

Geomorphology and Glaciology Seminar, Fall 2012
GEO 291/271C

Syllabus

Class meets Tuesday and Thursday 11-12:30 pm, EPS 2.104

Instructors: Joel Johnson, joelj@jsg.utexas.edu, EPS 3.136

Ginny Catania, gcatania@ig.utexas.edu, EPS 3.128

Office hours: Joel: Sometimes Tues-Thurs 10-11, by appointment, or feel free to stop by and see if I'm available.

Ginny: Tues 10-11 or by appointment (ditto for stopping by)

Overview: Most class time will be spent having group discussions of research papers. Sometimes one, usually two papers will be read per week, depending on length and complexity. The class will cover several broad topics within geomorphology and glaciology, and will be influenced by the interests of class participants.

The goal of the class is to develop a deeper understanding of the research topics discussed, as well as to stay up to date on new research in surface processes.

Grading Policy: Assigned grades will be based 50% on class participation, 25% on leading group discussions, and 25% on the presentation described below. Plus/minus grades will not be assigned. Class participation means reading the papers, attending class, and speaking up during group discussions. Two unexcused absence will be allowed; more than two will affect one's letter grade. Excused absences (generally only for school-related reasons) will require prior approval.

Final exam: none

Presentations: November 27 and 29 (two days of presentations)

Give a 12 minute AGU-length talk on a research topic of interest. This can be your own research, or exploring and explaining published work on a new topic.

Class website: Blackboard. We will try to load PDFs of papers to be read up on Blackboard, but you will also be able to download PDFs through the UT libraries.

Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities, 471-6259.

Possible topics to be covered, but not limited to:

Climate and tectonic feedbacks, from fluvial and glacial erosion.

Moulins and Potholes.

Supraglacial stream channels and bedrock channels: If the erosion controls are different, why are the morphologies the same?

Subglacial topography and its formation: Troughs and lineations.

Subglacial erosion, tectonic uplift and feedbacks associated with each.