Overview:
Your career as an undergraduate student has led you through analytical and theoretical courses. In courses like GEOG 2000, GEOG 2110 and GEOG 3000 you investigated surficial processes and landforms, and worked to understand how aspects of earth’s systems work to build and denude a landscape. In GEOG 2460 and other analytical courses, you combined observations with quantitative reasoning to describe and characterize responses and features of the environment. GEOG 4150 builds on these foundations and aims to provide you with a unique capstone experience. This course will challenge you through discussion and examination of the primary literature as well as linking to observations and original research conducted by yourself in the Sediment Transport Laboratory in the Department of Geography at University of Guelph. Catchment processes are arguably one of the most interesting aspects of Geography. Catchment processes play a key role in ecosystem function and health in a variety of environments, understanding these processes is vital to assessing ecosystems. Our understanding of the watershed and processes within it are critical in order to evaluate changes in the landscape and/or changes in the processes themselves as a result of human activity, landscape evolution, climate change and/or urbanization.

Purpose:
In this course you will become part of a collaborative team of researchers whose aim it is to understand aspects of catchment processes as they relate to the broader function of landscape evolution. As a group we will explore the principle concepts and theories behind surface processes and its linkages to abiotic and biotic responses. Through laboratory work we will observe and test some of these primary ideas and work to understand the cutting edge aspects of the field of earth surface processes and landforms.

In groups you will develop and practice your team work and team presentations, as well as seminar leading skills through group presentations. As individuals you will develop your own presentation skills in through individual presentations.

Learning Objectives:
This course aims to improve, enhance and master the learning objectives identified by the University of Guelph. Specifically, in this course students will:
- Develop a comprehensive depth and breadth of understanding of the core concepts and principles that dictate catchment processes
- Critically and independently evaluate the primary body of literature related to catchment processes and contextualize original research results
- Improve and expand numeracy aptitude and quantitative analytical expertise
- Enhance and master communication and literacy skills, with a focus on professional development, as students move beyond their undergraduate careers

Organization:
Our course will combine lectures, seminars, and labs for a rich and active learning experience. Formally we are scheduled to meet twice a week for ‘lectures’ on Tuesday and Thursday 4-5:20pm, this time slot will be used for lectures, seminars, and presentations.

Lectures: ROZH 109
Labs: refer to WebAdvisor for dates/times
Please stick with your original lab assignment section. There are no labs in the first week of the course.
Textbook:
There is no official text for this course. If you would like a recommendation I can give you several. We will be doing activities and readings from recent journal articles.

Depending on your background you may want to find a first year Physics text and/or an introduction to fluid mechanics textbook. Additional material will come from recent journal articles.

TA:
tba
The TA is your primary go-to for questions related to the labs, their involvement in the course beyond Lab 6 is minimal.

CourseLink:
Schedules, updates, links, etc. will be posted on our CourseLink page, check this often. Be sure that you check the email associated with your CourseLink account, as this will be the primary way in which I communicate with you outside of class, my ESP has been breaking down in my old age.

Evaluation (subject to change):
- Presentations (4 presentations total) 60%
- Seminar Participation 10%
- Lab Activities (4 total) 30%

Course Content
We will cover the obvious material with respect to catchment processes and landscape evolution; I have broadly broken down the term into the following units/topics, which will be covered through lectures, seminars, guest speakers and lab exercises/assignments.

- Behaviour of fluids, passive particle movement through fluids, fluid flow and turbulent flow
- Catchment process applications to landscape evolution and analyses
- Human activities at the catchment processes interface

How to succeed in this course
I believe success is possible in anything you set your mind to, therefore starting this class and each task associated with it with an engaged, positive and excited attitude puts you well on your way to an excellent experience. There are a few other items that will help you to succeed. Come to class prepared to participate. Ask questions; ask the question more than once if needed. Complete your assignments, read them over, read the questions, did you answer and address all the issues? When you are proud of your assignment, hand it in. Talk to me about your assignments, before you submit them and after you get feedback. Discussing issues in class, in the hall, in the lab or where ever, often makes the point and the issue clearer than just considering it once. Learning and comprehending concepts is not done through memorization. Have fun, I always remember fun things, and events that were mediocre or uninteresting I easily forget. If you come with the right attitude I will do my best to make this a fun, interesting and maybe even exciting class – I get excited about catchment processes.

This is the first time this course is being offered as a Tuesday/Thursday lecture schedule and the thus the course schedule is still in development but will be available shortly – Oct 3, JC
**E-mail Communication**
As per university regulations, all students are required to check their <uoguelph.ca> e-mail account regularly: e-mail is the official route of communication between the University and its students.

**When You Cannot Meet a Course Requirement**
When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. See the undergraduate calendar for information on regulations and procedures for Academic Consideration.

**Drop Date**
The last date to drop one-semester courses, without academic penalty, is March 10, 2017. For regulations and procedures for Dropping Courses, see the Undergraduate Calendar.

**Copies of out-of-class assignments**
Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

**Accessibility**
The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Centre for Students with Disabilities (soon to be re-named Student Accessibility Services) as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 56208 or email sas@uoguelph.ca or see the Centre for Students with Disabilities website.

**Academic Misconduct**
The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University’s policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor. The Academic Misconduct Policy is detailed in the Undergraduate Calendar.

**Recording of Materials**
Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

**Resources**
The Academic Calendars are the source of information about the University of Guelph’s procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.