

WINTER 2016

SCHOOL OF ENVIRONMENT, ENTERPRISE AND DEVELOPMENT

FACULTY OF ENVIRONMENT

UNIVERSITY OF WATERLOO

INDEV 608/PACS 652

Water and Security

Course Instructor: **Larry Swatuk**

Class Time: Mon/Wed 1000-1120

Class Location: **EV3 - 3406**

Office hours: 1130-1300 Mon/Wed or by appointment

Office Location: **EV3-4253**

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Note: The guidelines in this syllabus are subject to change. Refer to the course website for updates.

Overview:

This course is meant to serve as an introduction to issues – theoretical, conceptual, practical – of water and security in the world with a particular focus on the global South. Conventional wisdom would have us believe that the world is likely to face ‘water wars’ in the not-too-distant future. This scenario is dependent upon a rather simplistic equation: since freshwater is a scarce and constant resource, and since global populations are ever increasing, then water (and other resource) shortages are likely to cause (violent) conflict over time. While many regard this statement as axiomatic, the ‘reality’ of these hypothesised ‘water wars’ is still to be demonstrated. Nevertheless, the fact that many people – indeed, many powerful actors in the global political economic system – are thinking and beginning to take policy decisions along these terms makes it important for us to consider these issues carefully.

Impending conflict or not, the fact of scarce resources raises a number of issues for consideration. For example, how much water is there and where is it to be found? To what uses is this water being put? How are these uses determined? Who benefits and who suffers from existing water resource use patterns? Whose security is assured and whose threatened by current patterns of supply and demand? How would this balance alter if current supply/demand patterns were altered? What may be done to assure that in future there is water security for all?

How one answers the last question depends largely on where one sits in the present social, political and economic order. For, where one sits in this order determines to a significant degree what one thinks –

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about security, justice, equality – and hence the ‘relevant’ theoretical and practical frameworks for achieving and managing ‘security’.

The course is divided into two distinct sections. The first section introduces the concept of security and seeks to provide an understanding of the various ways it is used in policy and other related discourses. The second section focuses specifically on the role/place of water in security at both conceptual and practical levels. It highlights a number of key issues: is water a weapon of war or peace? How should we approach water security? How does water contribute to food and household security? Is access to water best addressed by treating water as a human right or an economic good? What are the appropriate institutions for ensuring water security?

Objectives:

- To provide students with the necessary skills to inform appropriate policy approaches to water security
- To provide a nuanced understanding of the role and place of water in the built and natural worlds
- To provide a nuanced understanding of key concepts such as security, development, conflict and cooperation
- To assemble a collectively-written, peer-review ready monograph on Water and Security

Assessment:

Essay Step 1: 10% (due 12 Feb)
Essay Step 2: 20% (due 5 March)
Essay Step 3: 40% (due 2 April)
2 Critical Reflections: 20% (10 Mar; 31 Mar)
Oral presentation: 10%

INTRODUCTION

Week 1: Why Water? Getting Organized/Basic Backgrounders (Lectures/Roundtable discussions)

SECTION 1: UNDERSTANDING SECURITY

Week 2: Group Work – Getting Organized

By the end of Week 1, students must organize themselves into a group (of 3) and inform the course instructor via email. During Week 2, students must identify a case study that they will work on, write a paragraph about this case in relation to ‘The Boomerang Effect’ and provide a short bibliography relating to the topic.

Week 3: What is ‘Security’? (Lectures/Roundtable discussions)

Read: L. Swatuk, background document.

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Read: T. Homer-Dixon, 'Environmental Scarcities and Violent Conflict: evidence from cases', *International Security*, 19:1 1994 (available at <http://www.library.utoronto.ca/pcc/evidence/evid1.htm>)

Read: L. Swatuk, 'Environmental Security'. In: M. Betsill, K. Hochstetler, D. Stevis, eds, *International Environmental Politics* (London: Palgrave): 203-236.

SECTION 2: WATER IN SECURITY

Week 4: How much water for what, for whom and why? (Lectures/Roundtable discussions)

Savenije, H.H.G., 2002. 'Why water is not an ordinary good, or why the girl is special', *Physics and Chemistry of the Earth* vol. 27, pp. 741-744.

Read: M. Falkenmark and J. Rockstrom, Chapters 1,2, 3 and 5 in M. Falkenmark and J. Rockstrom, *Balancing Water for humans and nature*, (London: Earthscan, 2004). (**SEE SLIDES ON LEARN.**)

Read: World Water Development Report (WWDR) 2, chapter 4.

Multimedia: UNESCO-IHE, *Water: the Drop of Life*: Kalahari Bushmen (2:00); Phoenix family (5:31); Lucas Family, Namibia (6:04).

Week 5: Water Security (Lecture/discussions)

Read: Paul van Hofwegen, 'Water security: everybody's concern, everybody's responsibility'. Paper presented at the 50th anniversary conference of UNESCO-IHE, October 2007.

