University of Victoria

GEOGRAPHY 476 - A01
UNIVERSITY OF VICTORIA
Spring TERM 2019
Dr. Eva Kwoll

COURSE OUTLINE
GEOG 476 ADVANCED STUDIES IN GEOMORPHOLOGY (CRN: 21680)

Office Hours: Th 2:00 – 4:00 pm, or by appointment
Office Location: DTB B124
Contact: ekwoll@uvic.ca

COURSE DESCRIPTION

This course consists of an advanced, project-based investigation of geomorphological processes for senior students in geomorphology. In this course you will work on your own datasets to develop a testable hypothesis, conduct data analysis, and practice the presentation of findings in form of a poster and journal-style report. We will examine data analysis techniques using the R Software. Your performance will be evaluated based on the different project components (proposal, seminar, poster, report) and on the preparation of small assignments handed out during the R lectures on Mondays (s. schedule below). The projects are based on analysis of existing data, however we will learn to systematically plan and conduct field campaign during lecture. More details on expectations regarding the different project components will be provided in class.

PREREQUISITES
GEOG 376; permission of the instructor

LEARNING OUTCOMES

At the end of this course, you should be able to
- Conduct a literature review and summarize key aspects of a geomorphological research problem
- Develop a testable hypothesis given a dataset, and write a proposal around the hypothesis
- Plan small field campaigns
- Detect pattern and processes in field data using advanced statistical techniques in R
- Prepare quality graphics for presentation of results in R
- Present your results in form of a poster to an audience of your peers
- Prepare a journal-style research report

RECOMMENDED TEXTS
As part of your project preparation you will be asked to conduct a small literature review on your research topic. For this you are expected to use resources at the library to browse the peer-reviewed literature. In addition, I recommend the following two Ebooks that are downloadable through the library:
Shroder, John F et al. (2013) Treatise on Geomorphology, Elsevier/Academic Press, Amsterdam. Downloadable as EBook here:http://www.sciencedirect.com/science/referenceworks/9780080885223

Lafaye de Micheaux, Pierre et al. (2013) The R Software – Fundamentals of Programming and Statistical Analysis, Springer, New York. Downloadable as EBook here: https://link.springer.com/book/10.1007%2F978-1-4614-9020-3

EVALUATION

In-class assignments and exercises:	15%
Geomorphological project (should be done in groups of 2-3):	
20-minute Proposal presentation and literature review (01.02-08.02)	20%
1-page written Proposal (due 17.02.2018)	10%
10-minute Poster Presentation (01.04-04.04.2018)	25%
Project Report (due 07.04.2018)	30%

GRADING SYSTEM

As per the Academic Calendar:

Grade	Grade point value	Grade scale	Description
A+ **A** **A-**	9 8 7	90-100% 85-89% 80-84%	**Exceptional**, **outstanding** and **excellent** performance. Normally achieved by a minority of students. These grades indicate a student who is self-initiating, exceeds expectation and has an insightful grasp of the subject matter.
B+ **B** **B-**	6 5 4	77-79% 73-76% 70-72%	**Very good**, **good** and **solid** performance. Normally achieved by the largest number of students. These grades indicate a good grasp of the subject matter or excellent grasp in one area balanced with satisfactory grasp in the other area.
C+ **C**	3 2	65-69% 60-64%	**Satisfactory**, or **minimally satisfactory**. These grades indicate a satisfactory performance and knowledge of the subject matter.
D	1	50-59%	**Marginal** Performance. A student receiving this grade demonstrated a superficial grasp of the subject matter.
F	0	0-49%	**Unsatisfactory** performance. Wrote final examination and completed course requirements; no supplemental.
N	0	0-49%	Did not write examination or complete course requirements by the end of term or session; no supplemental.

GEOGRAPHY DEPARTMENT INFO

- Geography Department website: http://geog.uvic.ca
- Undergraduate Advisor: Dr. Phil Wakefield – geogadvisor@uvic.ca

COURSESPACES

I will upload material on coursespaces: https://coursespaces.uvic.ca

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POLICY ON LATE ASSIGNMENTS

A deduction of 10% of the total mark per weekday (weekends count as 1 day) will be applied to all late assignments. Accommodations are made only for extenuating circumstances with proper medical or counselling documentation provided.

ACADEMIC INTEGRITY

It is every student's responsibility to be aware of the university's policies on academic integrity, including policies on **cheating, plagiarism**, **unauthorized use of an editor**, **multiple submission**, and **aiding others to cheat**.

Policy on Academic Integrity: http://web.uvic.ca/calendar/undergrad/info/regulations/academic-integrity.html

If you have any questions or doubts, talk to me, your course instructor. For more information, see http://www.uvic.ca/learningandteaching/students/resources/expectations/.

ACCESSIBILITY

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a documented disability or health consideration that may require accommodations, please feel free to approach me and/or the Centre for Accessible Learning (CAL as soon as possible https://www.uvic.ca/services/cal/). The RCSD staff is available by appointment to assess specific needs, provide referrals, and arrange appropriate accommodations. The sooner you let us know your needs, the quicker we can assist you in achieving your learning goals in this course.

POSITIVITY AND SAFETY

The University of Victoria is committed to promoting, providing and protecting a positive and safe learning and working environment for all its members.

COURSE EXPERIENCE SURVEY (CES)

I value your feedback on this course. Towards the end of term, as in all other courses at UVic, you will have the opportunity to complete an anonymous survey regarding your learning experience (CES). The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help the department improve the overall program for students in the future. The survey is accessed via MyPage and can be done on your laptop, tablet, or mobile device. I will remind you and provide you with more detailed information nearer the time but please be thinking about this important activity during the course.

WEEKLY CALENDAR

I have designed this course to consist of more theoretical parts with lectures on Thursdays and R practicals and hands-on coding on Mondays. R practicals will take place in DTB A251. Lectures and presentations will take place in Clearihue C108.
Please bring your own laptop on Mondays, if you have one. There are two weeks where I have scheduled no classes, which should be used to work on your projects and to discuss your progress with the instructor. There are three dates scheduled for the proposal and review presentations on 11.02 / 14.02.2018.

W	Date	Monday	Date	Thursday
1	7.01	Course Outline and instructions, Fundamentals of Geomorphological Research	10.01	Literature Review / Writing a research proposal
2	14.01	R - Intro, loading Data, plotting	17.01	Preparing a presentation / Working in teams
3	21.01	R - user defined functions	24.01	Research Design Examples (consulting)
4	28.01	R - conditional statements, interpolation, trends	31.01	Research Design Examples (government research)
5	4.02	Reading and Group Prep	7.02	Reading and Group Prep
6	11.02	Proposal and Review Presentations	14.02	Proposal and Review Presentations
7	18.02	Reading Break	21.02	Reading Break
8	25.02	R - raster plotting, making maps	28.02	Data analysis
9	4.03	R - Group specific problems	7.03	Data analysis
10	11.03	Group meetings (bring your figures + outline)	14.03	Scientific Writing
11	18.03	R - Group specific problems	21.03	Research Examples
12	25.03	Individual meetings (bring posters)	28.03	Research Examples
13	1.04	Poster Presentations	4.04	Poster Presentations

DISCLAIMER

The above schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances.