Introductory Plant Sciences AGRO/HORT 100G Fall 2020 Syllabus

<u>Lecture:</u> Instructor:

Asynchronous Online through CANVAS Dr. Ivette Guzmán Skeen Hall and Zoom Tel: (575) 646-1914 Email: ivguzman@nmsu.edu, Twitter: @NMplants4health Zoom Office Hours: Wed 12:00 – 1:00 PM or By Appointment Online

Labs: Online and FACE-2-FACE

M1A: Tues 10:30a-1:00p	M1B: Tues 1:30p-4:00p	M1C: Wed 1:30p-4:00p
M1D: Thurs 1:30p-4:00p	M1E: Fri 1:30p-4:00p	

Teaching Assistants:

Name	email	Lab time(s)	Office Hours
Srijana Dura	<u>srijana@nmsu.edu</u>	Lecture & Lab TA	By apt. on Zoom
Subhankar Mandal	<u>mandals@nmsu.edu</u>	M1A & M1E	By apt. on Zoom
Stephanie Torres	<u>storr305@nmsu.edu</u>	M1B & M1D	By apt. on Zoom
Brianna Lind	lind@nmsu.edu	M1C	By apt. on Zoom

Course Description:

Introduction to the physical, biological, and chemical principles underlying plant growth and development in managed ecosystems. In the laboratory portion of the class, students perform experiments demonstrating the principles covered in lecture. The course uses economic plants and agriculturally relevant ecosystems to demonstrate basic principles. This course is appropriate for non-science majors.

Course Objectives:

- 1. Describe the role plants play in everyday lives
- 2. Introduce career opportunities in plant and soil sciences, and related fields
- 3. Define plants through the concepts of plant structure and anatomy
- 4. Introduce the wide variety of plants cultivated throughout the world
- 5. Describe how plants work (growth, reproduction, physiology, and soil)
- 6. Describe how plants are manipulated to feed, clothe and entertain the world

Course Materials:

REQUIRED BOOK: Plants and People. James D. Mauseth. 2012. Jones & Bartlett Learning. ISBN-13: 978-1449657178. <u>Amazon Link</u>

COMMUNICATION

Announcements

I will send urgent and regular communication to all students using the **Announcements tool in Canvas**. It is a requirement in this class that you set your New Announcements in Notifications to "Right Away" to ensure that you receive any announcements. (Go to Account, then "Profile", then click on "Notifications", find Announcements and set to "Notify Me Right Away").

CANVAS

This course will use CANVAS (<u>http://learn.nmsu.edu/</u>). Lecture/laboratory materials can be found in **MODULES**.

<u>Email</u>

The instructor and the teaching assistants will respond to every student email prior to the end of the next business day (allow for 72 hours on weekends). NMSU policy says that instructors and teaching assistants can only respond to students through their NMSU email. Therefore, students are expected to check their NMSU email daily or forward their NMSU email to another account.

Office Hours and Getting Help

Office Hours are available online. You are also free to use the "Muddiest Points" Discussion Board within CANVAS to post any questions you might have about the course materials. These will be answered by your fellow students, teaching assistants and/or course instructor. Do not post non-class related material in the Muddiest Points Discussion. A separate discussion posting board will be created for "Items of Interest" Discussion Board within CANVAS for students to post other items. All inappropriate items will be removed from the course and one's ability to post items may be revoked for any reason.

Required Technical Skills:

Taking an online course requires technical skills as well as other soft skills. However, at a minimum you will need to meet certain technology responsibilities to complete work for this course. If you have questions about technical requirements for the course, please contact me immediately.

To begin in this course, you must:

- Be able to obtain access to an internet connection, preferably broadband, and a working computer for the duration of this course.
- Be proficient with Microsoft© Office applications.
- Be able to conduct research searches on the Internet; see the <u>NMSU LibGuides</u>
- Be able to send and receive emails and email attachments in and out of class.
- Be able to change your Canvas Notification settings.
- Be able to complete Canvas quizzes and assignments.
- Be able to maintain backups of all work you create for this course.

GRADING

A total of 1000 points will be available for grading purposes. No +/- grades will be assigned. Students taking the course "pass/fail" must have at least 700 pts. to "pass".

