



AGRO 1703 – CROP SCIENCE

SPRING 2019

Instructor: Peter Ampim, Ph.D.

Office Location: Agriculture and Business Bldg. Room 420

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Office hours: Mon: 10:00 pm – 11:30 am; 2:00 pm – 3:30 pm; Tues: 12:00 pm – 4:30 pm; Wed: 3:00 pm – 4:30 pm; Friday: 8:30 am – 11:30 am

Mode of Instruction: Face to Face

Course Locations: Juvenile Justice Building (Lecture) & Agriculture and Business Bldg (Lab)

Class Days, Times & Rooms:

Day	Schedule Type	Session	Meeting Time	Room
Monday & Wednesday	Lecture	P01	8:00 am – 8:50 am	257
Wednesday	Laboratory	P81	1:00 pm – 2:50 pm	111

Catalog Description: AGRO 1703 Crop Science: Credit - 3 semester hours. Botanical characteristics of agronomic and horticultural plants; relationship between crops and civilization in both historical and biological terms; nature of crop plants in relation to structure, physiology, environment, growth and development; crop improvement, cropping systems and practices, crop hazards and prevention

Prerequisites: None

Co-requisites: None

Required Text: Introductory Crop Science. 7th Edition. Richard P. Waldren, Pearson Custom Publishing

Recommended Text: Plant Science: Growth, Development, and Utilization of Cultivated Plants. 5th Edition. Margaret E. McMahon, Prentice Hall

Principle of Crop Production: Theory, Techniques and Technology. 2nd Edition. George Acquah, Prentice Hall

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Student Learning Outcomes:

Upon successful completion of this course, students will be able to:	Program Learning Outcome (PLO) #	Core Curriculum Outcome Alignment
1. Explain the importance of crops to society as sources of food, fiber, fuel and other industrial uses	PLO 1	
2. Examine plant structures, understand their function in addition to understanding plant metabolism and growth	PLO 1,2	
3. Explain the effects of climate and weather on crop production	PLO 1, 2, 4	
4. Describe how soil physical characteristics including texture, structure, bulk density, porosity, permeability and aggregation affect crop production	PLO 1, 2, 3	
5. Explain the foundational concepts of pest and disease control as well as Integrated Pest Management (IPM)	PLO 1	
6. Examine the entire crop production process	PLO 1, 2, 3	

Major Course Requirements:

Instrument	Value (Point or Percentage)	Total
Three Major Exams	15 (each)	45
Assignment/ Quizzes	10	10
Presentation on Class Project	10	10
Labs	10	10
Class Participation/Attendance	5	5
Final Exam	20	20
Total:		100

Grading Criteria and Conversions:

Grade	Percentage Point
A	90-100
B	80-89
C	70-79
D	60-69
F	0-59

Detailed Description of Major Assignments:

The instruments listed below will be used to determine student grades and proficiency of the learning outcomes for the course

Assignment Title or Grade Requirement	Description
Exams	Written tests designed to measure knowledge gained from the course
Exercises	Written assignments designed to supplement and reinforce the course material
Projects	Assignments designed to measure students' ability to apply the knowledge gained in the class
Labs	Exercises designed to reinforced lectures and provide practical experience
Class Participation	Daily attendance and participation in class discussions

Course Procedures or Additional Instructor Policies

Submission of Assignment

Observe deadlines for submitting assignments and term papers to avoid a 10% penalty for each.

Formatting Documents

Microsoft Word is the standard word processing tool used at PVAMU. If you're using other word processors, be sure to use the "save as" tool and save the document in either the Microsoft Word, Rich-Text, or plain text format.

Exam Policy

Exams should be taken as scheduled. No makeup examinations will be allowed except under documented emergencies (See Student Handbook).

Anyone caught cheating during an examination will get a **ZERO** for that examination.

Cell Phone Use

The use of cell phones (i.e. placing or receiving calls, texting etc.) **WILL NOT BE TOLERATED** in class. As a result, all cell phones must be silenced and put away upon entering the lecture room.

