

COURSE IMPLEMENTATION DATE: September 2005  
 COURSE REVISED IMPLEMENTATION DATE: January 2010  
 COURSE TO BE REVIEWED: January 2010  
 (Four years after implementation date) (MONTH YEAR)

**OFFICIAL 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 and the material will vary  
 - see course syllabus available from instructor

|                          |                       |              |
|--------------------------|-----------------------|--------------|
| FACULTY/DEPARTMENT:      | Geography             |              |
| GEOG 304                 | N/A                   | 4            |
| COURSE NAME/NUMBER       | FORMER COURSE NUMBER  | UCFV 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 GEOG 304 if student has taken GEOG 302 prior to 2005 (previously offered as Fluvial and Coastal Geomorphology).

PREREQUISITES: **Geography 202**  
 COREQUISITES: **none**

|  |                                   |
|--|-----------------------------------|
| SYNONYMOUS COURSE(S)   | <b>SERVICE COURSE TO:</b>         |
| (a) Replaces: _____<br>(Course #)  | <b>na</b><br>(Department/Program) |
| (b) Cannot take: <b>302 if taken prior to 2005</b> for further credit.<br>(Course #) | <b>na</b><br>(Department/Program) |

|                                      |           |                                |
|--------------------------------------|-----------|--------------------------------|
| TOTAL HOURS PER TERM:                | <b>75</b> | TRAINING DAY-BASED INSTRUCTION |
| <b>STRUCTURE OF HOURS:</b>           |           | LENGTH OF COURSE: _____        |
| Lectures: <b>30</b> Hrs              |           | HOURS PER DAY: _____           |
| Seminar: _____ Hrs                   |           |                                |
| Laboratory: <b>20</b> Hrs            |           |                                |
| Field Experience: <b>25</b> Hrs      |           |                                |
| Student Directed Learning: _____ Hrs |           |                                |
| Other (Specify): _____ Hrs           |           |                                |

|   |   |
|---|---|
| MAXIMUM ENROLLMENT:   | <b>25</b>   |
| EXPECTED FREQUENCY OF COURSE OFFERINGS:   | <b>once each year</b>   |
| <b>WILL TRANSFER CREDIT BE REQUESTED? (lower-level courses only)</b>            | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <b>WILL TRANSFER CREDIT BE REQUESTED? (upper-level requested by department)</b> | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <b>TRANSFER CREDIT EXISTS IN BCCAT TRANSFER GUIDE:</b>                          | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

**AUTHORIZATION SIGNATURES:**

Course Designer(s): \_\_\_\_\_ Chairperson: \_\_\_\_\_  
 Dr. Sandy Vanderburgh/Claire Beaney Raymound Welsh (*Curriculum Committee*)

Department Head: \_\_\_\_\_ Dean: \_\_\_\_\_  
 Dr. Sandy Vanderburgh Dr. Virginia Cooke

PAC Approval in Principle Date: \_\_\_\_\_ PAC Final Approval Date: February 25, 2005

**LEARNING OBJECTIVES / GOALS / OUTCOMES / LEARNING OUTCOMES:**

1. Students will be able to understand basic processes operating along the coast (e.g. waves, tides, currents, and sea-level rise).
2. Students will be able to characterize the dynamics of the shoreface and beaches including coastal sediment transport and deposition, and coastal erosion.
3. Students will acquire practical field experience in coastal settings in the Pacific Northwest that are transfereable to other areas of the earth sciences.
4. Students will develop practical skills in landform identification and mapping, problem solving, data presentation and field work commonly used by professional geoscientists.

**METHODS:**

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

**PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):**

Credit can be awarded for this course through PLAR (Please check:)  Yes  No

**METHODS OF OBTAINING PLAR:**

Challenge exams and portfolio assessment.

**TEXTBOOKS, REFERENCES, MATERIALS:**

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

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

Sea Level Rise: History and Consequences. 2000. ed. by Bruce Douglas, Michael Kearney, and Stephen Leatherman. Academic Press, New York, USA. International Geophysics Series, Vol. 75.

Haslett, S. 2000. Coastal Systems. Routledge Introductions to Environment Series, Routledge, London and New York.

Carter, R.W.G. 1988. Coastal Environments: An Introduction to the Physical, Ecological and Cultural Systems of Coastlines. Academic Press, New York, USA.

Additional resources will be placed in the library as required.

**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 Trip Reports/Projects | 25% |
| Exams (midterm and final)   | 50% |

**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  
Deltas and Deltaic Processes  
Estuaries

## Human Impact on the Coast