Assignment Total Points	Class Grade in Percents	Letter Grade	GPA
900-1000	90-100%	A	4.0
800-899	80-89.9%	В	3.0
700-799	70-79.9%	С	2.0
600-699	60-69.9%	D	1.0
0-599	0-59.9%	F	0.0

Graded items (800 pts. total, 80% of grade)

NMSU Covid-19 Crimson Commitment (20 pts each)	40 pts.
Weekly Reflections (10 pts each)	100 pts.
Biweekly Review Quizzes (5 x 40 pts each)	200 pts.
Final Presentations	100 pts.
Plant Topic Paper	100 pts.
Laboratory (13 labs x 20 pts each; drop lowest)	

All-Or-Nothing (AON) items (200 pts., 20% of grade, pick from the following)

Attend a student club meeting in Plant & Environmental Sciences	
(Hort Forum, Compost Club, Turf Club, ESSO)	
Join ASHS	
Daily Contact with 5 Plants Powerpoint	
Create your CV	
Zoom Coffee with Dr. Guzman (Before Sept. 11, by appointment)	
Paper: Topic submission (Before Sept. 18)	20
Plant Myth Submission	
Plant Myth Buster	
Wikipedia Quest	35
Neighborhood Swap	
Know Your Plant (plant assigned by Prof)	30
Paper: 1st Draft (Before Nov. 1)	40
I'm farming and I know it video	40

Plant Breeder Video Summary	20
Plant journal: Know your plant community (topic must be approved)	
"You Call It" (anything preapproved, points predetermined)	requires approval

Notes on All-Or-Nothing (AON) assignments.

Students can only receive points once for each approved item unless otherwise stated above. Students shall submit a write-up, journal, video, photo collage, signature from president of student club, etc. to receive points and must follow all instructions for each AON. For the "You Call It" items, student must meet with Dr. Guzman to get approval and to determine point value. An assignment contract will be signed by both parties.

Once AON assignments are turned in, the student will be awarded all assigned points or no points. Allow at least 8 business days for review. All assignments will have a due date. Paper topic submissions will only receive points if submitted prior to September 18 at 5 pm and the paper draft submission will only be considered if it is a <u>complete draft</u> received before October 16.

Extra Credit. Once a student has completed the required 200 points for AON assignments and **IF** they fulfill the requirements for the laboratory section including mandatory attendance, they can seek additional points from the non-graded AON assignments (maximum 150pts). All deadlines listed above still apply.

PLANT TOPIC PAPER

Due Dates: Paper topics must be approved by Dr. Guzman or you will not be allowed to submit a paper. If you want AON points, you must follow the Topics AON and Draft AON due dates listed above. The final paper submission is due November 20 at 5:00 pm.

Dr. Guzman and the TAs will review all paper topics for approval. General paper topics will not be approved. No two students may have the same topic. Paper topics may be changed, with additional approval, at any point prior to November 11. <u>Papers submitted from unapproved topics will not be accepted or graded until topic is</u> <u>approved.</u> Papers shall be submitted electronically through CANVAS as either a word document (doc/docx) or an Adobe Acrobat File (pdf) **ONLY**.

The written TEXT portion paper must be six (6) to eight (8) full-pages long, double-spaced, 1.0" margins, Times New Roman or Arial 12 point font. Bibliography, figures, maps, diagrams, etc. will not be counted in the page count and should be placed after the text portion of the paper. The topic and writing approach is left to the discretion of the student. One acceptable writing approach may be to present an issue, to present various viewpoints of the issue, and to provide evidence for the best solution/opinion. Another writing approach may be to write a compare and contrast paper. You must use at least ten (10) recent references (the oldest publication year should be 2010). No more than half of your references can come from "reliable" internet sources. <u>A grading rubric will become available later in the semester</u>. Plagiarism will not be tolerated and will result in significant consequences, including a zero on paper and/or further university discipline action (See Below). <u>Do not plagiarize!</u> It is easy to spot. When in doubt, simply use a citation within the paper and a reference in a bibliography. Papers not meeting all of the above guidelines will not be accepted or graded.

Paper topic examples (these are general topic areas, your topic must be much more specific to include a specific plant, plant trait, etc.)

- How should genetically modified plants be managed and how will they affect humankind?
- How will global warming affect plants on Earth and how will plants affect global warming?
- On a global scale, how can an ever expanding population be fed while reducing soil erosion, reducing new land development, and preserving natural ecosystems?
- In the Mesilla Valley of New Mexico, how can crop production agriculture be sustained with increased domestic and international competition, decreasing resources, and increased urbanization?
- With the recent food safety scares involving fresh produce, how can we ensure that produce is safe to eat?
- Should corn be grown for ethanol fuel and what effect will increased corn production have on commodity prices, fuel costs, energy dependence, and the environment?
- Why does steer manure smell so bad when it's fresh and so "sweet" when it's composted?
- With the increased prices for farm commodities such as corn, wheat, soybeans, etc., should U.S. farm subsidies and price supports continue? Why or why not?

