1. Prior to the planning and budget cycle for each college, the district Business Office will provide each College President with the prior "base year allocation and expenditures" and the projected "base year allocations". The budget assumption used for the "projected year" shall be the same as the State Chancellor's Office. The budgets for the cost centers will be allocated using a "base year" allocation. The "base year" allocation is based upon the prior year's actual expenditures.

2. Upon approval of the tentative district budget for the upcoming fiscal year, an appendix to the budget will be provided to illustrate the estimated actual budgets of the cost centers.

3. Distribution/Reduction of Income

    a. Prior to any distribution, the reserve must be taken into account which requires the district to set aside a minimum of 5% of revenues in order to comply with the California Community Colleges System Office Memorandum of October 25, 2005;
    b. Mandated expenses and increases in the mandated expenses to the district and colleges such as utilities, bad debt, step increases, insurance or other costs will be funded;
    c. After items a and b are accounted for, the remaining growth dollars will be allocated to each college based upon the percentage of growth dollars each college provided to the overall district funded growth. (Example: If the growth is 8% total for the District and 2% is from Coalinga and 6% is from Lemoore, then 25% of the new money will be allocated to Coalinga and 75% will be allocated to Lemoore.) In accordance with Education Code Section 84362, 50% of growth dollars expended at each college shall be expended for instructional purposes.

d. In the event the state provides a deficit factor to either COLA, growth or FTES which requires a reduction in the allocation to the colleges, the allocations to the colleges and District Office will be adjusted accordingly. This would also be applicable to any mid-year cuts.
e. In the event the state increases overall funding for the district, the allocations to the colleges and the district office will be adjusted accordingly.
f. As a part of the distribution of resources, there must be consideration given to the resources required to support the district office functions. These considerations would include, but not be limited to, resources received for scheduled maintenance, equipment or other restricted funds that serve to increase services throughout the district. The district office reserves the right to allocate resources from restricted areas to maximize their effect on the ability to serve students. These expenditures will be tied to a district scheduled maintenance plan, as well as any facilities plans in order to obtain maximization of the limited resources.
g. Decisions on how these resources are allocated will be finalized by the Chancellor's Executive Cabinet.

4. Distribution of Staff

a. In the matter of full time faculty, Title V Section 51025 provides the faculty obligation target number for the district to maintain.
b. Ideally, this process will conclude prior to the start of the spring semester to allow for immediate advertising in January to begin the process of employing faculty.
c. The Chancellor will require that the College Presidents meet and confer on their respective lists to determine similar positions or shared positions being sought by both colleges.
d. The reconciled list will then be forwarded to the Human Resources department for immediate distribution.
e. This process shall also be used in the recommendation of new and replacement classified, management and administrative staff.
f. The College President is responsible for disseminating the decisions made on distribution of staff to their respective colleges using regular and appropriate means of communicating the process and results of the decisions made.
g. In the event the district is in a position to freeze hiring or eliminate positions, a list will be maintained that provides a starting point for hiring once the freeze is lifted. An historical list of vacant positions will be created and reviewed on a yearly basis and used in the process.

Review of Procedure

This procedure will be reviewed on a regular basis, at least once every three years.

Board approval date: 11/15/05
Revised: 5/15/07; 1/19/10; 4/26/11

Other Operating Expenses Categories Definitions

Definitions: Other operating expenses, budget object code number 5000, are identified by the Budget and Accounting Manual published by the Chancellors Office. The various categories are as follows:

1. Audit: These expenses involve the cost associated with the districts audit as identified in Education Code Section 84040(b).

2. Contract Services: These payments are for those firms that provide internet access, access, on-line services, and software licensing. The object code also includes services for an entity such as joint powers agency to administer a self-insurance fund.

3. Depreciation: These expenses are taken from that asset that is income producing.

4. Dues and Membership: Expenses related to associations, membership fees, for the governing board and the employees who are required to join these associations due to their positions within the district.

5. Election: expenditures for election services provided by the county (Elections Code Section 10002).

6. Insurance: Expenditures for all forms of fire, casualty or liability insurance for the district. This would include any costs for appraisals, bonds safeguarding the district against losses resulting from actions of its employees, and insurance for students participating in intercollegiate athletics. (Excluded in this category are those insurance premiums related to employee benefits).

7. Interest: Interest expenses related to the cost of borrowing to finance the operations of the district.

8. Legal: Expenditures as assessments for other than capital improvements, bond issues or other advertisements required by law, judgments, and lawyers' fees.

9. Personal and Consultant Services: Contracts for personal or consultant services provided by an individual or firm. This would include costs associated with surveys and appraisals.

10. Postage: Costs for sorting, handling, shipping and postage of mail and documents.

11. Rents and Leases: Payments for the rent or lease of land, athletic fields, equipment, and buildings; payments to independent vendors for transportation. (Lease purchases are excluded and are expensed in object code 6000, Capital Outlay).

12. Repairs and Maintenance: Expenditures for payments to independent vendor for repairs and maintenance to buildings or equipment, including maintenance agreements on equipment.

13. Self-Insurance Claims: Expenditures for payments and/or accrued costs for claims to a self-insured fund. Payments to an insurance joint powers agency are treated as insurance expense in the General fund or applicable special fund, such as a bookstore fund.

14. Travel and Conference: Expenditures for per diem and actual, necessary expenditures incurred by employees, board members, and other district representatives for authorized meetings, transportation, mileage allowance, meals and lodging.

15. Utilities and Housekeeping: Expenditures for water, fuel, light, power, telephone, waste disposal, laundry, dry cleaning and other similar expenses, including contracts for these services.

16. Other: expenditures for bad debt expense, loan costs, physical examinations, fingerprinting, damage to personal property, cash variances, advertisements not required by law and all other operating costs not identifiable within any other object 5000 category. This would be the area where our advertising for marketing our educational programs would be charged.

Other Outgo Definitions

Definitions: Other outgo, budget object code number 7000, is identified by the Budget and Accounting Manual published by the Chancellors Office. The various categories are as follows:

1. 7100: Debt Retirement (Long-Term Debt)
   These expenditures include costs for long-term bonds or other indebtedness for the purpose of purchasing land, constructing or purchasing buildings, equipping buildings pursuant to Ed Code 15100 or 81901.

2. 7200: Intrafund Transfers-Out
   These are transfers within a fund of the district such as transfers from the general fund unrestricted to a general fund restricted.

3. 7300: Interfund Transfers-Out
   These are transfers that are taken from one fund and added to another fund without an expectation of repayment. An example would be where there is a required match for scheduled maintenance that is transferred from the general fund to the capital outlay projects fund.

4. 7400: Other Transfers
   These are for extraordinary situations such as transfers from reorganized or lapsed district to another district, loss on investments or joint ventures, such as material, prior-year assessments to self-insurance programs, JPA's or consortiums.

5. 7500: Student Financial Aid
   Expenditures for student aid in the form of grants, fellowships, scholarships, tuition reduction, etc. Payments to students for services rendered, such as work study that are chargeable to the activity benefited by the student's work.

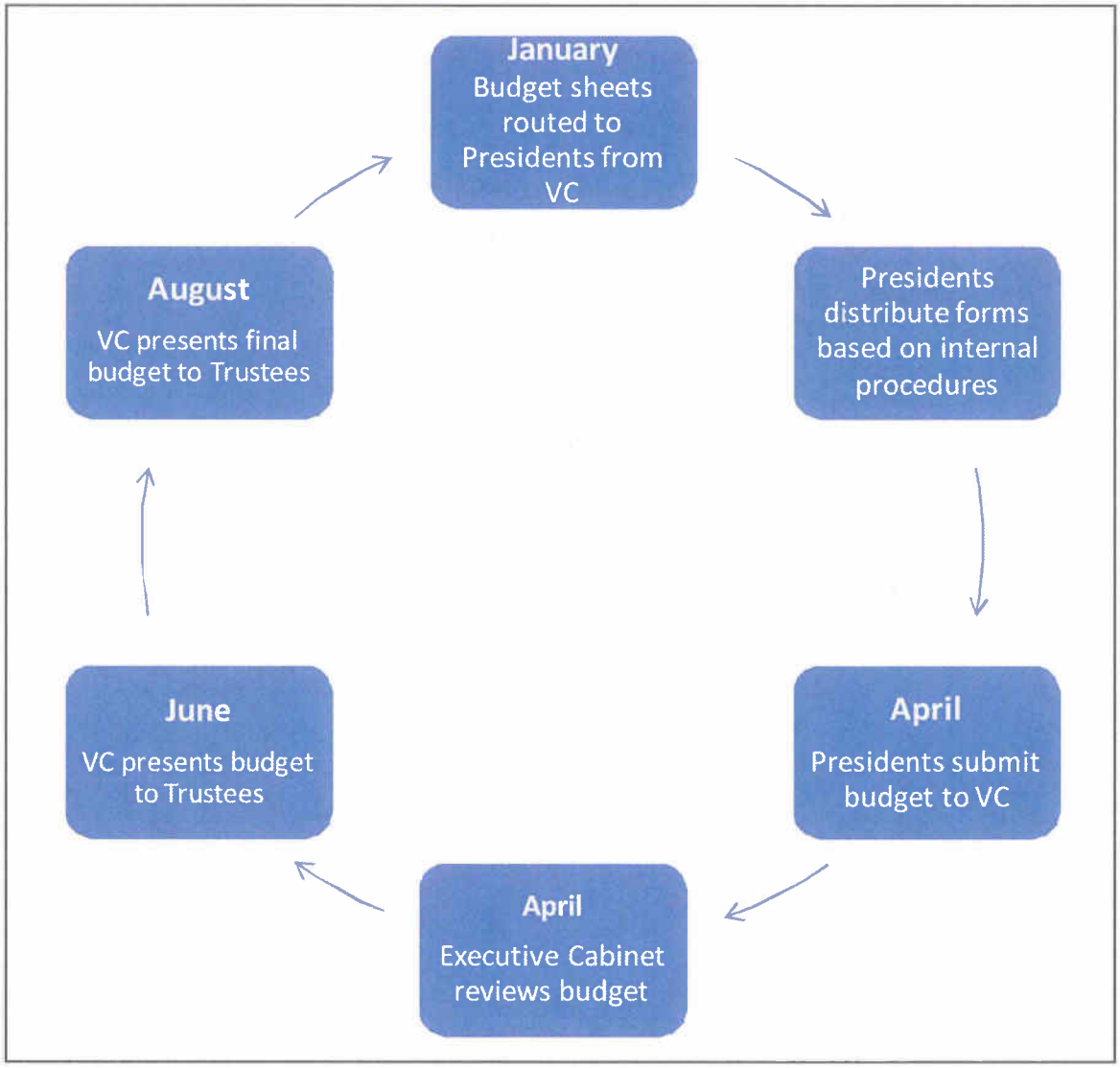
6. 7600: Other Student Aid
   This category is for amounts paid to/for students for non-cash assistance, such as bus tickets, auto repairs related to commuting to college classes, child care vouchers, and bookstore vouchers. These would be for participants in EOPS, DSPS or other categorical programs.

7. 7900: Reserve for Contingencies
   No expenditures are allowed in this category and are for appropriation only. This would include amounts equal to the portion of the current fiscal year's appropriation that are not designated for any specific purpose, but are held in reserve to fund other appropriation items necessary during the fiscal year.

CALENDAR FOR BUDGET DEVELOMENT FOR THE WEST HILLS COMMUNITY COLLEGE DISTRICT

DATE	ITEM	RESPONSIBILITY
Mid January – April 10	Distribute Budget Worksheet forms to College President.	Vice Chancellor
	College Presidents shall initiate college budget development process.	College Presidents
	Vice Chancellor shall distribute forms to district office Department managers.	Vice Chancellor
	Open hearings and meetings will be held at each College and District Office.	College Presidents Chancellor
	Submit college's proposed budget worksheets and priority lists to the Vice Chancellor	College Presidents
	Submit district office's proposed budget worksheets and priority lists to Vice Chancellor	Chancellor
Second week of April	Executive Cabinet to review budget submittals.	Executive Cabinet
April 15th	Vice Chancellor will notify Superintendent of Schools of newspaper publication, date, location and time of public display of proposed budget document.	Vice Chancellor
May Board Meeting	Vice Chancellor presents latest tentative budget information to Board of Trustees.	Vice Chancellor
Ten days prior to June Board Meeting	Copies of the proposed Tentative budget shall be placed in the District Office, College Libraries, Centers, and the President's offices for public view.	Vice Chancellor
June Board Meeting	At the June Board of Trustees meeting, the Board will hold a public hearing and will review and approve the proposed Tentative budget.	Board of Trustees
Before June 30th	Vice Chancellor will forward copy of approved Tentative budget to the Superintendent of Schools, Fresno County and the Chancellor, California Community Colleges.	Vice Chancellor
Before July 25th	All recommendations from Colleges and District to amend Tentative budget to be submitted to Vice Chancellor.	College Presidents Chancellor
Ten days before August Board Meeting	Copies of the proposed Tentative budget shall be placed in the District Office, College Libraries, Centers, and the President's offices for public view.	Vice Chancellor
August Board Meeting	At the August Board meeting, the Board will hold a public hearing and will review and approve the proposed Adopted budget.	Board of Trustees
Immediately after August Board Meeting	Vice Chancellor will forward copy of approved Adopted budget to the Superintendent of Schools, Fresno County and the Chancellor, California Community Colleges.	Vice Chancellor

Budget Development Process Flowchart



BUDGET FORUMLAS FOR EXPENSES FOR EACH COST CENTER

- Formula 1 is defined by the number of employees at each location
- Formula 2 is defined by the square footage at each location
- Formula 3 is defined by the number of FTES at each location

Object Code	Expense Category	Formula
5544	Student Insurance	Formula 3
5549	Liability Insurance	Formula 2
5562	Contract Services	Formula 1 for Country Payroll Formula 2 for software licenses
5564	Maintenance Agreements	Formula 2
5573	Legal Costs	Formula 1
5591	Bad Debt	Formula applied based upon actual from previous fiscal year percentage, calculated each year
5599	Advertising	Formula 1 for employee recruitment Formula 3 for student recruitment
5717	Long Term Debt	Formula 2 for infrastructure; 50/50 split for Allen Farm/District Office Loan
5731	Transfers	Allocated directly to the cost center at 100% (i.e. Farm of the Future 100% Coalinga; Foundation 100% District; Cafeteria 100% to either Coalinga or Lemoore

BUDGET DEVELOPMENT AND REVIEW

Policy Statement

It shall be the policy of this Board to establish procedures to ensure faculty, staff and students the right to participate effectively in the development of the District and college budget. To give faculty, staff and students the opportunity to express their opinions at the campus level and to ensure that these opinions are given every reasonable consideration, the Chancellor shall create a Budget Development and Review Committee.

The sole purpose of this policy is to implement the concept of shared governance enacted by AB 17256 in the area of budget development and review. This policy shall not be construed in any manner to alter the fundamental relationship between the Board and employees, students or other groups. The Board retains all powers implied or granted by law. The members of the Governing Board, as elected officials, recognize their accountability to the electorate within the District and their responsibility under law to make policy decisions affecting the District.

Purpose

The purpose of the Budget Development and Review Committee will be to receive and review budget proposals from the college community, develop a written tentative budget for consideration by the College Council for recommendation to the Chancellor, advise the Chancellor as to recommended budget issues, develop contingency recommendations and procedures in the event of budget additions or shortfalls, provide a venue for college and District-wide budget discussions, and provide a means of communication with the District concerning budget issues.

Membership and Structure of the Budget Development Review Committee

The Budget Development and Review Committee will consist of 12 representatives selected from the Budget Development and Review Subcommittees:

- Administrative Services (Vice Chancellor; one manager; one faculty person; one classified person elected by subcommittee)
- Community Campuses (Dean; one faculty person; one classified person elected by subcommittee)
- Instruction (Chief Instructional Office; two full-time faculty representatives from subcommittee – one elected from Arts and Sciences and one elected from occupational education)
- Student Services (Chief Student Services Officer; one faculty person (counselor); one classified person elected by subcommittee; and one student

Board approval date: 10/30/91

16.

Department Chair’s Duties

Job Description - Director of Farm of the Future
12 Months a year 40 Hours a week
Administrative

BASIC FUNCTION:

Under the general supervision of the Vice President of Educational Services, the Director of the Farm of the Future administers and provides support for the various instructional programs and crop operations located at the Farm of the Future. The Director of the the Farm of the Future is responsible for providing leadership and supervision to a diverse and comprehensive mix of instructional areas. The Director coordinates student recruitment efforts with faculty and works closely with the district grants office to seek external funding for innovation. The Director is responsible for the supervision of the day-to-day farm operations. Programs located at the Farm of the Future use the instructional Learn by Doing approach which ensure our students are provided with multiple well-designed, real life experiences on the farm and with our internship partners. The Director supports this effort by: coordinating professional development activities for faculty; nurturing partnerships with K-12 institutions, higher education, and business and agriculture industry leaders; and collaborate with faculty to develop practical learning experiences for students.

Position Duties

ESSENTIAL DUTIES:

- Assigned instructional areas include: Agriculture, Pest Control Advisor, Industrial Mechanics, Heavy Equipment and Rodeo.
- Function as the administrator of the Farm of the Future.
- Work closely with college admininstration and faculty to integrate agriculture into the curriculum across all the disciplines.
- Prepare, monitor and recommend a yearly budget for assigned areas for submittal to the college budget committee and the West Hills College Foundation.
- Represent the Farm of the Future in matters relating to assigned programs, including serving on assigned committees of the college.
- Coordinate student recruiting of Farm of the Future programs and activities among local high schools and employers.
- Provide instructional leadership to faculty including curriculum development and design, instructional and learning methodology, new and emerging programs and change.
- Work with faculty conducting on-farm research to integrate their work with the farm's production and educational priorities
- Review needs, initiate requests for positions, screen, interview, recommend for employment, and evaluate performance of all assigned employee positions.
- Work cooperatively with public and private agencies in the interpretation of employment training needs and other data.
- Facilitate articulation of college instructional programs with district area high schools, local, state and federal agencies, four-year institutions, and community based agencies, including business and industry.
- Assist in the preparation of fiscal, statistical and other reports including maintaining appropriate and necessary records, studies and support materials.
- Work in cooperation with the District Grants Office to expand opportunities for external funding.
- Attend regional, state, national, and other conferences and meetings as appropriate.

- Review and revise material on the college web site pertaining to assigned programs as necessary.
- Represent the College's Farm of the Future at local community activities.
- Assist faculty and others, where appropriate, in the development of Student Learning Outcomes (SLOs) and the determination of their effectiveness in helping students achieve their desired learning outcomes. In addition, provide leadership for the development of SLOs within their program areas of responsibility.
- Comply with college, state, federal, environment and animal care regulations as appropriate.
- Perform other duties as assigned.

DESIRABLE KNOWLEDGE, SKILLS, EXPERIENCE AND ABILITIES:

- Ability to establish and maintain effective working relationships with students, faculty, staff and community organizations.
- Coordinate with faculty for on-farm activities including research and on-site contract training.
- Plan outreach on-farm activities with educational institutions and public groups.
- Plan with faculty and implement a farmers market and/or farm to table distribution.
- Demonstrate sensitivity to and understanding of the diverse academic, socioeconomic, cultural and ethnic backgrounds of staff and students.
- Demonstrate sensitivity and understanding of staff and students with physical and learning disabilities.
- Ability to communicate clearly with students, faculty and staff, both orally and in writing.
- Develop and implement an operational plan for the farm in consultation with administration, faculty and advisory board.
- Demonstrate working knowledge of Microsoft Word computer programs and the Datatel management information system and its components.
- Demonstrate commitment to professional growth and development through memberships in regional, state and national organizations or other activities appropriate to the discipline or assignment.
- Ability to perform consistently under the pressure of deadlines and other administrative details.
- Excellent leadership, interpersonal, and analytical skills; effective written and oral skills.
- Experience and/or knowledge of instructional programs, including occupational and academic, and student services programs.
- Evidence of successful teaching experience, preferably at the community college level.
- Ability to work independently and innovatively within a framework of accountability.
- Knowledge of California Education Code provisions and federal and state regulations applicable to community colleges.
- Prepare program and fiscal reports
- Bilingual preferred (but not required).

Qualification

EDUCATION AND EXPERIENCE:

- A master's degree from an accredited institution in agriculture or a related field OR equivalent.
- Three year's administrative or management experience, preferably in a community college.

17.

Department’s Chart of Responsibilities

Board Policy 7215
Faculty, Counselor and Librarian Responsibilities

Full-Time College Instructors

The full-time college instructor is responsible for effective performance in the following areas:

A. General Scope of Responsibilities

1. Excellence in teaching and instruction.
2. Maintenance of professional growth and academic currency.
3. Carrying out area, departmental and/or program responsibilities.
4. Contribution to the District as a whole in the form of college-wide service.
5. Service to the local community (optional).

B. Teaching and Instruction

The following duties are representative of the kinds of expectations that are normally required of a full-time West Hills College instructor. Certain duties are common to the everyday operational needs of the District while other activities may be required on an as needed basis. All of the duties, however, are common requirements at various times for full-time instructional positions.

1. Be aware of and support the mission, vision, philosophy and objectives of the District as expressed in the college catalog.
2. Refer to the Faculty Resource Guide as a primary, but not exclusive, source of information and established District procedures.
3. Maintain a high level of competency in the subjects taught.
4. Plan for and be continually well prepared to teach.
5. Provide organized delivery of instruction.
6. Be courteous to and approachable by students.
7. Incorporate methods and activities in the teaching-learning process that recognize, incorporate, and are sensitive to the needs of a diverse student body.
8. Provide instruction consistent with the stated and approved goals and content of the official course outline.
9. Show enthusiasm for the subject matter.
10. Use effective motivation to create a personal desire in students to learn the subject/skill(s).
11. Use standards of student evaluation that are clear, fair and followed consistently throughout the course.
12. Make systematic evaluations of student progress consistent with established instructional objectives.
13. Require levels of instructor and student effort sufficient to the mastery of the subject or skills in the course.
14. Grade and return student assignments and tests in a reasonable period of time.
15. Make effective use of teaching aids and materials required of student (e.g., texts, manuals, etc.).

16. Prepare complete syllabi for all courses taught which should follow the guidelines established by the Academic Senate as published in the WHC Faculty Resource Guide and the WHC Curriculum Handbook. Syllabi must be provided to students during the first week of class, preferably at the first class session.
17. Be present in the classroom during the time classes are officially scheduled, exceptions to the approved by the administration.
18. Provide the administration with maximum advance notice of both the beginning of an absence and the return to duty.
19. Give final examinations as announced in the published examination schedule, exceptions to be approved by the administration.
20. Keep accurate records on attendance and grades and submit, on time, attendance reports, grade reports, grade record books, and other records and certifications required by the various administrative offices.
21. Take appropriate action to assure that students in his/her classes are only those who have been admitted in accordance with college procedures. However, guests not intending to enroll in a class for credit may attend class sessions by instructor permission.
22. Maintain prudent and reasonable supervision of students at all times while in charge of a class, laboratory, shop, field trip, or authorized college activity.
23. Work with counselors and other appropriate personnel on student problems that require special attention.
24. Maintain confidentiality of student records as required by the California Education Code.
25. Assist in the enforcement of college rules and regulations pertaining to student conduct.
26. Devote fulltime attention and effort to assignments and refrain from engaging in any employment, activity, or enterprise, which has been determined to be inconsistent, incompatible, or in conflict with duties as a District certificated employee.
27. Coordinate course content and methods with other teachers in the program/discipline.
28. Meet and assist students during office hours or by appointment or at other reasonable times.
29. Teach classes as assigned and scheduled by the administration (after consultation with the instructors), following the current approved course outlines and utilizing the current approved texts for each course taught.
30. Plan, initiate, and carry through curriculum improvements including revising and updating course outlines, content, and materials according to established WHC curriculum procedures.
31. Initiate and/or participate in overall department-wide program development, maintenance, evaluation, revision and/or expansion.

C. Professional Growth and Currency

1. Faculty members are required to show examples of activities that demonstrate a pattern of academic, professional, and/or technical updating or currency, including an understanding and sensitivity to the diverse population of students and staff of

the District. This can be accomplished through the Professional Development Goals/Plans Form for Tenured and Non-Tenured Faculty required in the evaluation process.

D. Area or Departmental/Program Responsibilities

1. Is knowledgeable about and abides by District policies and procedures. This includes the accurate and timely submission of all reports, grades, and paperwork.
2. Meet deadlines and time targets.
3. Assist in class scheduling.
4. Assist in the hiring process by serving on hiring committees as requested.
5. Provide assistance and help to other full-time, part-time and new instructors.
6. Coordinate plans and activities with colleagues, deans, departments, and other personnel as necessary.
7. Order instructional materials, equipment and textbooks with sufficient lead times in accordance with established District procedures.
8. Provide information for the development of departmental budgets.
9. Monitor expenditures to keep within authorized budget spending appropriations as necessary depending on department structure and procedures.
10. Assist in preparing the annual budget as set forth in established District policy and procedures.
11. Exercise good judgment and proper care in the use of and/or management of facilities, equipment and supplies, observing security precautions for the protection of such equipment.
12. Report to administration observed defects in the buildings, fields, furniture, or equipment, which might jeopardize the comfort, health, or safety of students or others.
13. Attend assigned meetings as requested including faculty meetings, department meetings, and other meetings called by authorized personnel unless excused by the person calling the meeting or by the President.
14. Work well with peers, classified staff and administration.
15. Do his/her fair share of outside of class departmental duties and responsibilities.
16. Is on campus or at an off-campus site each duty day as set forth in the District calendar, exceptions to be approved by the administration.
17. Maintain office hours per Article 6 of current Collective Bargaining Agreement.
18. Give prompt attention to all bulletins and announcements from administrative offices and comply with regulations thus issued. E-mail is an official, authorized method of communication.
19. Keep informed on procedures to be followed in case of emergencies such as fire, earthquake or other emergency, disaster or accident.

