

**Course Syllabus**  
**Geography 371 Water Resources Management: Spring 2016**  
Department of Geography, University of Victoria

**Instructor:** Dr. Michele-Lee Moore

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**Office Hours:** Monday: 1:30 – 3:30, Thursday: 1:30-2:30

**Course Information**

**Calendar Description:** A study of water resources management in different parts of the world, examining the influence of various physical, economic, social, political and technological factors. The alternative ways in which such problems as water scarcity, floods and declining water quality are handled will be discussed. A number of major water development schemes will be examined in detail. Students will be expected to undertake a modest research project and report upon it.

**Prerequisite:** Geog 209

**Course location:** COR B111

**Meeting times:** Mon, Thu: 1130 - 1250

**Coursespaces:** Coursespaces.uvic.ca

**Course Overview and Rationale for GEOG 371**

This course is designed to serve as an introduction to key debates about water resource management issues and the myriad of factors that contribute to these complex challenges, from a variety of perspectives. Examples include water supply concerns in the face of growing populations, increasing demand, and great uncertainty in light of climate change, water quality issues that can stem from point and nonpoint sources of pollution, as well as from a lack of sanitation, and the geopolitics that surround sharing transboundary waters or bulk water exports. Conceptual frameworks such as IWRM or the human right to water, as well as specific management tools, including pricing or privatization, which have been developed for water managers seeking to address these issues will also be explored.

Water plays an important role in everything that we do. Water has allowed us to move throughout our country, historically serving as an important transportation route. Water provides us with much of our power through hydroelectricity and our food cannot be grown without it. Water is necessary not just for human life, but for fish and wildlife. Water provides us with a playground, and it has long had cultural and spiritual significance for indigenous and non-indigenous peoples alike. Therefore, understanding the critical issues that affects the decisions we make about how we share water, use water, benefit from water, and protect water and our watersheds is important for any student, but especially for those of you interested in any aspect of environmental or resource management.

Traditionally, water resource management was based on the idea that humans could control water, but today, we know that droughts, floods, and hurricanes are not something

we can control and avoid. Thus, we need to learn to live with changing conditions and to live *with* water. This course examines the many challenges we face in trying to do just that.

In keeping with the Department of Geography's interdisciplinary approach, this course will span the physical and social sciences in the investigation of current water resource issues that are relevant locally, provincially, nationally, and internationally.

### **Instructor Expectations/Student Responsibilities**

Given that each of you will have completed GEOG 209 or an equivalent, it is expected that you will have a general understanding of resource management issues, including the availability of resources in different parts of the world, and both the conflicts and opportunities that surround their management. Specifically, it is assumed that you have adequate background information into the biophysical processes occurring in watersheds that contribute to, or are impacted by, the management issues that we will discuss.

It is expected that you will attend class and be actively engaged in class discussions and analyses of water issues. I recognize that students prefer to contribute to classes in different ways, and I expect you to not only contribute meaningfully, but to conduct yourself in a way that also encourages and respects that everyone else will also contribute in their own way. Both you (the student) and I (the instructor) have a responsibility to: come to class, be prepared to discuss the subject area, and create a positive, constructive learning environment for others, which includes turning cell phones off (ringers, SMS and email functions can all be distracting) and not using the internet for activities unrelated to the class lectures and discussions during class time.

Class will start on time. If you are more than 5-10 minutes late, consider that you have missed the class for the day. Please do not wander in after this time as it is disruptive for all of us. Leaving early is similarly disruptive. Therefore, plan on remaining in the class until 11:50 am. In addition to in-class time, you should expect to plan on committing an average of 4-6 hours per week for readings, assignments, and to tracking ongoing discussions and assignments on Coursespaces.

### **Communication**

Coursespaces will be used in this course for all course communication, including announcements, course materials, readings, and details about assignments, therefore please monitor and check Coursespaces frequently. If you have any questions or concerns with the course or your assignments, please feel free to meet me during office hours or by appointment, or contact via email. Remember that emails should not be confused with texting, tweeting, Facebook, or any messaging service, and therefore, should follow proper etiquette.

