AGRI 421 Course Syllabus

Course Description:. Curriculum development and methods of teaching and motivating students in agricultural mechanics. 2.0 hours seminar, 3.0 hours laboratory.

Prerequisites: Students should have completed AGET 120 and AGET 150 (or equivalent courses) before taking this class.

Instructor: Michael Spiess

Office Hours and Contact Information: Monday and Wednesday 0900-1100, 1200-1230, in Plumas 213,

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Web site: http://www.agedweb.org
Phone: 898-4554.

Class Meeting: Wednesday 1700-2150 in Shop II. **Attendance is also REQUIRED at the Arbuckle Field Day or UCD Field Day and Chico State Field Day (Saturdays) See schedule for dates.**

Course Objectives: Students will:

- ❑ Have an understanding of basic shop tasks commonly found in agriculture
- ❑ Be able to perform basic shop tasks common to agriculture
- ❑ Develop the ability to work safely in a shop environment.
- ❑ Demonstrate their ability to layout projects from drawings.
- ❑ Be able to create drawings of simple projects.
- ❑ Be able to correctly identify common tools and materials
- ❑ Develop an understanding of projects and materials that will enable them to create a bill of materials for common farm or classroom projects
- ❑ Be able to solve project construction problems such as efficient use of materials, materials selection, etc.
- ❑ Utilize various teaching procedures and techniques.
- ❑ Develop teaching objectives in Ag mechanics.
- ❑ Develop a file of appropriate lesson plans.
- ❑ Select tools and materials used in effective shop classes.
- ❑ Identify factors lending to an effectively layed-out shop facility.
- ❑ Lead a discussion of student evaluations of demonstrations and lessons.
- ❑ Practice & model safety procedures in Ag mechanics shop lessons.
- ❑ Successfully teach a "typical high school" lesson dealing with situations including, but not limited to: discipline, time limits, evaluation, management, etc.
- ❑ Teach several lessons involving demonstrations in Ag shop.
- ❑ Organize, plan and prepare for teaching Ag mechanics skills.

What the student should know:

- ❑ The steps to follow in developing teaching objectives and lesson plans in Ag mechanics instruction.
- ❑ The clinical teaching procedures and elements of good teaching.

- ❑ The development of a shop program budget and how to purchase tools, materials and supplies.
- ❑ Shop management and organization techniques.
- ❑ The general purposes and objectives of Ag mechanics instruction in Agricultural Education.
- ❑ The teacher's legal responsibility for conducting shop and fieldwork activities.
- ❑ Fully understand the California Educational Code relative to eye protection.
- ❑ The importance of giving prompt attention to student first aid needs.
- ❑ The obligation of the teacher relative to teacher liability in school shop accidents.

Required Texts: Bear and Hoerner, Planning, Organizing, and Teaching Agricultural Mechanics, Hobar Publications, 1986. AGET 120 text or equivalent

AGRI 421 Supplemental Reading & Reference (available at the book store).

Required Materials & Equipment: Students are responsible for obtaining materials for lab assignments (lessons). SAFETY GLASSES are required.

Web Site and Computer Use:

Computers are an integral part of agricultural mechanics industry and students are expected to use this technology as part of the course. Some materials for this course are found on the course web site delivered by WebCT. These materials are an integral part of the course and students will be expected to review it regularly. Written assignments are expected to be typed. Generally, assignments will be provided in MS-Word format allowing the student to print and edit the document. Students not familiar with computers or use of the Web (or WebCT) are strongly encouraged to seek training (see instructor for further information). Computer portions of this course can be completed on a home computer with an internet connection or in a campus computer lab (see http://www.csuchico.edu/stcp/labs/). Information on other computer resources for students is available at: http://www.csuchico.edu/stcp/

On the web site students will find:

- Lecture Notes (PDF) provided as a study aid only.
- Assignments and Exercises
- Grades (generally posted after the 4th week)
- A current course activity schedule
- Other resources and **required reading**.
- Resource materials

Class Attendance

Much of the course content is composed of demonstrations and lessons given by the students and the instructor. Class participation and feedback is a key part of the curriculum. Students will be graded on attendance.

