

AREC 460: Agriculture and Resource-based Economic Development
Colorado State University
Spring Semester 2016
9:30-10:45 TR,
C 108 Aylesworth Hall

Dr. Andy Seidl, Professor

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Office hours:

Tues & Thurs 2:00-3:00 pm and by appointment.

Description:

This course involves economic insights into food and nutrition security in developing countries, focusing on agricultural and natural resource management issues at the national and sub-national scale. The course hopes to shed light on the economic drivers that result in poverty and hunger that plague some 3/4 of the Earth's population and to propose some local, national and international policy solutions. Although we focus on international agricultural and natural resource development issues, many of these challenges can be observed in rural Colorado as well.

The perspective of the course is of development as managing scarce capitals toward improvements in human well-being. Agriculture and natural resource-based economic development are a part of a rural development portfolio dependent upon the rational management of the locally available resource base (focus on natural, financial and human capital). In addition, the class will engage in a discussion of the Sustainable Development Goals and progress toward achieving these global goals at the national scale.

Prerequisite: AREC/ECON 306 or consent of instructor.

Learning objectives:

Students will be able to:

- Critically discuss the drivers of natural resource-based economic development
- Critically discuss the principal economic development opportunities and constraints presented to natural resource dependent communities in Colorado and in developing countries.
- Identify the opportunities and constraints faced by Colorado communities and communities in developing countries when considering agriculture, forestry, tourism, mining, oil and gas, and other contemporary resource based economic development engines for the communities
- Discuss current international efforts to improve the measurement and monitoring of environmental quality and quantity and their role in economic development and poverty reduction.

Policies:

These should be self-evident. However...

- 1) Issues covered in this course can touch upon deeply held and personal values. I strongly encourage you to discuss these issues both inside and outside of class. General rules of civil discourse, mutual respect and decorum should be adhered to at all times.
- 2) Please be on time. I will begin and end class on time to be respectful of your time. Please reciprocate.
- 3) Do your part. The first question I will ask you when you come to office hours is "Have you read the text?" and the second question I will ask you is "What do your classmates say?"

4) All university policies about academic honesty most definitely apply.

Need Help?

CSU is a community that cares for you. If you are struggling with drugs or alcohol and/or experiencing depression, anxiety, overwhelming stress or thoughts of hurting yourself or others please know there is help available. Counseling Services has trained professionals who can help. Contact 970-491-6053 or go to <http://health.colostate.edu>. If you are concerned about a friend or peer, Tell Someone by calling 970-491-1350 to discuss your concerns with a professional who can discreetly connect the distressed individual with the proper resources (<http://safety.colostate.edu/tell-someone.aspx>).

Text/materials:

Principal text:

Norton, G.W., Alwang, J., and W.A. Masters. 2014. The economics of agricultural development: World food systems and resource use. Routledge Publishers. 3rd Edition.

Evaluation:

The class will be graded in the following manner:

A = > 90; B = > 80; C = > 70; D = > 60; F = < 60.

Performance on the following work will comprise the evaluation:

- 1) Homework (Problem sets; Public address write ups): 15%;
- 2) Midterm examinations (2): 60%;
- 3) Group project: 25%.

Public address write ups:

CSU and the broader Fort Collins community provide regular and frequent opportunities to hear world authorities speak on aspects of development. Although students will be encouraged to attend as many of these events as possible, for class evaluation students will provide a one page write up of two such events, emphasizing economic dimensions of the presentations, each worth 2.5% of the course grade.

Homework:

Students will complete 2 homework assignments designed to illustrate some of the more challenging or important concepts from class. Each homework is worth 5% of the course grade.

Exams:

Examinations will be in class and will be short answer and essay format, typically consisting of 4-6 multipart questions. There will be no final exam. Exam I (30%) covers the first half of the course. Exam II (30%) covers the second half.

Group project:

The class will have the opportunity to explore more completely the development progress and challenges facing emerging national economies reliant upon agriculture and natural resources. This year, Cuba, Malaysia, Kyrgyzstan, Rwanda, Colombia and Malta will be the focus of our investigations. Each group of approximately 5 students will provide an overview and analysis of one of these countries through the lens of agricultural and natural resource based economic development and the Sustainable Development Goals and report their findings to the rest of the class. The report should generally use the indicator data reviewed in class to provide a country baseline for the SDGs indicating where data are robust and thin and providing an overall synthesis

and recommendations moving forward in areas of particular strength/preparedness and weakness/priority. Generally, essential sources of exposition will include:

- a. An assessment of the current stocks and flows of important sources of natural capital
- b. A review of the relevant development indicators (with particular attention to SDG measures) over time and relative to peer nations
- c. A synthesis of the above in identifying opportunities and constraints to (agriculture and natural resource based) economic development for the country.

