

GEOP 315

Seismic Exploration I

Instructor: Dr. Abdullatif Al-Shuhail

Office: 3 – 110

Meeting Hours:

- **Lecture:** MW 11:00 – 12:15 in 3-108
- **Laboratory:** M 2:10 – 5:00 in 3-108

Office Hours: See my webpage.

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Objectives of the course:

- To understand the physical principles behind the petroleum seismic exploration method.
- To be able to recognize different events on the seismic record.
- To understand the equipment and field procedures used in 2-D and 3-D seismic surveys.

Textbook:

- Exploration Seismology *by* R. E. Sheriff and L. P. Geldart, 1995.

Supplementary Reading:

- Elements of 3D Seismology, *by* Christopher Liner, 2004.
- Introduction to Geophysical Prospecting, *by* M. Dobrin and C. Savit, 1988.
- Applied Geophysics *by* W. Telford & others, 1990.
- An Introduction to Geophysical Exploration *by* Kearey *et al.*, 2002.

Grading Scheme

- 30% Midterm exam
- 30% Final exam
- 20% Homeworks
- 10% Quizzes
- 5% Attendance
- 5% Field trip participation

Rules

- Every day of delay over an assignment's deadline discounts 10% of the assignment grade.
- Every unexcused absence discounts 1% of the total course grade.
- Missing the field trip for any reason discounts 5% of the total course grade.