- If the human population keeps growing and arable farmland keeps decreasing at their current rates, when will we run out of food?
- Is the US agriculture really feeding the world?
- Why do we grow different crops in New Mexico than in Pennsylvania?

Final Presentations Due Final Exam Week

Each student will upload and submit a Studio video with the following information. Rubric will be provided.

- 1) A journal of the vegetables they grew at the farm, from seed to harvest.
 - 2) A presentation of their paper topic in a powerpoint slideshow.

POLICIES

Lecture Participation

The lecture is asynchronous and you are expected to check into Canvas regularly. On a weekly basis, there will be 2-3 videos uploaded and one Online Weekly Reflections assignment due at the end of the week. At the end of each chapter, there will be a Review Quiz that will be an indepth review of the chapter. There will be no exams in this course. The due dates for the Weekly Reflections and the Quizzes will be strictly enforced. Plan ahead to do the assignments on Canvas.

Laboratory Participation and Attendance

Online Labs.

Each lab section will have its own canvas page. The lab instructors will upload videos and assignments on a weekly basis. The assignments will have a due date and each instructor will include their late policy on their canvas page.

Face-2-Face (F2F) Labs.

There will be **4** F2F labs, and the instructor will send an email directing you the meeting location. You will be meeting F2F in groups of 5 students at a time. Each group will meet with the instructor for a maximum of 20 minutes. This allows for better social distancing. All F2F labs will be outdoors, so be prepared with a sun hat and water.

Grading.

Attendance and participation in the laboratory section is mandatory for all students. Points earned in laboratories <u>cannot</u> be made up. A student who misses three (3) or more laboratories will receive no points for the laboratory section (260 points). In addition, no extra credit AON assignments are allowed (no extra credit). A student who arrives five (5) or more minutes late to class will be considered absent, but may be able to complete the day's activities with the teaching assistant's permission. There will be <u>LAB NO MAKEUP</u> options.

Late Assignments

Lose 50% of points; not accepted if more than 2 business days late. This is true for both the laboratory and lecture portion of the course. All AON assignments and extra credit assignments will not be accepted late.

There will be NO MAKEUPS without an official medical excuse.

ACADEMIC MISCONDUCT and PLAGIARISM

Academic misconduct including plagiarism will not be tolerated in the Plant and Environmental Sciences Department. The Department follows the policies and procedures pertaining to academic misconduct and plagiarism found in the NMSU Student Code of Conduct available online at https://studenthandbook.nmsu.edu/

Students at NMSU are expected to observe and maintain the highest academic, ethical, and professional standards of conduct. Any student found guilty of academic misconduct shall be subject to disciplinary action. Academic misconduct includes, but is not limited to, the following actions:

1. Cheating or knowingly assisting another student in committing an act of cheating or other forms of academic dishonesty;

- Plagiarism, which includes, but is not necessarily limited to, submitting examinations, themes, reports, drawings, laboratory notes, undocumented quotations, computer-processed materials, or other material as one's own work when such work has been prepared by another person or copied from another person;
- 3. Unauthorized changing of grades on an examination, in an instructor's grade book, or on a grade report; or unauthorized access to academic computer records;
- 4. Nondisclosure or misrepresentation in filling out applications or other university records in, or for, academic departments or colleges.
- 5. Violation of the Crimson Commitment for Covid Safety Practices

Academic Misconduct Class Policy: Cheating will not be tolerated on any class activity. Any student caught cheating will receive **zero** points for the activity. In addition, the student may be asked to leave the class, or the student may be subjected to further disciplinary action at the university level (e.g., hearing with possible dismissal from the university). Plagiarism is a crime, in addition to being academically dishonest, and will not be tolerated. Plagiarism can be committed unintentionally by quoting or copying others' works without providing the proper credit (literature citations). Ask the instructors for help if you are unsure about plagiarism. Plagiarism is easy to spot; please just don't do it. When in doubt, use a citation within the text to indicate you are using someone else's work, ideas or thoughts.

STUDENTS WITH DISABILITIES:

Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act Amendments Act (ADAAA) covers issues relating to disability and accommodations. If you have (or believe you have) a disability and would benefit from classroom accommodation(s), please contact the Services for Students with Disabilities (SSD) Office.

Jesse Haas, Director Student Accessibility Services (SAS) - Corbett Center Student Union, Rm. 208 Phone: (575) 646-6840 E-mail: <u>sas@nmsu.edu</u> Website: <u>http://sas.nmsu.edu/</u>

Student Responsibilities:

- 1. Register with SAS and obtain accommodation documents early in the semester;
- 2. Email the form(s) to the instructor(s) within the first two weeks of beginning of classes;
- 3. Retrieve the signed form(s) from faculty and return to SAS within (5) days of the receipt from faculty and at least one week before any scheduled exam; and,
- Contact the SAS Office if the services/accommodations requested are not being provided, not meeting your needs, or if additional accommodations are needed. Do not wait until you receive a failing grade. Retroactive accommodations cannot be considered.

Faculty Responsibilities

- Sign the ACCOMMODATION REQUEST FORM and TESTING ACCOMMODATION FORM (when presented), retain a copy, and return the original to the student within five (5) working days of receipt;
- 2. Contact SAS immediately if there are any questions or disputes regarding accommodation(s), disruptive behavior, etc.; and,

Discrimination Policy

NMSU policy prohibits discrimination on the basis of age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, retaliation, serious medical condition, sex, sexual orientation, spousal affiliation and protected veterans status. Furthermore, Title IX prohibits sex discrimination to include sexual misconduct: sexual violence (sexual assault, rape), sexual harassment and retaliation. NMSU's complaint process, or to file a complaint contact:

Lauri Millot, Director and Title IX Coordinator Agustin Diaz, Associate Director, Title IX Deputy Coordinator Office of Institutional Equity (OIE) - O'Loughlin House, 1130 University Avenue Phone: (575) 646-3635 E-mail: <u>equity@nmsu.edu</u> Website: <u>http://eeo.nmsu.edu/</u>

Other NMSU Resources:

NMSU Police Department: (575) 646-3311 <u>www.nmsupolice.com</u> NMSU Police Victim Services: (575) 646-3424 NMSU Counseling Center: (575) 646-2731 NMSU Dean of Students: (575) 646-1722 For Any On-campus Emergencies: 911

CRIMSON COMMITMENT for Classroom Covid-19 Safe Practices

Aggie Health and Wellness-Hours of Operation

Closed 11:30 - 1:00 pm for lunch.

By appointment and urgent care walk-

Monday – Friday 8:00 am – 5:00 pm

Contact Us

575-646-1512

in.

AGGIES LEAD BY EXAMPLE

As a student it is your responsibility to

- Positively influence others through respectful and productive relationships,
- Hold yourself accountable for your behavior and actions,
- Maintain high academic, ethical, and professional standards of conduct, which requires honesty in all academic matters
- Further the goals of New Mexico State University, the State of New Mexico and our country.

As an Aggie, I Commit to:

campus_health@nmsu.edu

Personally Protecting My Own Health	 Monitor myself for symptoms of COVID-19 Report to the Aggie Health & Wellness Center or other medical professional if I experience ANY of the following: a fever of 100.4 F (38 C) or higher, dry cough, difficulty breathing, chills, repeated shaking with chills, muscle pain, headache, sore throat or loss of taste or smell Wash my hands often with soap and water and/or use hand sanitizer Get vaccinated for the flu during the fall semester
Protecting Other Aggies	 Wear an appropriate face covering and other protective gear as directed in the NMSU Ready Plan Maintain appropriate social distancing, especially in classroom settings Stay home if I feel ill or after exposure to someone who is ill or someone who has tested positive for COVID-19 Be positive, attentive and helpful to anyone around who may be in need of support
Keeping the Aggie Community Safe	 Keep my belongings, personal spaces and shared common spaces clean Participate in testing and contact tracing to preserve the wellness of the community Carefully observe instructional signs and follow directions and requests of University officials

I understand and acknowledge the following Classroom COVID-19 Safe Practices and will abide by them throughout the duration of the course:

- I will observe the face covering requirement when on campus and when attending face to face classes.
- I will maintain distance of at least 6 feet between myself and others to limit the chance of acquiring or spreading COVID-19.
- \checkmark I will follow instructions regarding the decontamination of classroom work surfaces.
- ✓ I will follow instructions regarding seating instructions in campus classrooms.
- ✓ If I am unable or unwilling to comply with the Classroom COVID-19 Safe Practices I will leave the classroom willingly and seek alternative academic course options.

If you feel sick, do NOT show up to F2F labs. Contact Aggie Health Center – info listed above.