Read: UN Water, 2013. *Water Security and the Global Water Agenda*. UNU-INWEH and UN-ESCAP: United Nations University.

Read: Smith, D., and Vivekananda, J. 2012. *Climate Change, Conflict, and Fragility: Getting the Institutions Right*. In: *Climate Change, Human Security and Violent Conflict*, edited by J. Scheffran, M. Brzoska, H. G. Brauch, P. M. Link, and J. Schilling, 77–90. Berlin: Springer

Week 6: Perspectives: Water as a Human Right or Economic Good?

Read: J. Scanlon, A. Cassar, N. Nemes, 2004. *Water as a Human Right?* IUCN Environmental Policy and Law Paper No. 51 (Gland: Switzerland).

Read: P. Gleick, 2007. *Is there a human right to water?* (Pacific Institute: California).

Read: WWDR2, chapter 12.

Week 7-8: Managing Water: IWRM

Read: Conca, 'Expert Networks', Chapter 5.

Read: P. Moriarty, J. Butterworth and C Batchelor, *Integrated Water Resources Management*, 2004.

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Read: T. Allan, 2003. 'IWRM/IWRAM: a new sanctioned discourse?' SOAS Water Issues Study Group Occasional paper 50.

Multimedia: Selections from The Water Channel

Weeks 9: Institutional Frameworks: Governing Water

Read: Ken Conca, 2006. Chapter 4.

Read: Dublin Principles; UN Convention

Read: McCaffrey et al

Read: WWDR2, Chapter 2 (downloadable from:

http://www.unesco.org/water/wwap/wwdr/wwdr2/table_contents.shtml

Week 10 (March 18/20): Transboundary Waters

Read: BICC, paper 46.

Read: UN World Water Development Report 2, Chapter 11 (downloadable from:

http://www.unesco.org/water/wwap/wwdr/wwdr2/table_contents.shtml

Recommended: A. Earle, A. Jagerskog, J. Ojendal, eds, *Transboundary Water Management: principles and practice*, Chapters 1, 13 and 14.

Recommended: P. Gleick, 'Environment and Security: Water Conflict Chronology – Version 2000', in P. Gleick, *The World's Water 2000-1*, (California: Island Press, 2000).

Recommended: Tuset, H.P. Wollebaek, and N.P. Gleditsch, 1999, 'Conflict and Shared Rivers', paper presented to the 40th annual convention of the International Studies Association, 16-20 February, Washington, D.C.

Weeks 11 and 12: Conflict and Cooperation

Read: (i) Swatuk; (ii) Salame, Swatuk and van der Zaag; (iii) Swatuk, Amakali and Jembere; (iv) Conca (ch. 6)

Read: J.A. Allan, 'Hydro-peace in the Middle East: why no water wars? A Case Study of the Jordan River Basin', *SAIS Review*, vol. 22 no. 2 (Summer-Fall 2002).

Recommended: A.T. Wolf, A. Kramer, A. Carius and G.D. Dabelko, 'Managing Water Conflict and Cooperation', in Worldwatch Institute, *State of the World 2005: Global Security*, (London: Earthscan, 2005).

Recommended: Sadoff, C.W. and D. Grey, 2002. 'Beyond the River: the benefits of cooperation on international rivers', *Water Policy* 4, 389-403.

Recommended: Aaron Wolf, et al, 2003. 'Conflict, cooperation and university support.'

Multimedia: UNESCO-IHE, *Water: the Drop of Life* one or more short videos on Ataturk Dam (4:33); Okavango River (4:40); Jordan River (7:19); Aswan Dam (5:09); Tajo Segura Spain (4:39); Equador Rain Forest (5:48); Namib Desert (2:44); Rift Valley (2:18)

Pedagogy, Attendance and Participation

This course combines several teaching elements: (i) lectures followed by Q and A and general discussion; (ii) short video followed by deconstruction of the video; (iii) seminar style discussion of particular readings; and (iv) publication-oriented writing workshop. Participation in class activities is an integral aspect of this course and constitutes 20% of your overall grade. This requires you to attend all classes, do your weekly readings and engage in critical discussion of the materials. Grades will be awarded on the frequency and quality of student participation in class. I recognize that some students may not be comfortable speaking in large group settings and as a result contribution in small group discussions is encouraged. Attendance will be taken each day and students who absent themselves without any valid reason will not receive any marks for attendance. Please note that the readings have been carefully selected and have been ordered logically, so you should read them one after the other as they appear in the course outline. The seminar should then focus on each of the readings on its own: (i) what is the reading about? (ii) what are the key ideas s/he is putting forward? (iii) what are the key concepts the author(s) uses/develops? (iv) what are the key premises of the author's argument? (v) what evidence does the author bring forward in support of the argument? You can weigh in with a critique of the reading.

