

GEOPHYS 385L: “Quake Seminar” and GES 315: Literature of Structural Geology

Enrollment: Enroll for *1 unit only* with the S/NC grading basis.

Overview: This seminar serves as a forum to discuss topics related to earthquakes, seismology, crustal stress, and crustal deformation. During autumn and spring quarters, a unifying topic will be chosen for the quarter. Students and faculty will select appropriate papers and one or two students will lead a group discussion of one paper each week. The intent is to create an interactive dialog, with students posing and answering questions themselves, rather than being driven by faculty members as in the lecture courses offered in our department. All students are required to read the paper and provide a written “paper summary” to the student discussion leaders and supervising faculty member following the detailed instructions below. The winter quarter is devoted to student presentations of their own research projects. Students are required to submit a “talk summary” to the student presenters and supervising faculty member.

Grading: Satisfactory (S) grades will be given to students completing at least 8 paper/talk summaries, emailed to the supervising faculty member on time. No late summaries will be accepted.

Paper Summary (Autumn and Spring Quarters)

Due: Mon. 5 pm (to discussion leaders, edunham@stanford.edu, warrenj@stanford.edu)

See also http://sites.agu.org/publications/files/2013/01/PeerReview_Guide.pdf

Instructions: Spend approximately 30 minutes to 1 hour reading the paper (but not longer, as one goal of this exercise is efficiency). Start by skimming the paper, focusing mainly on the abstract, figures, discussion/conclusions, and similar key components to develop a “big picture” understanding of the study. After identifying the main points, you should have a better sense of what to focus on. Then read through the paper again, this time paying more attention to the details. But skip or skim through the details that are primarily of interest to experts pursuing similar research efforts.

Summary: Provide a one-paragraph summary of the paper. What problem is being studied? Why is it important? Explain the context of the study. Describe relevant data sets and/or modeling approaches used. Is this approach appropriate? What are the main conclusions or results of the study? What evidence do the authors provide to substantiate their claims? What outstanding issues need to be addressed in future work?

Questions for discussion: Provide additional comments or outstanding questions that you think ought to be discussed by the group.

Follow up: List three references, cited in the paper, that you would read next to learn more. Briefly explain why you selected these references.

Talk Summary (Winter Quarter)

Due: Friday 5 pm (email to student presenters with cc to edunham@stanford.edu)

Instructions: Complete the summary and optional feedback after attending the talks.

Summary: Provide a one-paragraph summary of the talk. What problem is being studied? Why is it important? Explain the context of the study. Describe relevant data sets and/or modeling approaches used. Is this approach appropriate? What are the main conclusions or results of the study? What evidence do the authors provide to substantiate their claims? What outstanding issues need to be addressed in future work?

Feedback (optional): Provide suggestions to improve the presentation (in terms of style, delivery, and/or content).