A final project report will be no more than 20 pages of 11 pt font, double-spaced text, inclusive of all tables, graphs, bibliographical materials, etc. and will comprise 75% of the group grade (assessed by the professor or TA) and the oral and visual (Power Point or Prezi) presentation will be 25% of the group grade (assessed by the class). Individual grades may be adjusted based upon peer assessment of their involvement in the group project and by participation in the peer assessment of the oral presentation.

Extra credit:

You may choose at most one of the two options below for extra credit of at most 2.5% of your final grade.

- a. This course repeatedly touches on the themes of severe poverty and hunger that plague some 2.5 billion people. Since CSU students generally have chosen their parents well and have little experience with either abject poverty or long term hunger, a student who wishes to submit a 750 word essay reflecting on their experience resulting from a 24 hr fast will be provided this opportunity. Let us be clear that this is not a requirement of the course, rather a choice freely entered into by the student having taken due care and consideration for his or her own health.
- b. Book review: Students will review 'A new blueprint for a green economy.' The book review will be no more than 750 words, spending at least ½ of the review providing an economic critique of the work. The critique should include one or more mathematical or graphical illustrations of a core issue or concern with the book.

Expected Course Outline (subject to change according to the interests and needs of the class):

Theme 1: January 19, 21, 26, & 28: Dimensions of world food and development problems; Hunger, malnutrition, economics of food demand, population, and demography.

Readings:

- Norton, G.W., Alwang, J., and W.A. Masters. 2014. The economics of agricultural development: World food systems and resource use. Routledge Publishers. Chapters 1-4.

Theme 2: Feb 2, 4, 9, & 11: Development theories and the role of agriculture and resource-based economic activities. **Homework 1 Due.**

Readings:

- Norton, G.W., Alwang, J., and W.A. Masters. 2014. The economics of agricultural development: World food systems and resource use. Routledge Publishers. Chapters 5-6.

Theme 3: Feb 16, 18, 23, 25, March 1, & 3: Agriculture in traditional societies, subsistence, determinants of agricultural systems, resource use and sustainability, human resources, gender roles, formal and informal institutions.

Readings:

- Norton, G.W., Alwang, J., and W.A. Masters. 2014. The economics of agricultural development: World food systems and resource use. Routledge Publishers. Chapters 7-10.

March 8 & 10: Review of first 7 weeks and Midterm Exam I.

Spring Break: March 15 & 17

Theme 4: March 22, 24, 29, & 31: Measures of wellbeing, Greening GDP, the Sustainable Development Goals.

Readings:

- UN Sustainable Development Goals:

<http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

- Ecosystem service identification, quantification and indicators.

<http://www.esindicators.org/>

<http://www.bipindicators.net/>

- World Bank Natural Capital Accounting:

<http://www.worldbank.org/en/news/video/2014/05/21/countries-go-beyond-gdp-to-make-natural-capital-count-for-development>

<http://www.worldbank.org/en/topic/environment/brief/environmental-economics-natural-capital-accounting>

<http://www.worldbank.org/en/news/feature/2014/05/21/natural-capital-accounting-taking-hold-as-69-countries-go-beyond-gdp>

Theme 5: March 29, 31 April 1, 3, 5, 7: TEEB, MEA and Ecosystem Services, Natural wealth and national planning: TEEB country studies, WAVES, BIOFIN, etc. **Homework 2 Due.**

Readings:

- Millennium Ecosystem Assessment. 2005. 'Summary for Decision-makers.'

<http://www.millenniumassessment.org/en/About.aspx>

<http://www.millenniumassessment.org/documents/document.356.aspx.pdf>

<http://www.greenfacts.org/en/ecosystems/index.htm>

- TED talk: Pavan Sukhdev, 'Putting a price on nature.'

http://www.ted.com/talks/pavan_sukhdev_what_s_the_price_of_nature.html

- TEEB for Country Studies Guidebook.

<http://vimeo.com/58715498>

- TEEB Country Studies

<http://www.teebweb.org/resources/guidance-manual-for-teeb-country-studies/>

Theme 6: April 12, 14, 19, 21. Theories of development, trade, and aid

Chapters 11, 16, 19 and 20

April 26 & 28: Second half of class synthesis, review and examination

Tuesday: Synthesis and review

Thursday: Midterm Examination II

May 3 & 5: Class Presentations

Tuesday: Group Presentations: Colombia, Cuba, and Kyrgyzstan. 15 minutes presentation, 5 minutes questions, per country.

Thursday: Group Presentations: Rwanda, Malaysia, and Malta. Final synthesis of lessons learnt. Class evaluations.