Email policy

If you'd like to contact me outside of my scheduled office hours, please direct all course-related questions to my uwaterloo email address at lswatuk@uwaterloo.ca. I will respond to your emails as promptly as possible. However, please be advised that I usually receive many emails each day that require a response. Therefore, it may take me a day or two to reply to your message. Note also that email is the official channel of communication between the University and its students. You are required to check your *uwaterloo.ca* email account regularly; I recommend that you check for course-related emails at least twice a week. If you use another email service (e.g., gmail), it is your responsibility to ensure that mail sent to your *uwaterloo.ca* account is forwarded to your other account.

Submission of assignments

Check the requirements in the schedule above regarding submission of electronic and/or hard copies for each assignment. Hard copies (with double-sided printing) are to be submitted to me during class.

By submitting an assignment for this course, you are agreeing to the following:

You have properly referenced and footnoted all ideas, words or other intellectual property from other sources used in the completion of this assignment.

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You have included a proper bibliography, which includes acknowledgement of all sources used to complete this assignment.

The assignment was completed by your own efforts. You did not collaborate with any other person for ideas or answers (with the exception of group projects)

This is the first time you have submitted this assignment or essay (either partially or entirely) for academic evaluation.

Turnitin: Plagiarism detection software (Turnitin) will be used to screen assignments in this course for proper citation, referencing and instances of plagiarism. This is being done both as an educational activity for you and to verify that use of all material and sources in assignments is documented. You will be able to submit your assignments to Turnitin multiple times so that you can see how the software has analyzed your writing, and so that you can make adjustments if portions of your text are flagged as being problematic.

Late policy: You are expected to take account of the possibility of computer or printer failure in planning your time. Emailed or faxed assignments will not be accepted. The penalty for late assignments is 5 % of the total possible mark per day, including weekends and holidays. I will not accept assignments more than 5 days after the due date unless we have a prior arrangement.

When You Cannot Meet a Course Requirement Due to Illness or Other Reasons: There will be no unpenalized extensions on assignments except for illness, severe personal extenuating circumstances, or weather emergencies. When you find yourself unable to meet a course requirement because of medical, compassionate or other reasons, please advise me in writing by ACE email; make sure to include your full name in your message. Where possible, you must contact me in advance of the assignment due date, but otherwise as soon as possible after the due date. As a rule, you must provide appropriate documentation, for example, a note from your doctor indicating the dates during which you were ill, and describing the severity of your illness. *Manage your time carefully. Pressure of work alone is not an acceptable reason for seeking an extension without penalty.*

University policies

Unclaimed assignments will be retained until one month after term grades become official in Quest. After that time, they will be destroyed in compliance with UW's [confidential shredding procedures](#).

Using UW-LEARN course website: See <http://uwace.uwaterloo.ca/> to sign on to UW-ACE. In case of difficulties, contact uwacehelp@ist.uwaterloo.ca.

Academic Integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. www.uwaterloo.ca/academicintegrity/

All students are encouraged to visit the on-line tutorial at <http://www.lib.uwaterloo.ca/ait/> (see 'Check your understanding') to learn more about what constitutes an academic offence.

Note for students with disabilities: The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term.

Religious Observances: Please inform the instructor at the beginning of term if special accommodation needs to be made for religious observances that are not otherwise accounted for in the scheduling of classes and assignments.

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 - Student Petitions and Grievances, Section 4, www.adm.uwaterloo.ca/infosec/Policies/policy70.htm. When in doubt please contact your Undergraduate Advisor for details.

Discipline: A student is expected to know what constitutes academic integrity, to avoid committing academic offence, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. For information on categories of offences and types of penalties, students should refer to Policy 71, Student Discipline, www.adm.uwaterloo.ca/infosec/Policies/policy71.htm. For typical penalties, check Guidelines for Assessment of Penalties, www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm

Appeals: A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 – (Student Discipline) may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72 (Student Appeals) www.adm.uwaterloo.ca/infosec/Policies/policy72.htm

Consequences of Academic Offences:

Students are expected to know what constitutes academic integrity, to avoid committing academic offenses, and to take responsibility for their actions.

Students who are unsure whether an action constitutes an offense, or who need help in learning how to avoid offenses (e.g., plagiarism, cheating) or about rules for group work / collaboration should seek guidance from the course professor, TA, academic advisor, or the Undergraduate Associate Dean.

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For information on categories of offenses and types of penalties, students should refer to Policy #71, Student Academic Discipline, <http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm>

Within FES, those committing academic offences (e.g. cheating, plagiarism) will be placed on disciplinary probation and will be subject to penalties which may include a grade of 0 on affected course elements, 0 on the course, suspension, and expulsion.

Students who believe that they have been wrongfully or unjustly penalized have the right to grieve; refer to Policy #70, Student Grievance, <http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm>