

COURSE SCHEDULE

IMPORTANT: ALL TIMES EASTERN - Please see the [University Policies](#) section of your Syllabus for details

Week	Module	
Week 1	Introduction Module 1: Human Security and Development	<ul style="list-style-type: none"> • Dossa, S. (2007). Slicing • Seers, D. (1969) The Me • Paris, R. (2001). Human • Taylor, V. (2004). From s • Kalahari Bushmen • Pheonix Family
Week 2	Module 2: Water in the World	<ul style="list-style-type: none"> • Savenije, H. (2002). Why • UNESCO. The State of th • Lopez-Gunn, E., Stefano, • Lopez-Gunn, E., & Ramó
Week 3	Module 3: How Much Water Is There?	<ul style="list-style-type: none"> • Chapters 1-3 from Falker
Week 4	Module 4: Water for Development	<ul style="list-style-type: none"> • UNESCO. The State of th • Conca, K. (2006). The Ec • Allan, T. (2003). IWRM/IV • Fearnside, P. (2006). Dar • Moore, D., Dore, J., & Gy • Aqueducts in Rome

- [Arizona, USA](#)

		<ul style="list-style-type: none"> • Arizona, USA
Week 5	Module 5: Gender and Water	<ul style="list-style-type: none"> • Cap-Net, International Ne • Rautanen, S., & Baaniya, • Stevenson, E., Greene, L • Laurie, N. (2011). Gende • Ngwenya, B., & Kgathi, D
Week 6	Module 6: Water for Health	<ul style="list-style-type: none"> • UNESCO. Protecting and • Yongsi, H. (2010). Sufferi • Khan, A., Ireson, A., Kova • McCann, D., Moore, A., & • Akanda, A., & Hossain, F • Epidemic in London • Diarrhea in Bangladesh
Week 7	Module 7: Water for Cities: Overview	<ul style="list-style-type: none"> • UNESCO. Water and hur • Subbaraman, R., Shitole, • Mahgoub, M., Steen, N., • City as a Catchment Area
Week 8	Module 8: Water for Cities: Systems of Supply	<ul style="list-style-type: none"> • Lundqvist, J., Tortajada, (• Von Schnitzler, A. (2008) • Ranganathan, M., Kamat • Wade, J. (2012). The Fut • Eco-cities: Sustainable C
Week 9	Module 9: Water for Agriculture and Food: Overview	<ul style="list-style-type: none"> • UNESCO. Water for food • Rockström, J., & Barron, • Gunatilake, H., Roland-H • The Projects and Challen
Week 10	Module 10: Water for Food: Savanna Case Study	<ul style="list-style-type: none"> • Falkenmark, M., & Rocks • Chapters 6-8 from Falker

		<ul style="list-style-type: none"> • Comas, J., Connor, D., Is • Farmers and Pastoralists
Week 11	Module 11: Water for Rural Areas	<ul style="list-style-type: none"> • Kgomotso, P., & Swatuk, • Swatuk, L., & Kgomotso, • UNESCO. Water for Food • Saldías, C., Speelman, S • A Borehole That Lasts for • The Seventh Video on Co
Week 12	Module 12: Toward Better Practice: Bringing It All Together	<ul style="list-style-type: none"> • Resurreccion, B. (2006). • Varis, O., Kummu, M., Ke • Saving Cambodia's Great

There is no final exam for this course.

| Official Grades and Course Access

Official Grades and Academic Standings are available through [Quest](#).

Your access to this course will continue for the duration of the current term. You will not have access to this course once the next term begins.

CONTACT INFORMATION



| Announcements

Your instructor uses the **Announcements** widget of the **Course Home** page to make announcements during the term to communicate new or changing information regarding due dates, instructor absence, etc., as needed. You are expected to read the **Announcements** on a regular basis.