Taskstream

Taskstream is a tool that Prairie View A&M University uses for assessment purposes. At least one of your assignments is **REQUIRED** to be submitted as an "artifact," an item of coursework that serves as evidence that course objectives are met. More

SEMESTER CALENDER

WEEK 1

Topic	<i>Introduction to crop science & terminologies</i>
Reading Assignment	Lecture notes
Class Exercise	None

WEEK 2

Topic	<i>Development of agriculture</i>
Reading Assignment	Lecture notes
Class Exercise	Quiz

WEEK 3

Topic	<i>Classification of crop plants</i>
Reading Assignment	Lecture notes
Class Exercise	Exam 1

WEEK 4

Topic	<i>Classification of crop plants</i>
Reading Assignment	Lecture notes
Class Exercise	Homework assignment

WEEK 5

Topic	<i>Seeds and seedlings</i>
Reading Assignment	Lecture notes
Class Exercise	Homework assignment

WEEK 6

Topic	<i>Seeds and seedlings</i>
Reading Assignment	Lecture notes
Class Exercise	Quiz

WEEK 7

Topic	<i>Seeding of crops</i>
Reading Assignment	Lecture notes
Class Exercise	Exam 2

WEEK 8

Topic	<i>Photosynthesis</i>
Reading Assignment	Lecture notes
Class Exercise	None

WEEK 9

Topic	<i>Respiration</i>
Reading Assignment	Lecture notes
Class Exercise	None

WEEK 10

Topic	<i>Cropping production systems</i>
Readings	Lecture notes
Class Assignment	Preparation for project power point presentation

WEEK 11

Topic	<i>Soil and plant nutrition</i>
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Readings
Class Assignment

Lecture notes
Exam 3

WEEK 12

Topic
Readings
Class Assignment

Soil and plant nutrition
Lecture notes
Preparation for project power point presentation

WEEK 13

Topic
Readings
Class Assignment

Crop improvement
Lecture notes
Project power point presentation
None

WEEK 14

Topic
Readings
Class Assignment

Environmental factors affecting crops
Project power point presentation
None

WEEK 15

Topic
Readings
Class Assignment

Environmental factors affecting crops
Lecture notes
None

WEEK 16

Topic
Class Exercise

Course Review
Final exam

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LABORATORY COURSE CONTENT

Part	Topic	Exercises
1	Plant structures and organs	Seeds and germination Vegetative characteristics of grasses and legumes Flowers and fruits
2	Plant growth and development	Growth of grasses and legume Growth stages of corn and soybean Effects of light, temperature and plant nutrition on crop growth
3	Agronomic calculations	Fertilizer Seeding rates Residue management Pesticide application
4	Plant identification	Grain, forage, oil and protein and specialty crops Weeds
5	GIS and remote sensing applications in crop science	Precision ag tools, web soil survey

Student Support and Success

John B. Coleman Library

The library and its partners have as their mission to provide resources and instructional material in support of the evolving curriculum, as a partner in Prairie View A&M University's mission of teaching, research, and service and to support the University's core values of access and quality, diversity, leadership, relevance, and social responsibility through emphasis on ten key areas of service. It maintains library collections and access both on campus, online, and through local agreements to further the educational goals of students and faculty. <https://www.pvamu.edu/library/> Phone: 936-261-1500

The Learning Curve (Center for Academic Support)

The Learning Curve offers Tutoring via peer tutoring. The services include workshops (i.e., Save My Semester, Recalculate Your Route), seminars (i.e., Tools You Can Use: TI-84), group review sessions (i.e., College Algebra Topic Reviews, GRE Preparation), group study opportunities (i.e., TSIA, HESI, Study Break, Exam Cram), and test-taking strategies (How to take Notes, Study Buddy, 5 Day Study Guide). The Learning Curve is a nationally certified tutoring program through the National Tutoring Association. The peer tutors are trained and certified by the coordinator each semester. Location: J.B. Coleman Library Rm. 207F. Phone: 936-261-1561

The Center for the Oversight and Management of Personalized Academic Student Success (COMPASS)

The Center for the Oversight and Management of Personalized Academic Student Success (COMPASS) is designed to help Prairie View students in their second year and beyond navigate towards graduation by providing the following services: Academic Advisement, Targeted Tutorials for Personalized Learning, Campus-Wide Referrals, and Academic & Social Workshops. Location: J.B. Coleman Library Rm. 306. Phone: 936-261-1040

Writing Center

The Writing Center provides student consultants on all aspects of the writing process and a variety of writing assignments. Writing Center consultations assist students in such areas as prewriting, brainstorming, audience awareness, organization, research, and citation. Students taking on-line courses or courses at the Northwest Houston Center or College of Nursing may consult remotely or by email. Location: Hilliard Hall Rm. 121. Phone: 936-261-3724.

