Course Name: The Environmental Science of Food Sustainability
Course Number: ENSC 540    Credits: 4
Instructor name: Dr. Holly V. Campbell
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Instructor phone: 541 740-9716
Link to instructor bio or website: https://fw.oregonstate.edu/users/holly-campbell

Course Description (100 words or fewer)
Examines the newest developments in environmental science research and on-the-ground best management practices for achieving food security and sustainability for growing U.S. and global populations in a dynamic environment and climate.

Communication
Please post all course-related questions in the General Discussion Forum so that the whole class may benefit from our conversation. Please email your instructor for matters of a personal nature. The instructor will reply to course-related questions and email within 24-48 hours. I will strive to return your assignments and grades for course activities to you within five days of the due date.

Course Credits
This course consists of 120 hours of instruction, online activities, and assignments for 4 credits.

Technical Assistance
If you experience computer difficulties, need help downloading a browser or plug-in, assistance logging into the course, or if you experience any errors or problems while in your online course, contact the OSU Help Desk for assistance. You can call (541) 737-3474, email osuhelpdesk@oregonstate.edu or visit the OSU Computer Helpdesk online.

Learning Resources  No textbook is required. Assigned readings including peer-reviewed literature, government and nongovernmental organization reports will be provided.

Canvas
This course will be delivered via Canvas where you will interact with your classmates and with your instructor. Within the course Canvas site you will access the learning materials, such as the syllabus, class discussions, assignments, projects, and quizzes. To preview how an online course works, visit the Ecampus Course Demo. For technical assistance, please visit Ecampus Technical Help.

Learning Outcomes for Graduate Students
Students in this course are preparing for professional careers in conducting, synthesizing and applying environmental science within a wide range of settings including laboratories, government, nonprofits, education industry and the business world. Students will learn to:

- recognize and describe carbon, nitrogen and GHG management issues within our coproduction of food, energy, and water and how they impact one another
• analyze the roles of interdisciplinary environmental science in food security and sustainability policy choices and potential trade-offs or unintended consequences

• analyze the spectrum of policy options or "tools" and be able to describe one or more potential integrated policy proposals based on contemporary environmental science perspectives

• initiate Discussion leadership and demonstrate mastery of core concepts, performing at the Superior level

Evaluation of student performance

All course grades will be based on:

A) weekly “community forum” discussion participation on Canvas (15%),

B) annotated bibliography of 20 targeted, relevant peer-reviewed literature sources (25%),

C) Power Point presentation of the student's final project on Canvas and participation in team evaluation of each other's final projects (constructive feedback and questions) (25%); and

D) the student's in-depth, well organized and well written final written project on their research results (35%) (the total equals 100%). Guidance and examples will be provided.

Course Overview


Only one example of video resources for the course: http://fse.fsi.stanford.edu/research/global_food_policy_series

Each week consists of readings, discussion, and occasionally other resources such as video.

Week 1  Introduction and Background: The role of agriculture in land, water, and climate management
         Examples of environmental science applications to food production decisions
         Who are the players in the United States and internationally?
         Resources available for your research; examples of research topics or questions
         Assignment of research project due in finals week. Read Chapter 2, p. 17-23

Week 2  Ferranti, 2017, “Food Sustainability, Security, and Effects of Global Change” PDF provided.
         Food availability vs. food accessibility; Chapters 3 & 4, p. 53-81

Week 3  Climate impacts (for example, greenhouse gas emissions) from our provision of food, examples of specific policies: intent, data, synergistic effects, consequences, trade-offs
         Chapter 3, p. 25-38

Week 4  Current Research in Action, potential video or slide presentation by expert guest speaker, USDA-Agricultural Research Service (ARS)

Week 5  The ecology of food: the state of soil science, land use, and water in relationship to food production; requested through interlibrary loan article on food sustainability and biodiversity

Week 6  Social sustainability: introduction to urban agriculture; local food movements in the US and internationally
Week 7  
Economic sustainability: integrated agricultural management for promoting cobenefits  
Sample Annotated Bibliography Due Friday

Week 8  
1. The United States, Global Producer, Chapter 8, p. 93-107  

Week 9  
Food for the future; Reading, Francis et al. 2013 “Food webs and food sovereignty: Research agenda for sustainability” pdf provided  
•Presentation of Final Projects Due (Post in Discussion, AND Assignments) by Friday

Week 10  
Constructive Peer Review of Classmates’ Presentations Due in Discussion by Thursday

Week 11  
Final Written Research Papers Due by Midnight (PST) Wednesday of finals week

Course Policies

Discussion Participation
Students are expected to participate in all graded discussions. You will need to participate in our discussions twice each week. First post your own initial response to the prompt early in the week; next contribute two or more responses to classmates’ posts. All posts are due by Sunday at midnight.

Exams
This course does not feature examinations, proctored or otherwise.

Incompletes
I rarely grant incomplete (I) grades. Everyone encounters challenges at times. If you are having any difficulty that interferes with your coursework, contact me right away; the earlier, the more options I have to help.

