

List of lecture topics for Ge211 class cruise - Draft

TOPIC	Who*	Textbook chapter (approx)	Date of lecture or meeting
Gravity – theory	BL	Chapter 6	
Gravity – data processing/ grav.tie	BL	Chapter 6	
Magnetics – theory	JMS	Chapter 7	
Magnetics – modeling and data interpretation	JMS	Chapter 7	
Seismic basics	RWC	Chapter 4	
Seismic reflection processing	RWC	Chapter 5	
Seismic refraction (sonobuoys)	RWC	Chapter 5	
Ocean acoustics (XBT); GPS navigation	JMS	Chapters 2& 3	
Ocean acoustics (multibeam & echosounding)	JMS	Chapter 3; also, Blondel & Murton	
Ocean floor geology	BL	Chapters 13, 14	
Other activities			
Science overview – class & RPSC	JMS		
Ping editing training	RPSC		October 9?
Watchstanding orientation	RPSC/JMS		October 9 or 10
IT orientation	RPSC		October 9?
2 safety meetings (fire drills)	EC		October 10
Engine room tour	EC		
Clothing issue at USAP CDC (at the Antarctic Centre, near Christchurch Airport)			9 a.m., Monday October 9

Textbook is “Marine Geophysics” by E. J. W. Jones (Publisher: John Wiley & Sons). We will bring a copy to have available at the watchstander desk for students to read it. There should also be a copy on board the ship.

We will also bring “Handbook of Seafloor Sonar Imagery” by Blondel & Murton. Caltech geology library has a copy of this, which we are putting on reserve for the class.

*BL = Bruce Luyendyk of UCSB; RWC = Rob Clayton of Caltech; JMS = Joann Stock of Caltech; EC = Edison Chouest personnel; RPSC = Raytheon Polar Services Corporation personnel