Course Management:

- Students are expected to compete the assigned reading prior to class and actively participate in discussion of the reading.
- Students are strongly advised not to miss labs since this time may be difficult or impossible to make up.
- No makeup's will be allowed unless by prior permission of the instructor.
- Cleanup of the shop is part of the laboratory exercise. Students not participating in shop cleanup will have points deducted from their grades.

- **No written assignments will be accepted after the last lecture meeting. Late assignments are subject to a 50% penalty. Assignment and due dates are posted on WebCT.**
- Student grades will be posted on the course web site and it is the responsibility of the student to check their grade for accuracy. If a student feels an error in grading has been made, the student has one week from the time of the assignment is returned to them (or the grade is posted on the web, whichever is later) to request a review of the grade. The request must be in writing – attached to the original assignment—and must include a specific statement as to what is in error, how it should be corrected, and what supporting evidence is available. It is highly recommend that students keep copies of assignments.
- Use of the shop outside of the scheduled class time will be permitted provided that an instructor is in the building and at least two students are in the shop (for safety). Students are expected to work safely and thoroughly cleanup. Abuse of this privilege will result in loss of the privilege.
- It is the student's responsibility to meet all appropriate deadlines for adding, withdrawing, etc. These deadlines can be found on the University web site at: http://www.csuchico.edu/schedule/
- Use of tobacco products is not allowed during class.
- Students are expected to turn off all pagers, cell phones and other electronic devices during class time.
- Students are expected to pay attention and participate in class meetings.
- All class participants are expected to exhibit respectful behavior to other students and the instructor.
- All students have the right and privilege to learn in the class, free from harassment and disruption.
- Inappropriate or disruptive behavior will not be tolerated, nor will lewd or foul language.
- The class follows the standards set in the ***Code of Students Rights and Responsibilities (EM 96-38***) and students are subject to disciplinary action for violation of that code.

Demonstration and Lesson:

Each student will deliver a demonstration (15-20 minutes) and a lesson (50 minutes). One demonstration/lesson will be farm power related and the other in the shop skills area. One presentation (either the demo or lesson) will include a "project" of your own design with complete plans and a sample of the completed project. Students will provide materials for the demonstrations and lessons. Arrangements for use of farm equipment needs to be made well in advance for the time it is needed.

Grading:

Grades will be determined by:

	Approximate Points
Safety Test	20
Binder	50
Demonstration	50
Complete Lesson	100
Field Day Summary (2)	100
Rubrics (2)	50
Other Assignments	100-200
Capital Budget	50
Materials Budget	50
Projects	50
Curriculums (final)	100
Demonstration Attendance & Feedback (5 points each)	150

Grades will be assigned using the following scale:

94% - 100%	A
90% - 92%	A-
87% - 89%	B+
83% - 86%	B
80% - 82%	B-
77% - 79%	C+
73% - 76%	C
70% - 72%	C-
67% - 69%	D+
60% - 66%	D
Below 60%	Failure

Course Binder:

Students are expected to keep a contemporaneous binder of lessons, assignments, and handouts during the class. These materials will be useful references for new teachers.

University Policies

University policies will be enforced in the course (see Catalog).

Cheating and Plagiarism: Cheating and plagiarism are considered as the most serious offenses in the teaching-learning process, as it erodes the integrity of the student/faculty relationship. Students are reminded that the University Policy on Academic Honesty will be enforced in this class. The policy is available in the Catalog. *Students are reminded that turning in someone else's homework or project is considered cheating*. If there is evidence that you have been involved in any form of academic dishonesty, you will receive an "F" grade for the course, be locked from WebCT, and a report will be provided to Student Judicial Affairs for further action.

Students with Disabilities: Upon identifying themselves to the instructor and the university, students with disabilities will receive reasonable accommodation for learning and evaluation. (Contact Disability Support Services)

Academic Rigor

Academic rigor means the consistent expectation of excellence and the aspiration to significant achievement. It should pervade the entire atmosphere of the University--teaching and learning, curriculum, evaluation of student and faculty, outreach, admissions, advising, and student life.

