

Winter 2015

## SIO 226 INTRODUCTION TO MARINE GEOPHYSICS

Instructors: LeRoy Dorman (LD, 534-2406) and David Chadwell (DC, 534-2663)

With assistance from: Steve Cande (SC) and Jeff Gee (JG)

Time: MWF 1100-1150

Location: VAUGN 300

Section ID: 823065

Date	Topic	Speaker
1-5	Seafloor Geodesy	DC
1-7	Marine Gravity	LD
1-9	Marine Gravity	LD
1-12	Marine Gravity	LD
1-14	Marine Gravity	LD
1-16	Discussion of Marine Gravity Altimetry Papers	Class
1-19	Holiday Martin Luther King Day	
1-21	Seafloor Mapping	DC
1-23	Open day, work on your papers	
1-26	Seafloor Mapping	DC
1-28	Seafloor Mapping	DC
1-30	Discussion of Seafloor Mapping Papers	Class
2-2	Refraction Seismology	LD
2-4	Refraction Seismology	LD
2-6	Refraction Seismology	LD
2-9	Refraction Seismology Discussion	Class
2-11	Reflection Seismology	DC
2-13	Reflection Seismology	DC
2-16	President's Day Holiday	
2-18	Reflection Seismology	DC
2-20	Reflection Seismology Discussion	Class
2-23	Marine Magnetism	DC
2-25	Marine Magnetism	JG
2-27	Marine Magnetism	LD
3-2	Marine Magnetism Discussion	Class
3-4		Class
3-6	Seafloor Heatflow	LD
3-9	Seafloor Heatflow	LD
3-11	Seafloor Seismicity	LD

Research papers assigned for each topic

Texts:

W. Telford, L. Geldart, R. Sheriff, and D. Keys, Applied Geophysics, TN269 .A663 1990

Brown, Joan and others, (The Open University), The Ocean Basins: Their Structure and Evolution QE39 .O23 1989

References:

J. Claerbout, Imaging the Earth's Interior, QE539 .C53 1985

M. Dobrin, Introduction to Geophysical Prospecting, TN269.D6 1988

C.M.R. Fowler, The Solid Earth, QC806.F625 1990

G. Garland, The Earth's Shape and Gravity, QB331.G233 1965

F. Grant and G. West, Interpretation Theory in Applied Geophysics, QE501 .G761 1965

L. Hatton, M. Worthington, and J. Makin, Seismic Data Processing, QE538.5 .H37 1986

P. Kearey and M. Brooks, An Introduction to Geophysical Exploration, TN269 .K25 1984

O. Yilmaz, Seismic Data Processing, TN269 .Y55 1987 .

Grade based on: (1) written paper reviews, and (2) in-class presentations.