

FALL 2014- GRG 338 • GRG 338C: Rivers and Landscapes: Fluvial Geomorphology

Instructor: Dr. Edgardo Latrubesse- Professor- CLA 3.418-
(latrubesse@austin.utexas.edu)- phone:2321592

Office hours: Thursday 8:15:00 AM-9:15AM

Teaching Assistant: Edward Park, PhD Student, Department of Geography and the Environment, geo.edpark@utexas.edu

Unique	Days	Time	Location	Instructor
37575	TTh	9:30 AM-11:00 AM	CLA3.102	Latrubesse

Class room: CLA 3.102

Course Description

Fluvial geomorphology is a comprehensive science that examines the evolution, structure, function, and dynamics of river systems. Because of the many ways in which humans alter rivers and landscapes fluvial geomorphology has numerous environmental applications. This course exposes students to theoretical and applied approaches to the discipline. A fundamental course goal is for students to gain an appreciation for the practical value of possessing knowledge of fluvial geomorphology. Students should come away from the course with a solid base of knowledge on fluvial geomorphology and an appreciation on the various ways in which it intersects with other disciplines, particularly geology, ecology, and engineering. Specific topics include drainage networks, stream hydrology, river channel dynamics, sediment transport, floodplains and basics on river management.

Prerequisites

Students should be of upper division undergraduate or graduate level standing. Students are not required to have had prior courses in fluvial geomorphology, but should have at a minimum some background in physical geography, geology, and/or natural sciences.

Labs

There are laboratory assignments/exercises for each theme. We will review the material and the methods for each lab, and I will either make the data available, or indicate where it may be obtained. Each lab will involve basic data analysis, and a short write-up of the results. Google Earth will be a main source for labs. Class will take place at CLA3.418. Personal laptops can be required to develop labs. If you do not have one, no worries, let it know to Prof. Latrubesse the class before the lab and he will solve it providing a lap top or computer for you.

Lab Assignments: Labs are assigned on every lab days (seven in total), and you will have one week to complete them in most cases. Lab manual will be uploaded on Canvas at least 24 hours before the lab. It is your choice to bring a hard copy or just view on computer screen. Please make use of lab time to complete the assignments so that you can work with other students and talk with me if you have any questions. Working with other students is highly encouraged, but you should be sure to turn in your own work in your own words. Plagiarism, which is very easy to identify, will not be tolerated.

Lab Due Dates:

Labs are due at 9:30 AM (at start of the class) on their scheduled due date.

Lab Submission Guidelines: Labs are to be written in your hand most of the case, but it could also be typed in Word. Answers should be concise (straight to the point) and are to be given in complete sentences where necessary. Please submit hardcopy of the lab. You do not have to print out the entire lab document, but only the question parts. No emailed lab assignments will be accepted.

Field class: Field classes are mandatory and will take place at Waller Creek.

Term Paper

Graduate students will complete an in-depth (3,000 - 4,000 words) term paper on an approved topic. The paper is due Tuesday, December 2nd. The paper must

adhere to a journal format, and include appropriate references, tables, and figures. The paper should involve original research and data analysis, but not necessarily field work. Importantly, the paper must include an in-depth literature review and the identification of a specific problem in geomorphology. This may include thesis or dissertation topics if relevant to the course content. Discuss with me about the possible topics at the beginning of the semester.

Course management

Course materials and grade will be posted on Canvas. Students are required to consult this website frequently. Selected materials from different textbooks and pdf versions of power points presentations will be provided through Canvas.

Policies

a) Attendance

This course is intensive and relatively complex. This is due, primarily, to the amount of topics and material to be covered during the semester. You are required to attend all classes and arrive on time. It is, therefore, my philosophy that your success in this course will surely vary directly with your class attendance. Be aware of the fact that attendance will be taken on a daily basis and this information can be used in the computation of your final class grade (see Grading policy below). Do not routinely arrive 5 minutes late to class with the excuse that parking was a problem (the obvious solution is to routinely depart 5 minutes earlier).

Lateness: Late labs and papers will be assessed as part of your participation and commitment. Laptops are NOT allowed except with prior permission or when developing some labs, and in exceptional situations.

b) Academic Integrity

The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility.

Each member of the university is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community. Each student in this course is expected to abide by the University of Texas Honor Code (see University guidelines on Academic Dishonesty (section 11-802). In this class, there is zero tolerance for students who violate university rules on scholastic dishonesty with all suspected cases turned over to the University's

Dean of Students office. Penalties for scholastic include possibility of failure of course and dismissal from the University. Since dishonesty harms the individual, fellow students and the integrity of the University, policies on scholastic dishonesty will be STRICTLY ENFORCED in this class. Any work submitted by a student in this course for academic credit will be the student's own work. Using other person's work without appropriate citation is plagiarism.

Disabilities

The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. Present the letter to the professor at the beginning of the semester so that needed accommodations can be discussed. The student should remind the professor of any testing accommodations no later than five business days before an exam. For more information, contact the Office of the Dean of Students at 471-6259, 471-4641. <http://www.utexas.edu/diversity/ddce/ssd/>

Grading Policy

Undergrads: Grades will be assigned on the plus and minus scale (A-, B+ and so forth). We will apply 3 Exams 70% at total (test 1= 25%; test 2=25%; test 3=20%) and 30% for lab assignments.

Graduate students: 3 Exams, 55% at total = (test 1= 20%; test 2=20%; test 3=15%); plus 25% for lab assignments and 20% term paper

▶ The exams will be traditional tests including theoretical questions, exercises from the labs and interpretation of figures, maps or diagrams.

▶ Plus and minus grades will be used for final course grades.

Labs and field works are mandatory.

▶ A specific calendar on labs and due dates is provided. Labs are due at 9:30 AM (at start of the class) on their scheduled due date. Do not turn your lab late. Late labs will be not accepted by either, the professor or the TA. The lab will be considered incomplete and the score for that lab will be zero (0 points)

▶ ***The course final grade will be successively dropped half a letter for each two (2) unexcused absences of labs or field activities.***

Grades	Range	
Grade		
A	100	to 94%
A-	<94%	to 90%
B+	<90%	to 87%
B	<87%	to 84%
B-	<84%	to 80%
C+	<80%	to 77%
C	<77%	to 74%
C-	<74%	to 70%
D+	<70%	to 67%
D	<67%	to 64%
D-	<64%	to 61%
F	<61%	to 0%

Examination Absence Policy

If you miss any exam, and you have a valid written excuse, you will be given an opportunity to make up a similar exam but with different questions or approach that previously applied. In order to be allowed to makeup the exam you will need to present to Prof. Latrubesse a copy of a valid written excuse. If you miss more than one exam due to valid written excuses, you may be asked to take an incomplete and to complete the course requirements the following semester.

What is a valid written excuse?

- Doctor's note. This note should specifically say that you were unable to come to class because of a verified illness. It must be signed.
- Note from athletic department, music department, etc. asking for an excuse due to a university function. These notes need to be presented well before the exam.
- Military Service activation note.
- Trial or jury duty note.
- Religious holy day. Religious holy day conflicts must be brought to the attention of Prof. Latrubesse in advance. Please check the syllabus calendar to be sure that your religious holy days don't conflict with exams. If there is a conflict: please provide a written, signed request before the end of the second week of class.
- **If you do not have a valid excuse, you will receive a zero for that exam.**

► *All notes must be on letterhead, signed, include a contact name and phone number.*

Texts

Course readings will include the text, as well as readings and figures. Selected materials from different textbooks and pdf versions of power points presentations will be provided through Canvas. It is my philosophy that an experienced professor with a strong background on research does not necessarily follow and use a textbook but contributes to student education transmitting his own experience to the students and discussing a variety of sources from the specialized literature. It is essential that you read prior to coming to class so that you may contribute to class discussions.

Recommended book (but not exclusive textbook)

Ro Charlton, 2007. Fundamentals of Fluvial Geomorphology, Routledge. ISBN: 978-0-415-33454-9

Articles: download pdf files from the course web site.

Research Experience

Students with a keen interest in the topic have the opportunity to participate on a research project in fluvial geomorphology.

This may include field, laboratory, or GIS work. Students must notify Dr. Latrubesse by September 10th if interested.

Ut Policy on Email Notification

Instructor to student email is a recognized and accepted form of official communication here at the University of Texas. For the University policy, read this. It is critically important that (1) you make sure to have your current and most frequently checked email address on file in UT Direct and (2) you check it on a daily basis. I will send class email frequently during the semester and you'll be given updates and notices in references to lectures as well as exams.

Religious Holidays

By UT Austin policy, students must notify the professor of a pending absence at least fourteen days prior to the date of observance of a religious holy day in special if it is coincident with the date of a test.

Behavior Concerns Advice Line (BCAL)

If you are worried about someone who is acting differently, you may use the Behavior Concerns Advice Line to discuss by phone your concerns about another individual's behavior. This service is provided through a partnership among the

Office of the Dean of Students, the Counseling and Mental Health Center (CMHC), the Employee Assistance Program (EAP), and The University of Texas Police Department (UTPD). Call 512-232-5050 or visit <http://www.utexas.edu/safety/bcal>

Office Hours

Prof. Latrubesse office hours this semester are Thursday 8:15:00AM-09:15AM. You may also arrange to meet with Prof. Latrubesse at another time by e-mailing me to set up an appointment.

Lab Instructor Office Hours (SAC 4.178): Edward Park will be available to answer any questions you have about the lab on every Tuesday from 11:00 AM to 1:00 PM in **SAC 4.178**. This room is located in SAC building on 4th floor. Just cross the bridge at 4th floor of CLA building and turn left.