AGRICULTURAL & APPLIED ECONOMICS UNIVERSITY OF WYOMING

Agricultural and Applied Economics 4720-40 On-line Water Resource Economics Spring 2014

Donald McLeod (Mack-Kloud)

Email: dmcleod@uwyo.edu

Phone: (307) 766-3116 FAX: (307) 766-5544

Office Location: 212 Ag C on the UW Campus

Mailing Address: Dept 3354, 1000 E. University Ave., University of

Wyoming, Laramie, WY 82071-3354



INSTRUCTOR BIO: I am an associate professor in the Department of Agricultural and Applied Economics. I have been an instructor for over 15 years at the University of Wyoming. I have the luxury of bringing not only other's thoughts and work but my own research experience into this class. I have also taught at Oregon State University (where I obtained my MS in Community Development and PhD in Natural Resource and Environmental Economics) and Willamette University. I have had the pleasure of teaching courses ranging from introductory to MS level in economic theory, applied management, resources, environmental assessment, agricultural policy, senior thesis, and research methods to name a few. I have taught Water Resource Economics seven times previously and enjoyed the class considerably.

I am a father of a graduate student at University of Oregon (in Public Administration) and grandfather of an 9th grader and BIG 2nd grader. My spouse is a pastry chef so I must always be on "sweet treat alert!" I like to fly fish, trail "run" (euphemism for speed hiking), watch wildlife and cross country ski. We have cats named Luna and Gemi plus a wood burning stove where the log splitting keeps my back limber!

I am looking forward to meeting and interacting with each of you.

GETTING HELP: The solution to getting prompt, effective and informed help is knowing the right person to ask. The help you may need is instructional, technical or administrative (student services).

- Ask the "Office" discussion board to raise a question to all your classmates and the instructor. This is good place to start with instruction-related questions.
- **Ask your instructor** questions you'd prefer not to ask the whole class. Contact your instructor by e-mail (note the Email tab at the top of the screen).
- Ask the HelpDesk any technical problems you have. E-mail the HelpDesk or call them at 800-448-7801 and follow option #2 to

- "Technical Assistance for Online UW courses". Your call will be transferred to the Online UW HelpDesk.
- Ask the Outreach School for student services, including questions about enrollment/registration, financial aid, accounting, disability student services, or other academic support services. Outreach School staff will help or put you in contact with appropriate assistance. E-mail Online UW or call the Outreach School at **800-448-7801**.

<u>COURSE PREREQUISITES</u>: AGEC 1020 or equivalent; QB (2nd level quantitative analysis) course; WB (2nd level writing) course; Senior standing or consent of instructor. A basic understanding of earth/life sciences and government institutions is useful (NOT required) for grasping the core elements of this course.

<u>COURSE DESCRIPTION</u>: Presents economic principles and procedures appropriate to water resource allocation and development decisions. Covers institutions and laws with respect to agricultural, recreational, municipal, industrial and other uses of water.

<u>DISABILITY STATEMENT</u>: If you have a physical, learning, or psychological disability and require accommodations, please let the instructor know as soon as possible. You must register with, and provide documentation of your disability to University Disability Support Services (UDSS) in SEO, room 330 Knight Hall.

INSTRUCTOR'S PHILOSOPHY OF EDUCATION: Learning has active and passive components. Passive forms include reading and listening to lectures. Active forms include problem based studying, research and paper writing. I intend to incorporate both types into this class. The course serves various segments of the water resources community.

COURSE OBJECTIVES:

- 1. To grasp the breadth of water issues in their diversity and as they impact resource quality and availability as well as social and individual choice.
- 2. To utilize economic theory to evaluate specific water resource issues, market outcomes and public policy initiatives.
- 3. To develop an understanding of the historic and contemporary political, cultural, social, environmental and economic context in which water resource policy has evolved and is evolving.

Academic Honesty and Plagiarism

The University of Wyoming is built upon a strong foundation of integrity, respect and trust. All members of the university community have a responsibility to be honest and the right to expect honesty from others. Any form of academic dishonesty is unacceptable to our community and will not be tolerated [from the UW General Bulletin]. Teachers and students should report suspected violations of standards of academic honesty to the instructor, department head, or dean. Other University regulations can be found at:

http://uwadmnweb.uwyo.edu/legal/universityregulations.htm

COURSE TEXTS:

- (1) Field, B. <u>Natural Resource Economics</u>. 2nd edition. 2008. Waveland Press. Long Grove, IL.
- (2) Cech, T. <u>Principles of Water Resources</u>. 3rd edition. 2010. John Wiley & Sons, Inc. Hoboken, NJ.

The texts are available through the University of Wyoming Campus Bookstore:

See http://www.uwyobookstore.com/ for ordering and shipping.

COURSE MATERIALS & READINGS: SEE ANNOUNCEMENTS in COURSE HOME! The course is based upon lecture notes (*podcast and text*) with additional reading material assigned (and made available)

as the semester progresses. Reading assignments will be posted weekly (overlapping the previous posting).

COURSE OUTLINE:

<u>Chapter 1:</u> Prelude = Course Organization

<u>Chapter 2:</u> A Brief Introduction and Classification of Resources. Water Resources to be viewed

as <u>inputs</u> (intermediate goods used for commercial production) and as <u>outputs</u> (final goods for household consumption).

