

PLSC 515, Agroecology

Course Information & Syllabus Fall 2020, 3 credit hours, lecture/lab combined

Lecture: Lectures are online and asynchronous, available through Canvas, and posted on M and W Lab Meeting Time: See schedule for dates, meeting times are Wednesday 10:30 am to 12:25 pm Location: South Greenhouse 124

Contact Information:

Instructor:

Dr. David Butler, Associate Professor, Plant Sciences Department Office: 327 Plant Biotechnology Building Phone: 865-974-7165 E-mail: <u>dbutler@utk.edu</u> Office hours: by appointment

Lecture teaching assistant:

Sam Purdom, Graduate Student, Plant Sciences Department E-mail: spurdom1@vols.utk.edu Office hours: W (starting Aug 25), 10-11 AM on Zoom at: <u>https://tennessee.zoom.us/j/95319510458</u>

Lab teaching assistant:

Márcia Quinby, Graduate Student, Plant Sciences Department E-mail: mdasilv4@vols.utk.edu

Course Description:

Application of ecological concepts to management of horticultural, agronomic and biofuel cropping systems. Examination of plant physiological ecology, population ecology, community ecology, and ecosystem ecology within the context of agroecosystems; discussion of current research in agroecology; assessment of sustainability of cropping systems from environmental, economic, and social perspectives. 2 hours lecture and one 2-hour lab.

Course Objectives:

Upon completion of this course, students will be able to:

- 1. Describe how environmental factors influence agroecosystem management.
- 2. Describe how organisms interact within agroecosystems at population, community, ecosystem and landscape scales.
- 3. Describe how ecological concepts of diversity, stability, disturbance, succession, and energy flow are relevant to sustainable management of cropping systems.
- 4. Evaluate cropping systems and food systems for sustainability from ecological, economic, and social perspectives.

Reference Textbooks (optional, also available from course reserves at the Pendergrass Library):

Agroecology. K. Martin & J. Sauerborn, 2013. Springer, Dordrecht.

Technology Use in the Course:

PLSC 515 will utilize Canvas via Online@UT. Find information about Canvas at http://online.utk.edu. As a student registered for this course, you are automatically loaded into the course Canvas site and it should appear on your homepage. We will post announcements, handouts, readings, and lectures on Canvas.

Readings:

Reading assignments for each lecture are indicated on the course schedule. The readings are especially important given the necessity of virtual learning environments this semester. Please complete readings *prior* to viewing the video lecture for a given topic. All readings on the syllabus will be posted on Canvas well in advance of the lecture period.

Examinations:

Students will be evaluated on their progress through **three (2) examinations during the semester and (1) 120-minute final examination**. All examinations will be administered through Canvas and will count toward the final grade.

Lab reports:

There will be a lab report due for each of two lab activities, worth 200 total points. Lab report requirements will be described at the beginning of each respective lab activity and will differ slightly for each lab activity. Please see course lab schedule for more information.

Case studies:

Students will prepare a case study project during the semester. Some examples of possible case studies are a local food or farm system analysis, surveys, focus group discussion, in-depth study of a system, or a proposed framework or system design. Each student will give a short presentation on their case study to the class at the end of the semester (see course schedule).

Quizzes/participation:

There will be a quiz for most lecture periods during the semester. Generally, quizzes cover overarching points gleaned from assigned readings. Each quiz will be worth 5 points. Quizzes are another simple way to maintain and improve your grade throughout the semester.

University Diversity Statement:

Diversity enriches the educational experience by providing students with the opportunity to learn from individuals who differ from themselves. Diversity strengthens communities and the workplace by preparing students for citizenship in an increasingly complex, pluralistic society, and by fostering mutual respect and teamwork.

Attendance:

Please keep up with the schedule of assigned readings and the video lectures. Attendance is expected during the lab activities. Please talk with the instructor if you must miss a laboratory due to illness or self-isolation.

Grading Policy:

| Two 75-min exams | |
|---|--|
| Lab reports | |
| Case study | |
| Quizzes/participation | |
| Final exam | |
| Total class points for graduate grade determination | |

Revision 18 Aug 2020

| Letter Grade | Quality points credit hour | Percentage (%) | Course Points Earned |
|--------------|-------------------------------|-------------------|-------------------------|
| A | 4.0 | 95 - 100 | 748 - 800 |
| A- | 3.7 | 90 - 94 | 716 - 747 |
| B+ | 3.3 | 87 – 89 | 684 - 715 |
| В | 3.0 | 84 - 86 | 668 - 683 |
| В- | 2.7 | 80 - 83 | 636 - 667 |
| C+ | 2.3 | 76 - 79 | 612 - 635 |
| С | 2.0 | 70 - 75 | 556 - 611 |
| D | 1.0 | 60 - 69 | 476 - 555 |
| F | 0.0 | ≤ 59 | ≤ 475 |

Graduate Grading Scale:

For further information on grading scales, see the 2020-2021 Graduate Catalog.

***Course syllabus is subject to change by instructor. Students will always have access to the current version on the course Canvas site.

Social distancing & COVID-19 procedures

Students are required to wear face coverings at all times and maintain social distancing (6 feet between individuals in traditional classrooms, or, in instructional laboratories and similar settings, only a few minutes in closer proximity when absolutely necessary to achieve learning objectives). Students who are feeling ill or experiencing symptoms such as sneezing, coughing, or a higher than normal temperature will be excused from class and should stay at home.

Instructors have the right to ask those who are not complying with these requirements to leave class in the interest of everyone's health and safety. In the event that a student refuses to comply with these requirements, the instructor has the right to cancel class.

Additionally, following other simple practices will promote good health in and out of the classroom, such as frequent and thorough hand washing, wiping down desks and seats with disinfectant wipes whenever possible, not sharing personal items such as pens and cell phones, and avoiding crowded hallways and other enclosed spaces.

The Volunteer Creed reminds us that we bear the torch in order to give light to others. As Volunteers, we commit to caring for one another and for the members of the communities in which we live, work, and learn. This semester, the University asks that we all demonstrate the Volunteer spirit by following these and other health guidelines and requirements.

Attachments:

UT Campus Syllabus Lecture schedule Lab schedule