AREC 460: Agriculture and Resource-based Economic Development
Colorado State University
9:30am-10:45am TR, 105 Military Sciences Building
Spring, 2020

Course Syllabus

Dale Manning
B304 Clark
970-491-5706 (office)
Dale.manning@colostate.edu
OH: 10:30-11:30 Mondays, 3-4 Tuesdays, and by appointment

TA: Putri Dara
OH: 1:00-2:00 Mondays, 11:30-12:30 Wednesdays

No Final Exam

NOTE:

I will be taking family leave around the middle of April. This will not affect class assignments or expectations. Professors Andy Seidl and Greg Graff will ensure that the course continues as planned.

Course Description:

This course uses economic insights to study food and nutrition security in developing countries, focusing on agricultural and natural resource management issues at the national and sub-national scale. The course sheds light on the economic drivers that result in poverty and hunger that plague more than 3 billion people, nearly 1/2 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 are relevant in 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 is a part of a development portfolio dependent upon the rational management of the locally available resource base (including on natural, built, 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.

Course Learning Objectives:

After taking the course, students should be able to:

- Critically discuss the drivers of natural resource-based economic development
- Critically discuss measures of (sustainable) (economic) development.
- Critically discuss the principal economic development opportunities and constraints presented to natural resource-dependent communities in developing countries.

- Identify the opportunities and constraints facing communities and/or countries when considering agriculture, forestry, tourism, mining, oil and gas, and other contemporary resource-based economic development engines.
- Discuss current international efforts to improve the measurement and monitoring of environmental quality and quantity and their role in economic development and poverty reduction.

Class Policies:

1) Issues covered in this course can touch upon deeply held and personal values. I encourage you to discuss these highly nuanced issues both inside and outside of class. The many perspectives and contexts we will explore are what make development discussions challenging and rewarding. General rules of civil discourse, mutual respect and decorum should always be adhered to so that all voices can be heard and valued.
2) Please be on time. I will begin and end class on time to be respectful of your time. Please reciprocate.
3) I recognize that many of you will take notes on a laptop or other device. That is acceptable but please be responsible with the use of devices during class. I highly discourage cell phone use.
4) All university policies about academic honesty apply.

Text/materials:

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.

I will supplement with other material as needed.

Evaluation:

The course assignments will consist of the following assignments:

1) Homework (Problem sets; critiques): 20%;
2) Midterm examinations (2): 60%;
3) Group project: 15%;
4) Participation: 5%.

And I will use the following grading scale:

A > 90; B > 80; C > 70; D > 60; F < 60. (+/- will be at my discretion)

Homework Types:

Type 1:

Graphical, numerical, and/or mathematical applications of the concepts and tools taught in class. These will be turned in at the beginning of class on the due date. Collaboration is anticipated and is not discouraged. However, each question submitted shall be individually authored, in the student's own words, and shall not be duplicated from another current or past student or copied verbatim from the text. Photographs of hand or computer drawn graphs are acceptable. Photographs of graphs directly from the book are not acceptable. Late submissions are accepted until the exercise is returned to the class. Such submissions will be subject to a 10% per day decrease in total possible points obtainable. (3 @ 5% each)

Type 2:

Students will complete two one-page (single spaced, 11 pt font) reflections of a resource and/or development economics-oriented seminar that you have attended during the semester. The write-up should discuss what was presented and what you learned from the presentation through an economic lens. Grading criteria will include an assessment of writing quality including logical support, *economic rigor (graphical and/or mathematical)*, grammar, spelling and form. I will mention some of the relevant events in class and via email, but you are not restricted to these suggestions. The weekly DARE seminar (Thursdays 3:30-4:45) provides useful material. If you have questions, please contact me for approval. (2 @ 2.5% each)

One Type 2 homework will be due the last class before Spring Break (3/12). The other will be due the last class of the semester (5/7).

Exams:

Examinations will be in class and will be short answer format, typically consisting of several multipart questions. There will be no final exam. Exam 1 (30%) covers the first half of the course. Exam II (30%) focuses on the second half but is cumulative.

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. Each group of approximately 3-4 students will provide an overview and analysis of one developing or emerging economy 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:

- An assessment of the current stocks and flows of important sources of natural capital
- A review of the relevant development indicators (with particular attention to SDG measures) over time and relative to peer nations
- 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) and the oral and visual (e.g., PowerPoint or Beamer) 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.