E. College-Wide Service

College-wide service can be accomplished in a variety of ways. Each instructor has his/her individual strengths, preferences, interests, and time available. It is expected that each person will choose activities that reflect these strengths, preferences, interests, and time available. The following list of duties is not all-inclusive.

1. Volunteer to serve on committees and/or serve on committees and project teams when requested.
2. Serve as a sponsor to student clubs and organizations.
3. Participate in participatory governance.
4. Participate on special project teams or ad hoc committees.
5. Serve as a faculty advisor to students designated by the administration who need assistance in an area for which an instructor has expertise.

F. Community Service (optional)

1. The District values and encourages the contributions made to the faculty member's local community; however, such contributions are at the option of the instructor and are not a formal requirement of the position.

G. The educational, experience, aptitudes, skills, etc., for instructional positions differ by type of academic or vocational program. Refer to job announcements for specific job specifications.

Counselors

The full-time college counselor is responsible for effective performance in the following areas:

A. General Scope of Responsibilities

1. Excellence in counseling, teaching, and instruction (as applicable).
2. Maintenance of professional growth and academic currency.
3. Carrying out area, departmental and/or program responsibilities.
4. Contribution to the District as a whole in the form of college-wide service.
5. Service to the local community (optional).

Non-classroom staff responsibilities represent a 35-hour week (197-days).

B. Counseling, Teaching, and Instruction (as applicable)

The following duties are representative of the kinds of expectations that are normally required of a full-time West Hills College counselor. Certain duties are common to the everyday operational needs of the District while other activities may be required on an as needed basis. All of the duties, however, are common requirements at various times for full-time counseling positions.

1. Be aware of and support the mission, vision, philosophy and objectives of the District as expressed in the college catalog.
2. Refer to the Faculty Resource Guide as a primary, but not exclusive, source of information and established District procedures.
3. Maintain a high level of competency in the subjects taught (as applicable).
4. Provide academic, vocational and limited personal counseling to students on an individual basis.
5. Provide group counseling for the accomplishment of specific objectives.

6. Assist in other areas as assigned by the administration.
7. Assist in the planning and implementation of registration.
8. Assist students with other campus services including but not limited to, assessment, job placement, and other programs as appropriate.
9. Assist in the implementation of the College's Matriculation Plan, including new student orientation.
10. Assist with or advise student organizations and clubs.
11. Provide transfer services and assist students in making the transition to a four-year college or university.
12. Assist administration in developing the counseling, outreach, and recruitment plan and schedule.
13. Assist in the preparation of information and publications for counseling, outreach, and recruitment.
14. Assist students with petitions for graduation.
15. Establish and maintain communication with the various instructional divisions, the administration and the staff of the District.
16. Establish and maintain communications with the high schools served by the District.
17. Establish and maintain communications with community agencies that can serve our students.
18. Plan and conduct outreach activities at service area high schools and other special locations and events.
19. Participate in recruitment efforts and activities and follow-up.
20. Conduct placement testing and orientation for students.
21. Develop educational plans for students and track their progress through follow-up.
22. Teach Guidance Studies and Orientation classes as assigned.
23. Assist with special projects such as research and special programs as they pertain to the counseling/advising function.
24. Keep current with developments and changes in his/her field.
25. Be courteous to and approachable by students.
26. Incorporate methods and activities in the counseling process that recognize, incorporate, and are sensitive to the needs of a diverse student body.
27. Show enthusiasm for the counseling function.
28. Become proficient in using the District Management Information System in performing job duties.
29. Provide the administration with maximum advance notice of both the beginning of an absence and the return to duty.
30. Keep accurate records required by the various administrative offices.
31. Maintain prudent and reasonable supervision of students at all times while in charge of a class, laboratory, shop, field trip, or authorized college activity.
32. Work with faculty and other appropriate personnel on student problems that require special attention.
33. Maintain confidentiality of student records as required by the California Education Code.
34. Assist in the enforcement of college rules and regulations pertaining to student conduct.

35. Devote fulltime attention and effort to assignments and refrain from engaging in any employment, activity, or enterprise, which has been determined to be inconsistent, incompatible, or in conflict with duties as a District certificated employee.
36. Coordinate job duties with other counselors.
37. Meet and assist students during office hours or by appointment or at other reasonable times.
38. Initiate and/or participate in overall department-wide program development, maintenance, evaluation, revision and/or expansion.

C. Professional Growth and Currency

1. Faculty members are required to show examples of activities that demonstrate a pattern of academic, professional, and/or technical updating or currency, including an understanding and sensitivity to the diverse population of students and staff of the District. This can be accomplished through the Professional Development Goals/Plans Form for Tenured and Non-Tenured Faculty required in the evaluation process.

D. Area or Departmental/Program Responsibilities

1. Is knowledgeable about and abides by District policies and procedures. This includes the accurate and timely submission of all reports, grades, and paperwork.
2. Meet deadlines and time targets.
3. Assist in class scheduling.
4. Assist in the hiring process by serving on hiring committees as requested.
5. Provide assistance and help to other full-time, part-time and new instructors.
6. Coordinate plans and activities with colleagues, deans, departments, and other personnel as necessary.
7. Order instructional materials, equipment and textbooks with sufficient lead times in accordance with established District procedures.
8. Provide information for the development of departmental budgets.
9. Monitor expenditures to keep within authorized budget spending appropriations as necessary depending on department structure and procedures.
10. Assist in preparing the annual budget as set forth in established District policy and procedures.
11. Exercise good judgment and proper care in the use of and/or management of facilities, equipment and supplies, observing security precautions for the protection of such equipment.
12. Report to administration observed defects in the buildings, fields, furniture, or equipment, which might jeopardize the comfort, health, or safety of students or others.
13. Attend assigned meetings as requested including faculty meetings, department meetings, and other meetings called by authorized personnel unless excused by the person calling the meeting or by the President.
14. Work well with peers, classified staff and administration.
15. Do his/her fair share of outside of class departmental duties and responsibilities.

16. Is on campus or at an off-campus site each duty day as set forth in the District calendar, exceptions to be approved by the administration.
17. Maintain office hours per Article 6 of current Collective Bargaining Agreement.
18. Give prompt attention to all bulletins and announcements from administrative offices and comply with regulations thus issued. E-mail is an official, authorized method of communication.
19. Keep informed on procedures to be followed in case of emergencies such as fire, earthquake or other emergency, disaster or accident.

E. College-Wide Service

College-wide service can be accomplished in a variety of ways. Each instructor has his/her individual strengths, preferences, interests, and time available. It is expected that each person will choose activities that reflect these strengths, preferences, interests, and time available. The following list of duties is not all-inclusive.

1. Volunteer to serve on committees and/or serve on committees and project teams when requested.
2. Serve as a sponsor to student clubs and organizations.
3. Participate in participatory governance.
4. Participate on special project teams or ad hoc committees.
5. Serve as a faculty advisor to students designated by the administration who need assistance in an area for which an instructor has expertise.

F. Community Service (optional)

1. The District values and encourages the contributions made to the faculty member's local community; however, such contributions are at the option of the instructor and are not a formal requirement of the position.

G. The educational, experience, aptitudes, skills, etc., for instructional positions differ by type of academic or vocational program. Refer to job announcements for specific job specifications.

Full-Time College Librarians

The full-time college librarian is responsible for effective performance in the following areas:

A. General Scope of Responsibilities

1. Excellence in carrying out assigned duties.
2. Maintenance of professional growth and academic currency.
3. Carrying out area, departmental and/or program responsibilities.
4. Contribution to the District as a whole in the form of college-wide service.
5. Service to the local community (optional).

B. Librarian Duties:

The following duties are representative of the kinds of expectations that are normally required of a full-time West Hills College librarian. Certain duties are common to the everyday operational needs of the District while other activities may be required on an as needed basis. All of the duties, however, are common requirements at various times for full-time instructional positions.

1. Be aware of and support the mission, vision, philosophy and objectives of the District as expressed in the college catalog.
2. Refer to the Faculty Resource Guide as a primary, but not exclusive, source of information and established District procedures.
3. Maintain a high level of competency in the field.
4. Assist the faculty, staff and students in the use of print, electonric, and automated library sources.
5. Develop and teach information-seeking skills to faculty, staff, and students. With the assistance of faculty, plans and coordinates library resources in relation to new classroom learning.
6. Select and recommend automated, electronic and print sources for purchase by the library.
7. Write and release procedures for circulating the general collection, reserve, and periodicals collections, and for the utilization of the reference collection.
8. Supervise the organization and management of various library service areas including the Learning Center.
9. Participate in the evaluation of course offerings, including the revision of course descriptions and course outlines.
10. Maintain control of equipment, materials and supplies as assigned.
11. Assist in the selection, training, supervision, and evaluation of library/learning center employees.
12. Represents the library at appropriate local, state, or national meetings.
13. Be courteous to and approachable by students.
14. Incorporate methods and activities in performing job duties that recognize, incorporate, and are sensitive to the needs of a diverse student body.
15. Show enthusiasm for the job duties.
16. Provide the administration with maximum advance notice of both the beginning of an absence and the return to duty.
17. Keep accurate records required by the various administrative offices.
18. Maintain prudent and reasonable supervision of students at all times while in charge of a class, laboratory, shop, field trip, or authorized college activity.
19. Work with counselors and other appropriate personnel on student problems that require special attention.
20. Maintain confidentiality of student records as required by the California Education Code.
21. Assist in the enforcement of college rules and regulations pertaining to student conduct.
22. Devote fulltime attention and effort to assignments and refrain from engaging in any employment, activity, or enterprise, which has been determined to be inconsistent, incompatible, or in conflict with duties as a District certificated employee.

23. Coordinate course content and methods with other teachers in the program/discipline.
24. Meet and assist students during office hours or by appointment or at other reasonable times.
25. Teach classes as assigned and scheduled by the administration (after consultation with the instructors), following the current approved course outlines and utilizing the current approved texts for each course taught.
26. Plan, initiate, and carry through curriculum improvements including revising and updating course outlines, content, and materials according to established WHC curriculum procedures.
27. Initiate and/or participate in overall department-wide program development, maintenance, evaluation, revision and/or expansion.

C. Professional Growth and Currency

1. Faculty members are required to show examples of activities that demonstrate a pattern of academic, professional, and/or technical updating or currency, including an understanding and sensitivity to the diverse population of students and staff of the District. This can be accomplished through the Professional Development Goals/Plans Form for Tenured and Non-Tenured Faculty required in the evaluation process.

D. Area or Departmental/Program Responsibilities

1. Is knowledgeable about and abides by District policies and procedures. This includes the accurate and timely submission of all reports, grades, and paperwork.
2. Meet deadlines and time targets.
3. Assist in class scheduling.
4. Assist in the hiring process by serving on hiring committees as requested.
5. Provide assistance and help to other full-time, part-time and new instructors.
6. Coordinate plans and activities with colleagues, deans, departments, and other personnel as necessary.
7. Order instructional materials, equipment and textbooks with sufficient lead times in accordance with established District procedures.
8. Provide information for the development of departmental budgets.
9. Monitor expenditures to keep within authorized budget spending appropriations as necessary depending on department structure and procedures.
10. Assist in preparing the annual budget as set forth in established District policy and procedures.
11. Exercise good judgment and proper care in the use of and/or management of facilities, equipment and supplies, observing security precautions for the protection of such equipment.
12. Report to administration observed defects in the buildings, fields, furniture, or equipment, which might jeopardize the comfort, health, or safety of students or others.

13. Attend assigned meetings as requested including faculty meetings, department meetings, and other meetings called by authorized personnel unless excused by the person calling the meeting or by the President.
14. Work well with peers, classified staff and administration.
15. Do his/her fair share of outside of class departmental duties and responsibilities.
16. Is on campus or at an off-campus site each duty day as set forth in the District calendar, exceptions to be approved by the administration.
17. Maintain office hours per Article 6 of current Collective Bargaining Agreement.
18. Give prompt attention to all bulletins and announcements from administrative offices and comply with regulations thus issued. E-mail is an official, authorized method of communication.
19. Keep informed on procedures to be followed in case of emergencies such as fire, earthquake or other emergency, disaster or accident.

E. College-Wide Service

College-wide service can be accomplished in a variety of ways. Each instructor has his/her individual strengths, preferences, interests, and time available. It is expected that each person will choose activities that reflect these strengths, preferences, interests, and time available. The following list of duties is not all-inclusive.

1. Volunteer to serve on committees and/or serve on committees and project teams when requested.
2. Serve as a sponsor to student clubs and organizations.
3. Participate in participatory governance.
4. Participate on special project teams or ad hoc committees.
5. Serve as a faculty advisor to students designated by the administration who need assistance in an area for which an instructor has expertise.

F. Community Service (optional)

1. The District values and encourages the contributions made to the faculty member's local community; however, such contributions are at the option of the instructor and are not a formal requirement of the position.

G. The educational, experience, aptitudes, skills, etc., for instructional positions differ by type of academic or vocational program. Refer to job announcements for specific job specifications.

Board approval date: 7/24/01

Reference: *Accreditation Standard III.A.1*

A. Faculty

The college faculty member is responsible for effective performance in the following areas:

1. General Scope of Responsibilities

    a. Excellence in teaching and instruction
    b. Maintenance of professional growth and academic currency
    c. Carrying out area, departmental and/or program responsibilities
    d. Contribution to the District as a whole in the form of college-wide service
    e. Service to the local community (optional)

2. Teaching and Instruction

    The following duties are normally required of all faculty members. Certain duties are common to the everyday operational needs of the College/District while other activities may be required on an as needed basis. All of the duties, however, are common requirements at various times for faculty positions.

    a. Be aware of and support the mission, vision, philosophy and objectives of the District as expressed in the college catalog.
    b. Maintain a high level of competency in assigned areas of responsibility.
    c. Be courteous to and approachable by students.
    d. Incorporate methods and activities in communicating with students that recognize, incorporate, and are sensitive to the needs of a diverse student body.
    e. Show enthusiasm for the job duties.
    f. Maintain prudent and reasonable supervision of students at all times while in charge of a class, laboratory, shop, field trip, or authorized college activity.
    g. Maintain confidentiality of student records as required by the California Education Code and FERPA (Family Educational Rights and Privacy Act).
    h. Assist in the enforcement of college rules and regulations pertaining to student conduct.
    i. Devote fulltime attention and effort to assignments and refrain from engaging in any employment, activity, or enterprise, which has been determined to be inconsistent, incompatible, or in conflict with duties as a College/District certificated employee.
    j. Meet and assist students during office hours or by appointment or at other reasonable times.

k. Plan, initiate, and carry through curriculum improvements including revising and updating course outlines, content, and materials according to established West Hills College curriculum procedures, including the development of Student Learning Outcomes, assessment, and utilization of improvements. Develop new courses and programs according to curriculum policy and procedures.
l. Initiate and/or participate in overall department-wide program development, maintenance, evaluation, program review, revision and/or expansion.

3. Professional Growth and Currency

   a. Faculty members are required to show examples of activities that demonstrate a pattern of academic, professional, and/or technical updating or currency, including an understanding and sensitivity to the diverse population of students and staff of the College/District. This can be accomplished through the Professional Development Goals/Plans Form for Tenured and Non-Tenured Faculty required in the evaluation process.

4. Learning Area/Program Responsibilities

   a. Is knowledgeable about and abides by District policies and procedures. This includes the accurate and timely submission of all reports, grades, and paperwork.
   b. Provide the administration with maximum advance notice of both the beginning of an absence and the return to duty.
   c. Meet deadlines and time targets.
   d. Assist in class scheduling.
   e. Assist in the hiring process by serving on hiring committees as requested.
   f. Provide assistance and help to other instructors.
   g. Coordinate plans and activities with colleagues, administrators, learning areas, and other personnel as necessary.
   h. Work with faculty and other appropriate personnel on college-related problems that require special attention.
   i. Order instructional materials, equipment and textbooks with sufficient lead times in accordance with established College/District procedures.
   j. Provide information for the development of budgets.
   k. Monitor expenditures to keep within authorized budget spending appropriations as necessary depending on department structure and procedures.
   l. Assist in preparing the annual budget as set forth in established District policy and procedures by providing input to the appropriate college-level budget committee.
   m. Exercise good judgment and proper care in the use of and/or management of facilities, equipment and supplies, observing security precautions for the protection of such equipment.

n. Report to administration observed defects in the buildings, fields, furniture, or equipment, which might jeopardize the comfort, health, or safety of students or others.
o. Attend assigned meetings as requested including faculty meetings, department meetings, and other meetings called by authorized personnel unless excused by the person calling the meeting or by the President.
p. Work well with peers, classified staff and administration.
q. Participate in outside of class duties and responsibilities.
r. Is on campus or at an off-campus site each duty day as set forth in the District calendar, exceptions to be approved by the administration.
s. Maintain office hours per Article 6 of current Collective Bargaining Agreement.
t. Give prompt attention to all bulletins and announcements from administrative offices and comply with regulations thus issued. Authorized methods of communication include, but are not limited to: e-mail, campus mail, district portal, MyWestHills, U.S. Postal Service, and meetings.
u. Keep informed on procedures to be followed in case of emergencies such as fire, earthquake or other emergency, disaster or accident.

5. College-Wide Service

College-wide service can be accomplished in a variety of ways. Each faculty member has his/her individual strengths, preferences, interests, and time available. It is expected that each person will choose activities that reflect these strengths, preferences, interests, and time available. The following list of duties is not all-inclusive:

a. Volunteer to serve on committees and/or serve on committees and project teams when requested.
b. Serve as a sponsor to student clubs and organizations.
c. Participate in participatory governance.
d. Participate on special project teams or ad hoc committees.
e. Serve as a faculty advisor to students designated by the administration who need assistance in an area for which an instructor has expertise.

6. Community Service (optional)

a. The District values and encourages the contributions made to the faculty member's local community; however, such contributions are at the option of the instructor and are not a formal requirement of the position.

B. Instructors

The classroom instructor is responsible for effective performance in the following areas:

1. Plan for and be continually well prepared to teach.
2. Provide organized delivery of instruction.

3. Provide instruction consistent with the goals and content of the official course outline and utilizing the current approved texts for each course taught.
4. Use effective motivation to create a personal desire in students to learn the subject/skill(s) as it relates to the course outline.
5. Use standards of student evaluation that are clear, fair and followed consistently throughout the course.
6. Make systematic evaluations of student progress consistent with established instructional objectives.
7. Require levels of instructor and student effort sufficient to the mastery of the subject/skills in the course.
8. Grade and return student assignments and tests in a reasonable period of time.
9. Make effective use of teaching aids and materials required of student (e.g., texts, manuals, etc.).
10. Prepare complete syllabi for all courses taught which should follow the guidelines established by the Academic Senate. Syllabi must be provided to students during the first week of class, preferable at the first class session.
11. Be present in the classroom during the time classes are officially scheduled, exceptions to be approved by the administration.
12. Give final examinations as announced in the published examination schedule, exceptions to be approved by the administration.
13. Keep accurate records on attendance and grades and submit, on time, attendance reports, grade record books, and other records and certifications required by the various administrative offices.
14. Take appropriate action to ensure that students in his/her classes are only those who have been admitted in accordance with college procedures.
    However, guests not intending to enroll in a class for credit may attend class session by instructor permission.
15. Coordinate course content and methods with other teachers in the program/discipline.
16. Teach classes as assigned and scheduled by the administration (after consultation with the instructors).

C. Counselors

The following duties are representative of the kinds of expectations that are normally required of a West Hills College counselor. Certain duties are common to the everyday operational needs of the College/District while other activities may be required on an as needed basis. All of the duties, however, are common requirements at various times for full-time counseling positions.

1. Provide academic, vocational and limited personal counseling to students on an individual basis.
2. Provide group counseling for the accomplishment of specific objectives.
3. Assist in other areas as assigned by the administration.
4. Assist in the planning and implementation of registration.
5. Assist students with other campus services including but not limited to, assessment, job placement, and other programs as appropriate.

6. Assist in the implementation of the College's Matriculation Plan, including new student orientation.
7. Provide transfer services and assist students in making the transition to other institutions and programs.
8. Assist administration in developing the counseling, outreach, and recruitment plan and schedule.
9. Assist in the preparation of information and publications for counseling, outreach, and recruitment.
10. Assist students with petitions for graduation.
11. Establish and maintain communication with the various instructional divisions, the administration and the staff of the College/District.
12. Establish and maintain communications with the high schools served by the College/District.
13. Establish and maintain communications with community agencies that can serve our students.
14. Plan and conduct outreach activities at service area high schools and other special locations and events.
15. Participate in recruitment efforts and activities and follow-up.
16. Conduct placement testing and orientation for students.
17. Develop educational plans for students and track their progress through follow-up.
18. Assist with special projects such as research and special programs as they pertain to the counseling/advising function.
19. Keep current with developments and changes in his/her field.
20. Incorporate methods and activities in the counseling process that recognize, incorporate, and are sensitive to the needs of a diverse student body.
21. Show enthusiasm for the counseling function.
22. Become proficient in using the District Management Information System in performing job duties.
23. Keep accurate records required by the various administrative offices.
24. Coordinate job duties with other counselors.
25. Maintain a work schedule as determined by the CBA and assigned by administration.

D. College Librarians

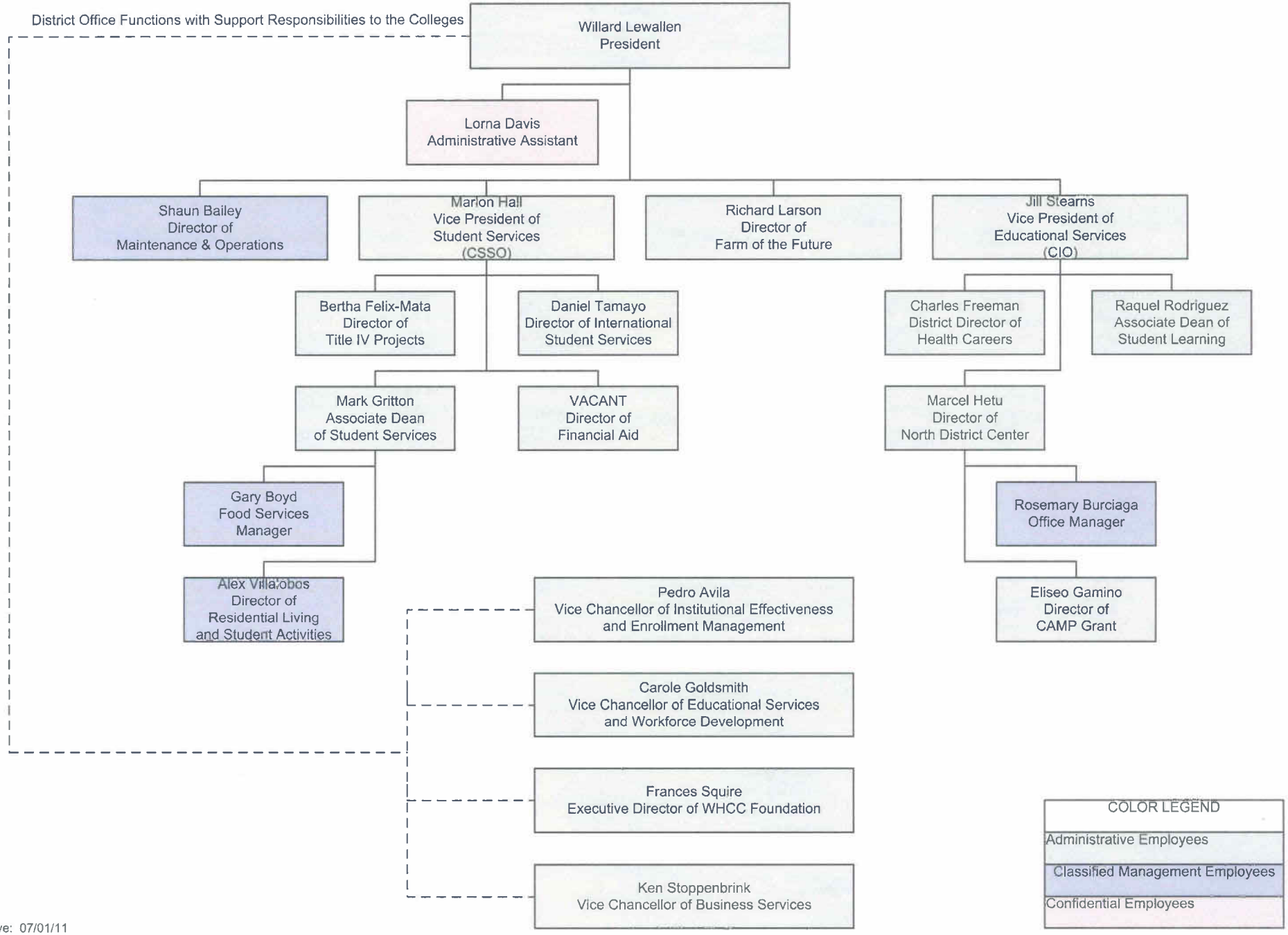
The following duties are representative of the kinds of expectations that are normally required of a West Hills College librarian. Certain duties are common to the everyday operational needs of the District while other activities may be required on an as needed basis. All of the duties, however, are common requirements at various times for faculty positions.

1. Assist the faculty, staff and students in the use of print, electronic, and automated library sources.
2. Develop and teach information-seeking skills to faculty, staff, and students. With the assistance of faculty, plans and coordinates library resources in relation to new classroom learning.

