

# GEOP 501

## Reflection Seismology

**Instructor:** Dr. Abdullatif Al-Shuhail

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**Meeting Hours:** UT 5:45 – 7:00 PM

**Meeting Venue:** 76-2233

### Objectives of the course:

- To analyze current issues in the seismic reflection method of petroleum exploration including:
  - Overview
  - Borehole seismology
  - Design of land 3-D seismic surveys
  - Amplitude Variation with Offset (AVO)
  - Topics on seismic wave propagation (given by industry professionals)

### Textbook:

- None

### Supplementary Reading:

- *Seismic Data Analysis* by O. Yilmaz, 2001.
- *Exploration Seismology* by R. E. Sheriff and L. P. Geldart, 1995.
- *Introduction to Geophysical Prospecting*, by M. Dobrin and C. Savit, 1988.

### Grading Scheme

- 30% Midterm exam
- 30% Final exam
- 30% Homeworks
- 10% Attendance & class participation