Instructor: John Antle, 307F Ballard, 7-1425, john.antle@oregonstate.edu, office hours by appointment.

Course Description
This course surveys research on the quantitative economic analysis of sustainable economic development, with an emphasis on integrated assessment methods and models and their application to agriculture and rural development policy, agricultural technology impact assessment, and climate change impact assessment. The goal is for students to become fluent in the literature in this field of research.

Prerequisites
AEC 611, 612, 625 (or equivalent)

Course Structure
The course is primarily a reading course with student presentations and class discussions, supplemented with lectures. An original research paper is required. Each week the instructor will lecture for one class, and one class will be led by a student to present and critique an assigned reading and lead discussion.

Student Performance and Grading
Students are expected to read all assigned material and also relevant supporting material cited in assigned readings as needed. Grades are based on in-class participation and presentations (40%) and a research paper (60%).

The research paper should be written in journal article style (e.g., American Economic Review or American J. of Ag. Econ.) and must be an original theoretical or empirical analysis of a topic related to the course. Additional information will be provided in class regarding data and other resources for the research paper.

Research paper schedule:

Week 2: identify topic, 1 page abstract (describing topic, data) with title due by email by Friday AM.
Week 4: 2-3 page outline due by email by Friday AM.
Week 6: Draft paper due by email Friday AM.
Week 10: Paper due by email before last class.
Final Exam: PPT presentation based on paper (10 min presentation, 5 min discussion)
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.

Student Code of Conduct
All students are required to conform to the Student Code of Conduct, including the provisions for Academic Misconduct, defined as, “Any action that misrepresents a student or group’s work, knowledge, or achievement, provides a potential or actual inequitable advantage, or compromises the integrity of the educational process.” Violations include: Cheating, Plagarism, Falsification, Assisting, Tampering, and Multiple Submissions of Work. Students are encouraged to obtain and read the OSU Student Code of Conduct at http://studentlife.oregonstate.edu/sites/studentlife.oregonstate.edu/files/code_of_student_conduct.pdf

Week 1: Sustainable Development: Concepts and Measurement


**Week 2: Growth and Sustainability**


**Weeks 3-4: Modeling Agriculture-Environment Interactions**


Weeks 5-6: Ex Post and Ex Ante Technology Impact Assessment


**Foster, A.D. and M.R. Rosenzweig. 2010.** “Microeconomics of Technology Adoption.” Economic Growth Center Discussion Paper 984, Yale University.


**Week 7 TBA**

**Week 8 Agricultural Ecosystem Services and Soil Carbon Sequestration**


**Week 9: Climate Change Economics**


Weeks 9-10: Climate Change: Agricultural Impact, Adaptation, Vulnerability and Resilience