3. Select and recommend automated, electronic and print sources for purchase by the library.
4. Write and release procedures for circulating the general collection, reserve, and periodicals collections, and for the utilization of the reference collection.
5. Supervise the organization and management of various library service areas including the Library/Learning Resource Center.
6. Participate in the evaluation of course offerings, including the revision of course descriptions and course outlines.
7. Maintain control of equipment, materials and supplies as assigned.
8. Assist in the selection, training, supervision, and evaluation of Library/Learning Resource Center employees.
9. Represents the library at appropriate local, state, or national meetings.
10. Monitor expenditures to keep within authorized budget spending appropriations as necessary depending on department structure and procedures.

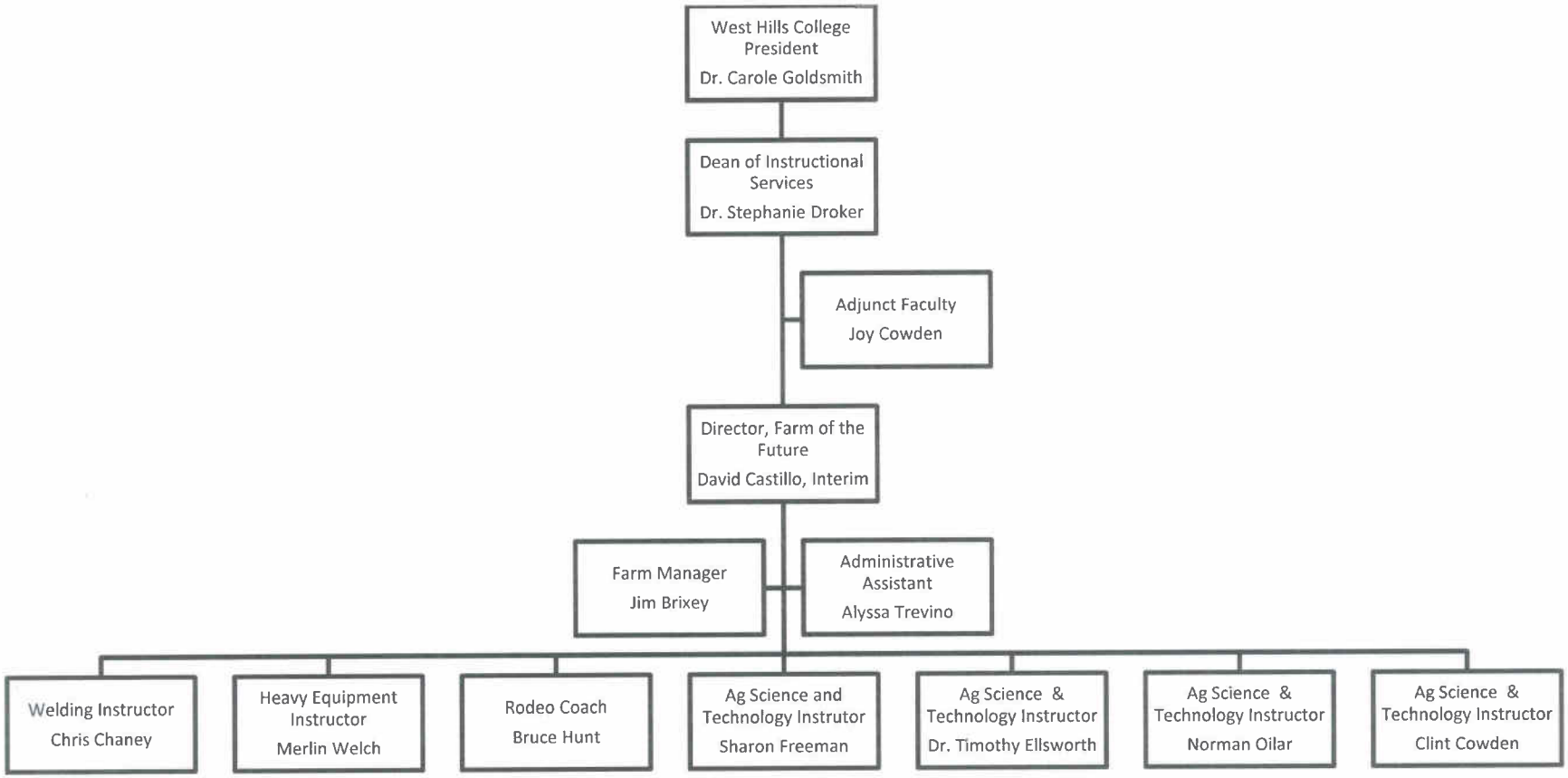
Board approval date: 7/24/01
Revised: 11/13/12

West Hills College Coalinga



Effective: 07/01/11

Farm of the Future Agriculture Department Organizational Chart

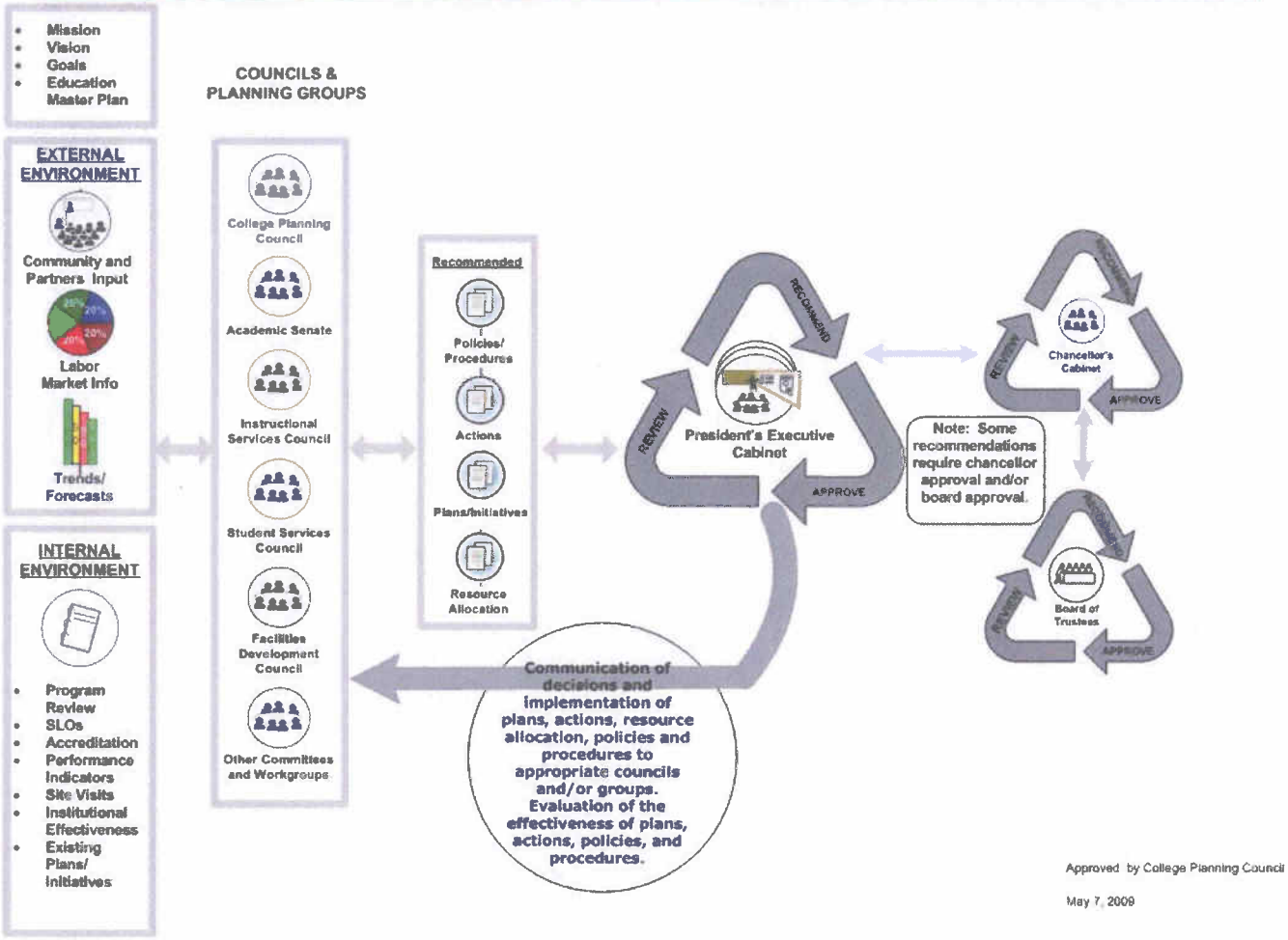


Farm of the Future Agriculture Department

2013-2014 Faculty and Staff Chart of Responsibilities

Name	Title	Campus Committees	Curriculum	Other
David Castillo	Interim Director		Course Schedule	Farm
Clint Cowden	Ag Science & Technology Instructor	Academic Senate	Pest Control Adviser Irrigation Technology Precision Agriculture	Ag Ambassadors
Bruce Hunt	Rodeo Coach/Ag Instructor		Rodeo	Rodeo Team
Merlin Welch	Heavy Equipment Instructor		Heavy Equipment	
Chris Chaney	Welding Instructor	Facilities Committee	Welding	Antique Tractor Pull Club Shotgun Club
Dr. Timothy Ellsworth	Ag Science & Technology Instructor	Curriculum Committee	Soils Plant Science	Soils Club
Norman Oiler	Ag Science & Technology Instructor		Maintenance Mechanic	
Sharon Freeman	Ag Science & Technology Instructor		Ag Business Animal Science	FFA Field Day

West Hills College Coalinga Planning and Governance Process



Approved by College Planning Council

May 7, 2009

18.

Program Completer Description

WEST HILLS COMMUNITY COLLEGE DISTRICT

Board Policy 4100
Graduation Requirements for Degrees and Certificates

Reference: *Education Code Section 70902(b)(3); Title 5, Section 55060 et seq.*

The District grants the degrees of Associate of Arts and Associate of Science to those students who have completed the subject requirements for graduation and who have maintained a minimum 2.0 cumulative grade point average and all grades of C or better in the major. Students must also complete the general education, residency and competency requirements set forth in Title 5 regulations.

Students may be awarded a Certificate of Achievement upon successful completion of courses of study or curriculum for which the District offers a certificate. The District has certificate programs that upgrade and develop occupational and vocational proficiency.

The Chancellor shall establish procedures to determine degree and certificate requirements and to assure that graduation requirements are published in the district's catalog(s) and included in other resources that are convenient for students.

Students who maintain continuous enrollment may elect to use the graduation requirements from the catalog in effect at the time the student began attending the West Hills Community College District, or any of the public California Community Colleges or California State Universities. Alternatively, students may elect to use the catalog in effect at the time the student is graduated. Beginning with the 2011-12 academic year, continuous enrollment is defined as being officially enrolled in one term during each academic year (summer, fall, or spring). Active military duty will maintain a student's continuous enrollment provided the student returns during the academic year following release from active duty.

See Administrative Procedure 4100 and 4107

Board approval date: 5/26/09
Revised: 9/27/11

Administrative Procedure 4100
Graduation Requirements for Degrees and Certificates

Reference: *Education Code Section 66746; Title 5, Sections 55002, 55060 et seq.*

The Governing Board of West Hills Community College District shall confer the degree of Associate of Arts or Associate of Science degree upon a student who has demonstrated competence in reading, in written expression and in mathematics, and who has satisfactorily completed at least 60 semester units of degree applicable units, of which 12 units are completed in residency. Commencing in Fall 2009, the West Hills Community College District competency shall be defined as completion of English 1A (Composition and Reading) and Math 63 (Intermediate Algebra) (equivalent or higher course). Coursework requirements must be fulfilled in a curriculum accepted toward the degree by West Hills College Coalinga and West Hills College Lemoore as shown in its catalogs or on the District's website.

Degree applicable coursework is defined at the course level in the West Hills College Coalinga and West Hills College Lemoore catalogs as defined by Title 5, Section 55002(a). Transfer coursework from another institution that meets requirements as defined by Title 5, Section 55002(a) is accepted as degree applicable coursework.

The Associate Degrees require at least 18 semester units in general education courses, a major area of study of at least 18 semester units with all grades of C or above and a grade point average of at least 2.0, and electives to complete 60 semester units and an overall grade point average of at least 2.0.

At least 12 semester units must be completed in residence at West Hills College Coalinga or West Hills College Lemoore.

The general education requirements must include a minimum of 18 units work in the natural sciences, the social and behavioral sciences, humanities, and language and rationality, English composition, communication and analytical thinking.

Ethnic studies will be offered in at least one of the areas required.

Local district requirements are Health Education 35 and students less than 21 years of age on their graduation date must complete at least 2 units of physical education activity courses. These local district requirements shall be waived for all degrees that qualify as associate degrees for transfer per Education Code Section 66746. Associate degrees for transfer are identified in the college catalogs.

Associate degree requirements, which include general education requirements, are listed in the West Hills College Coalinga and West Hills College Lemoore catalogs and on the District's website.

Certificates of achievement require 18 units or more of degree-applicable credit coursework with a grade point average of at least 2.0 in the area of certification, all certificates require grades C or above, a minimum of 12 semester units completed from West Hills College Coalinga and/or West Hills College Lemoore, and all coursework as defined in the college catalogs.

Shorter credit programs that lead to a local certificate may be established by the District. Content and assessment standards for certificates shall ensure that certificate programs are consistent with the mission of the District, meet a demonstrated need, are feasible and adhere to guidelines on academic achievement.

Board approval date: 5/26/09
Revised: 9/27/11

Graduation Requirements

Duty to Grant

The Governing Board of a community college shall award the appropriate diploma, degree, or certificate whenever a student has completed all requirements for the degree, diploma, or certificate without regard to the length of time actually taken by the student to complete such requirements. The Governing Board shall grant to any student who has satisfactorily completed the requirements of any course of study in less than the prescribed time, credit for the full number of semester hours scheduled for such course.

Students should plan the general direction of their educational careers as early as possible. Students wishing to transfer to a four-year college or university should select the transfer institution as early as possible. To assist with planning, requirements are described in this section for:

1. The Associate in Arts degree;
2. The Associate in Science degree;
3. Certificates of Achievement.

Petition to Graduate

It is the student's responsibility to file a Petition to Graduate no later than the eighth week of the semester in which he or she plans to complete the requirements of the certificate or degree program. The Petition to Graduate form is available in the counseling offices in Coalinga and Firebaugh. Original transcripts of college or equivalent work must be on file in the Admissions and Records Office at the time the petition to graduate is filed. Petitions to graduate are evaluated after grades are posted for the semester.

Students who file petitions after the end of the eighth week of the semester may not receive diplomas until after the end of the following semester. Diplomas are mailed 8-10 weeks following the end of the semester completed.

Students who have completed or enrolled in courses that meet the final requirements toward a certificate or degree must see a counselor. Students are advised to meet with a counselor two semesters before graduation to review their Student Educational Plan and complete an evaluation of their units.

Commencement Exercises

Students who wish to be awarded the Associate in Arts degree, Associate in Science degree, Associate in Arts for Transfer, Associate in Science for Transfer, or a Certificate of Achievement are strongly urged to participate in the commencement exercises held at the end of the spring semester.

General Education Requirements: Philosophy Statement

The general education component of the associate degree introduces students to the humanities, social sciences, natural sciences, applied sciences, and technology. It exposes students to different areas of study; demands the acquisition and use of reading, writing, and critical thinking skills; imparts a sense of our shared cultural heritage and how to function as responsible, ethical individuals in a complex society; and instills a level of intellectual curiosity and self-awareness conductive to lifelong learning and personal growth.

Together with the West Hills College Coalinga degree requirements, the general education component of the associate degree prepares students to:

1. transfer to and function successfully in a baccalaureate degree granting institution or;
2. enter the work force as a competent, productive citizen and;
3. live a richer, more rewarding life.

General education is the distinguishing feature of higher education. It is a broad based core of knowledge and abilities, acquisition of which is the distinctive characteristic of the educated person. General education courses emphasize the ability to reason, to examine issues from different perspectives, to challenge authority, and to communicate ideas logically and confidently. They instill open mindedness, respect for differences among people, and knowledge of self. They provide an understanding of the human condition and of human accomplishments and encourage a lifelong interest in learning.

General education courses are not primarily skills based, nor are they limited to, or more appropriate for majors in a specialized field of study.

Courses that fulfill general education requirements must:

1. Require reading, writing, computation, and critical thinking.
2. Improve students' abilities to: communicate oral and written ideas effectively; define problems, design solutions, critically analyze results; work effectively and cooperatively with others; work independently; develop and question personal and societal values, make informed choices, and accept responsibility for one's decisions; function as active, responsible, ethical citizens; acquire the curiosity and skills essential for lifelong learning.
3. Impart understanding, knowledge, and appreciation of: our shared heritage, including the contributions of women, ethnic minorities, and non-western cultures; the earth's ecosystem, including the processes that formed it and the strategies that are necessary for its maintenance; human social, political, and economic institutions and behavior, including their interrelationships; the psychological, social, and physiological dimensions of men and women as individuals and as members of our society.

Courses that fulfill general education requirements must fall into one of the content categories listed below:

Area A - Language and Rationality

Area B - Natural Sciences

Area C - Humanities

Area D - Social Science

Area E - Local District Requirements*

** Please note, Area E is not required for AA-T and AS-T degrees.*

The awarding of an associate degree symbolizes a successful attempt on the part of West Hills College Coalinga to lead students through learning experiences designed to develop certain capabilities and insights. Among these are the ability to think and to communicate clearly and effectively, both orally and in writing, to use mathematics; to understand the modes of inquiry of the major disciplines, to be aware of other cultures and times, to achieve insights gained through experience in thinking about ethical problems, and to develop the capacity for self understanding. In addition, the student shall acquire sufficient depth in a field of knowledge to contribute to lifetime interest.

The Governing Board of West Hills Community College District shall confer the degree of Associate in Arts or Associate in Science upon a student who has demonstrated competence in reading, in written expression, and in mathematics, and who has satisfactorily completed at least 60 semester units of college work. Course work requirements must be fulfilled in a curriculum accepted toward the degree by West Hills College Coalinga as shown in its catalog.

An associate degree program can be planned to meet a variety of goals. It is important to keep the following information in mind in planning a program of study:

Specific Career Program or Major

Generally, students who pursue a specific career program or major do not intend to transfer to a four-year university. However, some transfer students prefer to complete as many specific career and/or major courses as they can as part of their associate degree program. It is important to note that some of these courses might not be transferable to four-year universities. If you intend to use this option, you should see a West Hills College Coalinga counselor for assistance in planning the most appropriate educational program.

This associate degree program requires:

a. at least 18 semester units in general education courses;
b. a major area of study, with no grade lower than a C, and a grade point average of at least 2.0;
c. elective units to complete 60 units;
d. overall grade point average of at least 2.0. Of the required units, at least 12 semester units must be completed in residence at West Hills College Coalinga.

Associate in Arts Degree Requirements

I. Major Requirements

At least 18 semester units of study taken in a single discipline or related disciplines.

II. General Education Requirements

Area A. Language and Rationality (6 units)

These courses emphasize both the content and form of communication. They teach students the relationship of language to logic, as well as how to analyze, criticize, and advocate ideas, to reason deductively and inductively, and to reach sound conclusions. Courses fulfilling this requirement provide understanding of the psychological and social significance of communication, focus on communication from the rhetorical perspective, reasoning, advocacy, organization, accuracy; the discovery, critical evaluation and reporting of information; reading, listening, speaking, and writing effectively, provide active participation and practice in written and oral communication.

1. English and Composition (3 units)
   _____ English 1A
2. Analytical Thinking (3 units)
   _____ Math 1A, 1B, 2A, 2B, 10A, 10B, 15, 25, 45, 63

Area B. Natural Sciences (3 units for AA - 6 units for AS)

These courses impart knowledge about living and non-living systems, and mathematical concepts and quantitative reasoning with applications. Courses fulfilling this requirement promote understanding and appreciation of the methodologies and tools of science, emphasize the influence of scientific knowledge on the development of civilization, impart appreciation and understanding of basic concepts, not just skills and offer specific inquiry into mathematical concepts, quantitative reasoning and application;

_____ Biology 10, 15, 32, 35, 38
_____ Chemistry 1A, 1B, 2A, 2B
_____ Crop Science 1
_____ Geography 1
_____ Geology 1, 3
_____ Physical Science 1
_____ Psychiatric Technician 12
_____ Soil Science 21

Area C. Humanities (3 units)

These courses cultivate intellect, imagination, sensibility, and sensitivity. They encourage students to respond subjectively as well as objectively, and to develop a sense of the integrity of emotional and intellectual responses. Courses fulfilling this requirement study great work of the human imagination, increase awareness and appreciation of the traditional humanistic disciplines such as art, dance, drama, literature, and music, impart an understanding of the interrelationship between creative art, the humanities, and the self, provide exposure to both Western and non-Western cultures, and include foreign language courses.

_____ Art 2, 4, 5A, 13A, 15A, 16A, 16B, 42
_____ English 1B, 25
_____ Geography 3
_____ History 4A, 4B
_____ Humanities 1, 22
_____ Linguistics 11
_____ Music 42
_____ Performing Arts 1, 3, 14

Graduation Requirements

Duty to Grant

The Governing Board of a community college shall award the appropriate diploma, degree, or certificate whenever a student has completed all requirements for the degree, diploma, or certificate without regard to the length of time actually taken by the student to complete such requirements. The Governing Board shall grant to any student who has satisfactorily completed the requirements of any course of study in less than the prescribed time, credit for the full number of semester hours scheduled for such course.

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Commencement Exercises

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The general education component of the associate degree introduces students to the humanities, social sciences, natural sciences, applied sciences, and technology. It exposes students to different areas of study; demands the acquisition and use of reading, writing, and critical thinking skills; imparts a sense of our shared cultural heritage and how to function as responsible, ethical individuals in a complex society; and instills a level of intellectual curiosity and self-awareness conductive to lifelong learning and personal growth.

Together with the West Hills College Coalinga degree requirements, the general education component of the associate degree prepares students to:

1. transfer to and function successfully in a baccalaureate degree granting institution or;
2. enter the work force as a competent, productive citizen and;
3. live a richer, more rewarding life.

General education is the distinguishing feature of higher education. It is a broad based core of knowledge and abilities, acquisition of which is the distinctive characteristic of the educated person. General education courses emphasize the ability to reason, to examine issues from different perspectives, to challenge authority, and to communicate ideas logically and confidently. They instill open mindedness, respect for differences among people, and knowledge of self. They provide an understanding of the human condition and of human accomplishments and encourage a lifelong interest in learning.

General education courses are not primarily skills based, nor are they limited to, or more appropriate for majors in a specialized field of study.

Courses that fulfill general education requirements must:

1. Require reading, writing, computation, and critical thinking.
2. Improve students' abilities to: communicate oral and written ideas effectively; define problems, design solutions, critically analyze results; work effectively and cooperatively with others; work independently; develop and question personal and societal values, make informed choices, and accept responsibility for one's decisions; function as active, responsible, ethical citizens; acquire the curiosity and skills essential for lifelong learning.
3. Impart understanding, knowledge, and appreciation of: our shared heritage, including the contributions of women, ethnic minorities, and non-western cultures; the earth's ecosystem, including the processes that formed it and the strategies that are necessary for its maintenance; human social, political, and economic institutions and behavior, including their interrelationships; the psychological, social, and physiological dimensions of men and women as individuals and as members of our society.

Courses that fulfill general education requirements must fall into one of the content categories listed below:

Area A - Language and Rationality

Area B - Natural Sciences

Area C - Humanities

Area D - Social Science

Area E - Local District Requirements*

** Please note, Area E is not required for AA-T and AS-T degrees.*

The awarding of an associate degree symbolizes a successful attempt on the part of West Hills College Coalinga to lead students through learning experiences designed to develop certain capabilities and insights. Among these are the ability to think and to communicate clearly and effectively, both orally and in writing, to use mathematics; to understand the modes of inquiry of the major disciplines, to be aware of other cultures and times, to achieve insights gained through experience in thinking about ethical problems, and to develop the capacity for self understanding. In addition, the student shall acquire sufficient depth in a field of knowledge to contribute to lifetime interest.

The Governing Board of West Hills Community College District shall confer the degree of Associate in Arts or Associate in Science upon a student who has demonstrated competence in reading, in written expression, and in mathematics, and who has satisfactorily completed at least 60 semester units of college work. Course work requirements must be fulfilled in a curriculum accepted toward the degree by West Hills College Coalinga as shown in its catalog.

An associate degree program can be planned to meet a variety of goals. It is important to keep the following information in mind in planning a program of study:

Specific Career Program or Major

Generally, students who pursue a specific career program or major do not intend to transfer to a four-year university. However, some transfer students prefer to complete as many specific career and/or major courses as they can as part of their associate degree program. It is important to note that some of these courses might not be transferable to four-year universities. If you intend to use this option, you should see a West Hills College Coalinga counselor for assistance in planning the most appropriate educational program.

This associate degree program requires:

a. at least 18 semester units in general education courses;
b. a major area of study, with no grade lower than a C, and a grade point average of at least 2.0;
c. elective units to complete 60 units;
d. overall grade point average of at least 2.0. Of the required units, at least 12 semester units must be completed in residence at West Hills College Coalinga.

Associate in Arts Degree Requirements

I. Major Requirements

At least 18 semester units of study taken in a single discipline or related disciplines.

II. General Education Requirements

Area A. Language and Rationality (6 units)

These courses emphasize both the content and form of communication. They teach students the relationship of language to logic, as well as how to analyze, criticize, and advocate ideas, to reason deductively and inductively, and to reach sound conclusions. Courses fulfilling this requirement provide understanding of the psychological and social significance of communication, focus on communication from the rhetorical perspective, reasoning, advocacy, organization, accuracy; the discovery, critical evaluation and reporting of information; reading, listening, speaking, and writing effectively, provide active participation and practice in written and oral communication.

