



EAST TEXAS A&M

CRN 40307

ALEC 560: Laboratory

Management in Ag/CTE

Instructor: Whitney Figland, PhD, Assistant Professor

Office Location: AGET 153

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Email Address: Whitney.Figland@etamu.edu

Office Hours: Although I maintain an open-door policy and welcome visits to address questions, provide assistance, or just to learn more about my students, I would encourage you to send me a quick email to schedule a meeting, particularly if you are driving into campus.

COURSE INFORMATION

Course Description: This course is designed to give students certifying to teach secondary agricultural education through the online alternative certification program an overview of managing and safety related to various laboratories involved in teaching at a school-based agricultural education program or in FCS and CTE

Scheduled Meeting Times: None/Online

Textbook (Recommended):

Agricultural Mechanics and Technology Systems, Hancock, Edgar, Pate, Dyer, & Hoover. (2017). This textbook is used in other AMC classes and a great resource for the class.

National FFA Organization (1997) *The Agriculture Teacher's Manual*. Provided by instructor in pdf.

Useful References:

Ag In Texas www.agintexas.org

National FFA Organization www.ffa.org

Texas FFA www.texasffa.org

National Ag Ed www.teamaged.org

Course Objectives:

Upon completion of this course, students should be able to demonstrate the following skills and concepts:

- Practice and model safety procedures in agricultural mechanics laboratory/shop settings.
- Develop student management procedures for laboratory settings.
- Successfully teach a mini lesson using the demonstration method.
- Create a shop layout for the safe operation of machinery.
- Develop a lab/shop program budget and manage purchase requisitions.

COURSE ASSIGNMENTS AND CONTENT

Safety Test (100 Points) – A test covering safety in the agricultural mechanics laboratory in school settings will be administered online through D2L. This is a pass/fail test where a 100 must be achieved to receive points for the safety test. Anything less than 100% correct will receive zero points. You will have three opportunities to pass the exam.

Laboratory Safety Rules and Behavior Management Plan (50 Points) – Develop a list of safety and behavior rules that you would adopt in your own agricultural mechanics laboratory. In addition to the rules, write a description for how these rules will be enforced.

Demonstration Lesson (200 Points) – You will demonstrate either how to safely operate a power tool or how to perform a mechanical skill of your choice. You will create a shortened lesson plan (instructional delivery script) and a recorded video (10-15 minutes) of you demonstrating how to operate a power tool or how to perform a mechanical skill.

Student Management Plan (50 Points) – Given a scenario, develop a student management plan for grouping students in the laboratory based on equipment available and class size. This plan should include time for classroom instruction and laboratory practice.

Shop Inventory (50 Points) – Assume you are teaching in an active agricultural mechanics program. Create a shop inventory list using the Excel template provided. You should have 50 unique items on this inventory list that are appropriate for a school shop.

Shop Layout Design (200 Points) – You will design the layout of a 5000 square foot shop for an active agricultural mechanics program. You are not restricted on the outside shape of the shop perimeter. You may have to do some research to determine the types of equipment and generally layout of components in agricultural mechanics shops.

Purchase Order (50 Points) – You will fill out a mock purchase order request to secure funds to purchase a few tools and supplies for a project you would build in an agricultural mechanics' course.

Agricultural Mechanics Lab Budget (200 Points) – Create an instructional budget for the scenario provided. Your budget should have income (\$6,000) and expenses with a balance at the end. Each expense should have a justification listed. You can make the budget in either a Word or Excel document. You should have a minimum of 50 different expenses listed.

Final Exam (100 Points) – A final exam will be given in D2L testing your knowledge of concepts and skills taught throughout the entire course. Some items will be simple recall while others will require application.

Final Graduate Paper (200 Points) - You are to write a **3,000–4,000 word research paper** analyzing the role, structure, and management of laboratories in modern agricultural systems. The paper should evaluate current laboratory management practices, technologies, regulatory frameworks, and quality assurance systems in the context of sustainable and precision agriculture.

SPECIAL NOTE: The above requirements are minimums to be considered for passing the course. You cannot pick and choose what to do in order to “get by”. This is an all or nothing situation.

LATE WORK WILL NOT BE ACCEPTED

Assessment and Grade Determination

90% + = A 89.9-80% = B 79.9-70% = C Less Than 70% = Removal From Program

COURSE AND UNIVERSITY PROCEDURES/POLICIES
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Course Specific Procedures:

Professionalism: You are expected to be professional in your actions, words, attitude, dress, and in all things you are expected to perform. This class is scheduled in a block format with AGED 470 and will require considerable time, energy, and focus for an intensive semester. You are expected to be on-time, prepared and ready to engage. Business casual will be the minimum dress requirements for every day the classes meet. If you are presenting a micro-teaching lesson, you will be in business professional attire. Similarly, attendance is crucial and timeliness. Failure to be present and on-time in your student teaching, indeed in your future jobs, will result in your removal from your placement or position. The same is true here for your time on the block.

Plagiarism: Plagiarism **WILL NOT** be tolerated and will result in an automatic **F** in the course. Students are expected to do their own work. Assistance with written assignments, such as proofreading or editing, is encouraged as long as the final concepts and product are those drafted and authored by the student. Information or materials (including ideas, quotes, data, procedures, etc.) from sources other than the student must be given proper credit through appropriate citation. The discipline of Agricultural Education uses the APA format (7th edition) as its primary style guide for publications, including research papers and reports. Assistance with this format and general guidelines for written assignments are available at the following source:

I believe this syllabus to be a generally solid representation of the class. I reserve the right to make changes and revisions as needed to improve the class, the assignments, provide clarity, or provide a better experience.

Scholarly Expectations: All works submitted for credit must be original works created by the scholar uniquely for the class. It is considered inappropriate and unethical, particularly at the graduate level, to make duplicate submissions of a single work for credit in multiple classes, unless specifically requested by the instructor. Work submitted at the graduate level is expected to demonstrate higher-order thinking skills and be of significantly higher quality than work produced at the undergraduate level.

Writing Standards: All written assignment will be written in a format aligned with the *American Psychological Association (APA) Manual for Publication*, 6th or 7th edition. APA style will always be used for punctuation, writing style, headings, and citations. Exceptions to APA formatting will be specified when appropriate. For the two writings in this course, the exceptions and expectations are:

- Name (First Last) will be a flush right header and Assignment Name will be a flush right footer. I do not want a “running head” in the top left. Page numbers are optional. This precludes the need for a cover page or a “heading” on the first page in the body of the paper.
- 1” Margins for Top, Bottom, Left, and Right
- Times New Roman, 12 Point
- Single-Space all paragraphs with double space between paragraphs, topic headings (in the body), tables, and figures

A tutorial on scientific writing, including the use of APA format is available from the Online Writing Lab at Purdue University (<http://owl.english.purdue.edu/>). Personal face-to-face assistance with editing and format suggestions is available from the A&M Commerce on-campus Writing Center

Interaction with Instructor Statement: E-mail will serve as the primary method for out-of-class communication between the instructor and students. Therefore, students should check their university (myLeo) or other preferred e-mail account at least once daily. The instructor will attempt to answer each student-generated message within 48 hours of dispatch.

University Specific Procedures and Language

Students with Disabilities-- ADA Statement:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

Gee Library- Room 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: [Office of Student Disability Resources and Services](http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/)

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Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Citizenship

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](#).

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <https://www.britannica.com/topic/netiquette>

Counseling Availability

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit

www.tamuc.edu/counsel

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.