Student Counseling Services

The Student Counseling Services unit offers a range of services and programs to assist students in maximizing their potential for success: short-term individual, couples, and group counseling, as well as crisis intervention, outreach, consultation, and referral services. The staff is licensed by the State of Texas and provides assistance to students who are dealing with academic skills concerns, situational crises, adjustment problems, and emotional difficulties. Information shared with the staff is treated confidentially and in accordance with Texas State Law. Location: Owens-Franklin Health Center Rm. 226. Phone: 936-261-3564

Testing

The Department of Testing administers College Board CLEP examinations, the HESI A2 for pre-nursing majors, LSAT for law school applicants and MPRE for second-year law students, the Experiential Learning Portfolio option, the Texas Success Initiative (TSI) Assessment, which determines college readiness in the state, and exam proctoring, among other service such as SAT and ACT for high school students. Location: Delco Rm. 141. Phone: 936-261-4286

Veteran Affairs

Veterans Services works with student veterans, current military and military dependents to support their transition to the college environment and continued persistence to graduation. The Office coordinates and certifies benefits for both the G.I. Bill and the Texas Hazlewood Act. Location: Evans Hall Rm. 323. Phone: 936-261-3563

Office for Student Engagement

The Office for Student Engagement delivers comprehensive programs and services designed to meet the co-curricular needs of students. The Office implements inclusive and accessible programs and services that enhance student development through exposure to and participation in diverse and relevant social, cultural, intellectual, recreational,

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community service, leadership development and campus governance. Location: Memorial Student Center Rm. 221. Phone: 936-261-1340.

Career Services

Career Services supports students through professional development, career readiness, and placement and employment assistance. The Office provides one-on-one career coaching, interview preparation, resume and letter writing, and career exploration workshops and seminars. Services are provided for students at the Northwest Houston Center and College of Nursing in the Medical Center twice a month or on a requested basis. Distance Learning students are encouraged to visit the Career Services website for information regarding services provided. Location: Evans Hall Rm. 217. Phone: 936-261-3570.

University Rules and Procedures

Disability Statement (Also See Student Handbook):

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 believe you have a disability requiring an accommodation, please contact Disability Services, in Evans Hall, Room 317, or call 936-261-3585/3.

Academic Misconduct (See Student Handbook):

You are expected to practice academic honesty in every aspect of this course and all other courses. Make sure you are familiar with your Student Handbook, especially the section on academic misconduct. Students who engage in academic misconduct are subject to university disciplinary procedures.

Forms of Academic Dishonesty:

1. Cheating: deception in which a student misrepresents that he/she has mastered information on an academic exercise that he/she has not mastered; giving or receiving aid unauthorized by the instructor on assignments or examinations.
2. Academic misconduct: tampering with grades or taking part in obtaining or distributing any part of a scheduled test.
3. Fabrication: use of invented information or falsified research.
4. Plagiarism: unacknowledged quotation and/or paraphrase of someone else's words, ideas, or data as one's own in work submitted for credit. Failure to identify information or essays from the Internet and submitting them as one's own work also constitutes plagiarism.

Nonacademic Misconduct (See Student Handbook)

The university respects the rights of instructors to teach and students to learn. Maintenance of these rights requires campus conditions that do not impede their exercise. Campus behavior that interferes with either (1) the instructor's ability to conduct the class, (2) the inability of other students to profit from the instructional program, or (3) campus behavior that interferes with the rights of others will not be tolerated. An individual engaging in such disruptive behavior may be subject to disciplinary action. Such incidents will be adjudicated by the Dean of Students under nonacademic procedures.

Sexual Misconduct (See Student Handbook):

Sexual harassment of students and employees at Prairie View A&M University is unacceptable and will not be tolerated. Any member of the university community violating this policy will be subject to disciplinary action.

