

Syllabus
GES 400 H Selected Topics in Geography: Computer Aided Negotiation

MW, 4-5:15 p.m., Room 001 (not 205), Sondheim Hall

Course description

Disputes over water are often bitterly fought. The gun-slingers of the old west have been replaced with armies of high-priced lawyers and well-funded lobbyists, but it is a take-no-prisoners struggle nonetheless. Students in this course will tackle a real-world, interdisciplinary water-resources problem using Computer Aided Negotiation (CAN), a process for guiding stakeholders to create a mutually beneficial solution to natural resource disputes. Each group will have the opportunity to consult with professional experts, including lawyers, biologists, geologists, engineers, and economists. Groups of students playing the stakeholders will identify what they want, need, and can have from the water supply based on relevant science and law, and then use a water supply operations computer model in planning sessions with the other stakeholder groups to agree upon the operating rules for the system.

This course does not require specific prior technical expertise but is designed for a diverse group of students with senior standing and a range of disciplinary backgrounds. The course is being piloted at UMBC in Fall 2008 under a grant from the National Science Foundation with the goal of developing a model that can be used at other universities.

Instructors

Megan Rivera (Hydrologics, Inc.), mrivera@umbc.edu, 917-232-0934

Office Hours: MW 2:30-3:30, location: Sondheim 211-C;

Th 9:00-10:00 PM, virtual through Blackboard (go to Administritiva: Remote Office Hours)

Sam Lebherz, slbher1@umbc.edu, 240-626-9714

Office Hours: TBD

Andrew Miller (GES), miller@umbc.edu

Prof. Miller is PI on the NSF grant and will be participating as possible

Academic objectives

1. Provide students with hands-on experience in negotiating natural resource disputes by drawing on a range of disciplinary perspectives and tools in balancing multiple objectives
2. Build students' capacity to cull relevant information from the following disciplines to understand and resolve water resources disputes: Hydrology, Physics, Ecology, Mediation/Conflict resolution, Public policy and law, Economics, Multi-objective analysis, Computer programming, Mathematics/numerical modeling, Statistics and Data Analysis
3. Increase student mastery of content and procedural knowledge in some of the above areas
4. Facilitate students' understanding of and appreciation for the role of science and technology in solving complex problems in public policy

Additional Course Objectives: Impacting Water Management and Building an Educational Tool

This is not a typical course. We will be using cutting-edge techniques (not those typically used in water management and disputes) to develop new and, ideally, better management practices than those currently used in our case study, the Delaware River Basin (DRB). The Delaware River Basin Commission is aware of the course and is very interested in our work. There is the real

possibility that we will influence water management in the basin. Therefore, it is essential that your research be high quality and well documented.

In addition, we are collecting information that will be used by other universities to offer the course. This collection of materials, called "OASIS Scholar," will be made widely available to provide the course's educational benefits without requiring the substantial effort of choreographing a course of this nature. For example, you will have access to a number of practicing experts; students at other universities may not. To allow these students to benefit from our experts, we will be asking you to archive your email exchanges on Blackboard. Similarly, we want to avoid having future students contact stakeholders in the DRB with the same questions they have already answered for you. You will be receiving detailed information on how to archive your research. All identifying information will be removed (ie., your name and email address).

Also as part of OASIS Scholar, we will be video taping and/or audio taping a number of our classes. We are specifically interested in material presented by the instructor and guest experts, but if you ask questions (which we hope you will) or walk by the camera, you will also appear in these archived educational materials. Informing you of this possibility implies consent. If you have any questions or concerns, please do not hesitate to speak with the instructor. If you do not wish to have recordings of yourself included in OASIS Scholar, you may still participate fully in the course and the decision will not affect your grade, but you must inform the instructor so appropriate edits can be made. We will also be videotaping the CAN session to help the instructor assign grades, but these tapes will not be used for any other purpose.

Course requirements

Your final grade will be determined as follows:

	% of final grade
Written Reports	
Performance Measure report draft (group)	6
Performance Measure report final individual	8
Performance Measure report final group	8
Memo to stakeholder (group)	5
CAN report individual	15
CAN report group	15
CAN session (group)	5
Written Assignments	
PreAssignments	10
PostAssignments	15
Journal Entries	5
Participation	8

You will receive specific grading criteria for your written reports and the Computer Aided Negotiation session in class. You will be working in groups of 2 or 3, representing one of the states in the basin. Within that state, you will be assigned a specific stakeholder interest to focus on (for example, flood control in Pennsylvania or salinity contamination of aquifers in New Jersey). You will submit written reports and participate in the CAN session *as a group*, but you will also receive an individual grade on written reports for the sections pertaining to your stakeholder interests.

Overall, 39% of your final grade will be a group grade. One of the things we hope you will learn in this course is how to work effectively on a team. The instructor will be meeting periodically with the teams and is available anytime to help with problems. We encourage you to bring any major imbalances in effort to the instructor's attention as early in the semester as possible.

Assignments fall into three categories. PreAssignments are done in preparation for the day's course content. Grading is done on a "you did it or you didn't do it" basis: 8 points for a weak effort, 10 points for a standard effort (mostly, everyone will get 10s for doing it), 12 points for a particularly strong effort. If you get stuck and are unable to complete a PreAssignment, please explain what you are stuck on, and what additional information you would need to move forward in order to receive full credit.

PostAssignments are designed to solidify content we have covered in class. You will be graded on a typical scale (90-100 is an A, etc.) based on completeness, correctness, clarity, and any other criterion specified with the assignment.

