Comprehensive Program Review Report (Narrative)
College of the Sequoias
Program Review - Ag Technology

Prepared by: Frank Tebeau

What are the strengths of your area?:
1) During the survey period, FTES for Agriculture Technology courses has held steady or has shown slight increase. Success percentages continue to be above 80%.

2) Ag Technology is enjoying a rebirth with a move to the new Tulare College Center. Industry partners are excited and anxious to be involved with the expansion of the two certificates and AS Degree.

3) Students are being placed in local agriculture technology positions.

What improvements are needed?:
1) Consistent continuity of instructional programs and the improvement of industry ties including internships and graduate placement.

2) Increase in the instruction in higher level thinking including the application of highly technical industry created technologies. (Examples: the computerized operating systems for outdoor power equipment, large agriculture equipment and irrigation control systems.)

3) The growing of this program hinges on the addition of a full time agriculture technology faculty member. Addition of new classes which are recommended by industry partners can only be implemented and be successful with the guidance and dedication of a full time faculty member.

4) Industry partners indicate that the agriculture technology program should include a component specific to water management and irrigation.

Describe any external opportunities or challenges:
External opportunities and challenges are almost one in the same within the agriculture technology program. Industry partners that have donated equipment, money, internship opportunities, and the industries involvement continue to request students that are prepared in a wide variety of technological areas that support agriculture. They have offered and continued to ask for student interns.

The greatest challenge is the constant change and addition of new technologies. Examples include the agriculture power equipment, agriculture irrigation and water control management. In the instance of power equipment, equipment has gone from a mechanically controlled device to a "fly-by-wire"/computer based controlled system. The challenge is to keep the technology used in the classroom up-to-date with the industry changes.

The current challenge is the drought. Mitigating the effects of the drought is going to take agriculture based technologies that will require training for design, installation and service technicians.

Overall Outcome Achievement:
Overall performance in the ag technology program both SLOs and PLOs are on track to meet industry demands for new entry level positions. Review of assessments have occurred in all relevant courses and continue to show that students are meeting course goals at 70% level or higher. PLOs indicate that students are succeeding at or above college average. (See assessment results and improvements for AGTC: 103, 106, 202, 210). The greatest improvement recommended in the assessment cycle is the addition of a full time ag technology faculty member who would start in August. As this is the first program review for the ag technology department we have no previous year’s data or patterns to address.

Changes based on outcome achievement:
After reviewing the results of the outcome assessments and identifying strengths and weaknesses the ag technology faculty has identified the following potential ways to support and improve student achievement in the ag technology program.
1. Addition of new full time ag technology instructor.
2. New resources have been identified that will allow laboratories to better serve students and improve their outcome assessment.
3. Faculty proposes minor changes to assessments that will allow students to demonstrate more accurately their industry based skill levels.

Outcome cycle evaluation:
The ag technology department has assessed all courses and reviewed all assessments as listed in trackdat for Fall 2013 and Spring 2014. Courses for assessment in Fall 2014 and Spring 2015 are AGTC 202, 210, 212. Certificate and AS Degree for Ag Technology shall be assessed and evaluation in Fall 2014 Spring 2015.

Action: Create continuity and industry relevance to the agriculture tech program
- Become responsive to agriculture technology industry's desires for higher level skills required for their technicians.
- Create and promote agriculture technology internships.
- Develop higher level thinking skills within the agriculture technology curriculum that meet the ever-changing demands of this highly technical industry.
Start Date: 08/01/2014
Completion Date: 06/30/2015
Status: New Action

Identify related SLO: Upon completion of this course students will be able to identify and describe and demonstrate applications of different types of agriculture power equipment.

course/program outcomes:
  PLO: Upon completion of this program, students will be able to apply general maintenance and operational parameters to a variety of agriculture equipment.

Person(s) Responsible (Name Frank Tebeau
and Position):

Rationale (With supporting data): Agriculture technology is a growing industry and we are constantly being asked by industry partners to train the highly skilled technicians that are necessary to fulfill these technical positions.

Priority: High
Safety Issue: Yes

External Mandate: No

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<td>Full time agriculture technology instructor</td>
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Resource Type: Faculty- New/Replacement

Action: Secure storage for agriculture laboratory equipment
Secure inventory control for several thousand dollars worth of equipment donated by local and national agriculture technology companies.

Start Date: 11/12/2014
Completion Date: 01/07/2015
Status: New Action

Identify related SLO: Upon completion of this course students will be able to calculate and predict the most efficient operational parameters for modern agriculture equipment.

course/program outcomes:
  SLO: Upon completion of this course students will be able to explain and apply the theory’s and concepts of welding as they apply to hard facing, bronze welding, and project fabrication.
  PLO: Upon completion of this program, students will be able to identify the most efficient means of plant cultivation and harvesting.

Person(s) Responsible (Name Frank Tebeau
and Position):

Rationale (With supporting data): Many thousands of dollars worth of engine have been donated to the AGTC program and know that the dairy shop is occupied by the felsher farming company we have no place to store this equipment when not being used for instruction.

Priority: High
Safety Issue: No

External Mandate: Yes

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**Resource Type:** Non-instructional equipment