

SIO 239: Geophysics Research Discussion

Instructors: Dave Stegman and Donna Blackman

Times and locations

Class meetings Fri. 11:00–11:50 Munk Conference Room

Instructors

David Stegman	dstegman@ucsd.edu	858-822-0767	1103 Revelle
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Grading

This course is only offered S/U.

Attendance

You are expected to attend all the class meetings.

Presentations

Over the course of Winter and Spring quarters, each student will give at least two presentations to the class.

Reading Assignments

Every two weeks we will cover a geophysics topic by concurrently reading pairs of related papers. These typically include one paper considered to be a classic/landmark paper and the other paper will be more recent follow-up which provides a counterpoint. When possible, papers should be shorter, GRL length. The class will be divided into 2 groups, one for each paper. Students are required to read only the paper assigned to their group and are to have completed reading it within 1 week of it being assigned.

Written Assignments

Every other week you will read one scientific paper assigned to you and turn in 3 questions about the paper, either clarifying questions (what, how, etc) to be asked during the Q&A following it being presented in class, or probing questions (i.e. why?) related to more in depth discussion that occurs the following week.

Participation and Peer Assessment

Students are expected to participate every week by asking questions, such as clarifying questions or questions along a line of critical inquiry. Students will also fill out peer assessment forms to provide constructive comments to the presenters on their clarity, content, style, etc. The instructors will discuss this feedback with the presenters following the class.

Format

In the first week of each 2-week sequence, a *synopsis* for each paper will be presented. One student from each group will give this 15-20 minute presentation to cover the background, methods, results and conclusions. There will be a few minutes for questions, which should be aimed at clarifications to help better understand the paper. Students not presenting within the 2 week sequence are required to submit 3 questions to the forum on the course website at the end of the first week. These questions form a basis for discussion held in week 2.

In the second week, one student from each group will lead a *discussion* of their paper. They will assume that everyone is familiar with material so the emphasis is on in-depth analysis of the paper. They should not repeat the same material presented during week 1 of the sequence. They should try to incorporate comments/input from other students with the aim of facilitating discussion. The goal of the discussion is to further develop skills of critical inquiry of scientific literature.