

## GEOL555 – Elementary Seismology

**CLASS TIME/PLACE:** MWF, 12:20-13:10, EWSC 209  
**INSTRUCTORS:** Tom Owens, 7-4530, [owens@sc.edu](mailto:owens@sc.edu), EWSC Rm 502  
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**TEXTBOOK:** P. Shearer, Introduction to Seismology, 2<sup>nd</sup> Edition, 2009

### Course Objectives/Learning Outcomes:

Upon completion of this course, students should be able to: Demonstrate command of the basic concepts, principles, and equations of seismology; Describe the general features of seismograms and the theoretical basis of those features.

### Course Grading:

4 Sectional Exams @ 12.5% each	50% of grade
Problem Sets	35% of grade
In-class participation & problem solving	15% of grade

Graduate students will prepare a presentation not required of undergraduates, graded as two additional problem sets.

Hourly Exams will be on 2/3/10, 3/2/10, 4/6/10 in class and 4/25/10 (at 2pm)

### Topics & Approach:

We will follow the order of topics as covered in Shearer's book. Depending on our pace, we may skip some or all of Chapters 5 and 7 to make space for later chapters.

Most Fridays will be problem solving days. Students will be randomly selected to take the lead in solving problems at the board. Any number can play. The problems eligible for discussion will be distributed at least one, hopefully two, lectures in advance.

**Neatness:** Materials that you turn in must be well-organized, neatly-written, with clear well-labeled graphs and figures as needed. I'll warn you once if you don't meet this standard and allow you to re-do the work before I grade it. After that, points will roll.

**Academic Integrity:** You have to do the problem sets yourself. Don't be afraid to talk about the problems with your classmates. But, everything you turn in has to reflect your thoughts and your effort. Think of it like Karaoke ... your classmates can help by humming the tune, but you have to sing the song all by yourself!

**Attendance:** You are expected to attend every class session, in your seat and ready by 12:20. USC regulations allow for a grade penalty for absences in excess of 10%, which for this class is 4 sessions. For GEOL555, the penalty is 5% for every 4 classes missed. If you are regularly late, I will warn you, then start counting each late arrival as a half-class missed.