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Title IX Statement

Prairie View A&M University (PVAMU) is committed to supporting students and complying with the Texas A&M University System non-discrimination policy. It seeks to establish an environment that is free of bias, discrimination, and harassment. If you experience an incident of sex- or gender-based discrimination, including sexual harassment, sexual assault or attempted sexual assault, we encourage you to report it. While you may talk to a faculty member about an incident of misconduct, the faculty member must report the basic facts of your experience to Alexis Boyd, PVAMU's Interim Title IX Coordinator. If you would like to speak with someone who may be able to afford you privacy or confidentiality, there are individuals who can meet with you. The Title IX Coordinator is designated to handle inquiries regarding non-discrimination policies and can assist you with understanding your options and connect you with on- and off-campus resources. The Title IX Coordinator can be reached by phone at 936-261-2123 or in Suite 013 in the A.I. Thomas Administration Building.

Class Attendance Policy (See Catalog for Full Attendance Policy)

Prairie View A&M University requires regular class attendance. Attending all classes supports full academic development of each learner whether classes are taught with the instructor physically present or via distance learning technologies such as interactive video and/or internet.

Excessive absenteeism, whether excused or unexcused, may result in a student's course grade being reduced or in assignment of a grade of "F". Absences are accumulated beginning with the first day of class during regular semesters and summer terms. Each faculty member will include the University's attendance policy in each course syllabus.

Student Academic Appeals Process

Authority and responsibility for assigning grades to students rests with the faculty. However, in those instances where students believe that miscommunication, errors, or unfairness of any kind may have adversely affected the instructor's assessment of their academic performance, the student has a right to appeal by the procedure listed in the Undergraduate Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.

TECHNICAL CONSIDERATIONS

Minimum Recommended Hardware and Software:

- Intel PC or Laptop with Windows 7; Mac with OS X; Smartphone or iPad/Tablet with Wi-Fi
- High speed Internet access
- 8 GB Memory
- Hard drive with 320 GB storage space
- 15" monitor, 800x600, color or 16 bit
- Sound card w/speakers
- Microphone and recording software
- Keyboard & mouse
- Most current version of Google Chrome, Safari, Internet Explorer or Firefox

Note: Be sure to enable Java & pop-ups in the Web browser preferences

- A basic scientific calculator for class and lab exercises that involve calculation

Participants should have a basic proficiency of the following computer skills:

- Sending and receiving email
- A working knowledge of the Internet
- Proficiency in Microsoft Word (or a program convertible to Word)
- Proficiency in the Acrobat PDF Reader
- Basic knowledge of Windows or Mac O.S.

Netiquette (online etiquette):

Students are expected to participate in all discussions and virtual classroom chats as directed. Students are to be respectful and courteous to others on discussions boards. Foul or abusive language will not be tolerated.

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Technical Support:

Students should go to <https://mypassword.pyamu.edu/> if they have password issues. The page will provide instructions for resetting passwords and contact information if login issues persist. For other technical questions regarding eCourses, call the Office of Distance Learning at 936-261-3283.

Communication Expectations and Standards:

Emails or discussion postings will receive a response from the instructor, usually in less than 48 hours. Urgent emails should be marked as such. Check regularly for responses.

Discussion Requirement:

Online courses often require minimal to no face-to-face meetings. However, conversations about the readings, lectures, materials, and other aspects of the course can take place in a seminar fashion. This will be accomplished by the use of the discussion board. The exact use of discussion will be determined by the instructor.

It is strongly suggested that students type their discussion postings in a word processing application and save it to their PC or a removable drive before posting to the discussion board. This is important for two reasons: 1) If for some reason your discussion responses are lost in your online course, you will have another copy; 2) Grammatical errors can be greatly minimized by the use of the spell-and-grammar check functions in word processing applications. Once the post(s) have been typed and corrected in the word processing application, it/they should be copied and pasted to the discussion board.

Office of Diagnostic Testing and Disability Services

As a federally-mandated educational support unit, the Office of Disability Services serves as the repository for confidential disability files for faculty, staff, and students. For persons with a disability, the Office develops individualized ADA letters of request for accommodations. Other services include: learning style inventories, awareness workshops, accessibility pathways, webinars, computer laboratory with adapted hard and software, adapted furniture, proctoring of non-standardized test administrations, ASL interpreters, ALDs, digital recorders, livescribe, Kurtzweil, and a comprehensive referral network across campus and the broader community. Location: Evans Hall Rm. 317. Phone: 936-261-3585.