To ensure you are viewing the complete list of news items, you may need to click **Show All Announcements**.

| Discussions

A **General Discussion** topic* has also been made available to allow students to communicate with peers in the course. Your instructor may drop in at this discussion topic.

| Contact Us

Who and Why	Contact Details
<p>Instructor</p> <ul style="list-style-type: none"> • Course-related questions (e.g., course content, deadlines, assignments, etc.) • Questions of a personal nature 	<p>Post your course-related questions to the Ask the Instructor discussion topic*. This allows other students to benefit from your question as well. Questions of a personal nature can be directed to your instructor.</p> <p>Instructor: Larry Swatuk lswatuk@uwaterloo.ca Office hours: by appointment through email Office location: EV3 4253</p> <p>Your instructor checks email and the Ask the Instructor discussion topic* frequently and will make every effort to reply to your questions within 24–48 hours, Monday to Friday.</p>
<p>Technical Support,</p>	<p>learnhelp@uwaterloo.ca</p>

<p>Centre for Extended Learning</p> <ul style="list-style-type: none"> • Technical problems with Waterloo LEARN 	<p>Include your full name, WatIAM user ID, student number, and course name and number.</p> <p>Technical support is available during regular business hours, Monday to Friday, 8:30 AM to 4:30 PM (Eastern Time).</p> <p>LEARN Help Student Documentation</p>
<p>Learner Support Services, Centre for Extended Learning</p> <ul style="list-style-type: none"> • General inquiries • WatCards (Student ID Cards) • Examination information 	<p>Student Resources</p> <p>extendedlearning@uwaterloo.ca</p> <p>+1 519-888-4002</p> <p>Include your full name, WatIAM user ID, student number, and course name and number.</p>

*Discussion topics can be accessed by clicking **Connect** and then **Discussions** on the course navigation bar above.

COURSE DESCRIPTION AND OBJECTIVES



| Description

Whereas "water is life" is a frequently invoked truism, the fact that 1.1 billion people lack access to a safe supply of drinking water and 2.4 billion lack access to adequate sanitation suggests that the wrong kind of water may also bring both misery and death. This course surveys the role of water in human security and development. It locates water use in history and articulates the links between water and human security through a mix of cases and issues from around the world.

| Objectives

In this course, you will

- learn the necessary skills to inform appropriate policy approaches to water management
- gain a nuanced understanding of the role and place of water in the built and natural worlds
- gain a nuanced understanding of key concepts such as human security and development, particularly in relation to water resources development and management

| Expected Outcomes

At the end of this course each student will have

- strong analytical skills as they relate to water resources management,
- improved understanding of the interrelationship between theory and practice,
- deep understanding of case-study river basin, and
- enhanced understanding of key issues in water, security and development.

| Pedagogy

This course consists of several interlinked components: (i) guided lectures; (ii) videos; (iii) readings linked to specific topic areas; (iv) a group project; and (v) individual reflections. For this course to function to its maximum potential active participation by all members of the course is vital. Each week, the well-prepared student will have (i) watched the lecture; (ii) completed the assigned readings; and (iii) watched the video

(if there is one or more). The readings have been carefully chosen to speak directly to the weekly topic, most often by presenting a case study from somewhere out in the wide world. There are also general and more theoretical readings which are meant to provide the student with a solid foundation for understanding not only what is happening in the case studies, but why it is happening that way and to have some insight into thinking about what might be done to improve the situation or to adapt the positive outcome in her/his own river basin case that makes up the group project. For all of us to get the most out of this course, therefore, we must come to the week's discussions armed with insight and information—not just opinion.

This online course was developed by Larry Swatuk, with instructional design and multimedia development support provided by the Centre for Extended Learning. Further media production was provided by Instructional Technologies and Multimedia Services.

ABOUT THE COURSE AUTHOR



| Course Instructor and Author — Larry Swatuk

Larry Swatuk is an associate professor and director of the International Development Program in Waterloo's Faculty of Environment. Prior to coming to Waterloo in the fall of 2008, Larry spent 13 years in Africa. Read more in [Teaching wise water use, from Africa to Tajikistan](#).

Educational Background

Ph.D. Dalhousie University, Nova Scotia
M.A. University of Windsor
B.A. University of Windsor

Current Research

His current research and interests focus on the political ecology of natural resources governance and management, with a particular focus on water in Africa.



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MATERIALS AND RESOURCES



| Textbook(s)

Required

1. Falkenmark, M., & Rockström, J. (2004). *Balancing water for humans and nature: The new approach in ecohydrology*. London: Earthscan.

For textbook ordering information, please contact the [W Store | Course Materials + Supplies](#).