1. English and Composition (3 units)
   _____ English 1A
2. Analytical Thinking (3 units)
   _____ Math 1A, 1B, 2A, 2B, 10A, 10B, 15, 25, 45, 63

Area B. Natural Sciences (3 units for AA - 6 units for AS)

These courses impart knowledge about living and non-living systems, and mathematical concepts and quantitative reasoning with applications. Courses fulfilling this requirement promote understanding and appreciation of the methodologies and tools of science, emphasize the influence of scientific knowledge on the development of civilization, impart appreciation and understanding of basic concepts, not just skills and offer specific inquiry into mathematical concepts, quantitative reasoning and application;

_____ Biology 10, 15, 32, 35, 38
_____ Chemistry 1A, 1B, 2A, 2B
_____ Crop Science 1
_____ Geography 1
_____ Geology 1, 3
_____ Physical Science 1
_____ Psychiatric Technician 12
_____ Soil Science 21

Area C. Humanities (3 units)

These courses cultivate intellect, imagination, sensibility, and sensitivity. They encourage students to respond subjectively as well as objectively, and to develop a sense of the integrity of emotional and intellectual responses. Courses fulfilling this requirement study great work of the human imagination, increase awareness and appreciation of the traditional humanistic disciplines such as art, dance, drama, literature, and music, impart an understanding of the interrelationship between creative art, the humanities, and the self, provide exposure to both Western and non-Western cultures, and include foreign language courses.

_____ Art 2, 4, 5A, 13A, 15A, 16A, 16B, 42
_____ English 1B, 25
_____ Geography 3
_____ History 4A, 4B
_____ Humanities 1, 22
_____ Linguistics 11
_____ Music 42
_____ Performing Arts 1, 3, 14

____ Philosophy 1, 2, 3
____ Political Science 5
____ Spanish 1, 2, 3, 4, 11, 12, 51, 52, 53, 54

Area D. Area D. Social Science (3 units)

These courses explore, at the micro and macro level, the social, political, and economic institutions that underpin society. Courses fulfilling these requirements promote understanding and appreciation of social, political, and economic institutions, probe the relationship between these institutions and human behavior, examine these institutions in both their historical and contemporary context, include the role of, and impact on, non-white ethnic minorities and women and include both western and non-western settings.

____ Administration of Justice 1, 29
____ Business 20
____ Child Development 5
____ Economics 1A, 1B
____ Geography 2, 3, 18
____ History 4A, 4B, 17A, 17B, 32, 34, 44
____ Physical Education 29
____ Political Science 1, 2, 4, 5, 10, 20
____ Psychology 1, 2, 3, 4, 5, 29
____ Social Work 20
____ Sociology 1, 2, 3

Area E. Local District Requirements

Students completing AA-T and AS-T degrees are not required to complete the local district requirement.

These courses facilitate an understanding of human beings as integrated physiological, social and psychological organisms. Courses fulfilling this requirement provide selective consideration of human behavior, sexuality, nutrition, health, stress, implications of death and dying, and the relationship of people to the social and physical environment.

____* Health Education 35 (3 units)
____**Activity Courses (2 units, if under 21 at graduation)
P. E. Activity Courses or PA 25 Activity Course

** Any student who has completed more than one year of military service may be granted credit for Health Education 35 (3 units) upon petition.*
** Any student who has earned a Psychiatric Technician certificate who has not previously received credit in health education may be granted credit for Health Education 35 (3 units) upon petition.*
** Any student who is a licensed registered nurse or licensed cosmetologist who has not previously received credit in health education may be granted credit for Health Education 35 (3 units) upon petition.*
*** The physical education activity course requirement is waived for students 21 years of age or older.*

III. Electives

Elective courses must be completed to reach the total of 60 units required for an associate degree.

IV. Competencies

Reading and Writing

1. Completion of English 1A with a grade of C or higher, or
2. Transferring to West Hills College Coalinga from another accredited college with a C grade or higher in a course equivalent to English 1A.

Mathematics

1. Completion of Mathematics 63 with a grade of C or higher, or

2. Transferring to West Hills College Coalinga from another accredited college with a C grade or higher in a course equivalent to Mathematics 63.

V. Maintain a grade point average of 2.0 overall

VI. Maintain a 2.0 grade point within the major, with all grades of C or higher.

NOTE: While a course might satisfy more than one general education requirement, it may not be counted more than once for these purposes.

Associate in Arts for Transfer Degree Requirements (AA-T)

The Associate in Arts for Transfer degree is intended for students who plan to complete a bachelor's degree in an approved field of study in the California State University system. Students completing the AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that accepts this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. All requirements listed for the associate in arts degree above hold for the AA-T degree, except for Area E. Area E is waived for AA-T degrees.

Associate in Science Degree Requirements

Candidates for the Associate Science degree must have satisfactorily completed all of the requirements for the Associate Arts degree and an additional three units of general education in the area of natural science. The candidates must also have satisfactorily completed a major with a minimum of 18 semester hours in one of the fields of engineering, physical or biological sciences, or occupational curriculums.

Associate in Science for Transfer Degree Requirements (AS-T)

The Associate in Science for Transfer degree is intended for students who plan to complete a bachelor's degree in an approved field of study in the California State University system. Students completing the AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that accepts this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. All requirements listed for the associate in science degree above hold for the AS-T degree, except for Area E.

Additional Associate Degree

Students desiring a further associate degree after completing all requirements for either the Associate Arts or the Associate Science degree may qualify for another degree by:

1. Completing all requirements for the additional major (units used as part of the major program for the first degree shall not be counted toward a subsequent major).
2. Completing necessary application forms for the degree.
3. A minimum of 12 units for the additional degree must be completed in residence.

Certificate of Achievement Programs

Certificate of achievement programs are designed to give the student a concentration of skill courses adequate to provide immediate employment capability in a specialized field. The course content and course patterns have been developed after considerable study of industry and employer requirements and are approved at the state level. The advice and recommendations of several lay advisory councils and information obtained in occupational surveys were utilized in the development of these programs. Certificate requirements include: 1) a grade point average of at least 2.0 in the area of certification, 2) a minimum of 12 units of the total completed in residence, 3) required major courses. The courses required for a certificate of achievement are found in the college catalog under that major. Certificates of achievement are noted on the transcript of record.

Local Certificate Programs

Local certificate programs are designed to meet the needs of local employers and student educational goals where 12- 18 units provides preparation for employment. Local certificates are not noted on the transcript of record.

Transfer Information

General Information

This section includes the specific requirements for transfer to four-year colleges and universities. West Hills College Coalinga offers lower-division transfer courses to meet the requirements for most baccalaureate majors. Students should consult a counselor or academic advisor to be certain they enroll in courses to meet the freshman and sophomore level requirements of the college or university of their choice. Many of the transfer students from West Hills College Coalinga plan to enter either the California State University (CSU) system or the University of California (UC) system. Others choose to attend private universities.

Students are encouraged to consult the catalog of the college or university to which they intend to transfer. Admission requirements, as well as major and general education requirements, vary from institution to institution; and students must assume the responsibility for selecting the courses that will permit them to achieve their educational objectives.

ASSIST

ASSIST is a computerized student-transfer information system that can be accessed on the web. It displays reports of how course credits earned at one California college or university can be applied when transferred to another. ASSIST is the official repository of articulation for California's colleges and universities and therefore provides the most accurate and up-to-date information available about student transfer in California. ASSIST is available at www.assist.org.

California State University System

General Education Requirements

Completion of the CSU General Education Certification Course Pattern will meet the General Education Breadth Requirements of CSU. Students will need to have the general education pattern certified prior to transfer to the CSU. Students who have attended other colleges are urged to meet with a counselor or academic advisor for help on satisfying General Education Breadth requirements. Students are advised that these are the minimum requirements and individual CSU campuses have the authority to add to the General Education Breadth requirements. Students should consult a counselor for additional information.

West Hills College Coalinga will certify completion of this pattern by area or in its entirety for students transferring to one of the 22 campuses of the California State University system. West Hills College Coalinga will give full certification upon the completion of the thirty-nine (39) designated units.

The following West Hills College Coalinga courses meet this pattern. Courses may be used for credit in one area only.

Area A. Communication in the English Language and Critical thinking (3 courses, 9 units)
One course in each area: written communication, oral communication, critical thinking.

A1. Oral Communication
Communication 1, 3, 4

A2. Written Communication
English 1A, 1B

A3. Critical Thinking
Communication 3
Education 5
English 1B
Philosophy 2
Sociology 2

Area B. Physical Universe and its Life Forms (3 courses, 9 units)
One course in each area: Life Science, Mathematics, and Physical Science.

B1. Physical Science
Chemistry 1A, 1B, 2A, 2B
Geography 1
Geology 1, 3
Physical Science 1

B2. Life Science
Biology 10, 15, 32, 35, 38

B3. Laboratory Activity
Biology 15, 32, 35, 38
Chemistry 1A, 1B, 2A, 2B
Geography 1
Geology 1, 3
Physical Science 1

B4. Mathematics/Quantitative Reasoning
Mathematics 1A, 1B, 2A, 2B, 10A, 15, 25, 45

Area C. Arts, Literature, Philosophy and Foreign Language (9 units)

At least 1 course from Arts and 1 from Humanities.

C1. Arts
Art 5A, 13A, 16A, 16B, 42
Humanities 1
Music 42
Performing Arts 1, 3

C2. Humanities
English 1B
Foreign Language Spanish 1, 2, 3, 4, 11, 12
Geography 3
History 4A, 4B, 17A, 17B
Humanities 1, 22
Linguistics 11
Philosophy 1, 3
Political Science 5

Area D. Social, Political, Economic Institutions and Behavior, Historical Background (9 units)

Courses must be from at least 2 areas.

D0. Sociology and Criminology
Administration of Justice 29
Sociology 1, 2, 3

D1. Anthropology and Archeology
none available

D2. Economics
Economics 1A, 1B

D3. Ethnic Studies
History 32, 34

D4. Gender Studies
History 44
Sociology 3

D5. Geography
Geography 2A, 2B, 3, 18

D6. History
Geography 2A, 2B
History 4A, 4B, 17A*, 17B*, 32, 34, 44*

D7. Interdisciplinary Social or Behavioral Science
Social Work 20

D8. Political Science, Government and Legal Institutions
Administration of Justice 1
Political Science 1*, 2, 4, 5, 10, 20

D9. Psychology
Child Development 5
Physical Education 29
Psychology 1, 2, 3, 5, 29

**To meet U.S. History and constitutional requirements, History 17A ,17B, or 44 or Political Science 1 is required.*

Area E. Lifelong Learning and Development (3 units)

Child Development 4, 5
Communication 5
Health Education 35
Nutrition 1
Physical Education 29
Psychology 1, 2, 3, 4, 29
Sociology 3

Intersegmental General Education Transfer Curriculum (IGETC)

Following the Intersegmental General Education Transfer Curriculum (IGETC) will permit a student who is undecided about a specific major or college choice to ultimately transfer from the community college to a campus in either the University of California (UC) or the California State University (CSU) systems without the need, after transfer, to take additional lower-division, general education courses. Courses may be used for credit in one area only.

Please note that completion of the IGETC is not a requirement for transfer to UC or CSU, nor is it the only way to fulfill the lower division, general education requirements of the UC or CSU prior to transfer. Depending on a student's major and field of interest, the student may find it advantageous to take courses fulfilling the CSU's general education requirements or those of the UC campus or college to which the student plans to transfer.

The following is a list of West Hills College Coalinga courses that can be applied to the IGETC subject areas.

Area 1. English Communication (3 courses, 9 semester units)

1. Area 1A-English Composition
English 1A

2. Area 1B-Critical Thinking - English Composition
English 1B

3. Area 1C-Oral Communication (CSU requirement only)
Communication 1

Area 2. Mathematical Concepts and Quantitative Reasoning (1 course, 3 semester units)

Mathematics 1A, 1B, 2A, 2B, 15, 25

Area 3. Arts and Humanities(at least 3 courses, 9 semester units)

One course from each area of the Arts and Humanities areas.

3A. Arts
Art 16A, 16B, 42
Music 42

3B. Humanities
Foreign Language Spanish 3, 4
Geography 3
History 4A, 4B
Humanities 1, 22
Philosophy 1, 3
Political Science 5

Area 4. Social and Behavioral Sciences (3 courses, 9 semester units)

Courses from at least two areas.

4A. Anthropology and Archaeology

4B. Economics
Economics 1A, 1B

4C. Ethnic Studies
History 32

4D. Gender Studies
History 44

4E. Geography
Geography 2A, 2B, 3, 18

4F. History
History 4A, 4B, 17A, 17B, 32, 34, 44

4G. Interdisciplinary, Social and Behavioral Sciences
Social Work 20

4H. Political Science, Government and Legal Institutions
Political Science 1, 2, 4, 5, 10

4I. Psychology
Psychology 1, 2, 3, 5

4J. Sociology and Criminology
Sociology 1, 2, 3

Area 5. Physical and Biological Sciences (At least 2 courses required, 7-9 semester units)

One course from each of the Biological Sciences and Physical Sciences areas.

5A. Physical Sciences
Chemistry 1A, 1B, 2A, 2B
Geography 1
Geology 1, 3
Physical Sciences 1

5B. Biological Sciences
Biology 10, 15, 32, 35, 38

Area 6. Language Other Than English (UC Requirement Only)

Proficiency equivalent to two years of high school study in the same language or the following:

Foreign Language Spanish 2,12

Associate Degree and Certificate Programs Offered

AA= Associate in Arts Degree ..... C= Certificate of Achievement

AS= Associate in Science Degree ..... LC= Local Certificate

Administration of Justice – Law Enforcement ..... AA/AS
Administration of Justice – Corrections ..... AA/AS
Agricultural Maintenance Mechanic LC
Agriculture Science Technology ..... C/AS
Agriculture Science Technology – Precision Ag LC
Art ..... AA
Biology ..... AA/AS
Business Administration ..... AA/AS
Business Bookkeeping ..... C/AA/AS
Business Management ..... C/AA/AS
Retail Business Management ..... C/AA/AS
Child Development - Administration LC
Child Development Early - Care and Education ..... C/AA/AS
Child Development - Early Intervention Assistant C
Child Development - Family Day Care LC
Communication ..... AA/AS
Computer Information Systems ..... C/AA/AS
Educational Aide – Elementary LC
Educational Aide – Secondary LC
Geography ..... AA
Geology ..... AA/AS
Health Science ..... AA/AS
Heavy Equipment Operation LC
Hospital Peace Officer LC
Humanities ..... AA
Kinesiology ..... AA
Liberal Arts – Area of Emphasis ..... AA
- English and Communication
- Math and Science
- Arts and Humanities
- Social and Behavioral Sciences

Liberal Studies – Emphasis in Elementary Education ..... AA
Mathematics ..... AA
Nurse Assistant LC
Office Management and Technology ..... C/AA/AS
Office Technology - Clerk Typist ..... C/AA/AS
Office Technology - Secretary/Word Processing ..... C/AA/AS
Performing Arts ..... AA
Performing Arts – Technical Theater Production LC
Performing Arts – Television Production LC
Psychiatric Technician ..... C/AA/AS

Psychology ..... AA
Social Work LC
Social Science ..... AA
Transfer Studies (CSU) C
Transfer Studies (IGETC) C

Certificates of Achievement are noted on the student transcript and a certificate awarded.
Local Certificates are not noted on the student transcript; however, a certificate is issued to the student.

Agriculture Science Technology

The Precision Agriculture program prepares students to work with global positioning satellite (GPS) systems, geographic information system (GIS) software, automatic tractor guidance systems, variable rate chemical input applicators, surveying equipment, and related computer software. Students will learn through hands-on, real-world applications. Completing the certificate qualifies the student to enter the professional job market in the public sector as well as the agriculture industry. Units for the Precision Agriculture Certificate apply to the Associates Science Degree in Agriculture.

Associate Degree

Students must fulfill the following requirements to qualify for an associate degree.

- Complete the General Education pattern for the associate degree or
- Complete CSU Breadth or IGETC
- Complete a minimum of 25 additional units chosen exclusively from the major lists below
- Complete electives to reach a total of 60 degree applicable units
- Earn a grade of C or better in each course in the major
- Maintain a minimum cumulative G.P.A. of 2.00
- Complete the English and math proficiency requirements with a C grade or better

Students planning to transfer to a four-year university are cautioned that this degree may not meet all of the lower division requirements for transfer into a particular major. Students should consult with a counselor for specific information and develop an educational plan to ensure that this degree would be the most beneficial prior to transferring to the university of their choice. Students can also access transfer information on www.assist.org.

Agriculture Science and Technology AS Degree

Program student learning outcomes

- Students will demonstrate their ability to use agricultural technology.
- Students will understand agronomic fundamentals (soil, plant, water relationships).
- Students will demonstrate their ability to physically map using GPS and digitize field boundaries to create maps in GIS.
- Students will demonstrate job readiness skills needed to obtain employment upon graduation.

Course #	Title	Units
AG 15X	Work Experience	1
AGBUS 15	Computer Application to Agriculture	3
CRPSCI 1	Introduction to Plant Science	3
CRPSCI 6	Applications of GPS Technology in AG	4
CRPSCI 7	GPS Crop and Yield Monitoring	4
CRPSCI 19	California Water	3
Math 87	Mathematics for Life	3
SLSCI 21	Soils	4
	Electives	3
	TOTAL	**28**

Recommended electives: AG 10, 11

Certificate of Achievement

Completion of the 28 units listed above fulfills the requirements for an Agriculture Science and Technology Certificate of Achievement.

Precision Agriculture Local Certificate

Program student learning outcomes

- Students will demonstrate their ability to use agricultural technology.
- Students will understand agronomic fundamentals (soil, plant, water relationships).
- Students will demonstrate their ability to physically map using GPS and digitize field boundaries to create maps in GIS.

Course #	Title	Units
AGBUS 15	Computer Application to Agriculture	3
CRPSCI 1	Introduction to Plant Science	3
CRPSCI 6	Applications of GPS Technology in Ag	4
CRPSCI 7	GPS Crop and Yield Monitoring	4
CRPSCI 19	California Water	3
	TOTAL	**17**

CIP Code for Program: 19.9999
CIP Program Description:19.9999 Agriculture, Agriculture Operations, and Related Sciences, Other. Any instructional program in agriculture, agricultural operations, and related sciences not listed above.
Program Length: 29 months
# of units/credits required for this program: 28
Related Occupations: 25-1041 Agricultural Sciences Teachers, Postsecondary. 45-1011 First-Line Supervisors/Managers of Farming, Fishing, & Forestry Workers
Cost:
Total Tuition and Required Fees for the entire program completed in normal time: $1,008
Total estimated costs for books and supplies for the entire program: $865.15
Total room and board charges for living on campus: $3988.50 per semester and $125.00 deposit
Debt at Program Completion:
Number of students completing the program between July 1, 2009 and June 30, 2010: 2
Of these students, the number of student completing the program with any student loan debt: 0
The median cumulative debt for all students (both borrowers and non-borrowers) completing the program: 0
Federal student loan debt: NA
Private loan debt: NA
Institutional financing plan debt: NA

Agriculture Maintenance Mechanic Local Certificate

The Agricultural Maintenance Mechanic Program prepares students for work as maintenance mechanics in a variety of industries. A broad range of technologies and skills are introduced in this series of courses leading to a local certificate:

Program student learning outcomes

- Students will demonstrate job readiness skills needed to obtain employment upon graduation.
- Students will demonstrate an understanding of mechanical fundamentals needed for employment.
- Courses within this degree are offered infrequently. Please see a counselor for additional information.

Course #	Title	Units
AGMM 51	Introduction to Agricultural Manufacturing	.5
AGMM 52A	Trade Mathematics	1
AGMM 52B	Computer Fundamentals	.5
AGMM 52C	Job Preparation	.5
AGMM 52D	Technical Report Writing	.5
AGMM 53A	Fluid Power Fundamentals	.5
AGMM 53B	Pneumatic Fundamentals	.5
AGMM 53C	Hydraulic Fundamentals	.5
AGMM 54A	Power Transmission	.5
AGMM 54B	Welding Fundamentals	.5
AGMM 54C	Electrical Fundamentals	.5
	Total	**6**

19.

Reimbursement Process

WEST HILLS COMMUNITY COLLEGE DISTRICT

Board Policy 6317
Conference/Travel and Expense Reimbursement

It is the District policy that expenses for transportation, lodging, subsistence and related items incurred by employees who travel on official business of the colleges or District will be reimbursed, as estimated on an approved travel request form. Additionally, expenses incurred by authorized employees in excess of the employee's personal cell phone plan will be reimbursed.

Prior to traveling, a travel request form must be processed and include estimated expenditures for the planned college or District travel. This form is to be approved by the supervising Dean, President and/or the Chancellor and should be submitted to the District Business Office a minimum of two (2) weeks prior to the conference or business travel date.

Upon return, a conference and travel expense claim form shall be submitted for reimbursement of the actual trip lodging, meals, transportation and other incidental expenses within thirty (30) days of the activity, and must include original itemized receipts.

Employees are encouraged to use the most cost effective means for air fare expenses.

See Administrative Procedure 6317

Board approval date: 11/17/98
Board approval date: 6/28/05
Revised: 3/6/07

WEST HILLS COMMUNITY COLLEGE DISTRICT

Administrative Procedure 6317
Conference/Travel and Expense Reimbursement

The following are procedures for obtaining authorization and receiving reimbursement for travel expenses by employees for institutional travel activities and other expenses.

Pre-payment of Conference Fees, and Travel Expenses

Pre-payment of conference fees and air fare can be made if the authorized travel request form is received in the Business Office a minimum of two (2) weeks prior to the conference and is accompanied by supporting documentation (i.e. conference brochure, registration form, etc.). Hotel expenses will not be prepaid.

Commercial Air Travel

When travel is required by commercial air carrier, claims for reimbursement or advance should not be in excess of the lowest available commercial discount airfare, state government contract airfare, or customary standard (coach or equivalent) airfare. The only exceptions permitted would be if such accommodations would require circuitous routing; require travel during unreasonable hours; excessively prolong travel; greatly increase the duration of the flight; result in increased costs that would offset transportation savings; or offer accommodations not reasonably adequate for the medical needs of the traveler. All employees are encouraged to use the most cost effective means for air fare expenses which may include the use of the District's American Express Business Travel Account (BTA) to obtain state government contract airfare rates.

Travel by Automobile

When travel by automobile is required, authorization may be given by the Dean, College President or Chancellor for use of district or personal automobile. When travel is by personal automobile, the employee must certify on the travel request form that the automobile is adequately insured. Mileage will be paid at the IRS rate effective January 1st of each year when travel is outside the city limits of the employee's home base and/or primary place of employment. On occasion the IRS may change the rate during the calendar year to reflect special adjustments due to increases or declines in gas prices, vehicles and/or insurance. If the IRS changes the rate, that new rate will be effective for the specified period of time during the year.

When travel for one person by private automobile is authorized between points having air service, the amount claimed shall not be in excess of the lowest available discount coach airfare plus necessary parking and/or airport shuttle/bus service.

Transportation from Airports

Transportation from airports should be by airport shuttle, bus, van or public transit. A taxi may be used only if of equal or lesser cost. Original receipts are required.

Taxi service from bus terminals within the city to the hotel or meeting place is appropriate and reimbursable. Original receipts are required.

Lodging

The actual cost of a single room at the conference/meeting host hotel will be reimbursed. Other lodging will be paid at an actual and reasonable rate. However, an educational rate or state agency rate should be requested. When requesting reimbursement, expenses must be verified and submitted by the original hotel billing. Credit or charge card receipts are not acceptable for reimbursement.

Meals

The District shall reimburse employees for meals when:

1. the required travel is outside of the District;
2. additional meals are required before or after those meals included in the conference/meeting registration fees;
3. entertaining dignitaries and/or guests of the college/District where the benefit of providing a meal will enhance or fulfill the mission, objectives and goals of the District. The appropriate Dean, College President or Chancellor must approve, in advance, any meal the District will be obligated to pay;
4. the employee is requested or required to attend a community or service club meeting (i.e. Rotary, Chamber of Commerce, etc.).

Claims for reimbursement shall include the following:

1. Original invoice
2. List of people in attendance. If several persons are involved, position titles or other definable terms, such as "governing board members" or "management staff" may be used.
3. Agenda. If an agenda is not included, the purpose of the meeting shall be stated on the claim.

Employees should consult the employee section of the West Hills Community College District web site for the established maximum reimbursement rates as per the federal IRS maximum per diem rates in effect as of January 1st of the current fiscal year.

Foreign Meal Per Diem Rates

The foreign meal per diem rates are the established rates as per the federal IRS maximum foreign meal rates in effect as of January 1st of the current fiscal year. The federal IRS maximum foreign meal rates will be used for per diem advances and when there are no receipts available. When valid receipts are submitted, the actual amount paid for meals will be reimbursed.

Conference Registration Fees

The actual cost of registration will be reimbursed for authorized conference attendance.

Telephone Calls

Only District related telephone calls can be reimbursed. Personal calls will not be reimbursed, with the exception of an initial "safe arrival" call.

Cell Phone Expenses

Cell phone charges for District business calls conducted in excess of an employee's personal cell phone plan may be claimed for reimbursement, granted the employee is authorized by his or her supervisor to submit expense claims for conducting District business on his or her personal cell phone.

Timely Submission of Expense Claims

Expense claims, including those for mileage, are to be submitted for reimbursement within thirty (30) days of accruing the expense. Claims not submitted in a timely manner will be denied.

Board approval date: 6/28/05
Revised: 9/27/05
Revised: 3/6/07

WEST HILLS COMMUNITY COLLEGE DISTRICT

TRAVEL REQUEST

Traveler's Information

Name: Position Title:

Department or Area: Location:

Conference Information

Name of Conference:

Sponsoring Organization:

Location (City & State): Date(s):

Purpose of Trip:

Budget Information

Estimated Total Expenses:

· Transportation $ · Food $ ☐ Per Diem ☐ Actual

· Lodging $ · Registration Fees $ ☐ Send Check

· Mileage $ · Other $ Explain:

Special instructions:

Total Estimated Amount of Expenses: $

Account Number to be Charged: - - - -

Transportation

From (City & State)	To (City & State)	Mode of Travel	Departure Date & Time	Arrival Date & Time
			@	@
			@	@
			@	@
			@	@

Rental Car Authorized: ☐ Yes ☐ No

Use of Personal Car * : ☐ Yes ☐ No Estimated Mileage:

* Insurance certification: Mileage estimated will be driven in my personal car for which there is insurance in effect which includes public liability and property damage coverage.

_____ (Initials) I certify that I have a valid USA driver's license and that insurance coverage, as required by the State of California, is in force for the dates of travel indicated above. I understand that if I am driving my personal automobile while on District business and I am involved in an accident, by law my insurance policy is primary.

After completion of information above: Print page, sign and route for signatures as needed.

Approvals

Signature of Requester: _____ Date: _____

Signature of Supervisor: _____ Date: _____

Signature of Budget Head: _____ Date: _____

For out of state travel the following additional signatures are required:

Signature of Campus President: _____ Date: _____

Signature of Chancellor: _____ Date: _____

BUSINESS OFFICE USE ONLY

Funds Available: __ Yes __ No Amount Encumbered: $_____

Ticket No. _____ Received by: _____ Date: _____

WEST HILLS COMMUNITY COLLEGE DISTRICT

CONFERENCE AND TRAVEL EXPENSE CLAIM

Name: Position Title:

Department: Location:

Home Address: City/State/Zip:

Account Number to be Charged: - - - -

MILEAGE

Date	Destination and Purpose	Number of Miles
	Total miles	

_____ (Initials) I certify that I have a valid USA driver's license and that insurance coverage, as required by the State of California, is in force for the dates of travel indicated above. I understand that if I am driving my personal automobile while on District business and I am involved in an accident, by law my insurance policy is primary.

EXPENSES

Date	Destination/Purpose	Food	Lodging	Transportation Via	Transportation Cost	Registration	Misc.	Totals

Total Expenses $

Total miles: @ .56 = $

TOTAL CLAIM: $

After completion of information above:
Print page, attach receipts, sign and route for signatures as needed.

Approvals

Signature of Claimant: _____ Date: _____

Signature of Supervisor: _____ Date: _____

Signature of Fiscal Services: _____ Date: _____

WEST HILLS COMMUNITY COLLEGE DISTRICT

EXPENSE CLAIM

Name: Position Title:

Department: Location:

Home Address: City/State/Zip:

Account Number to be Charged: - - - -

Date	Description of Items Purchased and Purpose	Amount
	TOTAL CLAIM	**$**

After completion of information above:
Print page, attach receipts, sign and route for signatures as needed.

Approvals

Signature of Claimant: _____ Date: _____

Signature of Supervisor: _____ Date: _____

Signature of Fiscal Services: _____ Date: _____

FY 2014 Per Diem Rates for California

(October 2013 - September 2014)

SEARCH BY CITY, STATE OR ZIP CODE

Enter your city

OR

Enter your ZIP Code

FIND PER DIEM RATES

California

Per Diem Map >

ADDITIONAL PER DIEM TOPICS

- Meals & Incidental Expenses Breakdown (M&IE)
- FAQs
- State Tax Exemption Forms
- Factors Influencing Lodging Rates
- FY 2014 Per Diem Highlights
- Fire Safe Hotels
- Have a Per diem Question?
- Downloadable Per Diem Files

Cities not appearing below may be located within a county for which rates are listed.
To determine what county a city is located in, visit the National Association of Counties (NACO) website (a non-federal website).

You searched for: **California**

Primary Destination* (1)	County (2, 3)	Max lodging by Month (excluding taxes) 2013 Oct	Nov	Dec	2014 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Meals & Inc. Exp.**
Standard Rate	Applies for all locations without specified rates	83	83	83	83	83	83	83	83	83	83	83	83	46
Antioch / Brentwood / Concord	Contra Costa	117	117	117	117	117	117	117	117	117	117	117	117	66
Bakersfield / Ridgecrest	Kern County	94	94	94	94	94	94	94	94	94	94	94	94	51
Barstow / Ontario / Victorville	San Bernardino	99	99	99	99	99	99	99	99	99	99	99	99	56
Death Valley	Inyo	94	94	94	94	94	94	94	94	94	94	94	94	46
Eureka / Arcata / McKinleyville	Humboldt	87	87	87	87	87	87	87	87	102	102	102	87	61
Fresno	Fresno	85	85	85	85	85	85	85	85	85	85	85	85	61
Los Angeles	Los Angeles, Orange, Ventura, and Edwards AFB, less the city of Santa Monica	133	133	133	133	133	133	133	133	133	133	133	133	71
Mammoth Lakes	Mono	129	129	129	129	129	129	129	129	129	129	129	129	61
Mill Valley / San Rafael / Novato	Marin	122	122	122	122	122	122	122	122	122	122	122	122	56
Modesto	Stanislaus	84	84	84	84	84	84	84	84	84	84	84	84	51
Monterey	Monterey	123	123	123	123	123	123	123	123	123	156	156	123	71
Napa	Napa	163	163	127	127	127	127	163	163	163	163	163	163	66
Oakhurst	Madera	83	83	83	83	83	83	83	102	102	102	102	102	56
Oakland	Alameda	112	112	112	112	112	112	112	112	112	112	112	112	61
Palm Springs	Riverside	105	105	105	125	125	125	125	125	86	86	86	105	71
Point Arena / Gualala	Mendocino	93	93	93	93	93	93	93	93	93	93	93	93	66
Redding	Shasta	89	89	89	89	89	89	89	89	89	89	89	89	61
Sacramento	Sacramento	102	102	102	102	102	102	102	102	102	102	102	102	61
San Diego	San Diego	139	139	139	139	139	139	139	139	139	139	139	139	71
San Francisco	San Francisco	226	172	172	189	189	189	189	189	189	189	189	226	71

San Luis Obispo	San Luis Obispo	105	105	105	105	105	105	105	105	105	126	126	105	66
San Mateo / Foster City / Belmont	San Mateo	140	129	129	129	140	140	140	140	140	140	140	140	61
Santa Barbara	Santa Barbara	148	148	148	148	148	148	148	148	148	193	193	148	66
Santa Cruz	Santa Cruz	122	122	122	122	122	122	122	122	159	159	159	122	66
Santa Monica	City limits of Santa Monica	183	183	183	183	183	183	183	183	216	216	216	183	71
Santa Rosa	Sonoma	114	114	114	114	114	114	114	114	114	114	114	114	61
South Lake Tahoe	El Dorado	109	109	109	109	109	109	109	109	109	109	109	109	71
Stockton	San Joaquin	89	89	89	89	89	89	89	89	89	89	89	89	56
Sunnyvale / Palo Alto / San Jose	Santa Clara	144	144	144	144	144	144	144	144	144	144	144	144	56
Tahoe City	Placer	84	84	84	84	84	84	84	84	84	84	84	84	61
Truckee	Nevada	107	107	107	107	107	107	107	107	107	107	107	107	71
Visalia / Lemoore	Tulare and Kings	84	84	84	84	84	84	84	84	84	84	84	84	61
West Sacramento / Davis	Yolo	106	106	106	106	106	106	106	106	106	106	106	106	51
Yosemite National Park	Mariposa	133	133	133	133	133	133	133	133	178	178	178	133	71

* NOTE: Traveler reimbursement is based on the location of the work activities and not the accommodations, unless lodging is not available at the work activity, then the agency may authorize the rate where lodging is obtained.
** Meals and Incidental Expenses, see Breakdown of M&IE Expenses for important information on first and last days of travel.

CONTACTS

Additional Contacts for

Travel Management Policy

NEED MORE INFORMATION?

Rates for Alaska, Hawaii, U.S. Territories and Possessions (set by DoD)
Rates in Foreign Countries (Set by State Dept.)
Federal Travel Regulations (FTR)

RELATED TOPICS

Travel Resources
E-Gov Travel
FedRooms
POV Mileage Reimbursement Rates

Last Reviewed 2014-05-21

Meals and Incidental Expenses (M&IE) Breakdown

The separate amounts for breakfast, lunch and dinner listed in the chart are provided should you need to deduct any of those meals from your trip voucher. For example, if your trip includes meals that are already paid for by the government (such as through a registration fee for a conference), you will need to deduct those meals from your voucher. Refer to Section 301-11.18 of the Federal Travel Regulation for specific guidance on deducting these amounts from your per diem reimbursement claims for meals furnished to you by the government. Other organizations may have different rules that apply for their employees; please check with your organization for more assistance.

The table lists the six M&IE tiers in the lower 48 continental United States (currently ranging from $46 to $71). If you need to deduct a meal amount, first determine the location where you will be working while on official travel. You can look up the location-specific information at www.gsa.gov/perdiem. The M&IE rate for your location will be one of the six tiers listed on this table. Find the corresponding amount on the first line of the table (M&IE Total) and then look below for each specific meal deduction amount.

The table also lists the portion of the M&IE rate that is provided for incidental expenses (currently $5 for all tiers).

Total	Continental Breakfast/ Breakfast	Lunch	Dinner	IE
$46	$7	$11	$23	$5
$51	$8	$12	$26	$5
$56	$9	$13	$29	$5
$61	$10	$15	$31	$5
$66	$11	$16	$34	$5
$71	$12	$18	$36	$5

This table lists the amount federal employees receive for the first and last calendar day or travel. The first and last calendar day of travel is calculated at 75 percent.

Total	Rate this Page
$46	**$34.50**
$51	**$38.25**
$56	**$42.00**
$61	**$45.75**
$66	**$49.50**
$71	**$53.25**

Looking for the foreign and outside the continental United States (OCONUS) breakdown chart? Visit FTR Appendix B. (**Note:** Appendix B breakdowns do not apply to any locations in the continental United States; use the chart listed above.)

The shortcut to this page is www.gsa.gov/mie.

Last Reviewed 2014-04-18

QUESTIONS:

For all travel policy questions, email travelpolicy@gsa.gov.

RELATED GSA TOPICS
- State Tax Exemption Forms
- FedRooms®
- Travel E-mail Notification
- POV Mileage Reimbursement Rates

GOVERNMENT LINKS
- Fire Safety Information

mapquest

Notes

Trip to:

[9900 - 9998] Cody St

Coalinga, CA 93210

206.59 miles / 3 hours 42 minutes

[9900 - 9998] Cody St, Coalinga, CA 93210

Download Free App

1. Start out going **north** on **Cody St** toward **W Gale Ave**. Map	**0.09 Mi** *0.09 Mi Total*
2. Turn **right** onto **W Gale Ave**. Map	**0.1 Mi** *0.2 Mi Total*
3. Take the 1st **right** onto **E Elm Ave / CA-33 / CA-198**. Map *E Elm Ave is just past Oil City Rd* *If you reach S Stanislaus Ave you've gone about 0.9 miles too far*	**2.9 Mi** *3.1 Mi Total*
4. Turn **left** onto **N 5th St**. Map *N 5th St is just past N 4th St* *New China Restaurant is on the left* *If you are on W Elm Ave and reach N 6th St you've gone a little too far*	**0.4 Mi** *3.5 Mi Total*
5. Turn **left** onto **CA-33 / E Polk St**. Continue to follow **CA-33**. Map	**26.5 Mi** *30.0 Mi Total*
6. Turn **right** onto **CA-41**. Map	**19.6 Mi** *49.5 Mi Total*
7. Turn **slight right** onto **E Highway 41 / CA-46 / CA-41**. Continue to follow **CA-46**. Map	**25.3 Mi** *74.9 Mi Total*
8. Merge onto **US-101 S** via the ramp on the **left**. Map *If you reach Black Oak Dr you've gone a little too far*	**27.7 Mi** *102.5 Mi Total*
9. Take **EXIT 204** toward **Monterey Street**. Map	**0.1 Mi** *102.7 Mi Total*
10. Turn **right** onto **Buena Vista Ave**. Map	**0.02 Mi** *102.7 Mi Total*
11. Turn **left** onto **Loomis St**. Map	**0.2 Mi** *102.9 Mi Total*
12. Take the 3rd **right** onto **Grand Ave**. Map *Grand Ave is just past Graves Ave* *If you reach US-101 S you've gone about 0.1 miles too far*	**0.2 Mi** *103.2 Mi Total*
13. **1 GRAND AVE**. Map *Your destination is just past Hays St* *If you reach Slack St you've gone a little too far*	

A to **B** Travel Estimate: **103.16 mi - about 1 hour 50 minutes**

B

California Polytechnic State University
1 Grand Ave, San Luis Obispo, CA 93407
(805) 756-1181

1. Start out going **north** on **Grand Ave** toward **Slack St**. Map	**0.01 Mi** *103.2 Mi Total*
2. Make a **U-turn** at **Slack St** onto **Grand Ave**. Map *If you reach Deer Rd you've gone about 0.3 miles too far*	**0.5 Mi** *103.7 Mi Total*
3. Turn **left** onto **Monterey St**. Map *Monterey St is just past Palm St* *Holiday Inn Express SAN LUIS OBISPO is on the left* *If you reach the end of Andrews St you've gone a little too far*	**0.2 Mi** *103.9 Mi Total*
4. Merge onto **US-101 N**. Map	**27.6 Mi** *131.6 Mi Total*
5. Take the **CA-46** exit, **EXIT 231**, toward **Fresno / Bakersfield**. Map	**0.2 Mi** *131.8 Mi Total*
6. Turn **right** onto **E Highway 46 / CA-46**. Continue to follow **CA-46**. Map *If you reach US-101 N you've gone about 0.2 miles too far*	**25.2 Mi** *157.0 Mi Total*
7. Turn **left** onto **E Highway 41 / CA-41**. Continue to follow **CA-41**. Map *CA-41 is 0.1 miles past Cholame Valley Rd* *If you are on CA-46 and reach E Highway 46 you've gone a little too far*	**19.6 Mi** *176.6 Mi Total*
8. Turn **left** onto **CA-33**. Map *If you are on CA-41 and reach Utica Ave you've gone about 3.5 miles too far*	**21.9 Mi** *198.5 Mi Total*
9. Turn **left** onto **Jayne Ave / CA-33**. Continue to follow **CA-33**. Map	**4.7 Mi** *203.1 Mi Total*
10. Turn **right** onto **S 5th St**. Map *S 5th St is just past Hayes St* *If you are on E Polk St and reach W Ivy Ave you've gone a little too far*	**0.4 Mi** *203.5 Mi Total*
11. Turn **right** onto **E Elm Ave / CA-33 / CA-198**. Map *E Elm Ave is just past E Forest Ave* *New China Restaurant is on the right* *If you reach W Durian Ave you've gone a little too far*	**2.9 Mi** *206.4 Mi Total*
12. Turn **left** onto **W Gale Ave**. Map *If you are on Fresno Coalinga Rd and reach S Buffalo Ave you've gone about 1.1 miles too far*	**0.1 Mi** *206.5 Mi Total*
13. Take the 1st **left** onto **Cody St**. Map *Cody St is just past Oil City Rd* *If you reach S Monterey Ave you've gone about 0.9 miles too far*	**0.09 Mi** *206.6 Mi Total*
14. **[9900 - 9998] CODY ST**. Map *If you reach the end of Cody St you've gone a little too far*	

B to **C** Travel Estimate: **103.44 mi - about 1 hour 52 minutes**

[9900 - 9998] Cody St, Coalinga, CA 93210

Total Travel Estimate: **206.59 miles - about 3 hours 42 minutes**

20.

Program Review

WEST HILLS COMMUNITY COLLEGE DISTRICT

Board Policy 4270
Review of Occupational Programs

Reference: *Education Code Section 78016*

Section 1 – Policy Statement

In accordance with Section 78016 of the California Education Code, every two years the Governing Board of the West Hills Community College District shall review each occupational program offered by the district to ensure that each program, as demonstrated by the California Occupational Information System, including the State-Local Cooperative Labor Market Information Program established in Section 10522 of the Unemployment Insurance Code, or other sources of labor market information, meets the following criteria:

1. Meets a documented labor market demand;
2. Does not represent unnecessary duplication of other manpower training programs in the area; and
3. Is of demonstrated effectiveness as measured by the employment and completion success of its students.

Any program that does not meet these requirements and any other standards established by the Governing Board shall be terminated within one year in accordance with Section 78106 of the California Education Code.

Section 2 – Review Process

The review process required by this section shall include the review and comments by the local Workforce Investment Board established pursuant to Division I (commencing with Section 150000) of the Unemployment Insurance Code. This review and comments shall occur prior to any decision by the Governing Board.

A written summary of the findings of each review shall be made available to the public.

Board approval date: 5/21/02

WEST HILLS COMMUNITY COLLEGE DISTRICT

Administrative Procedure 4270
Review of Occupational Programs

Reference: *Education Code Section 78016*

Section 1 – Procedure if Program Meets Established Criteria

Each January, the appropriate Dean of Educational Services shall begin the occupational review process required by Section 78016 of the California Education Code for fifty percent (50%) of the total occupational programs offered by the district, alternating with the other fifty percent (50%) each year. Each occupational training program will complete an occupational program review each year.

As part of the program review process, information will be gathered from the VTEA Core Indicator Reports and County Labor Market Information on the Chancellor's Office web site, as well as Central Valley Workforce information on the Fresno and Kings County Workforce Investment Board web sites, to ensure that the program meets the following criteria:

1. Meets a documented labor market demand;
2. Does not represent unnecessary duplication of other manpower training programs in the area; and
3. Is of demonstrated effectiveness as measured by the employment and completion success of its students.

The appropriate Dean of Educational Services shall submit a written summary of the findings with the program review documents to MARC (Master Plan, Accreditation and Research Committee) for approval. This summary will include review and comments by the appropriate Workforce Investment Board. If MARC determines that the program meets the required criteria, the written review will be presented to the Governing Board for approval and made available to the public.

Section 2 - Procedure if Program Does Not Meet Established Criteria

If MARC determines that the program does not meet the criteria, the following procedures for the at-risk program shall be implemented:

1. Discipline faculty, vocational administrators, advisory committees and the local Academic Senate will analyze the following: enrollment statistics over a minimum of a five (5) year period; labor market information; VTEA core indicator reports for as many years as available; curriculum; pedagogical issues; student support services; physical resources; industry support; faculty adequacy; budget support.

   A written report will be generated delineating the analysis performed.

2. If low enrollment is a major factor, the discipline faculty, vocational administrators, advisory committees and the local Academic Senate will develop a plan that

emphasizes recruitment, partnerships with industry, counseling services, changes in course scheduling, and articulation of programs to boost enrollment.

If funding is a problem, needs will be identified, prioritized and presented to the district's budget committee.

If labor market information indicates that the program is no longer in demand, consideration will be given to curriculum modifications to add certificate/degree options that make the program viable.

If effectiveness of the program is an issue, a plan will be developed to improve student performance measures.

A written plan will be generated identifying specific steps to strengthen the at-risk program and the level of performance expected in each identified weak area.

3. The program will have until January 1st, one year later, to show steps taken toward improvement and levels of improvement attained in the specific areas. This analysis will be documented in a written report and returned by the appropriate Dean of Educational Services to MARC for review.

4. If the program then meets the criteria specified in Section 78016 of the California Education Code, a favorable written summary of the findings of the review will be presented to the Governing Board for approval and made available to the public. This summary will include the review and comments by the appropriate local Workforce Investment Board.

If the program still does not meet the criteria specified in Section 78016 of the California Education Code, a favorable written summary of the findings of the review will be presented to the Governing Board with a recommendation for termination of the program within one year. This summary should include provisions for the affected students and faculty members.

When a decision to phase out a program is made, it should be done so that students currently taking courses toward a certificate or degree can finish their program either at the district or at a neighboring institution. If this proves impossible, the district should assist students in revising their education plan and assure application of any credits earned in the discontinued discipline to a related discipline if possible.

The district should provide transfer and/or retraining opportunities for the affected faculty whenever possible.

Board approval date: 5/21/02

OCCUPATIONAL PROGRAM TWO-YEAR REVIEW

Date: _____ College: _____

Program: _____

1. Purpose of this Program

Significantly Changed Purpose in the Last Two Years ☐----☐----☐----☐----☐ No Changes in Purpose in the Last Two Years

Minor Changes in Purpose in the Last Two Years

(Description, mission, target population, etc.)

2. Demand for this Program

High Demand ☐----☐----☐----☐----☐ Low Demand

Adequate Demand for our Students

(Labor market data, advisory input, etc.)

3. Quality of this Program

Highest Quality ☐----☐----☐----☐----☐ Needs Significant Improvement

Meets Student Needs

(Core indicators, student outcomes, partnerships, certificates, degrees, articulation, faculty qualifications, diversity, grants, equipment, etc.)

4. External Issues

Benefits From and Contributes to External Issues ☐----☐----☐----☐----☐ Not Consistent with External Issues

Complies with External Issues

(Legislation, CCCCO Mandates, VTEA, Tech Prep, CalWORKs, WIA, BIG Career Ladders, etc.)

5. Cost of this Program

Income Exceeds Expenditures ☐----☐----☐----☐----☐ Expenditures Exceed Income

Income Covers Expenditures

(Enrollment/FTEs generated & in-kind contributions of time/resources minus salaries/equipment/supplies, etc.)

6. Two-Year Plan

Significant Growth Anticipated ☐----☐----☐----☐----☐ Need Significant Changes and/or Increased Resources to Continue

On Track for Next Two Years

(Recommendations, project future trends, personnel and equipment needs, etc.)

Signatures:

_____ _____

Administrator Date

_____ _____

Faculty Date

_____ _____

Faculty Date

To Board of Trustees on _____

Date

WEST HILLS COLLEGE COALINGA

PROGRAM REVIEW & PLANNING
AGRICULTURE

(Please submit this information using Microsoft Word. In formatting your response, please use the exact outline developed below.)

I. General Information

Program: Agriculture

Date Prepared: April 2011

Prepared By: C. Cowden

Department Faculty and Staff: C. Cowden, B. Hunt, M. Welch, C. Chaney, D. Gordon, R. Larson, L. Shults

Courses Included in this Program Plan:

- AG 10 Introduction to Agriculture
- AG 11 Agriculture Sales and Communication
- AGBUS 15 Computer Application to Agriculture
- AGMM 51 Introduction to Agricultural Manufacturing
- AGMM 52A Trade Mathematics
- AGMM 52B Computer Fundamentals
- AGMM 52C Job Preparation
- AGMM 52D Technical Report Writing
- AGMM 53A Fluid Power Fundamentals
- AGMM 53B Pneumatic Fundamentals
- AGMM 53C Hydraulic Fundamentals
- AGMM 54A Power Transmissions
- AGMM 54B Welding Fundamentals
- AGMM 54C Electrical Fundamentals
- ASCI 5 Rodeo Skills and Management
- ASCI 6 Rodeo Production and Promotion
- ASCI 7 Intercollegiate Rodeo
- ASCI 8 Advanced Intercollegiate Rodeo
- CRPSCI 1 Introduction to Plant Science
- CRPSCI 6 Application of GPS Technology in Ag
- CRPSCI 7 GPS Crop and Yield Monitoring
- CRPSCI 19 Water Management
- HVYEQUI 50 Heavy Equipment Operation
- SLSCI 21 Soils
- WT 40 Introduction to Welding
- WT 41 Intermediate Welding

II. Qualitative Analysis

A. *Please provide a general description of the program(s) or service(s) that are offered by your unit or department. When applicable, discuss any pertinent historical developments which impact the structure of your area or future planning.*

West Hill College Coalinga reflects the aspirations of its students and the region it serves. A major commitment of the College is the Farm of the Future, which is both a conceptual framework for programs that relate to Agriculture Science and Technology and an actual working farm - the Allen Farm. Rodeo is a well established program with many outstanding riders educated and trained at Coalinga.

The Farm of the Future offers the following programs and services:

- Associate of Science
  - Agriculture Science & Technology
- Certificate
  - Agriculture Science & Technology
  - Heavy Equipment Operation
- Local Certificate
  - Precision Agriculture
  - Agriculture Maintenance Mechanic
- Other
  - Intercollegiate Rodeo Program

A wide range of programs affiliated with the Farm of the Future emphasize precision agriculture that makes use of global positioning satellite (GPS) systems, geographic information system (GIS) software, automatic tractor guidance systems, variable rate chemical input applicators, surveying equipment and related computer software. Students also can specialize in heavy equipment operation - using equipment that is common to agriculture, land leveling and construction including crawlers, tractors, scrapers, backhoes, excavators, loaders and motor graders, all managed with the latest in laser controlled equipment.[1] These programs provide learning opportunities for students in preparation for transfer or employment.

[1] Farm of the Future Strategic Planning Session – Harris Ranch – October 15, 2010

B. *Please list assumptions or trends unique to your area that are likely to influence your discipline or profession; you may want to describe how the nature and needs of students in your service area are changing, etc.*
(Example: Regional issues, new employers, water, resources, or changing demographics)

As the cost of labor and agricultural inputs increases, California Agriculture is becoming increasingly more mechanized. Coupled with the increase of mechanization, comes the increase for skilled workers; either for operation or installation of the new equipment. The continual and rapid advancement of technology, the current agricultural market and government regulations have created both advantages and disadvantages to agriculture and the agriculture department. Some of the advantages and disadvantages outlined at our Strategic Planning Meeting are: rapid change in technology increases the need for short-term training, environmental issues, such as cutback in water allocations, created high unemployment and fewer than 15% of student in agriculture at WHCC are Hispanic yet the Hispanic student population overall is 60%.