I will attempt to respond to emails in a timely fashion, although depending on my schedule or the nature of the request, delays may occur. Therefore, be prepared to wait up to 48 hours for a response during the week. Email will only be checked sporadically on weekends. Therefore, you should expect that emails sent over the weekend may not be answered until Monday at the earliest.

## **Learning Goals, Objectives, and Outcomes**

**Goal:** To provide students with the materials, resources, and activities that will allow you to describe and analyze pressing issues in water resource management and explain historical and future strategies to address these challenges.

### **Objectives:**

- Identify, examine and analyze key debates and water issues
- Identify, compare and interpret management frameworks to address key issues
- Evaluate tools that can be used in water resource management decisions-making and dismantle different stakeholder perspectives

### **Outcomes:**

By the end of this course, you should be able to:

- Explain different physical and social factors of water issues and demonstrate the relationships among the issues
- Summarize and compare the range of approaches and tools proposed to address critical issues in water by various local, provincial, national, and international actors
- Describe and be able to distinguish between different stakeholder perspectives on major water issues
- Use academic literature, lecture notes, and materials from class discussions and activities to assess a critical water issue of your choice
- Research and develop a position and rationale from a specific stakeholder perspective for a water management issue
- Demonstrate advancement in depth of knowledge and ability to analyze water issues
- Show improvement in writing skills through assignments, which includes developing thesis statements, structured reports, and using appropriate citation formats, as well as demonstrate progress in presentation skills and the ability to debate complex issues

### **Assessments**

Learning outcomes will be assessed using the following:

In-class contributions: 15% (Option A) or 20% (Option B)\*

Case Study Submission: 25%

Water Issues Report and Speed Talk: 25% (Option B) or 30% (Option A)\*

Exam: 30%

\*As third year students, it is important that you develop an awareness of your strengths, weaknesses and preferred means of contributing to class. Therefore, this class offers students an option for assignment grading, from which you are expected to choose how you intend to meet the course requirements. You are strongly encouraged to carefully consider how you would like to divide the proportions for the graded assignments. All students must complete all assignments, and all students will engage in structured in-class activities. But those who prefer to participate through presentations, class discussions, online forums, and in engaging with guest speakers may prefer to weight their in-class contributions more heavily than their written paper. Others may prefer that their grades for their water issues report comprise a larger total of their course grade instead. Note that in-class contributions are not marks for attendance but for contributing substantively and creatively to the class discussions. Marks for in-class contributions will consider quality, regularity, and willingness of your participation. All students must submit their grading option (A or B) by **January 11th** on CourseSpaces (see the Choice option under the first section). No subsequent changes will be permitted after this date.

## **Details of Assignments**

### ***In Class Contributions***

Debate and discussion plays a significant role in academia and university life, providing an opportunity to challenge ideas and to be challenged in your own thinking - a critical part of any learning process. Each week, class materials will involve a range of lecture notes, presentations by guest speakers, and readings assigned by the instructor. You are expected to have completed the readings before class begins and to be prepared to engage in discussions, debates, and class exercises focused on key themes. Participation will be graded by a combination of participation in general discussions or Q&A periods in class and in structured activities (randomly conducted 5 times, 'best' 4 will be used). Additionally, students are expected to scan various local, national and global media sources throughout the semester for water resource management related stories and may share them on the CourseSpaces forums. When posting, briefly explain the relevance of the stories to course materials, theories and frameworks.

### ***Water Issue Report***

The purpose is to produce a well organized, concise and compelling report for water managers that conveys important facts, questions, arguments and a recommended course of action about a specific issue. The issue is your choice, but assume the audience for the report is a senior decision maker who could help resolve the issue. There are no geographical limits to the issues (i.e. it does not have to be an issue in BC or in Canada). You will be expected to provide scholarly references using APA or Harvard Business style (author-date). The total length is: 1500-2000 words (not including references) and the document should be single spaced, double sided. A minimum of 7 academic references (peer reviewed, or edited volumes only) are required.