Revised 08/17/2020

COURSE SCHEDULE

Dates and Topics are subject to change. Updated 08/15/2020

Week	Week Dates	Video Topics	Readings & Online Assignment	Lab Topics
1	Aug 19 - 21	 Introduction Syllabus 	 Covid Video Assignment Covid-19 Quiz Syllabus Weekly Reflection 	NO LAB
2	Aug 24 - 28	 Plants & People What is a Plant? 	 Read Ch. 1 Online Weekly Reflection 	1. Virtual Lab Orientation
		AON: Unusual Contact with Plants	AON Due Aug 29	
3	_	 Interactions with Plants Plant Careers 	 Read Ch. 1 Online Weekly Reflection	2. Virtual Campus Tour
		AON: Create your CV	AON Due Sept 5	
4	Sept 7-11	 Dr. Thompson Hort Specialist Ch. 1 Review Quiz Instructions 	• Ch. 1 Review QUIZ	3. F-2-F Vegetable Planting
		AON: Zoom coffee with Dr. Guzman	AON Due Sept 11 5PM	
5	Sept 14 – 18	 Plant Shoots Shoot Types 	Read Ch. 2Online Weekly Reflection	4. Virtual Library Tour
		AON: Paper Topic Submission	AON Due Sept 18	
6	Sept 21 -25	 Roots Flower Stucture 	Read Ch. 2Online Weekly Reflection	5. Virtual Seed Structure
		AON: Plant Myths Submission	AON due Sept. 25	
7	Sept 28 – Oct 1	 Life Spans Dr. Beck or Skimore? 	 Read Ch. 2 Ch. 2 Review QUIZ 	6. Virtual Flower Structure
		AON: Plant Myth Buster	AON due Oct 1	

8	Oct 5 - 9	 Plant Cells 1 Plant Cells 2 	 Read Ch. 3 (pp 42 - 50) Online Weekly Reflection 	7. Virtual Plant Sexual Reproduction
		AON: Join ASHS	AON due Oct 9	
Oct 12 – 16 9 Last day to drop with a W		 Dr. Beck or Skidmore?? Plant Sexual Reproduction 1 	 Plant Cells Review QUIZ Read Ch. 7 	8. F-2-F Grafting Chile
	(Oct. 16)	AON: Paper Draft	AON due Oct 16	
10	Oct 19 -23	 Plant Sexual Reproduction 1 Plant Asexual Reproduction 2 	 Read Ch. 7 Online Weekly Reflection 	9. F-2-F Plant Asexual Reproduction
		AON: Neighborhood Swap	AON active all week in labs	
11	Oct 26 -30	 Speaker Mineral Nutrition 	 Ch. 7 Review QUIZ Read Ch. 4 (pp 94-100) 	10. Virtual Hydroponics
		AON: Know Your Plant	AON due Oct 30	
12	Nov 2 - 6	1. Plant Growth & Environment 1 2. Plant Growth & Environment 2	 Read Ch. 6 Online Weekly Reflections 	11. F-2-F Organic Agriculture
		AON: Wikipedia Quest	AON due Nov 6	
13	Nov 9 -13	 Types of Agriculture Plant Breeding & Biotechnology 	 Read Ch. 12 Online Weekly Reflections 	12. Virtual Valley Tour
		AON: Dr. Lozada's Video	AON due Nov. 14	
14	Nov 16 -20	 Video Economic Botany Introduction 	• Ch. 6 and 12 Review QUIZ	13. Virtual Lab Topic TBA
		** PAPER DUE **	** All AON Due **	
15	Nov 23 - 27	Thanksgiving Week – NO ClassesYAY!! ☺		
16	Nov 30 – Dec 4	 Economic Botany - Spices Economic Botany - Medicines 	 Read Ch. 14 & 15 Online Weekly Reflections 	14. Virtual Plant Phytochemistry
17	Dec 7	(FINAL EXAM) Final Presentations Due 5 PM		NO LAB

AON Assignment Contract for AGRO/HORT 100

Student:	Date:	
Approver:	Proposed point value:	pts.
Description of assignment:		
Approver signature/date	Student signature/date	
Completion Date and Final Points awarded:	Approver:	
to the second		
AON Assignment Cor	ntract for AGRO/HORT 100	
Student:	Date:	
Approver:	Proposed point value:	pts.
Description of assignment:		
Approver signature/date	Student signature/date	
Completion Date and Final Points awarded:	Approver:	