Rigorous Learning

Rigorous students are part of the equation of rigorous teaching and learning. A rigorous education is vigorous, difficult, deeply satisfying work, and it requires a lifestyle conducive to achieving excellence. College is not a temporary diversion or a period of entertainment, but a fundamental piece of student character, citizenship, and employment future. A diploma and good grades from a demanding institution count for something. Rigorous students

- Set high personal standards, develop a strong sense of purpose, come to class well-prepared, and complete assignments on time.
- Develop an effective relationship with the instructor, in and outside of class, and make the most of University advising and other services.
- Treat fellow students and the classroom environment with complete respect. Give each class full attention and participation. Do not miss class, arrive late, or leave early.
- Accept continuing responsibility for learning and for grades earned.
- Approach each class in a professional manner, as if the class were real employment. Treat a full-course load as full-time work and spend no less time on it. Determine exactly what is expected.
- Experiment with all teaching and learning strategies used in classes, and also determine which work best for them.
- Demonstrate complete honesty and integrity.

Rigorous Teaching

Rigorous faculty are role models for the behaviors and accomplishments the University seeks to promote. They demonstrate a high level of professionalism and commitment to the University and to their discipline and inspire in students an excitement about learning. Guiding students toward excellence, they

- Communicate high expectations and demonstrate them through a demanding syllabus and well-prepared classes.
- Encourage student-faculty contact in and out of class and offer conscientious advising and consistent availability.
- Encourage collaboration and active learning, fully involving students in the learning experience.
- Provide students early, prompt, and frequent feedback and develop appropriate assessment strategies.
- Emphasize time on task, clearly communicate time required for learning, make it clear that full-time study is full-time work, and design learning experiences so that homework matters.
- Develop approaches and strategies geared to diverse talents and ways of learning, while maintaining high standards of accountability.
- Reduce opportunities to engage in academic dishonesty and challenge its occurrence.

Course Schedule

Week Of	Topic	Reading*	Assignments**	Activity
1/24/2007	Introduction to Class Career Development Events in Ag Mechanics	Chapter I CATA Code on CalAgEd	Ag Mech CDE/Stds	Ag Mech CDE/Stds Field Day Planning/Organization
1/31/2007	Sample Demonstration / Grading Rubrics for Ag Mechanics California Curriculums for Ag Mechanics	Chap 1,2,3, Curriculum on CalAgEd	Arbuckle Field Day (2/3)	Safety Quiz, Grading Rubric Activity
2/7/2007	Sample Demonstration / Teacher Prep Ag Mechanics Standards Curriculums in other States	Standards on CalAgEd		2nd Grading Rubric Activity Demonstration (4)
2/14/2007	Academic Standards Shop Materials Planning	See CDE site, Curriculum on CalAged Chapter 4, See Web	Shop Materials	Field Day Prep Demonstration (4)
2/21/2007	Lesson Planning	See web		Field Day Prep Demonstration (4)
2/28/2007	Instructional Strategies: Stations, Shop Safety and the Teacher's Responsibility	Chapter 6,7,8,9	UC Davis Field Day (3/3)	Field Day Prep Demonstration (4) Shop Hazard Assessment
3/7/2007	Instructional Strategies: Using Student's Aids, Instructional Strategies: Supervision		Field Day Evaluation I Due	Field Day Prep, Field Day Sat. 3/10 REQUIRED
3/14/2007	Instructional Strategies: Assessment			Project Building (Bring Materials)
3/21/2007	Spring Break			
3/28/2007	Tool and Materials Control	Chap 12 & 13	Field Day II Due	Lesson (3)
4/4/2007	Curriculum Development Shop Design & Layout	Chap 5, Chap 10, 11		Curriculum Materials Presentations
4/11/2007	Material and Tool Planning: Budgeting, Material Acquisition		Shop Capital Budget	Lesson (3)
4/18/2007	SAE Projects / Ag Mechanics Record Book		Record Book Problem	Shop Inventory / Tool Storage Lesson (3)
4/25/2007	Ag Mechanics Instruction supports academic skills	Chapter 14		TBA
5/2/2007	Budget Discussion/Record Book Discussion	On CalagEd		Capital Budget Presentation Lesson (2)
5/9/2007	Service Learning			Lesson (4)
5/16/06	Final Wednesday 6-7:50 p.m		Binder Due	Project Presentations

*Complete before first lecture of the assigned week. ** Assignments can be found on the course web site and may change during the semester. See the calendar for current schedule. Due dates are approximate, see WebCT Assignments.

Course Schedule: The course schedule is subject to change. Changes will be announced in class and posted on the course web site.