

Instructor: Dr. Ross Guida
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Office: LDB 336
Office Hours: M, W 2-330 pm; By Appt.

Lecture: MWF 12-12:50, LDB 220

Lab: F 1-2:50, LDB 319

Objectives

By the end of class, students should be capable of:

- Identifying and discussing surficial landforms;
- Understanding physical processes and explaining how the surface of the earth is shaped;
- Applying physical equations and lecture-concepts to problems;
- Explaining the importance of historical geomorphology, where we are today, and how the field is evolving;
- Using topographical profiles from maps and field equipment to better understand earth's surface;
- Finding and interpreting peer-reviewed journal articles;
- Researching and writing annotations;
- Developing a quality undergraduate presentation on a relevant topic;
- Discussing why geomorphology is important to society and how it influences human beings and what surficial processes and landforms human beings can influence.

Required Textbook:

Ritter et al. 2011. Process Geomorphology, 5th Ed. Waveland Press: Long Grove, IL.

Other potential readings will be made available as PDFs on Blackboard.

Required Lab Materials:

Labs will be posted on Blackboard. Please make sure you check Blackboard and print the labs when available and bring pencils and a scientific (or graphic) calculator along with any other required materials listed. Read the labs ahead of time to make the best use of the lab period.

Course Website: Lecture notes, lab exercises, and supplemental readings will be made available via SHSU Online/Blackboard

SHSU Email: Your SHSU email account is the official form of university communication I will use it as a primary means of communication with you. Please make sure that you maintain a valid password and regularly check your SHSU email account for important announcements.

Attendance Policy: Attendance in this course is mandatory. Only documented absences will be excused in accordance with university policy. Students are allowed 6 unexcused absences. Additional undocumented absences will adversely impact your grade. Please see: <http://www.shsu.edu/dept/dean-of-students/absence.html>

If you do miss class, you must take the initiative to get lecture and/or discussion notes from classmates and/or go over the materials posted online. I am happy to meet during office hours to discuss questions from lectures, but my office hours are not meant for holding individual/one-on-one lectures unless there was a legitimate reason to miss class.

Should unusual circumstances arise during the semester (medical problem, death in the family, house floods, etc.) please contact me ASAP and provide official documentation when possible so I can work with you to accommodate the situation. Please do not wait until the end of the semester or until your grade has fallen as these are not sufficient reasons and may result in me not being able to make accommodations.

In addition to the above, please be on time to limit disruptions for your classmates.

Grading:

Scale: A=90-100%, B=80-90%, C=70-80%, D=60-70%, F<60%

Breakdown:

Labs (9)	30%
Exam 1	15%
Exam 2	15%
Annotated Bibliography	10%
AB Presentation	5%
Final exam (Comprehensive)	25%
	100%

Labs: Labs are meant to supplement lecture through gaining a hands-on understanding of the material and applying equations and methods that may be required upon either entering the workforce or going to graduate school. I do not expect you to memorize equations, as professionals still reference texts when necessary, but I do expect you to be able to use them and run through calculations and conversions. You are encouraged to work together to talk through issues on labs and associated problems, but ***this does not mean copying each other verbatim on every problem. Each student should understand their own answers and will be required to turn in their own individual lab reports each week.***

Answers should be written clearly and concisely where appropriate. All calculations and units must be included so I can see how you worked through the problem and where there may have been errors. Treat these as if you're turning them into an employer who is paying you as an hourly consultant or if you're turning them in as part of a contracted local, state, or federal report. Clear writing and reporting are always important.

Exams: There will be three exams: two midterm exams and a cumulative final. Content will include readings, lectures, and lab-related concepts. Questions will be multiple choice, fill-in-the-blank, matching-based, diagrams, and short answer (including calculations and problems). I also will include picture slides with landform identification. The final will be comprehensive, meaning it will include questions from previous exams, as well as material we covered after. The final will also include a short-answer component with applied problems/concepts in addition to the Scantron portion. There will be an in-class review for

the final, and I will briefly discuss what to expect on each exam in class. *Make-up exams will only be given in the event of an illness or family emergency with proper documentation. Please see the link under the “attendance policy” section.*

** Make sure you bring a basic scientific calculator to class as well as pencils for the midterm and final. Smartphones, tablets, etc. will not be allowed during exams. Sharing of devices will also not be allowed under any circumstances. Please come prepared or be ready to do it the old-fashioned way.**

Annotated Bibliography (AB) and Presentation: This assignment is meant to familiarize you with distilling information down from academic sources and/or scientific reports in order to tell a coherent and concise story. The AB will be due on Monday, April 30th. You will turn in a hard copy at the beginning of the class period and must also upload a digital copy (Word file) to Blackboard by noon on the same day

For this annotated bibliography, you will write a 1-page, 1.5-spaced executive summary distilling down what the take-home message is from the set of articles you read. Following the summary, you will have a one paragraph entry (5-6 sentences) for each article you read.

Formatting requirements include: 12-point Times New Roman font, 1.5 spacing, margins of 1”, with the full article reference above each summary. Leave at least 2 blank lines between each article annotation. Please use Chicago Style author-date format (see below) for your article citations and full references. This format is common in many geography and earth science publications. Annotations that do not meet basic formatting requirements will receive point deductions, as correct reference formatting is a key component for literature reviews.

Guida, R.J., J.W.F Remo, and S. Secchi. 2016. Tradeoffs of strategically reconnecting rivers to their floodplains: The case of the Lower Illinois River (USA). *Science of the Total Environment* 572: 43-55. DOI 10.1016/j.scitotenv.2016.07.190

Topics must be chosen ahead of time with an initial list of 4 peer-reviewed articles due Fri., March 9th at the start of lecture. For this list, please come up with a tentative title and provide your 4 peer-reviewed references in alphabetical order using the Chicago-Style format above. I encourage you to look at the syllabus and book in detail to find a theme that may interest you. While topics covered in lecture are allowed, you will be required to develop the topic in much greater detail and may not use articles I provide or we discuss. Examples of approved topics include: the impacts of dams on the geomorphology of the Columbia River; agricultural influences on soil erosion rates in the Corn Belt; or shoreline erosion and progradation along the Texas coast.

Your final AB must include annotations for 8 peer-reviewed articles. I encourage you to use database tools like GeoRef or Google Scholar to find full-text sources while logged into your Sam accounts. In place of two articles you may include federal or state-agency reports that are at least 10 pages in length. Work on paraphrasing the information—verbatim citations/quotes will not be allowed. Do not simply copy the author’s abstract. The grade on your annotations will be based on a combination of: Formatting, grammar and spelling, quality of the summary, quality of your sources, overall writing ability, and how well your

articles fit your chosen topic. I will provide a rubric around the same time you turn in your topics so you know what to expect.

In addition to the written assignment, during the last week of class (due 5/2 at noon), you will give a 5-minute presentation to the class on what you learned from your annotations. Questions and short discussion will follow student presentations.

SHSU Student Conduct Code: Academic dishonesty, including cheating and plagiarism, will be taken seriously. PLEASE DO NOT PLAGIARIZE YOUR LABS OR YOUR ANNOTATIONS PLEASE DO NOT CHEAT ON YOUR EXAMS. These issues will result in failing the lab or exam in question and/or the course. For more, please see the SHSU Student Conduct Code: <http://www.shsu.edu/dept/dean-of-students/policies/documents/Student+Guidelines+2013-2016.pdf>

Students with Disabilities: It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail disability@shsu.edu). They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Services for Students with Disabilities. For a complete listing of the university policy, see: <http://www.shsu.edu/dept/academic-affairs/documents/aps/students/811006.pdf>

Religious Holy Days: If a student desires to be excused from class, assignment, or a test to participate in activities associated with a religious holy day, then the student must notify the instructor ahead of time of each scheduled class that he/she will miss for religious reasons. In such cases, the student will be required to take the test or submit the assignment early—unless there are good reasons for not being able to do so and the instructor has agreed to those reasons.

Visitors in the Classroom: Unannounced visitors to the classroom must present a current, official SHSU identification card to be permitted in the classroom. They must not present a disruption to the class by their attendance. If the visitor is not a registered student, it is at the instructor's discretion whether or not the visitor will be allowed to remain in the classroom. This policy is not intended to discourage occasional visiting of classes by responsible persons.

Tentative Course Schedule (subject to change based on illness, weather, arrival of baby, etc.):

Class Week	Week starting:	Topic	Readings
1	W 1/17	Course logistics; Geom intro/history; Systems and processes	Syllabus
	Lab	No lab ; Lecture for part: Systems, processes, equilibrium	
2	M 1/22	US Landscapes, Physiography; Topo map intro	Ch. 1
	Lab	Lab 1 – Topo Maps and Profiles; Stereogram intro	
3	M 1/29	Climate and weathering	Chs. 2, 3
	Lab	Lab 2 – Weathering and topo profile of campus (outside)	
4	M 2/5	Weathering; Soils: ID, formation, erosion, management	Ch. 3
	Lab	Lab 3 – Soils	
5	M 2/12	Karst: Hydrology, landforms, and caves	Ch. 12
	Lab	Lab 4 – Karst	
6	M 2/19	Volcanoes, earthquakes, and associated geomorphic hazards	Ch. 2
	F 2/23	Exam 1	
7	M 2/26	Hillslopes and mass wasting	Ch. 4
	Lab	Lab 5 – Slope Stability and Mass wasting	
8	M 3/5	Drainage basins/watersheds; sediment generation	Ch. 5
	Lab	Lab 6 – Basin Geometry and Sediment	AB topics due
	M 3/12	Spring Recess – no lecture or lab	
9	M 3/19	Fluvial processes	Ch. 6
	Lab	Lab 7 - Fluvial Processes and Hydraulics (field station)	
10	M 3/26	Fluvial landforms	Ch. 7
	Lab	F 3/30 – No lab (Good Friday)	

11	M 4/2	Aeolian processes and landforms	Ch. 8
	Fri 4/6	Exam 2	
12	M 4/9	No lecture - AAG meeting; Readings posted online	
	Lab	Lab – No formal lab; use time to work on ABs	
13	M 4/16	Periglacial and Glacial processes and landforms	Chs. 10 & 11
	Lab	Lab 8 – Glacial	
14	M 4/23	Coastal processes, hurricanes, and human impacts	Ch. 13
		Lab 9 – Coastal trip (Galveston; full day)	
15	M 4/30	Examples of Applied Geomorph Projects	Final ABs due
	W 5/2	Student presentations	
	Lab F 5/4	Student presentations & Final Exam Review	
16	Week of May 7-10	<p align="center">Final Exam: Monday, May 7th 1:00 – 3:00 pm (Bring Scantron, pencil, calculator!)</p>	Galveston trip reports (Lab 9) due at beginning of final