OFFICIAL UNDERGRADUATE COURSE OUTLINE (page 1)

6COURSE IMPLEMENTATION DATE:	January 1995
COURSE REVISED IMPLEMENTATION DATE:	September 2010
COURSE TO BE REVIEWED: *(four years after UPAC approval)*	January 2014 *(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 302	Geography	4
COURSE NAME/NUMBER	FACULTY/DEPARTMENT	UFV CREDITS

Fluvial Geomorphology
COURSE DESCRIPTIVE TITLE

CALENDAR DESCRIPTION:

This course provides a comprehensive understanding of the processes responsible for shaping the fluvial environment and the landforms that result from them. Emphasis is placed on understanding the theoretical basis of fluvial geomorphology and the identification and formative processes of fluvial landforms. Participation in field trips scheduled outside of regular class times is required.

PREREQUISITES: GEOG 202
COREQUISITES:
PRE or COREQUISITES:

SYNONYMOUS COURSE(S):
(a) Replaces:
(b) Cross-listed with:
(c) Cannot take: for further credit.

SERVICE COURSE TO: *(department/program)*

TOTAL HOURS PER TERM: 75

STRUCTURE OF HOURS:

Lectures:	35	Hrs
Seminar:		Hrs
Laboratory:	25	Hrs
Field experience:	15	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: Once every 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):	**Dr, Olav Lian**		
Department Head:	**Dr. Ken Brealey**	Date approved:	**November 2009**
Supporting area consultation (Pre-UPAC)		Date of meeting:	**November 27, 2009**
Curriculum Committee chair:		Date approved:	**January 2010**
Dean/Associate VP:	**Dr. Jacqueline Nolte**	Date approved:	**January 2010**
Undergraduate Program Advisory Committee (UPAC) approval		Date of meeting:	**January 29, 2010**

LEARNING OUTCOMES:

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

1. identify and understand the theoretical basis for fluvial geomorphology.
2. theorize and apply field skills in fluvial geomorphology in the Pacific Northwest that are transferable to other areas of the earth sciences.
3. demonstrate intermediate to advanced mastery of skillsin landform identification and mapping, problem solving, data presentation and fieldwork commonly used by professional geoscientists.

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

Instructional methods include lectures, laboratory sessions, and a two-day field trip along the courses of the Fraser and Nicola rivers.

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:]

Knighton, D. 1998. Fluvial Forms and Processes: A New Perspective. Oxford. OR
Robert, A. 2003. River Processes: An Introduction to Fluvial Dynamics. Oxford. OR
Bridge, J.S. 2003. Rivers and Floodplains: Forms, Processes and Sedimentary Record. Blackwell. OR
Charlton, R. 2007. Fundamentals of Fluvial Geomorpgology, Routledge.

Additional resources will be placed in the library as required.

SUPPLIES / MATERIALS:

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

STUDENT EVALUATION:

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

Labs (8-10)	30%
Project/field trip report	20%
Exams (midterm and final)	50%

COURSE CONTENT:

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

1. History of Fluvial Geomorphology
2. Drainage Basins and Stream Networks
3. Open Channel Flow – basic fluid mechanics principles
4. Hydraulic Geometry
5. Sediment Erosion
6. Sediment Transport
7. Sediment Deposition
8. Bedforms and Sedimentary Structures
9. Channel Planforms – Straight, Meandering, Wandering Gravel Bed, Braided, etc.
10. Application of Fluvial Geomorphology/Sedimentology to understanding environmental change