### http://kingsriverlife.com/wp-content/uploads/2014/10/reedleycollege.jpg

###  *Fall 2020*

### MAG 40 56022

### Introduction to Agricultural Mechanics

### Syllabus

**Instructor:** Ben Drake

**Office Hours:** By arrangement.

E-mail: ben.drake@reedleycollege.edu

**Lecture Meeting:** Tuesday & Thursday 3:00 -3:50 LSH 1

**Lab Meeting:** Thursday, 4 – 6:50, LSH 1 Shop

**Units:** 3

**Course Description:** Selection, care, and use of common tools, safety, projects of wood and metal; mechanical skills in the field of agriculture. Course is taught primarily to prepare agricultural education students, but skills are applicable to general agriculture. (2 lecture, 3 lab hours).

**Course Goals:**

* The student will develop an understanding of basic farm projects, materials and tools used.
* The student will be able to perform basic shop tasks commonly found in agricultural farming enterprises.

**Primary Learning Outcomes:**

The student 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.

**Secondary Learning Outcomes:**

The student will:

* Work with cold metal and perform simple tasks
* Work with plumbing materials and perform simple and assembly/repair tasks
* Work with wood and perform simple repair tasks
* Work with electrical circuit components and perform simple assembly/repair tasks
* Work with surveying instruments and perform simple tasks

**Lab Dress:** Work clothes, shop coats, or coveralls. No loose clothing. Long hair must be restrained. Closed toe shoes are required. Safety glasses will be worn at all times.

**Required Lab Equipment:**

* OSHA approved Z87.1 or higher safety glasses
* Steel tape measure

**Lockers:** Lockers are available in the restrooms in the Agricultural Mechanics building. Provide your own lock.

**Safety:** Safety is a primary concern while working in the shop. Students that are not working in a safe manner will be required to leave the shop. This includes failure to wear adequate eye protection. You will receive instruction on the safe operation of the equipment; any unsafe operation will be dealt with accordingly. **Proof of tetanus immunization is required.**

**Required Text:**

RayHerren, Agricultural Mechanics Fundamentals & Applications, 7th edition Delmar Publishers.Students are expected to have read the assigned reading before lecture.

**Students Responsibility:**

* Students are strongly advised not to miss labs since this time may be difficult or impossible to make them 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 project grades.
* No written assignments will be accepted after the last lecture meeting. Late assignments are subject to a 20% penalty. No lab projects will be accepted after the final exam.
* Handouts will be given in almost every class or laboratory.

**Tentative Schedule:**

|  |  |  |
| --- | --- | --- |
|  | **LABS** | **BOOK UNITS** |
| * Week 1-
 | Safety/Measurement project | Units 4, 5 & 6 |
| * Week 2-
 | Wood Project (Nail Box) | Units 7 & 8 |
| * Week 3-
 | Wood Projects Continued | Units 9 & 10 |
| * Week 4-
 | Sheet Metal (Measuring Gauge) | Unit 12 |
| * Week 5-
 | Sheet Metal (Dust Pan) | 15 & 16 |
| * Week 6-
 | Tool Fitting (Sharpening Drill Bits Screwdrivers & Chisels) | Units 21 & 22 |
| * Week 7-
 | Surveying |  |
| * Week 8-
 | Electrical Wiring | Unit 33 |
| * Week 9-
 | Electrical Wiring/Motors and Controls | Unit 34 |
| * Week 10-
 | Motors and Controls | Unit 36 |
| * Week 11-
 | Tap and Die | Unit 13 |
| * Week 12-
 | Concrete and Masonry (Step Stone) | Unit 40 |
| * Week 13-
 | Plumbing (Sprinkler) | Unit 37 |
| * Week 14-
 | Plumbing (Sprinkler) |  |
| * Week 15-
 | Lab Make-up |  |
| * Week 16-
 | Google Sketch-up | Units 18, 19 & 20 |
| * Week 18-
 | Open |  |

\***You will be responsible for completing the multiple choice sections of all unit assignments on a scantron sheet (882) and turned in the following week or on Canvas.**

**Subject to Change:**

This syllabus and schedule are subject to change. If you are absent from class, it is your responsibility to check on any changes made while you were absent.

**Evaluation:**

Students will be evaluated on the basis of their performance on quizzes (announced and unannounced), written assignments, unit tests, lab projects and final examination according to the following scale.

Unit Assignments 10%

 Tests & Quizzes 25%

 Lab projects 40%

Final Exam 25%

Your grade in this course will be based on the following scale:

 A – 90 – 100%

 B – 80 – 89%

 C – 70 – 79%

 D – 60 – 69%

 F – 59% and below

**Attendance**

Lecture: Attendance is required and roll will be taken at each class meeting. There is no difference between an “excused” or “unexcused” absence. A “tardy” is considered an absence unless the student contacts the instructor at the end of class to change the status from absent to tardy. Two tardies will count as an absence. Any student who misses more than two weeks of class meetings within the first 9 weeks of class may be dropped from the class by the instructor (i.e., class meets two times per week, 4 absences; class meets 1 time per week, 2 absences).

