Global Agroecosystems

INSTRUCTORS:

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OFFICE HOURS: By appointment

COURSE OFFERED: Every Fall Semester, resident and distance education

TIMES: MWF Period 3 (9:35 am – 10:25 am) weekly lectures can be viewed from the Canvas course management site; biweekly paper discussions via Canvas.

CREDIT HOURS: 3

PREREQUISITES
Soils for Environmental Professionals (SWS 5050), Applied Field Crop Production (AGR 4214C), and Agricultural Ecology (ALS 3153), or equivalents, or approval by the instructors.

COURSE DESCRIPTION:
This course focuses on the principles of agroecology and presentation of topics that integrate ecological with agricultural principles to optimize resource conservation, productivity, societal benefit, and profitability.

COURSE OVERVIEW:
There is a need for students to be trained broadly in agriculture, including agriculture’s role in ecology as farming systems become more complex. This context is found in the “triple bottom line” of economics, environment, and society that complement production when evaluating the sustainability of farming systems. This course will emphasize a greater understanding of this triple bottom line in agricultural production in an ecosystem context, often termed agroecology. It will focus on the global trends of increasing population and land-use pressure; diminishing soil, water, nutrient, and energy resources; concern over the negative impacts of agricultural production on the environment; increasing awareness of the potential ecosystem service benefits from agriculture; and interactions with socio-economic concerns.
COURSE OBJECTIVES:
The overall objectives of the course are to provide students with:

1) a thorough understanding of the complex interactions that occur in agroecosystems;

2) the ability to apply this knowledge to the design and management of sustainable agricultural production systems across the world.

STUDENT LEARNING OBJECTIVES:
Following this course, students are expected to be able to:

1. Describe global agricultural production systems and their role in facing the challenge of global change.
2. Evaluate and discuss agricultural production issues from environmental, economic, and societal perspectives.
3. Analyze research literature dealing with the sustainability of agriculture.
4. Synthesize and apply the knowledge gained in this course to assess emerging agricultural production systems.
5. Use principles learned in this course to synthesize and evaluate a relevant and timely global issue in agroecology.

CLASS FORMAT
Three 50-minute periods per week. Delivery will be synchronous and asynchronous through videotaped classroom lectures. Recorded lectures will be placed in the course Canvas site. There will be a biweekly discussion session managed in Canvas, for a total of 8 discussions throughout the semester.

TEXTBOOK
None required. Readings will be assigned for each discussion in the course. The following references are useful resources for the course:


**SPECIAL SOFTWARE**

None required

**E-LEARNING**

E-learning Canvas. The entire course will be managed through e-learning using Canvas. All materials and content will be available fully on-line, delivered in E-Learning Canvas, the centrally-supported course management system at UF. Canvas is the online source for the majority of your learning resources and assignments in this course. Students enrolled in the course should login to Canvas on the first day of the course at: https://elearning.ufl.edu. You will use your Gatorlink name and password to login to Canvas. All PowerPoint presentations that support the video lectures will be posted, as well as readings on the lecture topics.

**EVALUATION OF STUDENTS**

The class is graded on a point scale, totaling **100 points**.

- 3 exams. All students will complete exams online through Canvas, and these will be open from Monday 6:00 AM until Wednesday 11:59 PM. These exams will be open book, but you have to provide your own work. Exams will combine short answers and an essay question focusing on the analysis of a case study. Exams will be weighted as **15, 15, and 20 points = 50 points total**

- Participation in biweekly discussions of assigned scientific readings on advanced topics. Students will be expected to post a question for the class to discuss for all assigned readings during the semester and post two original comments/replies to other students’ questions. Each discussion will be worth 3 points (1 point for questions and individual replies) x 8 discussions = **24 points total**

- A paper analyzing the student’s study system according to production, environment and socio-economic components, with an emphasis on one of these three components. An outline will be due on Oct. 14, and the final paper incorporating feedback will be due Dec. 4. The outline will be worth 10 points, and the final paper will be worth 16 points = **26 points total**

- Students enrolled in ALS 4154 and 5155 will be evaluated using different exams as well as different rubrics to grade each assignment.

**TOPICAL OUTLINE:** see posted topic schedule in Canvas.
GRADING:
We will use the following grading scale for the course:

<table>
<thead>
<tr>
<th>Points</th>
<th>Grade</th>
<th>Grade points</th>
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<tbody>
<tr>
<td>94 – 100</td>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>90 – 93.9</td>
<td>A-</td>
<td>3.67</td>
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<tr>
<td>87 – 89.9</td>
<td>B+</td>
<td>3.33</td>
</tr>
<tr>
<td>83 – 86.9</td>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>80 – 82.9</td>
<td>B-</td>
<td>2.67</td>
</tr>
<tr>
<td>77 – 79.9</td>
<td>C+</td>
<td>2.33</td>
</tr>
<tr>
<td>73 – 76.9</td>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>70 – 72.9</td>
<td>C-</td>
<td>1.67</td>
</tr>
<tr>
<td>67 – 69.9</td>
<td>D+</td>
<td>1.33</td>
</tr>
<tr>
<td>63 – 66.9</td>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>60 – 62.9</td>
<td>D-</td>
<td>0.67</td>
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<td>&lt; 60</td>
<td>E</td>
<td>0</td>
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</tbody>
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For information on current UF policies for assigning grade points, see https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

CLASSROOM ETIQUETTE AND DEMEANOR:
Students are expected to arrive for class on time since lectures will begin promptly at the beginning of the period. Cell phones must be muted during class.

ABSENCES AND MAKE-UP WORK
Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

ACADEMIC HONESTY
As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.” You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of
disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php.

SOFTWARE USE:
All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

SERVICES FOR STUDENTS WITH DISABILITIES:
The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation
0001 Reid Hall, 352-392-8565, www.dso.ufl.edu/drc/

CAMPUS HELPING RESOURCES:
Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university’s counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu/cwc/
  Counseling Services
  Groups and Workshops
  Outreach and Consultation
  Self-Help Library
  Training Programs
  Community Provider Database
- Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/\n
STUDENT COMPLAINTS

Distance students: http://www.distance.ufl.edu/student-complaint-process.