Another important challenge facing California Agriculture, especially in the Central Valley, is the shortage of water for irrigation. Growers have faced cutbacks as much as 90% of their normal allocation for the past 3 growing seasons. As water is decreased farmers will need to become more efficient with the water that is allocated, as well as document acreage and input allotment. Along with fallowed acreage, high unemployment has plagued this district.

Production Agriculture continues to be the major agriculture enterprise in our region and the State of California. Fresno and Kings Counties lead the nation in many production areas including nut crops, grapes, melons, and cotton. With the increases in agriculture positions, the calls from potential employers far exceeds the number of program graduates, the largest challenge for the program is effectively communicating the opportunities in this field; including the benefits to Hispanic, bilingual students.

C. *Provide program or service goal statements form the core of your unit plan. In prioritized order, describe the near term (3-Year) and long range (10-Year) direction/vision for your program(s). Describe what you want to do differently or more effectively in the future.*
(Example: to introduce psychology to non-majors and to help serve other programs on campus and their students.)

The Farm of the Future vision, as outlined at the 2010 Strategic Planning Session is, "*The Farm of the Future will be an international model of Agriculture Science and Technology, emphasizing education in sustainable practices and resource management. It will specialize in integrated food, fiber and environmental systems-using the resources of the Valley and the world*".

The mission is, "*WHCC Farm of the Future and related programs provide exemplary education and training for students and the community utilizing regional strengths, emerging technologies and applied learning, empowering those we serve to be competitive in the global economy.*"

The direction and vision for the Agriculture program is to maintain currency with industry and student trends, in order to prepare students for employment in today's job market. This will include the following near term and long range visions, as prioritized at the October 2010 Strategic Planning Session.

Near Term (3-year) Vision

1. Increase enrollment in Farm of the Future programs of study.
2. Continually assess workforce development needs of business and industry.
3. Recruit diverse; non-Valley; underrepresented groups (Hmong, Hispanic, etc.)
4. Market Farm of the Future to appeal to all prospective students.
5. Increase the number of degrees and certificates awarded.
6. Reach out to and increase support for incoming freshmen.
7. Re-design degree and certificate programs
   - Agriculture Associate of Science (transferrable courses) with concentrations in International Agribusiness, Agriculture Engineering Technology, Mechanized Agriculture, Irrigation and Agricultural Science.
   - Agricultural Technician Associate degree (non-transferrable courses) with concentrations in International Agribusiness, Mechanized Agriculture, Rodeo Science and Irrigation
   - Welding Technology Associate degree
   - Plant Health/Pesticide Applicators Associate of Science degree
8. Create internships.

Long Range (10-year) Vision

1. Increase enrollment in Farm of the Future programs of study.
2. Continually assess workforce development needs of business and industry.
3. Develop leadership-talented and experienced faculty building a premier educational institution.

4. Provide education for employment in agribusiness, career advancement and a springboard for academic advancement.
5. Increase partnerships-local business and industry; K -12; partnerships internal to WHCCD
6. Articulate the curriculum to facilitate completion and/or transfer.
7. Ensure the resources for success.

D. Curriculum: *Please describe the curriculum changes anticipated in the next three years. These described changes would include major course revisions, course deletions, new courses, revised or new options within a program, or proposed new programs. Please cite reasons, such as technological changes, demographic changes and multicultural issues, changes in the subject field, enrollment trends, or why such changes are expected.*

Redesigning curriculum has been, and will continue to be, a major endeavor of the Farm of the Future program. The drastic economic conditions throughout the State and the Nation have changed the face of the community college. Unemployment within our district is higher-than-ever and educational cutbacks have limited education and training programs throughout the state. This means that we must do more with less.

Many students are entering college without the basic foundation to complete intensive, college transferrable courses, but it is important to maintain our current academic standards which allow for seamless transition to university programs. Even students, who are prepared academically, are lacking hands-on skills needed to excel in the workplace. Gone is yesterday's agriculture students who grew up immersed in agriculture. Even children of farmers, due to increased requirements for academic and extra-curricular activities, are not involved in day-to-day farming practices.

The major curriculum changes anticipated in the next three years are the addition of Associate degrees in Agriculture, Agricultural Technician, Welding and Plant Health/Pesticide Application.

The Associate of Science in Agriculture program will incorporate core agriculture courses with a concentration of seven units chosen based on student interests. This degree will require 3 additional courses, AG 30, AG 31 and AG 32. These will be one unit, laboratory shop courses, implementing students with skills necessary for technological degrees. These courses can be taught at the same time with one instructor similar to WT 40 and WT 41. One additional course AG 1, International Agriculture will be created for the International Agribusiness concentration.

An example catalog statement is shown below:

Agriculture prepares students for careers in the agriculture industry. Careers in California agriculture require knowledge of both technology and management. This degree is intended for students who plan on transferring to a university upon completion. The curriculum focuses on a foundation of essential agricultural skills such as plant science, soil science, water management, and GPS/GIS. Students can tailor the curriculum to their own interests by choosing a concentration in International Agribusiness, Agriculture Engineering Technology, Mechanized Agriculture, Agricultural Science, or Irrigation.

Course #	Title	Units
CRPSCI 1	Introduction to Plant Science	3
CRPSCI 6	Applications of GPS Technology in Ag	4
CRPSCI 19	Water Management	3
SLSCI 21	Soils	4
	Electives	7
	TOTAL	21

Concentrations are as follows (choose 7 units from one of the following):

International Agribusiness

Required

AG 11	Agriculture Sales and Communication	3
AG 1	International Agriculture	3

Optional (1 course)

AGBUS 20	Farm and Agriculture Business Management	3
AGBUS 24	Agriculture Accounting	3
AGBUS 40	Introduction to Agriculture Economics	3

Agricultural Engineering Technology (AET)

Required

AET 10	Surveying	2
AET 11	Advanced Surveying with GIS Applications	2
AET 15	CAD for Agriculture	2
AET 16	CAD Applications for Land Management in Agriculture	1

Mechanized Ag

Required

AET 15	CAD for Agriculture	2
AET 30	Laboratory Skills and Safety	1
AET 31	Advanced Laboratory Skills and Safety	1
WT 40	Introduction to Welding	2

Optional (1 course)

AET 10	Surveying	2
AET 32	Laboratory Design Implementation	1
WT 41	Intermediate Welding	2

Agriculture Science

Optional (7 units)

AG 10 ..... Introduction to Agriculture 3
AG 11 ..... Agriculture Sales and Communication 3
AGBUS 20... Farm and Agriculture Business Management 3
AET 10 ..... Surveying 2
EQUSCI 4.... Principles of Horse Management 3
WT 40 ..... Introduction to Welding 2
AET 30 ..... Laboratory Skills and Safety 1

Irrigation

Required

AET 22 ..... Irrigation Evaluation and Design Principles 4
AET 23 ..... Advanced Irrigation Design 3

In order to accommodate the students not able to, or uninterested in, transferring the Agricultural Technician degree will be offered. For the introduction of this program the following courses will be created as non-transferrable: CRPSCI 51 Elementary Plant Science, CRPSCI 56 Introduction to Ag GPS and GIS, CRPSCI 59 Elementary Water Management, SLSCI 71 Introductory Soils, and AG 65 Workplace Success. CRPSCI 51, CRPSCI 56, CRPSCI 59 and SLSCI 71 can be offered in the same classroom with CRPSCI 1, CRPSCI 6, CRPSCI 19 and SLSCI 21. This degree will follow the same outline as the transferrable program except with the following core courses: CRPSCI 51, CRPSCI 56, CRPSCI 59, SLSCI 21, AGBUS 15 and AG 65. This will require writing new curriculum for non-transferrable courses and one additional course in Workplace Success. The following concentrations will be incorporated into the degree: International Agribusiness, Mechanized Agriculture, Irrigation and Rodeo Science. Additional non-transferrable courses will be AET 55 Introductory Surveying and AG 61Developing Sales and Communication Skills; these will be taught with AG 15 and AG 11, but with non-transferrable assignments.

The welding associate degree program will include welding courses leading to national certifications in welding.

As the Baby Boomers generation is retiring there is a major shortage of skilled employees in the workforce. Over 60% of all certified pesticide applicators will retire. This leaves a large gap between open positions and available jobs. A future Associate degree will be created in Plant Health/Pest Control Application. This will include online core courses such as CRPSCI 1, CRPSCI 6, CRPSCI 19,

SLSCI 21 and additional courses catering to the certification requirements of the California Department of Pesticide Regulation.

E. Instruction: *Please describe any anticipated changes in the area of instructional methodology in the next three years. This statement might include the use of self-contained video recorders, computer-aided instruction, the mix of large group lectures and small group discussions, greater use of LRC, instructive video, etc.*

The major changes in instructional methodology will be creating non-transferrable courses which align with current transferrable courses which can be taught concurrently but with less strenuous exams and projects. This will allow students who are unable or uninterested in the rigor of transferrable courses to take the non-transferrable courses. Then if students are able and interested in pursuing transfer, they can participate in the transferrable courses, allowing them the ability to experience the information twice. In addition, there will be integration of distance education, both fully online courses and hybrid courses.

F. Technology: *Please describe how technology will be used to enhance teaching/learning.*

The hands-on use of cutting-edge technology is a key fundamental of the agriculture program as a whole. New technology that has been incorporated is computer-aided drafting, AutoCAD. Additional technology is more incorporation of GIS, the use of surveying equipment, advanced irrigation equipment (i.e. soil moisture monitors, variable frequency drives, etc.), and solar and biofuel technologies. In addition, the welding trailer allows for off-site welding instruction.

G. Supplies: *Please describe the supply requirements of your existing programs, as well as the effect that any proposed curricular or instructional changes would have on the supplies required in the next three years. This statement should include the kinds and amounts of supplies needed, any anticipated costs, and the need for any computer software.*

- Software
  - AutoCAD $22,000/lab Grant funding available
    - Computer-aided drafting software
    - Design Institute – software for 3 years
    - $6,000/lab after initial 3 year term
  - ArcGIS 10.x $2,100/lab
    - GIS software
    - Annual subscription update

H. Equipment: *Please describe the equipment requirements of your existing program, as well as the effect that any proposed curricular or instructional changes would have on equipment required in the next three years. This statement should include a description of and rationale for new equipment or replacement of existing equipment and the estimated costs of the equipment. It should also include any on-going maintenance and installation requirements, as well as an estimate of the costs associated with these requirements.*

- Handheld GPS 3/year $800/unit
  - PDA with CF or Bluetooth GPS receiver
- Surveying 7-10 units $30,000 grant funding available
- Irrigation equipment $250,000
  - Retrofit of existing equipment to be compatible with industry standards
- Alternative Fuels equipment $250,000
  - Solar panels for pump operations
  - Bio Diesel generators
  - Methane – Electricity generators

I. Facilities: *Please describe the need for facility modifications within your existing program or the effect that any proposed curricular or instructional changes would have on the existing facilities in the next three years. This statement should include a description of the desired changes, the rationale for the changes, and a rough estimate of the costs.*

Facility modifications are underway with the completion of Phase II of the new Ag Science Facility. A new shop will be built to house the agricultural laboratories as well as the completion of the rodeo facilities.

J. Staffing: *Please describe the certificated and classified staffing requirements of the existing program, as well as the effect any proposed curricular or instructional changes would have on certificated or classified staffing in the next three years. This statement should include the need to retrain or to add certificated staff for new specialties, for anticipated enrollment increases, or for replacing anticipated retirements. Finally, this statement should include the need to retrain or to add classified support staff for clerical assistance, for maintaining equipment, or for serving as an instructional assistant.*

Faculty for Existing Program

- Clint Cowden - Full-time Ag Science & Technology Instructor
- Bruce Hunt – Full-time Agriculture Instructor
- Merlin Welch – Full-time Heavy Equipment Instructor

- Chris Chaney – Full-time Welding Instructor (grant funded)
- Adjunct – Maintenance Mechanic (grant funded)

Staff for Existing Program

- Director
- Administrative Assistant

Faculty for Additional Programs

- Current faculty
- Maybe adjunct for additional courses if needed and grant funded

Staff for Additional Programs

- Lab Assistant/Equipment Technician (grant funded)
- Recruiter (grant funded)

K. *Articulation and Marketing:* *Please describe any anticipated changes in the way the unit articulates with feeder high schools and with CSU and UC systems, and other accredited institutions. Please also describe any anticipated changes in the way the department/unit intends to promote its offerings to potential students.*

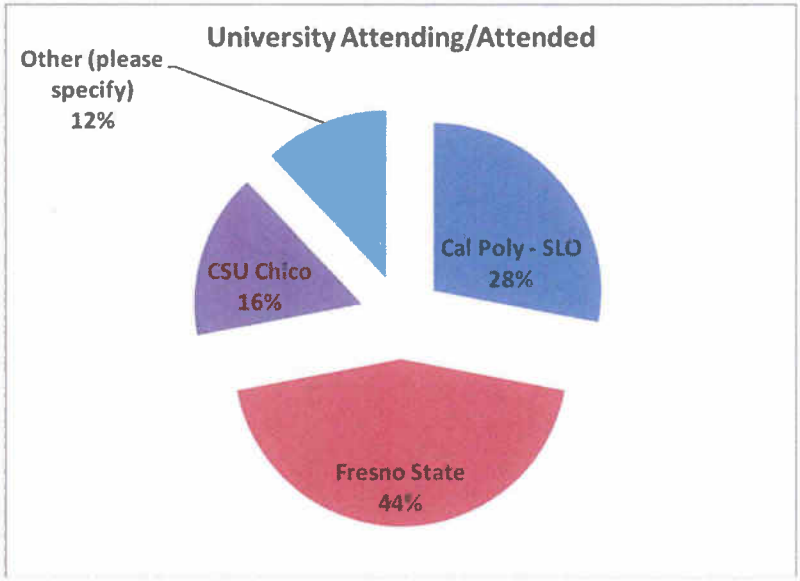
In order to ensure transferability of courses, C-ID (The Course Identification Numbering System) outlines are used. These are courses that have already been approved with all California State Universities and Universities of California as well as between California Community Colleges. (http://www.c-id.net/)

In order to create 2+2+2 programs the newly developed non-transferrable courses can be articulated to high schools while maintaining articulation of transferrable courses with UC's and CSU's. Articulation will be created with local high schools such as Firebaugh, Avenal and Lemoore.

In order to promote the programs to potential students a recruiter, using grant funds, will head-up the Agricultural Ambassadors and recruit for the program. The recruiter will recruit throughout California at high schools at curricular and extra-curricular functions as well at industry field days and workshops. In addition, field days for both students and educators will be developed and conducted to inform students and teachers about the opportunities at West Hills College.

An additional effort, during the next 3 years, will be international recruiting. Agriculture materials will be translated into foreign languages, such as Spanish and Vietnamese. A new International Agribusiness concentration will allow domestic students to interact with international students, so they can all gain international awareness.

As can be seen in the following chart graduates are attending or have attended the following schools: CSU Fresno - 44%, Cal Poly, SLO – 28%, CSU Chico – 16%, other– 12%. To ensure transferability for a majority of the students program staff meets at least annually with department heads from Fresno, Cal Poly and Chico State.



L. ***Staff Development Requirements***: *Please describe the department/unit plans for staff development over the next three years. The requirements may include, but are not limited to, the following areas: improvement of teaching, maintenance of academic and technical knowledge and skills, retraining, development of innovations, affirmative action/diversity, instructional technology, and self-esteem.*

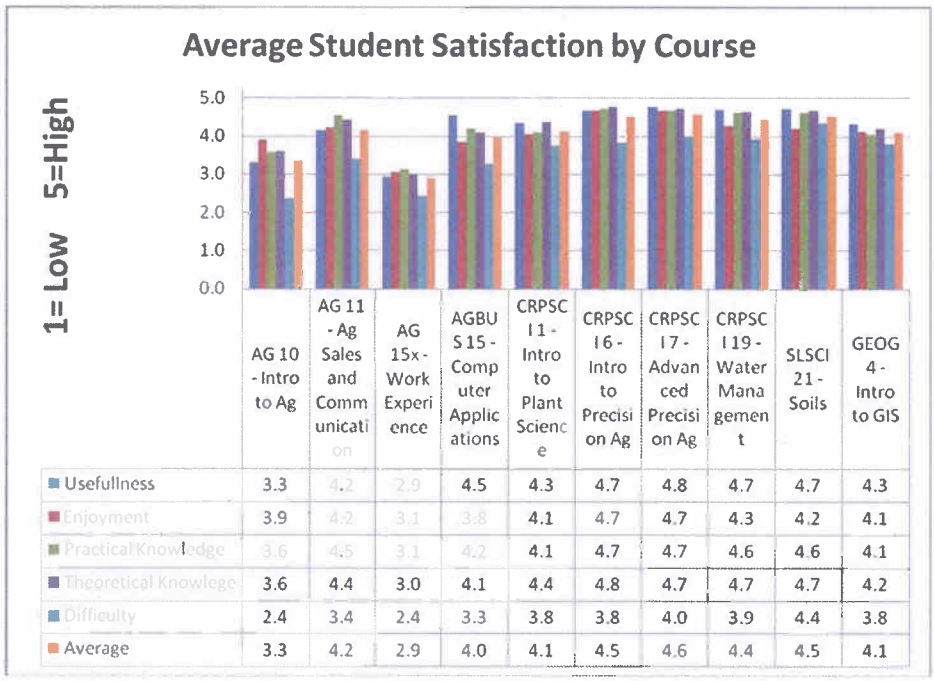
- Technical Knowledge and Skills
    - Irrigation Association
        - Certification courses
            - Agricultural Drip and Micro Design
            - Agriculture Irrigation Specialist
    - World Agriculture Expo
    - International Conference on Precision Agriculture
        - Anticipated to present paper
    - ESRI International Users Conference
- Improvement of Teaching
    - National Institute for Staff and Organizational Development (NISOD)
        - Co-presenting paper June 2011

- California Agriculture Teachers Association
  - Winter Conference
  - Summer Conference

M. Vocational Education Requirements: *Please explain how the courses in the program address the issues of integration of academic and vocational education, course sequencing,, SCANS foundation skills and competencies, and All Aspects of Industry as defined in the statewide plan.*

Due to the nature of the program, courses have been designed to integrate academic and vocational education in order to facilitate students to directly enter the workforce or to continue their education following completion of the academic programs. The additional programs will be likewise designed. SCANS foundation skills and competencies, although not directly measured, are embedded within the courses in order to create students able to directly enter the workforce. In order to stay current with industry, program faculty routinely meets with an advisory committee and industry professionals to insure that industry skills and competencies are being met.

As shown in the chart below, students were asked to rank courses based on course usefulness within their industry, enjoyment, theoretical knowledge gained, practical knowledge gained and difficulty. Results from this survey as well as anecdotal references are used to update courses to ensure that vocational skills are being met.



	AG 10 - Intro to Ag	AG 11 - Ag Sales and Communication	AG 15x - Work Experience	AGBUS 15 - Computer Applications	CRPSCI 1 - Intro to Plant Science	CRPSCI 6 - Intro to Precision Ag	CRPSCI 7 - Advanced Precision Ag	CRPSCI 19 - Water Management	SLSCI 21 - Soils	GEOG 4 - Intro to GIS
Usefullness	3.3	4.2	2.9	4.5	4.3	4.7	4.8	4.7	4.7	4.3
Enjoyment	3.9	4.2	3.1	3.8	4.1	4.7	4.7	4.3	4.2	4.1
Practical Knowledge	3.6	4.5	3.1	4.2	4.1	4.7	4.7	4.6	4.6	4.1
Theoretical Knowlege	3.6	4.4	3.0	4.1	4.4	4.8	4.7	4.7	4.7	4.2
Difficulty	2.4	3.4	2.4	3.3	3.8	3.8	4.0	3.9	4.4	3.8
Average	3.3	4.2	2.9	4.0	4.1	4.5	4.6	4.4	4.5	4.1

N. Class Scheduling Patterns: *Describe the annual scheduling patterns for courses in this program and discuss their impact on students, faculty, and the program. Consider interaction with other instructional programs, use of facilities, and flexibility for students.*

Scheduling patterns are an important aspect of a successful program. These patterns differ based on the student body involved. Therefore the scheduling patterns for the Farm of the Future are continually changing based on informal student surveys. Traditional college-bound students prefer courses from 9 am until 4 pm. Farm of the Future courses offered at 7 am have shown lower enrollment than later courses. Therefore, future scheduling will offer courses beginning at 9 am or later. Non-traditional, vocational trainings (i.e. Welding, Ag Maintenance Mechanic) are offered evenings and weekends. These courses are offered both on and off-site to accommodate a less mobile working population. The welding trailer was designed in order to offer welding programs off-site at locations without welding facilities.

Another scheduling pattern which will be applied will be to offer non-transferrable courses concurrently with a transferable counter-part. For example, CRPSCI 51 Elementary Plant Science will be offered at the same time, in the same classroom, and with the same instructor as CRPSCI 1 Introduction to Plant Science. This will allow multiple entrance and exits for students and will efficiently utilize instructor time and facilities.

O. Additional Information (optional): *Please provide any other information to describe, explain, justify, analyze, or clarify prospective program/departmental changes or needs anticipated in the next three years.*

P. *What factors did you use in determining the quality and success of this program? (Example: increased enrollment, more critical thinking applications; high retention rate; student success in next sequential course, etc.)*

- Student survey
  - Student satisfaction
  - Graduate salaries
  - Students transferring
- Anecdotal
  - Industry and advisory committee member informal comments express satisfaction with our graduate's job readiness or inadequacies.
  - Student comments regarding job performance or performance after transferring to four-year universities.

III. Quantitative Analysis

Please provide a short, written commentary answering each of the following: Refer to information and data from the statistical report provided for your program.

A. Student Enrollments And Characteristics

1. *How does the five-year enrollment trend for this program compare with the overall College trend?*

The five-year enrollment trend for the Agriculture program has increased 112% from 2005-2006 to 2009-2010 compare to a 29% increase for the college. Enrollment and sections offered through the Agriculture department are related to grants therefore the pattern shows a cyclical pattern. Year one of grants is usually involved with the research and creation of programs and year two is offering the courses.

West Hills College Coalinga Duplicated Enrollment

	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Duplicated Enrollment	14,117	13,598	15,607	17,547	19,483	18,201
% Change	14.9%	-3.7%	14.8%	12.4%	11%	-6.6%

Agriculture Program Trends

WHCC AG	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Sections	25	58	42	71	74
Duplicated Enrollment	271	396	321	676	545
% Change	Baseline	46%	-19%	111%	-19%

2. *How do each of the five-year demographic trends (age, gender, ethnicity, unit load, day vs. evening) for this program compare with the overall College trend?*

Age

WHCC STUDENT AGE CATEGORY

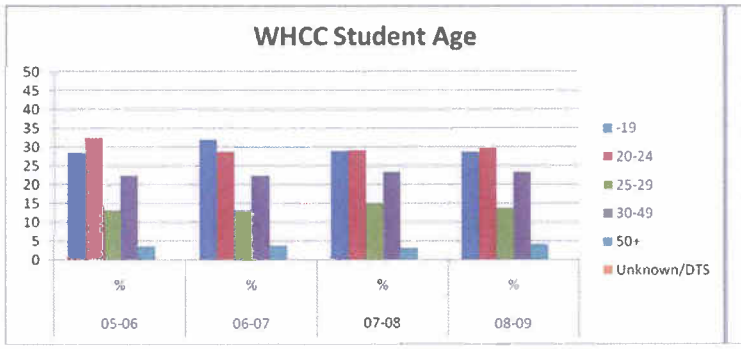
AGE	05-06	06-07	07-08	08-09	09-10
	%	%	%	%	%
-19	28.3	32.0	29.0	28.7	17.4
20-24	32.4	28.7	29.2	29.7	39.7
25-29	13.2	13.1	15.1	13.8	15.4
30-49	22.4	22.4	23.3	23.3	23.8
50+	3.6	3.8	3.2	4.09	4.2
Unknown/DTS	0.0	0.0	0.1	0	0.0

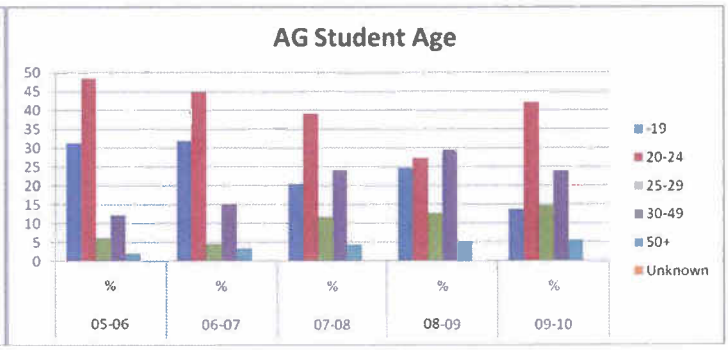
WHCC Agriculture STUDENT AGE CATEGORY

AGE	05-06 %	06-07 %	07-08 %	08-09 %	09-10 %
-19	31.3	32.0	20.5	24.8	13.7
20-24	48.5	44.9	39.1	27.4	42.1
25-29	6.1	4.5	11.8	12.8	14.8
30-49	12.1	15.2	24.2	29.6	24.0
50+	2.0	3.4	4.3	5.3	5.5
Unknown/DTS	0.0	0.0	0.0	0.0	0.0
Total	100	100	100	100	100

Source: WHCCD data warehouse

The major age trend difference between the Ag department and the college as a whole is the 20-24 bracket. The Ag department has, on average, 8.5% higher percent of students in this category. The other age categories vary between 2 and 4% difference. This is a positive aspect of the program; students who have been out of high school realize they need skills and enter vocational training. This is the perfect age bracket to most utilize vocational programs.