Lab: Attendance in all labs is mandatory. Students must make prior arrangements with the instructor to be excused from lab. At that time, the instructor will determine, if any, make-up work will be appropriate.

Quizzes: There will be no make-ups for quizzes.

Tests: Make-up tests are limited to students who have made arrangements with the instructor prior to the required testing period or those students who have been excused by the SCCCD Dean of Admissions, Dr. John Cummings.

**Grading Policy/Scales/Evaluation Criteria**

For maximum point consideration, all written assignments and term reports should be typed and double-spaced. Lecture assignments (homework) will be accepted late up to the test for that unit of the course; however, late assignments will be penalized 1/3 of the possible points. Late laboratory assignments turned in within one week of the required due date will be accepted with a penalty equal to 1/3 of the maximum points. Any lab assignment turned in after that time up to the last regular class meeting will be accepted with a 50% penalty.

**College Policies:**

**Cheating & Plagiarism**

In keeping with the philosophy that students are entitled to the best education available, and in compliance with Board Policy 5410, each student is expected to exert an entirely honest effort toward attaining an education. Violations of this policy will result in disqualification for the course.

**Accommodations for Students with Disabilities**

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 (ADA) or Section 504 of the Rehabilitation Act, please contact the instructor as soon as possible.

**Work Ethic -** Most students are enrolled in college classes to obtain a quality job or to enhance their skills for advancement with their current employment situation. Employers look for a punctual, responsible individual who is prepared to go to work. Our goal is to replicate the workplace environment where a student can develop and demonstrate these desirable traits.

* Punctual: It is customary to arrive at least 5 minutes before work begins. Individuals will be terminated if they are not punctual.
* Responsible: It is expected than an employee work every scheduled work day. Individuals will be terminated if they are not responsible.
* Prepared: It is expected that an employee be prepared with he/she arrives for work. Students must have work shirts, safety glasses, and appropriate footwear to participate in the laboratory. If a student is not prepared, he/she cannot participate and will receive a zero (see “responsible”).

**Language -** English is expected to be spoken in class for the following reasons:

* All course content and materials are presented in English and class discussions all take place in English.
* All lab activities are conducted in groups and must have effective communication between all group members.
* Shop activities can be hazardous and it is vital that instructors receive feedback in English to ensure safe practices.
* This policy is designed so that instructors and all students may communicate in a common language.
* All individuals must have freedom of expression and are allowed and encouraged to communicate in the language of their choice outside of class times, including breaks.

**Behavioral Standards**

* Each student is responsible for his/her own work. Written assignments are not group assignments and no credit will be awarded for students who turn in the same work. Students suspected of cheating on tests and quizzes will receive no credit for that particular assignment and may be removed from the class.
* It is considered polite to turn off cell phones when in the classroom or shop. Please do so.
* Reedley College is a **Tobacco Free Campus**! No tobacco products of **any** form are allowed while on campus. This includes “E-Cigarettes”
* This class is set for the semester. All doctor’s appointments, interviews, meetings with counselor, and other types of appointments should be scheduled during your time outside of class.

**Important Dates**

* Last day to drop and qualify for a refund August 21
* Last Day to drop a class and not receive a letter grade October 9
* Labor Day September 7
* Veterans Day November 11
* Thanksgiving November 26 & 27
* Finals Week December 7 – 11

|  |
| --- |
| **FINAL EXAM: –**  |

On-Campus:

As we return Fall 2020, there are procedures to help keep students, faculty, staff, and their families safe and compliant with state regulations.

Please modify these procedures so that they are appropriate for your own area.

**COVID 19 Safety Practices**

**Masks**: Students, faculty, and staff are required to wear masks that cover the nose and mouth when entering, exiting, while inside buildings and when unable to social distance. Students who have medical need can use face shields as an alternative.

**Handwashing**: Students are required to wash their hands or use hand sanitizer prior entering classroom or other campus buildings.

**Social Distancing**: Maintain a distance at least 6 feet apart from others while on campus.

**Cleaning**: Disinfect areas that students and the public touch frequently. Each service area should develop specific guidelines on frequency based on the nature of student contact.

**Ingress and Egress**: Shared spaces have, when possible, designated an entrance and an exit door to minimize congestion.

**Reminders**: If in an area where students congregate, it might be appropriate to remind students that they should not be on campus if they are experiencing symptoms, that they need to hand sanitize if they have not recently washed their hands, that they should be wearing their masks, and that they need to be 6 feet apart. Signage will be posted, but verbal reminders are appropriate as well, particularly for areas where students form lines.