For your convenience, you can compile a list of required and optional course materials through [BookLook](#) using your Quest userID and password. If you are having difficulties ordering online and wish to call the Waterloo Bookstore, their phone number is +1 519-888-4673 or toll-free at +1 866-330-7933. Please be aware that textbook orders **CANNOT** be taken over the phone.

| Resources

- [Library services for co-op students on work term and extended learning students](#)

| Water Organizations

- [African Ministers' Council on Water](#)
- [African Water Facility](#)
- [Building Partnerships for Development in Water and Sanitation](#)
- [Centre for Affordable Water and Sanitation Technology](#)
- [Eawag](#)
- [European Union Water Initiative](#)
- [European Water Partnership](#)
- [Global Water](#)
- [Global Water Partnership](#)
- [Healing Waters International](#)

- [Institute of Water Policy](#)
- [International Commission on Large Dams](#)
- [International Organization of Hydrogeologists](#)
- [International Rivers](#)
- [International Water Management Institute](#)
- [IRC International Water and Sanitation Centre](#)
- [Millenium Water Alliance](#)
- [Office International de l'Eau](#)
- [Pacific Institute](#)
- [Rural Water Supply Network](#)
- [Sanitation and Water for All](#)
- [Stockholm International Water Institute](#)
- [Sustainable Sanitation Alliance](#)
- [The UN Think Tank on Water](#)
- [The Water Institute](#)
- [The World Bank - Water](#)
- [The World Water Organization](#)
- [UN Global Environment Monitoring System \(GEMS\) Water Programme](#)
- [UN Water](#)
- [UNDP - Water and Ocean Governance](#)
- [UNESCO - World Water Assessment Programme](#)
- [UNICEF - WASH](#)
- [Water Aid](#)
- [Water and Sanitation for Africa](#)
- [Water and Sanitation Program](#)
- [Water Supply and Sanitation Collaborative Council](#)
- [WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation](#)
- [World Commission on Dams](#)
- [World Resources Institute](#)
- [World Water Council](#)

GRADE BREAKDOWN



The following table represents the grade breakdown of this course.

Activities and Assignments	Weight (%)
Introduce Yourself	Ungraded
Weekly Discussions	20%
Group Water Manager Basin Project <ul style="list-style-type: none">• Steps 1-5• Step 6 Final Report	25% (5 x 5%) 25%
Individual Critical Reflections	30% (3 x 10%)

COURSE AND DEPARTMENT POLICIES



| Course Policies

The Instructor's 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 regarding submission of each assignment.

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.
- 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.

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 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.*

| Department Policies

Consequences of Academic Offenses:

A student is expected to know what constitutes academic integrity, to avoid committing academic offenses, and to take responsibility for her/his 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. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to [Policy 71 – Student Discipline](#).

Within ENV, those committing academic offenses (e.g. cheating, plagiarism) will be placed on disciplinary probation and will be subject to penalties which may include a grade of zero on affected course elements, zero 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](#).

ENV students are strongly encouraged to review the material provided by the [University's Academic Integrity Office](#).

UNIVERSITY POLICIES



| Submission Times

Please be aware that the University of Waterloo is located in the **Eastern Time Zone** (GMT or UTC-5 during standard time and UTC-4 during daylight saving time) and, as such, the time that your activities and/or assignments are due is based on this zone. If you are outside the Eastern Time Zone and require assistance with converting your time, please try the [Ontario, Canada Time Converter](#).

| Accommodation Due to Illness

If your instructor has provided specific procedures for you to follow if you miss assignment due dates, term tests, or a final examination, adhere to those instructions. Otherwise:

Missed Assignments/Tests/Quizzes

Contact the instructor as soon as you realize there will be a problem, and preferably within 48 hours, but no more than 72 hours, have a medical practitioner complete a [Verification of Illness Form](#).

Email a scanned copy of the Verification of Illness Form to your instructor. In your email to the instructor, provide your name, student ID number, and exactly what course activity you missed.

Further information regarding Management of Requests for Accommodation Due to Illness can be found on the [Accommodation due to illness](#) page.

Missed Final Examinations

If this course has a final exam and if you are unable to write a final examination due to illness, seek medical treatment and have a medical practitioner complete a [Verification of Illness Form](#). Email a scanned copy to the Centre for Extended Learning (CEL) at extendedlearning@uwaterloo.ca within 48 hours of your missed exam. Make sure you include your name, student ID number, and the exam(s) missed. You will be **REQUIRED** to hand in the original completed form before you write the make-up examination.

After your completed Verification of Illness Form has been received and processed, you will be emailed your alternate exam date and time. This can take up to 2 business days. If you are within **150 km** of Waterloo you should be prepared to write in Waterloo on the additional CEL [exam dates](#). If you live

outside the 150 km radius, CEL will work with you to make suitable arrangements.

Further information about [Examination Accommodation Due to Illness](#) regulations is available in the Undergraduate Calendar.

| 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. **If you have not already completed the online tutorial regarding academic integrity you should do so as soon as possible.**

Undergraduate students should see the [Academic Integrity Tutorial](#) and graduate students should see the [Graduate Students and Academic Integrity](#) website.

Proper citations are part of academic integrity. Citations in CEL course materials usually follow CEL style, which is based on APA style. Your course may follow a different style. If you are uncertain which style to use for an assignment, please confirm with your instructor or TA.

For further information on academic integrity, please visit the [Office of Academic Integrity](#).

| Turnitin

Turnitin.com: Text matching software (Turnitin®) may be used to screen assignments in this course. Turnitin® is used to verify that all materials and sources in assignments are documented. Students' submissions are stored on a U.S. server, therefore students must be given an alternative (e.g., scaffolded assignment or annotated bibliography), if they are concerned about their privacy and/or security. Students will be given due notice, in the first week of the term and/or at the time assignment details are provided, about arrangements and alternatives for the use of Turnitin® in this course.

It is the responsibility of the student to notify the instructor if they, in the first week of term or at the time assignment details are provided, wish to submit the alternate assignment.

| Discipline

A student is expected to know what constitutes [academic integrity](#) to avoid committing an academic offence, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about "rules" for group work/collaboration, should seek guidance from the course instructor, 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](#). For typical penalties, check [Guidelines for the Assessment of Penalties](#).

| 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](#).

| 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. When in doubt please be certain to contact the department's administrative assistant who will provide further assistance.

| Final Grades

In accordance with [Policy 46 - Information Management](#), Appendix A - Access to and Release of Student Information, the Centre for Extended Learning does not release final examination grades or final course grades to students. Students must go to [Quest](#) to see all final grades. Any grades posted in Waterloo LEARN are unofficial.

| AccessAbility Services

[AccessAbility Services](#), located in Needles Hall, 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 accommodation to lessen the impact of your disability, please register with AccessAbility Services at the beginning of each academic term and for each course.

| Accessibility Statement

The Centre for Extended Learning strives to meet the needs of all our online learners. Our ongoing efforts to become aligned with the [Accessibility for Ontarians with Disabilities Act \(AODA\)](#) are guided by University of Waterloo accessibility [Legislation](#) and policy and the [World Wide Web Consortium's \(W3C\) Web Content Accessibility Guidelines \(WCAG\) 2.0](#). The majority of our online courses are currently delivered via the Desire2Learn Learning Environment. Learn more about [Desire2Learn's Accessibility Standards Compliance](#).

| Use of Computing and Network Resources

Please see the [Guidelines on Use of Waterloo Computing and Network Resources](#).

| Copyright Information

UWaterloo's Web Pages

All rights, including copyright, images, slides, audio, and video components, of the content of this course are owned by the course author, unless otherwise stated. These web pages are owned or controlled by the University of Waterloo, Centre for Extended Learning. By accessing the web pages, you agree that you may only download the content for your own personal, non-commercial use. You are not permitted to copy, broadcast, download, store (in any medium), transmit, show or play in public, adapt, or change in any way the content of these web pages for any other purpose whatsoever without the prior written permission of the course author and the University of Waterloo, Centre for Extended Learning.

Other Sources

Respect the copyright of others and abide by all copyright notices and regulations when using the computing facilities provided for your course of study by the University of Waterloo. No material on the Internet or World Wide Web may be reproduced or distributed in any material form or in any medium, without permission from copyright holders or their assignees. To support your course of study, the University of Waterloo has provided hypertext links to relevant websites, resources, and services on the web. These resources must be used in accordance with any registration requirements or conditions which may be specified. You must be aware that in providing such hypertext links, the University of Waterloo has not authorized any acts (including reproduction or distribution) which, if undertaken without permission of copyright owners or their assignees, may be infringement of copyright. Permission for such acts can only be granted by copyright owners or their assignees.

If there are any questions about this notice, please contact the University of Waterloo, Centre for Extended Learning, Waterloo, Ontario, Canada, N2L 3G1 or extendedlearning@uwaterloo.ca.