You will then share a few highlights of your report with the class in a speed talk format. These will be informal 2 minute presentations (no Powerpoint slides) and will be followed by 10-20 minute interactive sessions in which you will field questions and lead a discussion

with small groups. Some of you may choose a presentation date before the written paper is due – this may provide an opportunity to test ideas and get feedback that you can use to shape your paper. Others will be presenting after you have submitted the final paper, and you will need to consider any feedback/evaluation that you receive and incorporate that into your ideas.

**DUE DATE: Optional dates for speed talks include: Feb 4, Feb 22, Mar 3, Mar 14. Sign up will be on a first come, first served basis on CourseSpaces once announced. ALL PAPERS (regardless of speed talk date) will be due February 18th, 2016. Must be submitted via CourseSpaces Dropbox BEFORE class begins.**

### ***Case Study Competition***

Teams of 5 members will be presented (in class) with current water issues relevant to the course. Teams will compete to propose a recommended solution to one of these pressing problems of their choice, and draft their submission to the relevant decision-makers.

More detailed instructions of how to develop this strategy will be provided in class and on CourseSpaces.

The final components of the assignment will include the following:

- **Group Presentation** - delivered to the judges on the day of the competition (at least one guest judge will be present for each presentation)
- **Ten page submission** – This paper can be imagined as the written submission you would submit to the relevant government agency based on their request for public comment. This summary should provide a thorough view of the issue analysis, complete approach/solution and rationale proposed by the team. Teams without a ten-page summary or with a summary longer than ten pages will be disqualified. Submissions must be handed in at the beginning of class on the day of the competition. Text should be single spaced, all figures and tables must be labelled, and pages should be double-sided.
- **References** – Must include a minimum of 7 academic sources. Additional governmental, industry and media sources may be used but will not count as part of your 7 academic sources. Also not considered in the ten page “count”.
- **Exhibits/appendices** – You may also submit the following in an attached appendix or exhibit, where relevant: samples of additional materials such as a schedule for an outreach/consultation strategy, photographs, or social media materials, etc.

The presentation will be worth 10% and the written submission will be worth 15% of the final mark (total = 25%).

**DUE DATE: Due on the date assigned to your group - TBD. The final paper must be submitted by the beginning of class on the day of your presentation.**

## ***Exam***

A final exam will cover the full range of course materials, including readings, guest lectures, course discussions, and lectures. **Date TBA.**

## **Late Policy:**

Written assignments that are handed in late will be deducted **15%** per day. In-class contributions and presentations that are not prepared on time will be given zero and substitutions to later dates are not optional. Failure to complete any one of the assignments may result in a failure of the course.

## **UVic policies and procedures**

### ***Academic Integrity:***

Please review <http://web.uvic.ca/calendar2011/FACS/UnIn/UARe/PoAcl.html> for university policy on academic integrity and useful information on avoiding plagiarism. Any form of academic dishonesty will result in an automatic "F" for that assignment or test and possibly the course for ALL individuals involved.

### ***Accessibility:***

Students with diverse learning needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodation, please feel free to approach me and/or the Resource Centre for Students with a Disability (RCS D) as soon as possible. The RCS D staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations <http://rcsd.uvic.ca/http://rcsd.uvic.ca/>. The sooner you let us know your needs, the quicker we can assist you in achieving your learning goals in this course.

### ***Recording:***

If you prefer to record lectures or class exercises, or use any sort of device for images in the classroom, please ensure you follow the principles of prior, informed consent with the instructors and fellow students.

### ***Positivity and Safety:***

The University of Victoria is committed to promoting, providing and protecting a positive and safe learning and working environment for all its members.

## Grading Policy:

Posted directly from the UVic undergraduate calendar:

