

COURSE IMPLEMENTATION DATE: January 2005  
 COURSE REVISED IMPLEMENTATION DATE: September 2010  
 COURSE TO BE REVIEWED: January 2014  
*(four years after UPAC approval)* (month, year)

**OFFICIAL UNDERGRADUATE COURSE OUTLINE INFORMATION**

Students are advised to keep course outlines in personal files for future use.  
 Shaded headings are subject to change at the discretion of the department – see course syllabus available from instructor

GEOG 304	Geography	4
COURSE NAME/NUMBER	FACULTY/DEPARTMENT	UFV CREDITS
Coastal Geomorphology		
COURSE DESCRIPTIVE TITLE		

**CALENDAR DESCRIPTION:**

The coast represents one of the most dynamic and complex environments on the earth's surface and the interaction between the marine, terrestrial, and atmospheric systems results in a wide range of coastal processes and landforms. This course will focus on the basic processes operating along the coast, coastal landforms, and themes in applied coastal geomorphology. Participation in mandatory field trips scheduled outside of regular class times is required.

Note: Credit cannot be obtained for this course if GEOG 302 has been taken prior to 2005 (previously offered as Fluvial and Coastal Geomorphology).

PREREQUISITES: **GEOG 202**  
 COREQUISITES:  
 PRE or COREQUISITES:

**SYNONYMOUS COURSE(S):**

- (a) Replaces: \_\_\_\_\_
- (b) Cross-listed with: \_\_\_\_\_
- (c) Cannot receive credit for course and: **GEOG 302 if taken prior to 2005**

**SERVICE COURSE TO:** *(department/program)*

**TOTAL HOURS PER TERM:** 75  
**STRUCTURE OF HOURS:**  
 Lectures: 30 Hrs  
 Seminar: \_\_\_\_\_ Hrs  
 Laboratory: 20 Hrs  
 Field experience: 25 Hrs  
 Student directed learning: \_\_\_\_\_ Hrs  
 Other (specify): \_\_\_\_\_ Hrs

**TRAINING DAY-BASED INSTRUCTION:**  
 Length of course: \_\_\_\_\_  
 Hours per day: \_\_\_\_\_

**OTHER:**  
 Maximum enrolment: 25  
 Expected frequency of course offerings: \_\_\_\_\_  
*(every semester, annually, every other year, etc.)*

**WILL TRANSFER CREDIT BE REQUESTED? (lower-level courses only)**  Yes  No  
**WILL TRANSFER CREDIT BE REQUESTED? (upper-level requested by department)**  Yes  No  
**TRANSFER CREDIT EXISTS IN BCCAT TRANSFER GUIDE:**  Yes  No

Course designer(s): <b>Claire Beaney</b>	Date approved: <b>November 2009</b>
Department Head: <b>Dr. Ken Brealey</b>	Date of meeting: <b>November 27, 2009</b>
Supporting area consultation (Pre-UPAC)	Date approved: <b>January 2010</b>
Curriculum Committee chair: _____	Date approved: <b>January 2010</b>
Dean/Associate VP: <b>Dr. Jacqueline Nolte</b>	Date of meeting: <b>January 29, 2010</b>
Undergraduate Program Advisory Committee (UPAC) approval	

**LEARNING OUTCOMES:**

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

1. demonstrate an understanding of basic processes operating along the coast (eg. Waves, tides, currents and sea-level rise).
2. characterize the dynamics of the shoreface and beaches including coastal sediment transport and deposition, and coastal erosion.
3. apply practical field experience in coastal settings in the Pacific Northwest to other areas of the earth sciences
4. demonstrate intermediate to advanced mastery of skills in landform identification and mapping, problem solving, data presentation and field work commonly used by professional geoscientists.

**METHODS:** *(Guest lecturers, presentations, online instruction, field trips, etc.)*

Instructional methods include lectures, laboratory sessions, and field trips.

**METHODS OF OBTAINING PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):**

Examination(s)                       Portfolio assessment                       Interview(s)

Other (specify):

PLAR cannot be awarded for this course for the following reason(s):

**TEXTBOOKS, REFERENCES, MATERIALS:**

*[Textbook selection varies by instructor. An example of texts for this course might be:]*

Bird, E. 2008. Coastal Geomorphology: An Introduction. Wiley, USA.

Masselink, G. and Hughes, M. 2003. An Introduction to Coastal Processes and Geomorphology. Arnold, USA.

Davis, R.A. and Fitzgerald, D.M. 2004. Beaches and Coasts. Blackwell Publishing, Maryland, USA

Sea level rise: History and Consequences. 2000. ed. By B. Douglas, M. Kearney and S. Leatherman. Academic Press, New York, USA. International Geophysics Series, Vol. 75.

**SUPPLIES / MATERIALS:**

There will be a fee for field trip transportation and accomodation costs.

**STUDENT EVALUATION:**

*[An example of student evaluation for this course might be:]*

Labs and lab exams	25%
Field trips reports	25%
Exams	25%
Final paper	25%

**COURSE CONTENT:**

*[Course content varies by instructor. An example of course content might be:]*

Introduction to Coasts  
Waves and Wave Produced Currents  
Tides  
Sea Level Rise  
Coastal Sediment Transport  
Beach Morphology and Processes  
Coastal Landforms: Barriers and Dunes  
Coastal landforms: deltas  
Human Impact on the Coast: examples from the Gulf of Mexico and the PacificNorthwest