Each week starting the week of 9/8, please complete an electronic journal entry by midnight Friday. Journals are found on Blackboard (Assignments: Private Journal). The journals are not visible to other students. Journal entries should be brief (3-5 sentences) and contain the following information:

- 1) name one thing you learned this week (through your own research or in class)
- 2) pose one question you have (something that is not clear to you from the work you did this week)

I may respond directly to your question, but more often, I will use the information in putting together course materials. You may skip two weeks without any impact to your grade. I'm essentially grading on a "you did it or you didn't do it" basis: 8 points for a very weak entry, 10 points for a standard entry (mostly, everyone will get 10s for doing it), 12 points for a particularly insightful entry. Grades will be entered in the on-line gradebook (Grades on Blackboard).

Your participation grade will be based on the following: 1) Teach-in (toward the end of the semester, each student will have about 10 minutes to teach the class something they've learned through their independent research, 2% of overall course grade), 2) answering questions posed by class (when questions come up in class that no one can answer, I'll take volunteers to find out and report back at next class meeting, 1% of overall grade), 3) CAN session (your personal contribution to the CAN session, 1%¹), 4) participation in group work (in-class partner or small group assignments, 1%), 5) general in class participation (asking questions, volunteering information, etc., 1%¹), 6) contribution to OASIS scholar (posting useful links and documents, posting email exchanges, alerting us to information that is not useful, 2%).

Academic integrity

[The following statement, adapted from "Rights and Responsibilities of Students in the Department of Public Policy," reflects concerns that the we and UMBC want all students to recognize.]

By enrolling in degree programs at UMBC, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong.

¹ This is intentionally small to keep people from trying to "over participate." There are 15 students in the class, so you will be graded for appropriate participation rather than quantity.

Academic misconduct could result in disciplinary action that may include, but is not limited to, a failing grade for the assignment, a failing grade for the course, suspension or dismissal. The Policy and Procedures for Graduate Student Academic Misconduct is available at <http://www.umbc.edu/gradschool/procedures/misconduct.html>.

Of particular concern is plagiarism. Plagiarism is defined as “taking and passing off as one’s own the ideas, writings, etc., of another” (Webster, 1983). In other words, plagiarism is theft of another’s words and ideas. It constitutes **serious academic dishonesty**. Plagiarism can result from a student’s failure to cite a source (e.g., of the ideas, writings, etc., of another that the student uses in his or her paper) or failure to appropriately block or use quotation marks (and an appropriate source citation) around directly quoted material.

This policy does not distinguish between intentional and inadvertent plagiarism. Nor does it distinguish between drafts and final submissions. Clearly, intentional plagiarism is a serious offense. Some students may feel, however, that inadvertent plagiarism is not a serious offense. It is, for at least two reasons. First, it is difficult (some might say impossible) to distinguish between intentional and inadvertent plagiarism. Second, inadvertent plagiarism suggests that students either have not paid attention to this policy or are willing to submit work that is carelessly and sloppily completed. In either event, plagiarism will be appropriately punished if it is found in any work for this course.

All students at UMBC should be familiar with the following:

UMBC Policies and Procedures

- Statement of Values for Student Academic Integrity at UMBC, <http://www.umbc.edu/provost/integrity/Honorcode.htm>.
- USM Board of Regents, “Rights and Responsibilities for Academic Integrity,” <http://www.usmd.edu/Leadership/BoardOfRegents/Bylaws/SectionIII/III100.html>
- Policy and Procedures for Student Academic Misconduct, <http://www.umbc.edu/gradschool/procedures/misconduct.html>.

What Is Plagiarism and How to Avoid It

- A. O. Kuhn Library, “Avoid Plagiarism: Give Credit To Those Who Deserve It, Including Yourself,” <http://aok.lib.umbc.edu/reference/plagiarism.php3>.
- The Writing Center at the University of Wisconsin-Madison, “Quoting and Paraphrasing Sources,” <http://www.wisc.edu/writing/Handbook/QuotingSources.html>.
- The Writing Place at Northwestern University, “Avoiding Plagiarism,” <http://www.writing.northwestern.edu/tips/plag.html>.

There is no single departmental standard regarding citation style, although specific instructors may require a particular citation style. Style guides for several common formats for citing sources can be accessed through the following:

- A.O. Kuhn Library, “Citing Sources,” <http://aok.lib.umbc.edu/reference/BI/styleguides.php3>. This website includes a link to a guide for citing Internet sources.
- The Writing Center at the University of Wisconsin-Madison, “Citing References in Your Paper,” <http://www.wisc.edu/writing/Handbook/Documentation.html>.

We encourage you to bring any questions you might have regarding the meaning and importance of academic integrity, what plagiarism is and how to avoid it, and citation styles to faculty members in the department.

Required textbooks

There are no required books, but I would recommend *Getting to Yes: Negotiating Agreement Without Giving In* by Roger Fisher and William Ury. (1981, 1991). We will be discussing the principles toward the end of the semester.

Course outline

Topics covered each day are provided on Blackboard ("Calendar" button). These may shift over the course of the semester, so please check periodically. Changes that affect deadlines will be announced in class.

A few additional notes

This is an extremely interdisciplinary class. There is a broad range of backgrounds among the students, instructors, experts, and other guests. We need to draw on each others knowledge (so please don't be shy about speaking up), and we need to ask when we don't understand something (so please don't be shy about asking questions).

We'll be using quite a bit of technology: Blackboard, a server to run the OASIS model, Skype and Netviewer to communicate with guests. You will be receiving a handout on interacting with these technologies. Things will most certainly go wrong, so please plan to alert us to problems as soon as you find them, and try to be patient.