OFFICIAL UNDERGRADUATE COURSE OUTLINE (page 1)

COURSE IMPLEMENTATION DATE: January 2005
COURSE REVISED IMPLEMENTATION DATE: May 2014
COURSE TO BE REVIEWED: May 2020
(six years after UEC 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

The Geography of the Coastal Zone
COURSE DESCRIPTIVE TITLE

CALENDAR DESCRIPTION:

The coastal zone 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. The coastal zone is also home to approximately 65% of the global population. Understanding the interaction between people and the environment in this dynamic region is key in times of environmental change and sea-level rise. This course will focus on the geomorphic processes operating along the coast resulting in various coastal landforms, and discuss the complex interactions between the human and physical environments in the coastal zone. Field trips outside of regular class times may be required. Please refer to the Department of Geography website for scheduling information.

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: One of GEOG 201, 202, or 219.
COREQUISITES:
PRE or COREQUISITES:

SYNONYMOUS COURSE(S):
(a) Replaces:
(b) Cross-listed with:
(c) Cannot take: **GEOG 302 if taken prior to 2005** for further credit.

SERVICE COURSE TO: *(department/program)*

TOTAL HOURS PER TERM: **75**

STRUCTURE OF HOURS:

Lectures:	**15**	Hrs
Seminar:		Hrs
Laboratory:		Hrs
Field experience:	**15**	Hrs
Student directed learning:	**45**	Hrs
Other (specify):		Hrs

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

OTHER:
Maximum enrolment: **25**
Expected frequency of course offerings: Every other year
(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):	**Claire Beaney**		
Department Head:	**Dr. Michelle Rhodes**	Date approved:	**October 3, 2013**
Campus-Wide Consultation (CWC)		Date of meeting:	**October 11, 2013**
Curriculum Committee chair:	**David Fenske**	Date approved:	**October 18, 2013**
Dean/Associate VP:	**Dr. Lucy Lee**	Date approved:	**October 18, 2013**
Undergraduate Education Committee (UEC) approval		Date of meeting:	**November 22, 2013**

LEARNING OUTCOMES:

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

1. Discern and articulate the various physical processes operating in a specific geomorphic environment;
2. Apply geomorphic principles to describe and explain the landforms of a specific environment;
3. Predict the response of a specific geomorphic environment to climate change;
4. Apply human and physical geographic perspectives to address complex environmental issues;
5. Evaluate the roles of various stakeholders in a specific environment and discuss key management concerns;
6. Identify and apply the appropriate geographic skills and techniques (data analysis, mapping, GIS etc.) to solve problems commonly seen by professional geoscientists and physical geographers;
7. Demonstrate numerical, written, and verbal competency in the scientific arena;
8. Use professional and respectful communication and work effectively in team settings.

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

Instructional methods include classroom discussions, instructor and student presentations, self-directed learning, 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:]

Davidson-Arnott, R. 2010. *Introduction to Coastal Processes and Geomorphology*. Cambridge University Press.
Bird, E. 2008. Coastal Geomorphology: An Introduction. Wiley, USA.
Masselink, G. Hughes, M., and Knight, J. 2011. An Introduction to Coastal Processes and Geomorphology. Arnold, USA.

SUPPLIES / MATERIALS:

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

STUDENT EVALUATION:

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

Project:	35%
Presentation:	20%
Poster:	20%
Project timeline and reporting assignment:	10%
Self-reflective journal:	15%

An alternative evaluation plan:

Project/research paper :	35%
Exams:	20%
Lab exercises:	25%
Presentation:	20%

COURSE CONTENT:

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

Course delivered using PBL:
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. Depending on the problem, fieldtrips to the study site will be arranged. Short mini lessons on key topics will be given by the instructor to guide the students' learning 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 mirror that covered in a traditional course model but organization will be somewhat fluid and a weekly breakdown is not possible (due to the PBL delivery mode). Topics to be covered (although not in necessarily in this order):

- Coastal processes (waves, currents, tides)
- Coastal landforms
- Sediment transport
- Environmental change and coasts
- Human impact on the coast
- Coastal management

Traditional course delivery:
The course may also be offered using a more traditional delivery method that uses lectures, lab exercises, discussion of journal articles, and field trips. Course content (both lecture and lab topics) is as follows:

Week 1: Introduction to coasts
Week 2: Waves Dynamics
Week 3: Wave-produced currents
Week 4: Tides
Week 5: Field trip to Crescent Beach & Boundary Bay
Week 6: Sea level rise
Week 7 Coastal Sediment Transport
Week 8: Beach Morphology and Processes
Week 9: Coastal Landforms 1
Week 10: Coastal Landforms 2
Week 11: Human impact on the coast
Week 12: Coastal Zone Management
Week 13: Course Review