

DEPARTMENT OF GEOGRAPHY
University of Toronto

COURSE OUTLINE

COURSE: GGR 301S - Fluvial Geomorphology

INSTRUCTOR: Joe Desloges (desloges@geog.utoronto.ca) – best way to contact me

Office: ES2124 – 22 Russell St. (Earth Sciences Centre)
Office Hours: Thursdays 2-3:30

Prerequisites: GGR270H (or equivalent)
Recommended Preparation: 10.0 FCE's including GGR100H1 or GGR201H1
Distribution Requirement Status: This is a Science course
Breadth Requirement: The Physical and Mathematical Universes (5)

Lectures/Labs: M 1-3 pm. Room 101, Physical Geography Building
45 St. George St.

Course Description: A lecture and laboratory course that emphasizes elements of drainage basin morphology and hydrology, classification of rivers, stream patterns and hydraulic geometry. Elements of open channel flow, sediment transport and the paleohydrology of river systems. River channel adjustments to environmental change, human impact and the management/design of river habitats. Exercises include experimentation in a laboratory flume. fluvial processes, river mechanics and the association between environmental change and river regime.

Required Text: Wohl, Ellen (2014). Rivers in the Landscape: Science and Management. Wiley Blackwell, Chichester, UK. . 318 p.

Supplemental Text Materials (Companion) Website:
www.wiley.com/go/wohl/riverslandscap

Objectives and Learning Outcomes:

- (a) An interpretation of the morphology of rivers and fluvial landscapes.
- (b) To introduce the main processes that occur in rivers, and the means for observing them.
- (c) To learn and use some of the techniques for analysis of river morphology and processes and understand river response to natural and human induced environmental change.
- (d) To introduce the geomorphological, earth science, engineering and river management/conservation literature which is relevant to the subject.

PROGRAMME:

- (1) Lectures: A detailed outline will be distributed in class.
- (2) Laboratories and Demonstrations: There will be two flume demonstrations and three exercises to be handed in for marking consisting of computational and interpretive procedures. The use of a spread sheet program (e.g. Excel, etc.) and a good scientific graphics program will greatly facilitate the laboratory exercises. Access to the GGR Collaboratory in PGB Rm 05 will be available.

Unless noted otherwise, laboratory assignments are due two weeks after they are distributed. Late penalties of 10% per day apply to all assignments. Weekends count as one day.

All hardcopy assignments are to be handed in to the assignment submission box in the main Earth Sciences department, Rm 1066, 22 Russell St. The office is open M-F from 9-5.

- (3) Thematic/Research Paper. A list of specific topics will be discussed and provided early in the term. You are expected to access the literature relevant to the topic and write a 2500 word (approx. 9 pages plus any additional figures/tables) paper.
- (4) A field trip to one or more river reaches in a selected GTA watershed. The trip will only occur if the weather cooperates and will depend on temperature and snowpack conditions.

Evaluation:	Laboratory Exercises	36% (equal weight for each of 3)
	Final Exam	34% (regular exam period)
	Research Paper	30%

(see term work due dates on the detailed Class Schedule available at the first class)

General Comment: The course includes some very basic physics and fluid mechanics as well as an appropriate amount of formulation required to introduce such topics.

Accessibility Needs:

The University of Toronto is committed to accessibility. If you require accommodations or have any accessibility concerns, please visit <http://studentlife.utoronto.ca/accessibility> as soon as possible.

Academic Integrity:

Plagiarism is an academic offense at the University of Toronto. Plagiarism is quoting (or paraphrasing) the work of an author (including the work of fellow students) without a proper citation. Students also should not be submitting any academic work for which credit has previously been obtained or is being sought, without first discussing with the instructor. Please consult the "Rules and Regulations" section of the Arts and Science Calendar (http://www.artsandscience.utoronto.ca/offr/calendar/Rules_&_Regulations.html) for further information and check the 'How not to plagiarize' website at <http://www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize>

Communications Policy:

Please always use your University of Toronto email address (@utoronto.ca or @mail.utoronto.ca) for course related communications. Other email addresses may be filtered as spam, and I cannot not promise to respond to them. Please read the course handouts and check the Blackboard site before emailing a question, to make sure that it has not already been answered. For course related queries, email Prof. Joe Desloges (desloges@geog.utoronto.ca). For department or program related queries, email Geography Department Undergraduate Advisor, Kathy Giesbrecht giesbrecht@geog.utoronto.ca

Missed Due Date for Assignments:

In addition to declaring an absence on ROSI in order to receive academic accommodation for any course work such as a late assignment, students must follow the policy outlined below for requesting special consideration. Late assignments will be subject to a **late penalty of 10% per day (weekends count as one day)** of the total marks for the assignment. **Assignments will not be accepted after marked assignments have been returned.** All assignments are due no later than 4:30 pm on the due date. This deadline is rigid and a full day late penalty applies immediately. Exceptions can be made when an assignment is late for University accepted, verifiable reasons beyond one's control.

You must inform me by email within 24 hours of an assignment due date of any circumstances that prevent you from submitting an assignment on time. University accepted documentation (e.g., U of T Student Medical Certificate) for late assignments and missed tests must be provided within 5 calendar days of the assignment due date. Medical Certificates or Doctor's Notes MUST be an original U of T Student Medical Certificate (available from the Office of the Registrar's web site) and MUST include the statement "This Student was unable to complete the assignment on date(s) for medical reasons". Failure to comply with this policy will result in a grade of zero for the assignment.

Writing Support

1. Students can find information about college writing centres at <http://www.writing.utoronto.ca/writing-centres/arts-and-science>. The teaching approach of the college writing centres is described at <http://www.writing.utoronto.ca/writing-centres/learning>.

2. The home page for the website "Writing at the University of Toronto" is www.writing.utoronto.ca. You can use the navigation bar or the search function to find pages relevant to your course.

- More than 60 Advice files on all aspects of academic writing are available at www.writing.utoronto.ca/advice. A complete list of printable PDF versions are listed at <http://www.writing.utoronto.ca/about-this-site/pdf-links-for-students>.
- "How Not to Plagiarize" and other advice on documentation format and methods of integrating sources; these are listed in the section at www.writing.utoronto.ca/advice/using-sources.

3. Writing Plus workshop series, described at <http://www.writing.utoronto.ca/writing-plus>.

4. Information about the English Language Learning program (ELL) is available at <http://www.artsci.utoronto.ca/current/advising/ell>.

The Communication Cafe, which meets weekly at four different times and locations for the first five weeks of each term for practice with oral skills like class discussion and presentations

- Reading eWriting, an online program that helps students engage course readings more effectively. You can also find further instructional advice files for students and for classroom instruction on this site. For more information, please contact the ELL Coordinator Leora Freedman at leora.freedman@utoronto.ca