



ORIGINAL COURSE IMPLEMENTATION DATE: January 2005
 REVISED COURSE IMPLEMENTATION DATE: September 2017
 COURSE TO BE REVIEWED: (six years after UEC approval) May 2020
 Course outline form version: 09/15/14

OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

Course Code and Number: GEOG 304	Number of Credits: 4 Course credit policy (105)																
Course Full Title: Coasts and Climate Change Course Short Title (if title exceeds 30 characters):																	
Faculty: Faculty of Social Sciences	Department (or program if no department): Geography and the Environment																
Calendar Description: The coastal zone represents one of the most dynamic and complex environments on the earth's surface. This course will investigate the complex interactions between people, coastal processes and landform zones in times of environmental change and sea-level rise. Note: Field trips outside of regular class times may be required. Please refer to the department website for scheduling information.																	
Prerequisites (or NONE):	One of the following: GEOG 201, GEOG 202, or GEOG 219/BIO 219.																
Corequisites (if applicable, or NONE):	NONE																
Pre/corequisites (if applicable, or NONE):	NONE																
Equivalent Courses (cannot be taken for additional credit) Former course code/number: Cross-listed with: Equivalent course(s): GEOG 302 if taken prior to 2005 <i>Note: Equivalent course(s) should be included in the calendar description by way of a note that students with credit for the equivalent course(s) cannot take this course for further credit.</i>	Transfer Credit Transfer credit already exists: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Transfer credit requested (OREg to submit to BCCAT): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (if yes, fill in transfer credit form) Resubmit revised outline for articulation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No To find out how this course transfers, see bctransferguide.ca .																
Total Hours: 60 Typical structure of instructional hours: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr><td>Lecture hours</td><td style="text-align: center;">5</td></tr> <tr><td>Seminars/tutorials/workshops</td><td></td></tr> <tr><td>Laboratory hours</td><td></td></tr> <tr><td>Field experience hours</td><td style="text-align: center;">20</td></tr> <tr><td>Experiential (practicum, internship, etc.)</td><td></td></tr> <tr><td>Online learning activities</td><td></td></tr> <tr><td>Other contact hours: Student-directed learning</td><td style="text-align: center;">35</td></tr> <tr><td style="text-align: right;">Total</td><td style="text-align: center;">60</td></tr> </table>	Lecture hours	5	Seminars/tutorials/workshops		Laboratory hours		Field experience hours	20	Experiential (practicum, internship, etc.)		Online learning activities		Other contact hours: Student-directed learning	35	Total	60	Special Topics Will the course be offered with different topics? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, different lettered courses may be taken for credit: <input type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input type="checkbox"/> Yes, no limit <i>Note: The specific topic will be recorded when offered.</i>
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Other contact hours: Student-directed learning	35																
Total	60																
Maximum enrolment (for information only): 28																	
Expected frequency of course offerings (every semester, annually, every other year, etc.): every other year																	
Department / Program Head or Director: Steven Marsh	Date approved: December 2016																
Faculty Council approval	Date approved: January 2017																
Campus-Wide Consultation (CWC)	Date of posting: March 17, 2017																
Dean/Associate VP: Dr. Lucy Lee	Date approved: January 2017																
Undergraduate Education Committee (UEC) approval	Date of meeting: March 24, 2017																

Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Articulate the physical processes operating in the coastal environment;
2. Assess climate change threats facing a coastal community and design strategies to mitigate these problems;
3. Appreciate indigenous perspectives of the coastal landscape;
4. Evaluate the roles of various stakeholders in a specific environment and discuss key management concerns;
5. Apply the appropriate geographic skills and techniques (field methods, data analysis, ethics, mapping, GIS, survey design etc.) to solve climate change problems facing a coastal region.;
6. Demonstrate numerical, written, and verbal competency in the scientific arena;
7. Use professional, ethical and respectful communication to work effectively and productively in team settings
8. Utilize communication strategies to report findings to multiple audiences;
9. Critically reflect upon your learning from individual and group interactions, in-class discussions, field work and related research.

Prior Learning Assessment and Recognition (PLAR)

Yes No, PLAR cannot be awarded for this course because

Typical Instructional Methods (guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion)

Instructional methods include problem-based learning, student-led and self-directed learning, classroom discussions, presentations, and field excursions to assess, test and to gauge perception of the locality to the threats associated with climate change and rising sea level.

Grading system: Letter Grades: Credit/No Credit: Labs to be scheduled independent of lecture hours: Yes No

NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.

Typical Text(s) and Resource Materials (if more space is required, download Supplemental Texts and Resource Materials form)

Author (surname, initials)	Title (article, book, journal, etc.)	Current ed.	Publisher	Year
1. Pethick, J.	<i>Coastal management and sea level rise.</i>	<input type="checkbox"/>		2001
2. Alexander, K., Ryan, A. & Measham, T.	Managed retreat of coastal communities: understanding responses to sea level rise	<input type="checkbox"/>		2012
3. Government of British Columbia	Sea level rise adaptation primer	<input type="checkbox"/>		2013
4. Government of British Columbia	Guidelines for Management of Coastal Flood Hazard Land Use	<input type="checkbox"/>		2011
5. IPCC	Climate Change 2014: Synthesis Report	<input type="checkbox"/>		2014

Required Additional Supplies and Materials (software, hardware, tools, specialized clothing, etc.)

There may be a fee for field trip costs for this course.

Typical Evaluation Methods and Weighting

Final exam:	%	Assignments:	65%	Midterm exam:	%	Practicum:	%
Reflective journal:	15%	Participation:	10%	Field experience:	10%	Total:	100%

Details (if necessary):

Breakdown of assignments (65%):

Report (individual) 40%

Presentation (team) 15%

Discussion facilitation (team) 10%

Typical Course Content and Topics

This course will be offered using a modified problem-based learning strategy and as such much of the learning and content of the course will be largely determined by the students. Students will be introduced to a real-world problem at the beginning of the course and will then be responsible for determining the strategies and content required to meet the course learning outcomes while answering the posed question. Real world problems will investigate coastal issues in the local area and will be supported by field work. Short mini lessons on key topics may be given by the instructor to guide the students' learning at the request of the students with the remainder of the content resulting from student investigation of the topic. The instructor will facilitate the learning environment and provide key direction, mini lessons, and background information. The content covered will be based on student investigation and a weekly breakdown is not possible (due to the PBL delivery mode). Topics likely to be covered include:

- Coastal processes (waves, currents, tides)
- Coastal landforms
- Sediment transport
- Climate change predictions
- Human impact on the coast
- Coastal management
- Field survey methods
- Ethics and social science survey design
- Data analysis