Guidelines for a Productive and Effective Online Classroom
Students are expected to conduct themselves in the course (e.g., on discussion boards, email) in compliance with the university’s regulations regarding civility.
Civility is an essential ingredient for academic discourse. All communications for this course should be conducted constructively, civilly, and respectfully. Differences in beliefs, opinions, and approaches are to be expected. In all you say and do for this course, be professional. Please bring any communications you believe to be in violation of this class policy to the attention of your instructor.
Active interaction with peers and your instructor is essential to success in this online course, paying particular attention to the following:
• Unless indicated otherwise, please complete the readings and view other instructional materials for each week before participating in the discussion board.
• Read your posts carefully before submitting them.
• Be respectful of others and their opinions, valuing diversity in backgrounds, abilities, and experiences.
• Challenging the ideas held by others is an integral aspect of critical thinking and the academic process. Please word your responses carefully, and recognize that others are expected to challenge your ideas. A positive atmosphere of healthy debate is encouraged.
Statement Regarding Students with Disabilities
Accommodations for students with disabilities are determined and approved by Disability Access Services (DAS). If you, as a student, believe you are eligible for accommodations but have not obtained approval please contact DAS immediately at 541-737-4098 or at http://ds.oregonstate.edu. DAS notifies students and faculty members of approved academic accommodations and coordinates implementation of those accommodations. While not required, students and faculty members are encouraged to discuss details of the implementation of individual accommodations.

Accessibility of Course Materials
All materials used in this course are accessible. If you require accommodations please contact Disability Access Services (DAS). Additionally, Canvas, the learning management system through which this course is offered, provides a vendor statement certifying how the platform is accessible to students with disabilities.

Expectations for Student Conduct
Student conduct is governed by the university's policies, as explained in the Student Conduct Code.

Academic Integrity
Students are expected to comply with all regulations pertaining to academic honesty. For further information, visit Student Conduct and Community Standards, or contact the office of Student Conduct and Mediation at 541-737-3656.

OAR 576-015-0020 (2) Academic or Scholarly Dishonesty:

a) Academic or Scholarly Dishonesty is defined as an act of deception in which a Student seeks to claim credit for the work or effort of another person, or uses unauthorized materials or fabricated information in any academic work or research, either through the Student's own efforts or the efforts of another.

b) It includes:
   i) CHEATING - use or attempted use of unauthorized materials, information or study aids, or an act of deceit by which a Student attempts to misrepresent mastery of academic effort or information. This includes but is not limited to unauthorized copying or collaboration on a test or assignment, using prohibited materials and texts, any misuse of an electronic device, or using any deceptive means to gain academic credit.
   ii) FABRICATION - falsification or invention of any information including but not limited to falsifying research, inventing or exaggerating data, or listing incorrect or fictitious references.
   iii) ASSISTING - helping another commit an act of academic dishonesty. This includes but is not limited to paying or bribing someone to acquire a test or assignment, changing someone's grades or academic records, taking a test/doing an assignment for someone else by any means, including misuse of an electronic device. It is a violation of Oregon state law to create and offer to sell part or all of an educational assignment to another person (ORS 165.114).
   iv) TAMPERING - altering or interfering with evaluation instruments or documents.
   v) PLAGIARISM - representing the words or ideas of another person or presenting someone else’s words, ideas, artistry or data as one's own, or using one's own previously submitted work. Plagiarism includes but is not limited to copying another person's work (including unpublished material) without appropriate referencing, presenting someone else's opinions and theories as one's own, or working jointly on a project and then submitting it as one's own.

c) Academic Dishonesty cases are handled initially by the academic units, following the process outlined in the University’s Academic Dishonesty Report Form, and will be referred to SCCS for action under these rules.

Conduct in this Online Classroom
Students are expected to conduct themselves in the course (e.g., on discussion boards, email postings) in compliance with the university's regulations regarding civility.
Tutoring
NetTutor is a leading provider of online tutoring and learner support services fully staffed by experienced, trained and monitored tutors. Students connect to live tutors from any computer that has Internet access. NetTutor provides a virtual whiteboard that allows tutors and students to work on problems in a real time environment. They also have an online writing lab where tutors critique and return essays within 24 to 48 hours. Access NetTutor from within your Canvas class by clicking on the Tools button in your course menu.

OSU Student Evaluation of Teaching
Course evaluation results are extremely important and are used to help me improve this course and the learning experience of future students. Results from the 19 multiple choice questions are tabulated anonymously and go directly to instructors and department heads. Student comments on the open-ended questions are compiled and confidentially forwarded to each instructor, per OSU procedures. The online Student Evaluation of Teaching form will be available toward the end of each term, and you will be sent instructions via ONID by the Office of Academic Programs, Assessment, and Accreditation. You will log in to “Student Online Services” to respond to the online questionnaire. The results on the form are anonymous and are not tabulated until after grades are posted.