**Equipment**

**Computers**: Most open computer labs are temporarily closed. Students are encouraged to bring their own computers from home, if possible. If they do not have a home computer, have them contact IT which will issue them a computer to use for the semester. These computers will be used in all locations, including computer labs.

**Lab Computers**: Shut down all office and service area computers after every use. The fog used to disinfect rooms will corrode the computer if the fan is left running.

**HVAC**: Appropriate ventilation is an important preventative measure; however, do not assume that your classroom door or windows should be open. HVAC systems are being adjusted for appropriate airflow. If your area is on Central Plant or Package HVAC systems, opening the doors and windows decreases ventilation. If your building utilizes evaporative cooling or has no cooling system, doors and windows can be opened if appropriate for your classroom setting. For more information contact Building Services.

**Policy and Process**

All employees must complete the health screening every day they come to campus (on the portal page). If you are not feeling well, have been exposed to an individual who has tested positive for COVID-19, or you have tested positive for COVID-19, stay home and contact your supervisor immediately and contact Human Resources for information on leave options. Close contact is defined as “someone who has spent 15 minutes or more time within 6 (six) feet or less of individual who has been exposed or is positive for COVID-19 while unmasked. COVID-19 symptoms are fever or chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, or diarrhea.

* High risk individuals: For students and staff considered to be a member of a vulnerable population as a result of underlying medical conditions, age or other co-morbidities, or for those that need religious accommodation, are pregnant or nursing, or live with a person with compromised immunity, the College will work with internal partners, including Human Resources, student services offices, counseling, instruction and operations to provide additional, non-discriminatory protocols to reduce risk of infection. This will include a process for making requests for reasonable accommodations by an at-risk person through normal institutional processes. Human Resources and have developed a process through which faculty, staff, and students are informed about how to access the accommodations process on the College’s website.
* Symptomatic Students: If students are displaying symptoms of COVID, you are encouraged to remind them that they are not to come to campus with symptoms. Encourage them to go home and contact their healthcare provider or the Reedley College Health Services.
* Common COVID-19 Symptoms include, but are not limited to:
* Respiratory symptoms: cough, sore throat, shortness of breath
* Fever of 100.4 degrees F or higher or chills
* Review [CDC’s COVID-19 symptom](https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html) for a full list.

COVID 19 Positive Student: If you have a student who tells you he or she is symptomatic or positive for COVID 19, tell the student to stay home and notify your supervisor and Nurse Kelly Murguia.

1. You may be required to quarantine for 14 days based on the Fresno County Department of Public Heath guidelines.
2. Consider visiting an available testing site in the area.

**Enforcement of Policies**

We have all seen that there can be push back on COVID mask policies. We ask that you remind students that our policies are following legal mandates from our governor and CDC Guidance for educational areas. If students do not follow policies, we encourage you to use the following as a baseline for your response:

1. Remind students that the policy is a campus-wide policy.
2. Have an individual conversation/dialogue with the student about why they are not complying. Try to resolve the situation yourself.
	1. If they do not have a mask, refer them to the free mask sites.
	2. If the student has a medical concern about using a mask, refer the student to Health Services.
	3. Document your interaction using a COVID Compliance Flag in Starfish. This flag will not automatically be sent to the student; however, COVID health services information will be forwarded to the student.
	4. If the situation is resolved between you and the student, document it with the flag, but close the flag when resolved.
3. If the student still does not comply, remove the student from the class for the day. Immediately contact the Dean of Students, Shannon Solis to document the encounter.

We discourage you from calling the police unless the situation escalates to an emergency. Work with the Dean of Students and allow the Behavior Intervention Team to deal with the student and to coordinate with police as necessary. (Some of the details of the Starfish notification are still being developed. Anticipate a separate, more thorough, communication on this closer to the start of the semester.)

**Modifying Policies**

These policies may need to be modified for your own work situations.  In making these modifications, please consider the following:

* Most Effective Measures: The most effective measures are facial coverings, handwashing, social distancing, use of proper hygiene when sneezing or coughing, and enhanced cleaning.  If you must modify these policies, keep these practices in mind.
* Follow the directives set by the Chancellor of State Center Community College District (SCCCD), the Fresno County Department of Public Health, the California Department of Public Health and the CDC guidance for institutions of higher education.  Talk to your Dean or the College Nurse if you need clarification.

These practices were developed by the Reedley College COVID-19 Taskforce, with broad representation from faculty and staff from multiple areas of campus.  We all know that these are unprecedented times; this guidance is subject to change as the situation evolves.

Additionally, we know that unforeseen problems might arise.  If you have a question or concern that has not been addressed by this guidance, please contact your area’s vice president, or another member of the COVID-19 Taskforce, who will take the concern to the Taskforce for discussion.  The COVID-19 Taskforce will host open forum trainings during the first weeks of classes to provide updates, hear concerns, and discuss solutions.