<u>Chapter 3:</u> Review of Microeconomics: Supply, Demand, Systems of Allocation and Externalities/Market Failure.

Chapter 4: Water Institutions

<u>Chapter 5:</u> Property Rights, Liability and Western Water Law (the Colorado Compact, the Clean Water and Safe Drinking Water Acts in particular).

Chapter 6: Water Quality

Chapter 7: Water Pricing and Residential Use

Chapter 8: Water and Agriculture

Chapter 9: Benefit Cost Analysis related to Water Projects

Chapter 10: Ground Water

Chapter 11: Environmental and Recreational Values

Chapter 12: Finale = Course Wrap-up

WORK ASSIGNMENTS

% OF GRADE

All work must be submitted to the appropriate drop box by the respective due date.

1. Three Exams (20% each)

60%

Covers general topics, pertains to theory with problem solving.

1st Available Friday 5pm2/2, Due Friday 11:30pm 2/28;

2nd Available Friday 5pm 4/4, Due Friday 11:30pm 4/11; and

3rd FINAL Exam (non-comprehensive and covering the last third of the course) Available Friday 5pm 5/2, Due Friday 11:30pm 5/9.

2. Three Journal Writings

20%

A collection of 2 page informal writings (about 60-120 minutes pondering/writing per assignment). Students are asked to write about real world issues from popular outlets.

Students are expected to <u>relate course/economic concepts to the issues</u>. THOUGHT-CONTENT

Weekly assignments turned in to Don periodically as given below.....

Open Friday 5pm 1/24 and Due Friday 11:30pm 2/7 (1st entry);

Open Friday 5pm 2/28 and Due Friday 11:30pm 3/14 (2nd entry); and

Open Friday 5pm 4/11 and Due Friday 11:30pm 4/25 (3rd entry).

3. Weekly Quizzes (1.25% each; 8 best scores)

10%

Short exercise based on week's material.

Given Fridays 5pm and Due Mondays by noon

4. Weekly Threaded Discussions

10%

(1.25% each; 8 best commentaries + follow-ups)
Initial statement and then follow-up reply to another student.

Given Tuesdays 8am and Due Fridays by 5pm

POLICY ON WORK, MISSING EXAMS OR WORK COMPLETION DEADLINES:

All work is to be the student's own. Request and justification to take an exam late or hand in late work must be made at least three days prior to the scheduled date. If an emergency arises, then I must be contacted within two days following the due date. Otherwise late work will be given half of the earned grade.

Exams

Exams will be given three times during the semester, including the final. Each targets a specific part of the course and its associated work, reading, notes and materials; hence the final is NOT comprehensive. Quality not quantity of response is valued. The answers should reflect concepts and analytical effort directly traced to the materials of Water Resource Economics. The exam questions consist of short answer, calculations and graphing. This is strictly individual work where all materials are available to the student (i.e. open book, notes) EXCEPT other student's help.

Journals

Students are expected to perform about 1-2 hours of writing about a current water topic per each assignment. The topics will typically be articles in the popular press to which course concepts are applied (from lecture notes/readings). The use of economic concepts is particularly important in conveying thought about the water related issue. The journal will consist of individual's interpretations and perspectives. Polished grammar, word syntax, punctuation are of less concern than the student's ability to think about a problem and communicate those thoughts. This is exploratory or expressive writing, something that closely resembles thinking out loud on paper about a particular instance and related questions. The aim is for students to become more focused thinkers when it comes to concepts related to the field of Water Resource Economics.

The goal of this work is quality thinking in expressing applications of economic concepts relevant to the course. Journal entries should reflect the writer as grappling with the topic assigned. *The writing should demonstrate the outcome of understanding notes from class lectures as well as the out of class reading required.* The journal entries should reflect a serious attempt; evidence that the student is studying and thinking. The highest quality of journal entries will be *interesting to*

read for they will convey the effort exerted in struggling with ideas.

Set aside an hour or two to write continuously. Write legibly and nonstop. If dry spell occurs rephrase previous writing until a new train of thought occurs. Note this is an exercise to keep the writing targeted on the topic assigned. This technique works best if the "pump is primed" (cannot resist the pun) via thoughtful interpretation of reading and lecture notes. The journal is a useful preparation for the much more structured writing expected in the exams. This is strictly individual work where all materials are available to the student (i.e. open book, notes) EXCEPT other student's help.

Quiz

Chapters 2-11 will have 1-2 quizzes each offered one per week. The quizzes will consist of up to 10 true/false and/or multiple choice questions. They may be taken once only in a 60 minute time limited period: once started it cannot be suspended and re-visited! This is strictly individual work where all materials are available to the student (i.e. open book, notes) EXCEPT other student's help.

Threaded Discussions

1-2 discussion questions will be posed for each chapter, one per week. The response and follow-up opportunities begin Tuesdays at 8am and closes at Friday 5pm. Each discussion question will be chapter specific. The quality of the response and then follow-up to another student's response will determine the grade. Simple agreement/disagreement will earn minimal scores. The responses need to reflect understanding of the course material: use referenced course material and integrate it into a thoughtful and well organized statement. Creative statements that utilize course ideas and related skills are valued. This is practice for professional work and is not to be viewed as coffee shop/cocktail party chats.