Gender

WHCC STUDENT GENDER

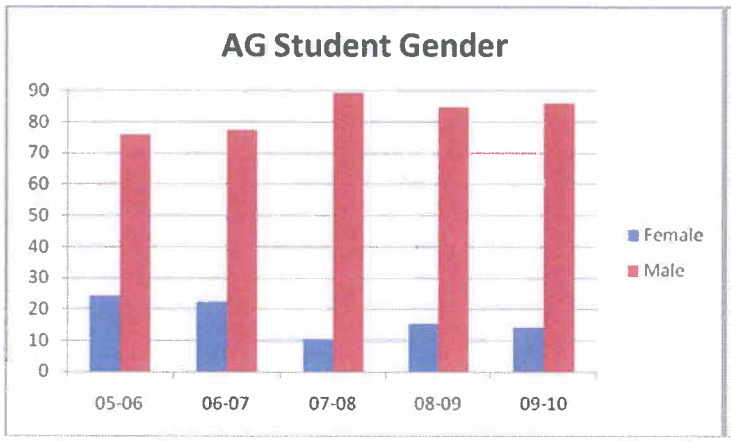
GENDER	05-06 %	06-07 %	07-08 %	08-09 %	09-10 %
Female	59.2	59.4	58.2	58.5	55.8
Male	40.6	40.0	41.4	40.5	44.2
Unknown/DTS	0.2	0.6	0.4	0	0.0

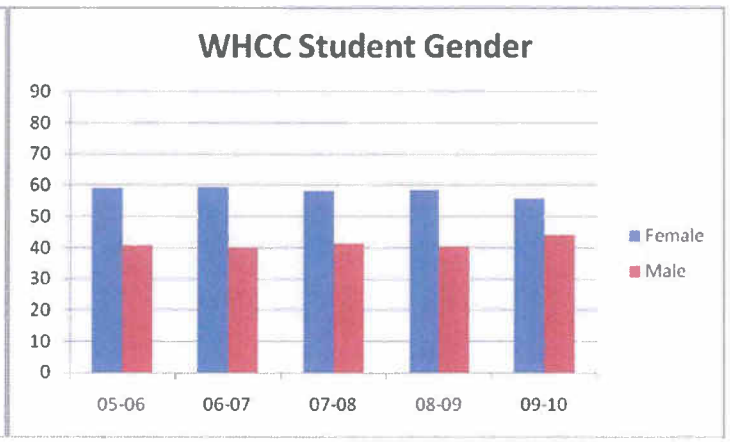
WHCC Agriculture STUDENT GENDER

GENDER	05-06 %	06-07 %	07-08 %	08-09 %	09-10 %
Female	24.2	22.5	10.6	15.3	14.2
Male	75.8	77.5	89.4	84.7	85.8
Unknown/DTS	0.0	0.0	0.0	0.0	0.00
Total	100	100	100	100	100

Source: WHCCD data warehouse

As can be seen in the following graph, the Agriculture department is primarily male, whereas the college as a whole has a higher percentage of female students enrolled. This is very inherent in agricultural and vocational programs.





Ethnicity

WHCC STUDENT ETHNICITY

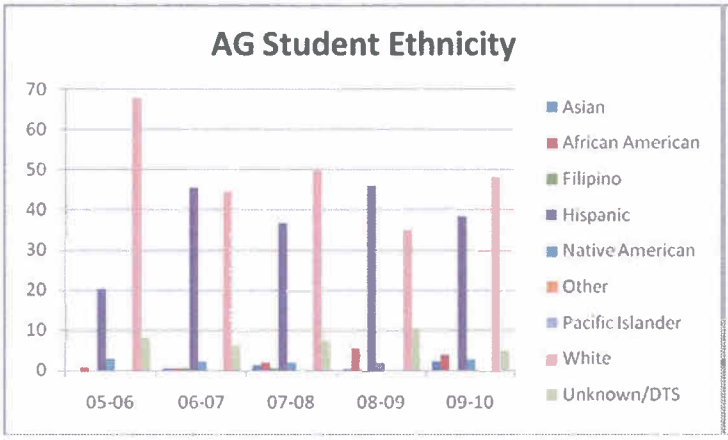
ETHNICITY	05-06	06-07	07-08	08-09	09-10
	%	%	%	%	%
Asian	3.2	3.6	4.3	4.6	4.6
African American	6.7	5.7	7.0	7.1	8.0
Filipino	1.4	1.3	1.4	1.6	1.9
Hispanic	50.9	53.1	52.2	50	50.8
Native American	1.2	1.2	1.1	1.1	1.2
Other	0.8	1.0	0.8	0.9	0.0
Pacific Islander	0.5	0.5	0.5	0.5	0.7
White	31.4	29.0	28.5	27.5	27.4
Unknown/DTS	4.1	4.6	4.3	6.6	5.5

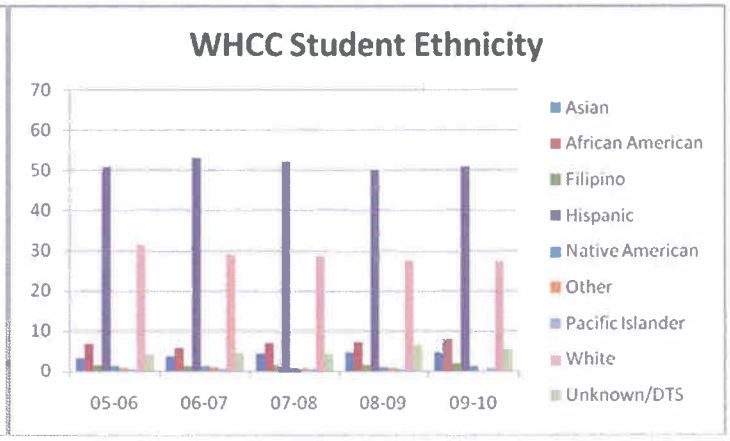
WHCC Agriculture STUDENT ETHNICITY

ETHNICITY	05-06	06-07	07-08	08-09	09-10
	%	%	%	%	%
African American	1.0	0.6	1.9	5.8	3.8
Asian	0.0	0.6	1.2	0.4	2.2
Filipino	0.0	0.6	0.6	0.0	0.0
Hispanic	20.2	45.5	36.6	46.0	38.3
Native American	3.0	2.2	1.9	2.2	2.7
Other	0.0	0.0	0.0	0.0	0.0
Pacific Islander	0.0	0.0	0.6	0.0	0.0
White	67.7	44.4	49.7	35.0	48.1
Unknown/DTS	8.1	6.2	7.5	10.6	4.9
Total	100	100	100	100	100

Source: WHCCD data warehouse

As can be seen in the below graphs, Agriculture department Hispanic enrollment has increased considerably since 2005 and more aligns with college trends. As reported at the Strategic Planning Session, Hispanic enrollment is around 15%, but this has shown incorrect. The introduction of less traditional trainings has increased the Hispanic enrollment. Future efforts are still needed to increase Hispanic enrollment in traditional courses.





B. Productivity

1. *Have there been any significant fluctuations in WSCH over the last five years? If so, explain.*

   There have been significant fluctuations in WSCH over the last five years but the overall trend is increasing by 75%. The fluctuations from year to year are due to availability of grant funding.

WHCC AG	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
WSCH	1,917	2,888	2,305	3,842	3,355
% Change	Baseline	0.51	-0.20	0.67	-0.13

2. *Have there been any significant fluctuations in WSCH/FTEF over the last five years? If so, explain.*

   There is a general downward trend in WSCH/FTET, 15% from 2005-2006 to 2009-2010, with 2007-2008 being considerably lower. The average WSCH/FTEF for this time period is 348 which is slightly lower (10%) than West Hills College average of 385.

WHCC AG	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
WSCH per FTEF	375	389	262	328	320
% Change	Baseline	4%	-32%	25%	-2%

3. *Describe any change in number of course sections taught by adjunct faculty in the past five years.*

   There has been an increase in the number of course sections taught by adjunct faculty with the creation of the Agricultural Maintenance Mechanic program and increased offerings of Heavy Equipment and Welding. Adjunct faculty have taught a majority of the off-site courses offered throughout the district.

C. Student Outcomes

1. *List program SLOs and annual assessment results. Describe any trends illustrated by the data and planned or implemented changes based on assessment results.*

   The following program level Student Learning Outcomes were created but have not yet been assessed.

   1. Students will demonstrate job readiness skills needed to obtain employment upon graduation.
   2. Students will demonstrate an understanding of mechanical fundamentals needed for employment.
   3. Students will demonstrate an understanding of safety fundamentals needed for employment.
   4. Students will understand agronomic fundamentals (soil, plant, water relationships.)
   5. Students will demonstrate an understanding of animal science fundamentals needed for employment.
   6. Students will demonstrate their ability to use agricultural technology.
   7. Students will demonstrate their ability to physically map using GPS and digitize field boundaries to create maps in GIS.
   8. Students will develop operation skills for three different types of heavy equipment.
   9. Students will troubleshoot problems associated with hydraulic, pneumatic, electric and power transmission systems for equipment.

   Previous assessment methods were therefore used to assess student learning. These methods included student exit and employer surveys as well as graduate student salaries and university acceptance. The advisory committee is always taken into consideration when assessing student success and future direction for the program.

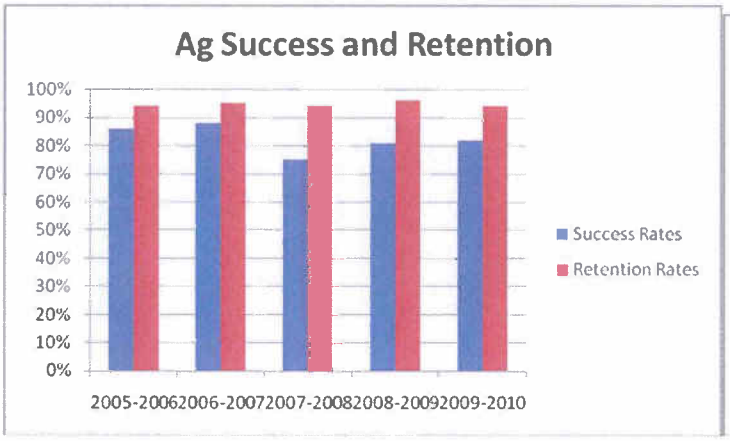
   Based upon employer and student surveys, non-transferrable Agricultural Technician and Plant Health/Pesticide Control Application degrees will be developed.

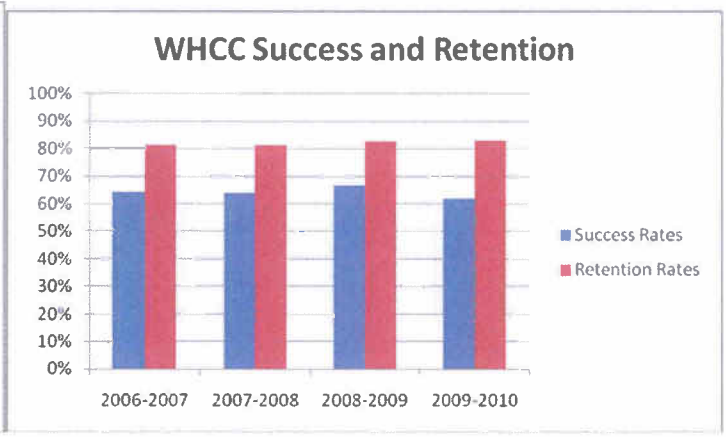
2. *How does the program's passing grade rate compare with that of the area and the College?*

The agriculture program as a whole has had tremendous success and retention rates with the averages being 82.4% and 94.6%, respectively, compared to the college 64.2% and 81.97%.

WHCC AG	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Success Rate	86%	88%	75%	81%	82%
Retention Rate	94%	95%	94%	96%	94%

WHC Coalinga	2006-2007	2007-2008	2008-2009	2009-2010
Success Rates	64.31%	63.96%	66.7%	61.9%
Retention Rates	81.06%	81.30%	82.7%	82.8%





3. *List the number of transfer degrees conferred in each of the past five years.*

Only 28 total transfer degrees have been awarded during the past five years. This is due to the fact that students are completing the paperwork to receive the certificates and degrees. They are transferring or gaining employment, therefore they do not feel a need to fill out the paperwork. The increase in degrees awarded after 2007, is because of a push to get students who have already completed the program to come back and complete the paperwork.

Agriculture programs are taught as a cohort, therefore all of the students are in the same courses. This affords a great opportunity for encouraging them to complete the forms to obtain degrees. If, during the end of the Spring semester, a counselor met with the class and helped fill out the paperwork, the number of certificates would greatly increase as well as an increase in the number of associate degrees.

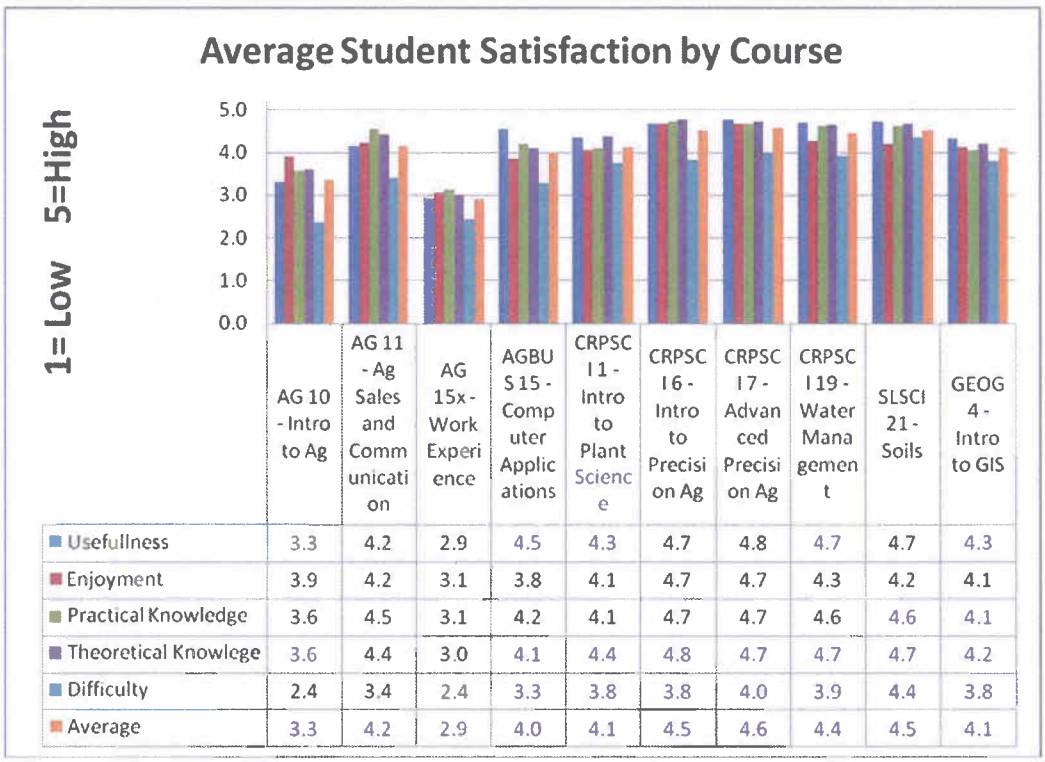
WHCC AG	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Degrees/Certificates Awarded					
AgSciTech AA/AS	0	0	2	4	2
AgPrec Certificate	0	0	0	0	4
AgSciTech Certificate	0	0	3	11	2
TOTAL	0	0	5	15	8

D. *For Occupational Programs*

1. *How well does your department prepare students for a job? What are the indicators?*

   Five indicators used to determine the success of the program in preparing students for jobs are student course satisfaction survey, student's assessment of basic skills, number of students entering the job market and obtaining internships and increase in demand for program graduates.

   A survey was given to students who have participated in the program and asked them to rate the program courses for the following criteria: usefulness for current job/college program, enjoyment, theoretical knowledge gained, practical knowledge gained and difficulty. The courses received the following average scores (on a scale of 1-5):

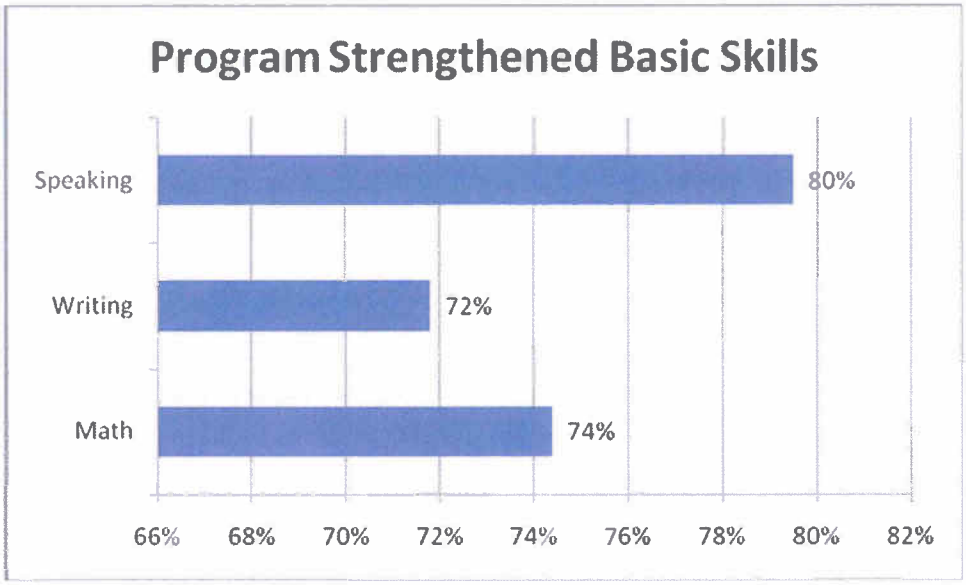


	AG 10 - Intro to Ag	AG 11 - Ag Sales and Communication	AG 15x - Work Experience	AGBUS 15 - Computer Applications	CRPSCI 1 - Intro to Plant Science	CRPSCI 6 - Intro to Precision Ag	CRPSCI 7 - Advanced Precision Ag	CRPSCI 19 - Water Management	SLSCI 21 - Soils	GEOG 4 - Intro to GIS
Usefullness	3.3	4.2	2.9	4.5	4.3	4.7	4.8	4.7	4.7	4.3
Enjoyment	3.9	4.2	3.1	3.8	4.1	4.7	4.7	4.3	4.2	4.1
Practical Knowledge	3.6	4.5	3.1	4.2	4.1	4.7	4.7	4.6	4.6	4.1
Theoretical Knowlege	3.6	4.4	3.0	4.1	4.4	4.8	4.7	4.7	4.7	4.2
Difficulty	2.4	3.4	2.4	3.3	3.8	3.8	4.0	3.9	4.4	3.8
Average	3.3	4.2	2.9	4.0	4.1	4.5	4.6	4.4	4.5	4.1

- AG 10 = 3.3
- AG 11 = 4.2
- AG 15x = 2.9
- AGBUS 15 = 4.0
- CRPSCI 1 = 4.1
- CRPSCI 6 = 4.5
- CRPSCI 7 = 4.6
- CRPSCI 19 = 4.4
- SLSCI 21 = 4.5
- GEOG 4 = 4.1

Another question asked of students, was whether or not they felt that the program strengthened their basic skills in the areas of speaking, writing and mathematics. The following percent of students felt that they were prepared in the representative areas:

- Speaking 80%
- Writing 72%
- Math 74%



Of the students who have completed the program, 38.5% have already entered the workforce. Additional evidence that students are well prepared for the job is the internships completed. Industry has a high demand for students with far more job opportunities than program graduates.

2. *Does your program provide any assistance with job placement? If so, describe the activities and include any data you have on results.*

An important aspect of the Agriculture program is industry contact. Students are assisted with job placement, either through the contacts they make during their involvement in the program or through the instructor's industry contacts. Students are involved with industry training workshops and product

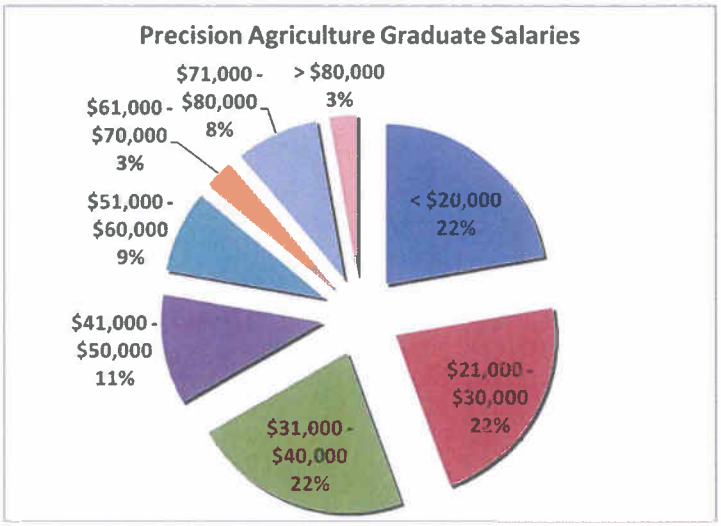
development conducted on the farm and they complete internships with companies during the World Ag Expo. In addition, students complete real-world consulting projects for local industry. Students gain industry contacts while being involved at industry conferences such as the Cotton Conference. 66% of students surveyed state that they obtained their job through the instructor. Of the 17% that chose other, they specified:

- While at the Cotton Conference I met Brock who I help with scheduling.
- Clint asked two In-Time reps to speak o our class about their jobs and they were looking for another employees for In-Time California
- Class work experience

3. *What evidence exists that program completers (or near completers) are successful on the job? What, if available, are their beginning salaries?*

A strong indicator for the successfulness of program completers (or near completers) is the annual salaries for those who have entered the workforce. Many of the students who are completing their education are still earning a considerable salary through internships and summer employment. This data includes students who are still full-time students. The following is a breakdown of program completer's salaries (includes students who are still full-time students):

- >$31,000 66%
- >$41, 000 44%
- >$61,000 14%
- >$80,000 3%



Another source for the evidence of the successfulness of program completers is informal meetings with employers. Due to the strong industry involvement with the program, the instructor is in contact with employers and discusses the effectiveness of the student's training and knowledge sets.

4. *After reviewing the U/I wage data report for this vocational area, please comment on how the data for your program compares to statewide data. How do you plan to use this information in the future to evaluate your program?*

Precision Agriculture is not an area that is separated out for wage data. Agriculture is lumped all into one category, from field worker to farm owner, therefore it is not very representative of the program. Below is data found at http://data.bls.gov/oep/noeted/empoptd.jsp. As shown below, both the job outlook and annual wage appears to be positive. The salaries earned by program completers appears to track closely to these values.

	2009 Wage Estimates		
Occupation	**Median Hourly**	**Mean Hourly**	**Annual**
Engineering Technician (Environmental)	$20.36	$21.99	$45,730
Surveying and Mapping Technicians	$17.88	$18.98	$39,470

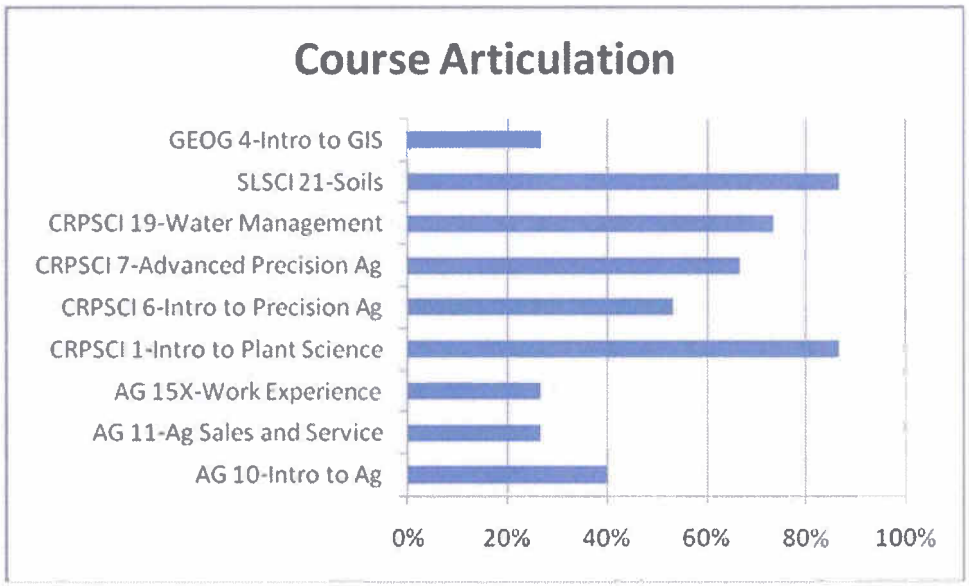
U.S. Department of Labor Bureau of Labor Statistics April 2011

E. Professional Standards And Growth

1. *Curriculum: What procedures are being used to assure that current curriculum is adequately meeting the needs of students?*

Program faculty hold annual advisory meetings, with regional industry and educational experts, to ensure that current curriculum is adequately meeting the needs of students. Employer surveys are conducted to determine if students are gaining the necessary skills for the workplace. In addition, faculty meets at least annually with department heads from Fresno State, Cal Poly, SLO and Chico State. Program faculty also attends summer and winter CATA conference to ensure courses articulate from campus to campus.

Students are having success with articulation of courses within their new majors as shown in the graph below.



Student Learning Outcomes are assessed and used to make necessary course changes. In addition, competency based grading is being used in vocational courses to ensure students are gaining the skills being taught in the class.

