

**CAPILANO UNIVERSITY
COURSE OUTLINE**

TERM: SPRING 2017	COURSE NO: GEOGRAPHY 330	
INSTRUCTOR:	COURSE NAME: WATER CHANGES EVERYTHING	
OFFICE: LOCAL:	SECTION NO:	CREDITS: 3
E-MAIL:		
OFFICE HOURS:		

COURSE FORMAT:

Three hours of class time, plus an additional hour delivered through on-line or other activities for a 15-week semester, which includes two weeks for final exams.

COURSE PREREQUISITES: 45 credits of 100-level or higher course work

COURSE DESCRIPTION:

In this geography course we seek to appreciate the tremendous power of water in influencing virtually every aspect of our existence on Earth. Moving water creates incredible forces that have the power to carve rock and move sediment, in the process sculpting our natural landscape. The uniqueness of its molecule means water has the capacity to store enormous amounts of heat, and unleash this heat in the form of devastating storms. Water creates a formidable link between people and their natural surroundings. Among other things, it powers industry, sustains agriculture, and provides a means of transport and a source for recreation. As a result, human settlement patterns have been largely controlled by the distribution of water on Earth. Indeed, water is essential to all life. To maintain our supplies of water we have dammed and diverted rivers, and pumped water from the ground. Today, when water extraction, water privatization, land conversion, climate change, and pollution threaten Earth's water supply, it is increasingly important to understand the multi-faceted nature of water.

This course will begin with a study of the science of water. Students will learn to appreciate how the remarkable physical and chemical properties of water make it a unique substance. To provide an overview of the stocks and flows of water on Earth and show why very little of Earth's water is both fresh and accessible, we will use a systems approach to outline the hydrologic cycle. Next, we will consider the role of water in creating weather, and shaping landscapes. Applying knowledge of these physical processes, we can account for the distribution of water on Earth, the ability of water to erode and transport rock material, and the potential of water to produce natural hazards such as floods and landslides.

While water shapes our physical world, it also provides an essential resource. In the second half of the course we will study water as a resource. In this context, we will examine the many, and diverse, ways in which we depend on water, and come to appreciate how water—in its abundance or scarcity—has influenced both where we live and how we live. We will also consider the technologies we use to ensure that we protect and maintain our water supplies. Finally, it is becoming increasingly evident that human actions are threatening our supply of clean fresh water. We will conclude the course with an important discussion around how to secure reliable sources of water for people today and in the future.

STUDENT LEARNING OUTCOMES:

- After completing this course students should be able to
- explain the unique physical and chemical properties of water
 - analyse the distribution of water on Earth
 - explain how the distribution of water influences both physical and cultural landscapes
 - contrast the diversity of ways in which water is a resource
 - critically evaluate issues associated with water scarcity and water security

REQUIRED TEXT: Selected readings by topic as posted on Moodle site.

COURSE CONTENT:

Week 1	Introduction
Week 2	A Remarkable Substance—The Physical and Chemical Properties of Water
Week 3	The Hydrologic Cycle—Water in the Earth System
Week 4	Watersheds as Regions—Natural Boundaries
Week 5	The Uneven Distribution of Water on Earth—What Makes it Rain?
Week 6	Shaping the Landscape—The Power of Currents, Waves, and Ice
Week 7	Water as Hazard—Floods and Flows
	MIDTERM EXAM
Week 8	Water as a Resource—How do we use Water?
Week 9	Living Near Water—Floodplains and Coasts
Week 10	Human Impacts on Water Resources—Use and Abuse
Week 11	Dams and Diversions—Maintaining Supply
Week 12	Water Privatization—Who Owns the Rights to Water?
Week 13	Water Security—Access to Clean, Fresh Water
Weeks 14/15	FINAL EXAM PERIOD

EVALUATION PROFILE:

Participation	10%
Research Question and Proposal	10%
Research Paper	25%
Midterm Exam	25%
Final Exam	<u>30%</u>
	100%

Further information about the midterm and final exams will be provided in class. Detailed instructions for the assignments, including the fourth hour assignment, will be given as handouts.

GRADING PROFILE:

A+ = 90 - 100%	B+ = 77 - 79%	C+ = 67 - 69%	D = 50 - 59%
A = 85 - 89%	B = 73 - 76%	C = 63 - 66%	F = 0 - 49%
A- = 80 - 84%	B- = 70 - 72%	C- = 60 - 62%	

OPERATIONAL DETAILS:

Capilano University has policies on Academic Appeals (including appeal of final grade), Student Conduct, Cheating and Plagiarism, Academic Probation and other educational issues. These and other policies are available on the University website.

Attendance: Regular attendance is recommended.

Responsibility for Material covered during a missed class:

When students are absent from class, they are still responsible for the material covered during their absence, including announcements, assigned readings, and hand-outs.

Participation: Student participation will be evaluated based on:

- demonstrated knowledge of assigned readings
- attendance
- engagement in class discussions

Late Assignments:

Late assignments will be accepted, but for every day that an assignment is late 10% of the total possible points will be deducted.

Missed Exams: Students who are unable to write an exam must have an acceptable excuse and are expected to contact the instructor before the exam. The exam must be completed as soon as possible after returning to class.

Incomplete Grades:

Grades of Incomplete "I" will be granted only if there is a valid reason for extending the evaluation deadline and if the student has a reasonable chance of improving their grade to pass the course.

English Usage: All written work submitted must use good academic English and follow the guidelines provided in the *Capilano University Guide to Writing Assignments* (available from the University Bookstore).

Cheating/Plagiarism:

Plagiarism is the presentation of another person's work or ideas as if they were one's own. Plagiarism is both dishonest and a rejection of the principles of scholarship. Information about how to avoid plagiarism by proper documentation of sources is available from the Library and the Writing Centre. All students should familiarize themselves with the *University Policy on Cheating and Plagiarism* (See the *University Website*) as such behaviour can result in suspension from the University.

Electronic Devices:

During all classes, turn off cell phones and remove them from the desk.

Emergency Procedures:

Please read the emergency procedures posted on the wall of the classroom.