Undergraduate Grading Scale			
Passing Grades	Grade Point Value	Percentage *	Description
A+ A A-	9 8 7	90 – 100 85 – 89 80 – 84	An A+, A, or A- is earned by work which is technically superior, shows mastery of the subject matter, and in the case of an A+ offers original insight and/or goes beyond course expectations. Normally achieved by a minority of students.
B+ B B-	6 5 4	77 – 79 73 – 76 70 – 72	A B+, B, or B- is earned by work that indicates a good comprehension of the course material, a good command of the skills needed to work with the course material, and the student's full engagement with the course requirements and activities. A B+ represents a more complex understanding and/or application of the course material. Normally achieved by the largest number of students.
C+ C	3 2	65 – 69 60 – 64	A C+ or C is earned by work that indicates an adequate comprehension of the course material and the skills needed to work with the course material and that indicates the student has met the basic requirements for completing assigned work and/or participating in class activities.
D	1	50 – 59	A D is earned by work that indicates minimal command of the course materials and/or minimal participation in class activities that is worthy of course credit toward the degree.
COM	Excluded Grade	N/A	<b>Complete</b> (pass). Used only for 0-unit courses and those credit courses designated by the Senate. Such courses are identified in the course listings.
CTN	Excluded Grade	N/A	<b>Continuing</b> . Denotes the first half of a full-year course.
Failing Grades	Grade Point Value	Percentage *	Description
E	0	0 – 49	Conditional supplemental. Supplemental examinations are not offered by all departments and the allowable percentage may vary by program (e.g. 35-49). Students will be advised whether supplemental will be offered and if the percentage range varies when assessment techniques are announced at the beginning of the course.
F	0	0 – 49	F is earned by work, which after the completion of course requirements, is inadequate and unworthy of course credit towards the degree.
N	0	0 – 49	Did not write examination or complete course requirements by the end of term or session; no supplemental.
N/X	Excluded Grade	N/A	Did not complete course requirements by the end of the term; no supplemental. Used only for Co-op work terms and for courses designated by Senate. Such courses are identified in the course listings. The grade is EXCLUDED from the calculation of all grade point averages.
F/X	Excluded Grade	N/A	Unsatisfactory performance. Completed course requirements; no supplemental. Used only for Co-op work terms and for courses designated by Senate. Such courses are identified in the course listings. The grade is EXCLUDED from the calculation of all grade point averages.

## Course Experience Survey (CES):

I value your feedback on this course. Towards the end of term, you will have the opportunity to complete a confidential course experience survey (CES) regarding your learning experience. The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help guide improvements for the overall program for

students in the future. When it is time for you to complete the survey, you will receive an email inviting you to do so. If you do not receive an email invitation, you can go directly to <http://ces.uvic.ca>. You will need to use your UVic NetLink ID to access the survey, which can be done on your laptop, tablet or mobile device. I will remind you nearer the time, but please be thinking about this important activity, especially the following three questions, during the course.

1. What strengths did your instructor(s) demonstrate that helped you learn in this course?
2. Please provide specific suggestions as to how the instructor(s) could have helped you learn more effectively.
3. Please provide specific suggestions as to how this course could be improved.

### Tentative Course Schedule

<b>THEME</b>	<b>DATE</b>	<b>READINGS &amp; ASSESSMENTS</b>
Water Management and Water Governance Basics (in BC)	Jan 4-14	Explore the Living Water Smart blog and B.C. Water Sustainability Act blog <b>Evaluation Strategy Due Jan 11<sup>th</sup>.</b>
Dams and Development	Jan 18-21	Richter <i>et al.</i> (2010) <b>Sign Up Due for Speed Talks (Jan 18<sup>th</sup>)</b>
Drinking Water	Jan 25 – Feb 4	Prudham (2000) Budds & McGranahan (2003) <b>Sign Up Due for Case Study (Jan 25<sup>th</sup>)</b> <b>Speed Talks Group 1 (Feb 4<sup>th</sup>)</b>
<b>READING BREAK</b>	<b>Feb 8-12</b>	
Water Quality and Monitoring	Feb 15-22	Ongley (2008) <b>Speed Talks Group 2 (Feb 22<sup>nd</sup>)</b> <b>Water Issue Report (Feb 18<sup>th</sup>)</b>
Extreme events	Feb 25 – Mar 3	<b>Speed Talks Group 3 (Mar 3)</b>
Water Security, Conservation, and Planning	Mar 7-17	Wolf (2005) <b>Speed Talks Group 4 (Mar 14)</b>
Case Study Submissions	Mar 21-24	<b>Presentations and Papers DUE</b>
Course Wrap-Up	Mar 31 – Apr 4	