2. *Academic Standards: What are the processes and procedures that the department uses to maintain academic standards and achieve consistency within the department, particularly in regard to multiple section introductory classes?*

   The majority of courses are taught in a cohort setting; with one instructor teaching all of the courses. Full-time faculty meet with adjunct faculty and approved curriculum, course content, syllabi and midterms are given to the adjunct instructors and adjunct instructors send midterms to full-time instructors for approval.

3. *Individual Professional Growth: What evidence is there that faculty are staying current in their respective disciplines and instructional methodologies?*

   2005-06
   - Central Coast Cotton Conference- Pismo, CA
   - West Side Precision Ag Field Day- Lemoore, CA
   - Conservation Tillage- Five Points, CA

- California Ag Teachers Association, Summer Conference- San Luis Obispo, CA
- ESRI International Users Conference- San Diego, CA
- World Ag Expo- Tulare, CA
- Agriculture and Natural Resources Student Leadership, Winter Leadership and Teambuilding- Lake Tahoe, CA
- Cal GIS- Bakersfield, CA
- California Ag Ambassadors Conference- Davis, CA
- Animal Science Conference, National Animal Identification- Harris Ranch, CA
- Professional Soil Scientist Association of California- Harris Ranch, CA
- Soil Carbon Sequestration- Five Points, CA
- Agri-Knowledge, Technology in the Classroom- Ventura, CA
- Curly Top Virus, in Processing Tomatoes, Coalinga, CA
- California Geospatial Conference- Pismo, CA
- California Ag Teachers Association, Mid-Winter Institute, Chico, CA
- Trimble, Ag Awareness for the Engineering Group- San Jose, CA
- International Conference on Precision Agriculture- Minneapolis, MN

2006-07

- Central Coast Cotton Conference- Monterey, CA
- Conservation Tillage- Five Points, CA
- California Ag Teachers Association, Summer Conference- San Luis Obispo, CA
- ESRI International Users Conference- San Diego, CA
- World Ag Expo- Tulare, CA
- California Agriculture Leaders, Winter Leadership and Teambuilding- Wonder Valley, CA
- California Ag Teachers Association, Mid-Winter Institute, Santa Rosa, CA
- In-Time Field Day, Almonds- Harris Ranch, CA
- In-Time Field Day, Processing Tomatoes, Huron, CA
- TOPCON, Three Dimensional Machine Control- Livermore, CA
- TOPCON, X20 Precision Agriculture Product Training- Coalinga, CA
- John Deere, Part and Sales Training- Coalinga, CA

2007-08

- World Ag Expo- Tulare, CA
- California Ag Teachers Association, Mid-Winter Institute, Bakersfield, CA
- TOPCON, Point Man Training for Three Dimensional Machine Control- Livermore, CA
- TOPCON, X20 Precision Agriculture Product Training- Coalinga, CA
- California Ag Teachers Association, Summer Conference- San Luis Obispo, CA

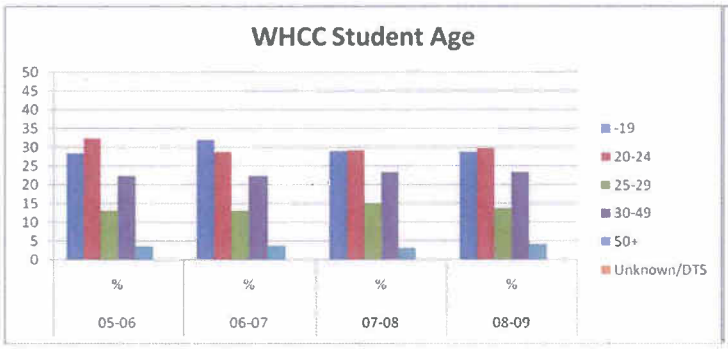
4. *What recognitions (awards, publications, promotions, memberships, etc.) have been given to faculty within the last year?*
    - Awards
        - Lemoore Chamber of Commerce – Agriculture Supporter of the Year – 2007
            - Voted by Past Agriculturalists of the Year
    - Presentations
        - Published and Presented – ESRI International Users Conference - *Teaching Precision Agriculture at a California Community College*
        - Presenting at 2011 NISOD Conference – Basic Skills Yeah or Yuck – Contextualized Basic Skills Integration
    - Publications
        - Paying Tribute to Leaders in Agriculture
            - Lemoore Advance
            - October 4, 2007
        - Farm of the Future
            - California Farmer
            - Cover Page
            - November 2007 Issue
        - Satellite School
            - California Farmer
            - November 2007
        - The Farm of the Future (Department)
            - OEM – Off-Highway
            - February 1, 2008
        - Land Improvement Contractors of America
            - Contractor of the Year Award – Merlin Welch
                - Volume 23-No 2 – March/April 2010

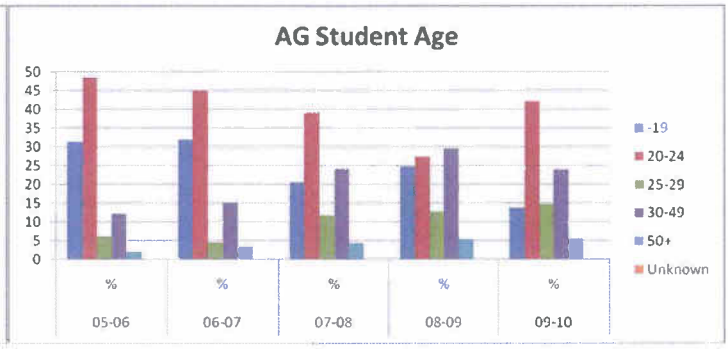
F. *Overall Changes*

1. *Were there any significant changes in data or trends? Describe. (Example: 17.4% increase in retention; 10% increase in apportionment generated; cost per FTES increased by 5%; growth trend - down by 3% from previous year, etc.)*

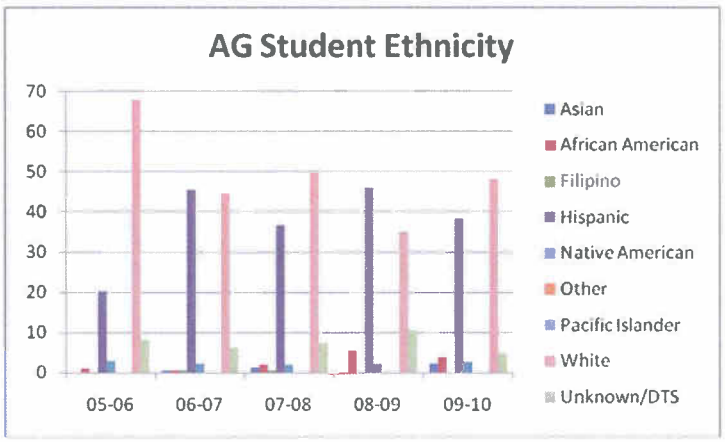
    a) The five-year enrollment trend for the Agriculture program has increased 112% from 2005-2006 to 2009-2010 compare to a 29% increase for the college.

b) The major age trend difference between the Ag department and the college as a whole is the 20-24 bracket. The Ag department has, on average, 8.5% higher percent of students in this category.





c) As can be seen in the below graphs, Agriculture department Hispanic enrollment has increased considerably since 2005 and more aligns with college trends.



d) There have been significant fluctuations in WSCH over the last five years but the overall trend is increasing by 75%.

e) The agriculture program as a whole has had tremendous success and retention rates with the averages being 82.4% and 94.6%, respectively, compared to the college 64.2% and 81.97%.

f) There has been a significant increase in the number of degrees/certificates awarded; from 0 during 2005-2007 to 28 from 2007-2010.

2. *If changes occurred, what were the reasons for these changes? (Example: faculty meetings with high school teachers; more course offerings on Saturdays; etc.)*

   a) Enrollment has increased steadily over the past five years due to the introduction of new programs, AET and Ag Maintenance Mechanic and increased offerings of Heavy Equipment and Welding.

   b) The number of students within the 20-24 age bracket is a positive aspect of the program; students who have been out of high school realize they need skills and enter vocational training. This is the perfect age bracket to most utilize vocational programs.

   c) The introduction of less traditional trainings has increased the Hispanic enrollment. Future efforts are still needed to increase Hispanic enrollment in traditional courses.

   d) Overall enrollment has increased but so has the number of sections offered. It is important to increase the number of students per course, as well in order to maximize efficiency.

   e) High success and retention rates are very high throughout the agriculture program. Teaching using the cohort system allows students to get to know their teachers. With personal buy-in, students are more compelled to complete the program.

   f) The number of degrees/certificates awarded has increased because past and present students are being encouraged, by faculty, to complete the necessary paperwork to receive their degrees/certificates.

3. *Does analysis of the data suggest any changes are needed to improve program effectiveness: If so, what changes? (Example: Increase retention rate for all classes, more diversity/alternatives in teaching methods; etc.)*

   Enrollment has increased but so has the number of sections, in order to increase productivity, enrollment per section needs to be increased. This can be done by hiring a recruiter, using grant funds, to promote the programs to potential students and head-up the Agricultural Ambassadors to recruit for the program. The recruiter will recruit throughout California at high schools at curricular and extra-curricular functions as well at industry field days and workshops. In addition, field days for both students and educators will be

developed and conducted to inform students and teachers about the opportunities at West Hills College.

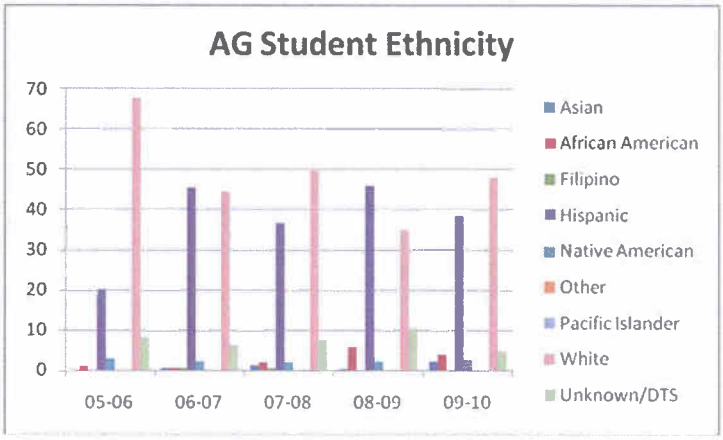
Another change to increase productivity and allow multiple entrance and exit points for students in offering transferrable and non-transferrable programs concurrently. This will allow students who are not able, or are uninterested, in the rigor of transferable courses, to take the course with less rigor, but while maintaining faculty productivity.

IV. Program Analysis and Three-Year Plan

A. *What were the major accomplishments of this program in the previous academic year? Did these accomplishments meet your educational plan for the previous academic year?*
(Example: Increased WSCH & apportionment funding; increased enrollment; among the top 10 declared majors; more course articulations with high schools; etc.)

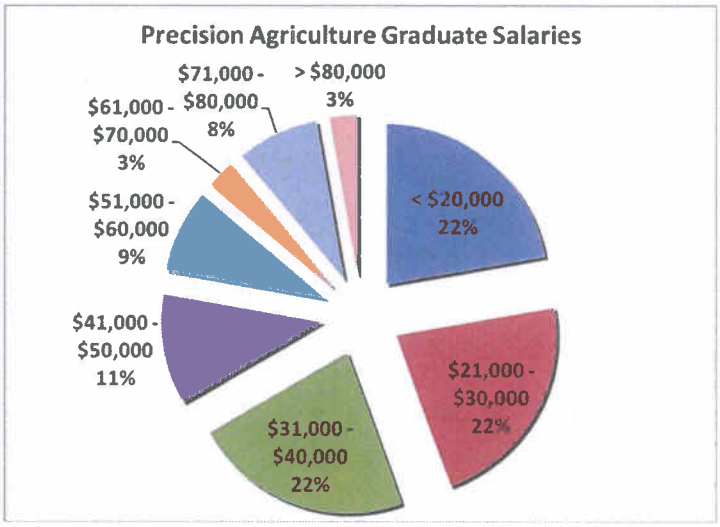
- The five-year enrollment trend for the Agriculture program has increased 112% from 2005-2006 to 2009-2010 compare to a 29% increase for the college.

- Agriculture department Hispanic enrollment has increased considerably since 2005 and more aligns with college trends.



- The agriculture program as a whole has had tremendous success and retention rates with the averages being 82.4% and 94.6%, respectively, compared to the college 64.2% and 81.97%.

- The following is a breakdown of program completer's salaries (includes students who are still full-time students):
  - >$31,000 66%
  - >$41, 000 44%
  - >$61,000 14%
  - >$80,000 3%



B. *List other accomplishments that were not in the educational plan. (Example: developed a computer literacy component; revised course outline to fit into proposed G.E. requirement; etc.)*

- Lemoore Chamber of Commerce – Agriculture Supporter of the Year – 2007
- LICA Contractor of the Year Award – Merlin Welch - 2010

C. *Please create a three-year plan for this program using the analyses made in this review. Please use the attached "Three-Year Plan" form.*

V. Summary Statement

What are the major conclusions on the state of the present program? Summarize the plan for improving or maintaining the quality of the program. Identify strategies for the future.

- Development of an Associate of Science in Agriculture.
  - Students will choose a concentration and work towards a certificate in that area.
    - International Agribusiness
    - Agriculture Engineering Technology
    - Mechanized Agriculture

        - Agricultural Science
        - Irrigation
    - Core courses
        - CRPSCI 1 – Introduction to Plant Science
        - CRPSCI 6 - Application of GPS Technology in Ag
        - CRPSCI 19 – Water Management
        - SLSCI 21 – Soils
    - Seven units of electives related to concentration

- Development of an Associate of Science in Agricultural Technician.
    - New non-transferrable courses will be created to be taught concurrently with transferrable courses
        - CRPSCI 51 Elementary Plant Science
        - CRPSCI 56 Introduction to Ag GPS and GIS
        - CRPSCI 59 Elementary Water Management
        - SLSCI 71 Introductory Soils
    - Students will choose a concentration and work towards a certificate in that area.
        - International Agribusiness
        - Mechanized Agriculture
        - Irrigation
        - Rodeo Science.
    - Core courses
        - CRPSCI 51 Elementary Plant Science
        - CRPSCI 56 Introduction to Ag GPS and GIS
        - CRPSCI 59 Elementary Water Management
        - SLSCI 71 Introductory Soils
        - AGBUS 15 Computer Applications to Agriculture
        - AG 65 Workplace Success
    - Four units of electives related to concentration

- Development of an Associate in Welding Technology.

- Development of an Associate in Plant Health/Pest Control Application

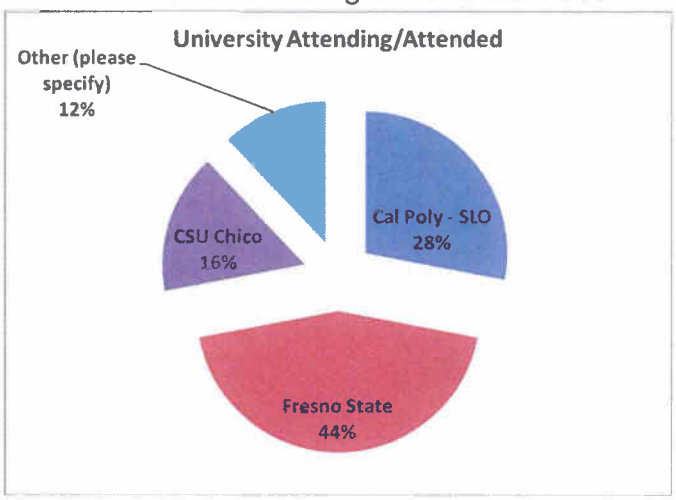
- The five-year enrollment trend for the Agriculture program has increased 112% from 2005-2006 to 2009-2010 compare to a 29% increase for the college.

- Agriculture department Hispanic enrollment has increased considerably since 2005 and more aligns with college trends.

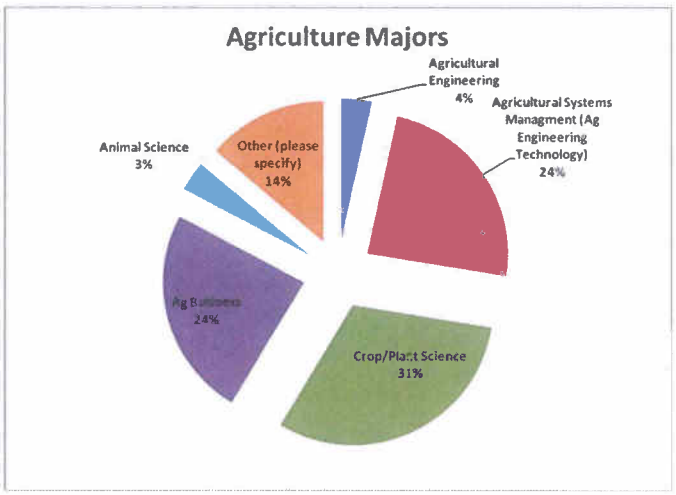
- The agriculture program as a whole has had tremendous success and retention rates with the averages being 82.4% and 94.6%, respectively, compared to the college 64.2% and 81.97%.

- In order to promote the programs to potential students a recruiter will be hired to head-up the Agricultural Ambassadors and recruit for the program

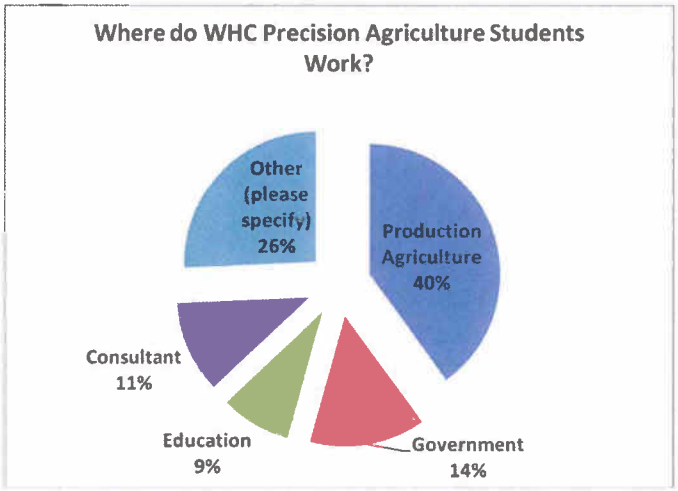
- The universities students are attending or have attended



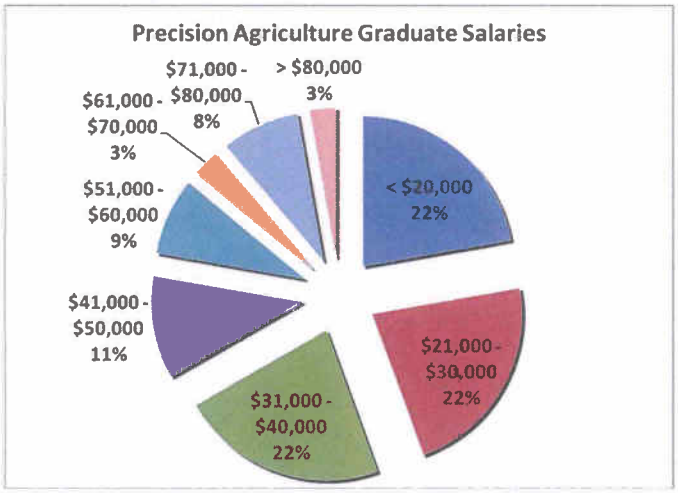
- Intended majors



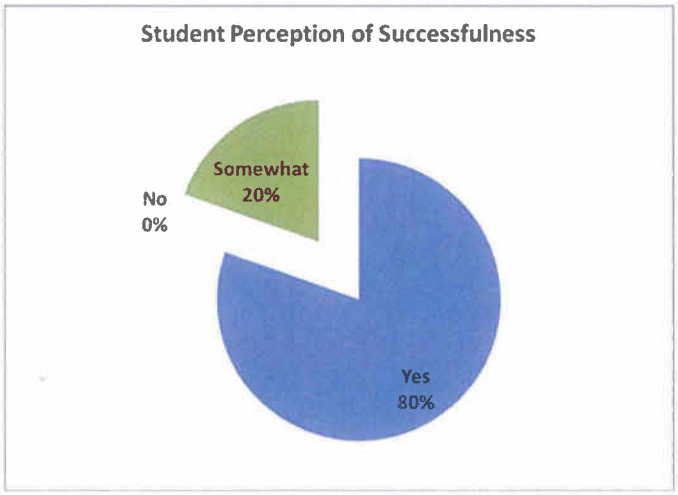
- Intended job categories



- Precision Agriculture completer salaries



- % of students that consider themselves successful



WEST HILLS COLLEGE COALINGA
THREE-YEAR PLAN FOR INSTRUCTIONAL PROGRAMS
For years
2011 through 2014

AGRICULTURE DEPARTMENT

Date Plan Developed: April 2011

1. ***Curriculum:***

   a. Changes
   - Development of an Associate of Science in Agriculture.
     - Students will choose a concentration and work towards a certificate in that area.
       - International Agribusiness
       - Agriculture Engineering Technology
       - Mechanized Agriculture
       - Agricultural Science
       - Irrigation
     - Core courses
       - CRPSCI 1 – Introduction to Plant Science
       - CRPSCI 6 - Application of GPS Technology in Ag
       - CRPSCI 19 – Water Management
       - SLSCI 21 – Soils
     - Seven units of electives related to concentration

   - Development of an Associate of Science in Agricultural Technician.
     - New non-transferrable courses will be created to be taught concurrently with transferrable courses
       - CRPSCI 51 Elementary Plant Science
       - CRPSCI 56 Introduction to Ag GPS and GIS
       - CRPSCI 59 Elementary Water Management
       - SLSCI 71 Introductory Soils
     - Students will choose a concentration and work towards a certificate in that area.
       - International Agribusiness
       - Mechanized Agriculture
       - Irrigation
       - Rodeo Science.

- Core courses
  - CRPSCI 51 Elementary Plant Science
  - CRPSCI 56 Introduction to Ag GPS and GIS
  - CRPSCI 59 Elementary Water Management
  - SLSCI 71 Introductory Soils
  - AGBUS 15 Computer Applications to Agriculture
  - AG 65 Workplace Success
- Four units of electives related to concentration

- Development of an Associate in Welding Technology.

- Development of an Associate in Plant Health/Pest Control Application

- New Courses to be taught concurrently with transferrable course
  - CRPSCI 51 Elementary Plant Science
  - CRPSCI 56 Introduction to Ag GPS and GIS
  - CRPSCI 59 Elementary Water Management
  - SLSCI 71 Introductory Soils
  - AET 55 Introductory Surveying
  - AG 61Developing Sales and Communication Skills
- New Courses
  - AG 65 Workplace Success
  - AG 30 Laboratory Skills and Safety
  - AG 31 Advanced Laboratory Skills and Safety
  - AG 32 Laboratory Design Implementation
  - AG 1 International Agriculture

b. Special Projects (research related to program review, grants, pilot projects, student retention plans, recruitment, outreach, etc.)

- Increase enrollment in Farm of the Future programs of study.

- Continually assess workforce development needs of business and industry.

- Recruit diverse; non-Valley; underrepresented groups (Hmong, Hispanic, etc.)

- Market Farm of the Future to appeal to all prospective students.

- Increase the number of degrees and certificates awarded.

- Reach out to and increase support for incoming freshmen.

- Create internships.

- In order to promote the programs to potential students a recruiter, using grant funds, will head-up the Agricultural Ambassadors and recruit for the program. The recruiter will recruit throughout California at high schools at curricular and extra-curricular functions as well at industry field days and workshops. In addition, field days for both students and educators will be developed and conducted to inform students and teachers about the opportunities at West Hills College.

- An additional effort, during the next 3 years, will be international recruiting. Agriculture materials will be translated into foreign languages, such as Spanish and Vietnamese. A new International Agribusiness concentration will allow domestic students to interact with international students, so they can all gain international awareness.

2. ***Teaching/Learning Methodology:***

The major changes in instructional methodology will be creating non-transferrable courses which align with current transferrable courses which can be taught concurrently but with less strenuous exams and projects. This will allow students who are unable or uninterested in the rigor of transferrable courses to take the non-transferrable courses. Then if students are able and interested in pursuing transfer, they can participate in the transferrable courses, allowing them the ability to experience the information twice. In addition, there will be integration of distance education, both fully online courses and hybrid courses.

3. ***Resources Needed:***

a. Personnel

- Faculty for Additional Programs
    - Current faculty
    - Maybe adjunct for additional courses if needed and grant funded
- Staff for Additional Programs
    - Lab Assistant/Equipment Technician (grant funded)
    - Recruiter (grant funded)

b. Equipment

- Handheld GPS 3/year $800/unit
    - PDA with CF or Bluetooth GPS receiver

- Surveying 7-10 units $30,000 grant funding available
- Irrigation equipment $250,000
    - Retrofit of existing equipment to be compatible with industry standards
- Alternative Fuels equipment $250,000
    - Solar panels for pump operations
    - Bio Diesel generators
    - Methane – Electricity generators

c. Facilities

Facility modifications are underway with the completion of Phase II of the new Ag Science Facility. A new shop will be built to house the agricultural laboratories as well as the completion of the rodeo facilities.

d. Supplies
- Software
    - AutoCAD $22,000/lab Grant funding available
        - Computer-aided drafting software
        - Design Institute – software for 3 years
        - $6,000/lab after initial 3 year term
    - ArcGIS 10.x $2,100/lab
        - GIS software
        - Annual subscription update

e. Travel

- Technical Knowledge and Skills Conferences
    - Irrigation Association
    - World Agriculture Expo
    - International Conference on Precision Agriculture
    - ESRI International Users Conference
- Improvement of Teaching
    - National Institute for Staff and Organizational Development (NISOD)
    - California Agriculture Teachers Association
        - Winter and Summer Conferences
- Recruiting
- Field Trips

f. Other