

Date (dd/mm)	Lecture	Reading	Lab for the current week
11.01	Stress, strain and moduli plus Hook's Law demo	3.2	<b>No lab</b>
13.01	Seismic waves with slinky and velocity	3.3-3.4	
15.01	Snell's Law and critical refraction	3.6.2-3.6.3	

Table 1: Week 1, Seismic basics.

Date (dd/mm)	Lecture	Reading	Lab for the current week
18.01	2-layer, 3-layer, and multi-layer refraction	5.2.1-5.2.3	Equipment overview
20.01	Dipping-layer refraction and non-planar	5.2.4 and 5.4.1	
22.01	The $\pm$ method	5.4.2	

Table 2: Week 2, Seismic refraction 1.

Date (dd/mm)	Lecture	Reading	Lab for the current week
25.01	Fault example, hidden layer example, and applications	5.2.5, 5.6, and 5.11	Refraction analysis by $\pm$ and first writeup (1 week to complete)
27.01	Single reflector and $\alpha_{RMS}$	4.2.1-4.2.2	
29.01	Dix equation	4.4.2 (last Equation)	

Table 3: Week 3, refraction applications and reflection seismology.

Date (dd/mm)	Lecture	Reading	Lab for the current week
01.02	Dipping reflector and multiple raypaths	4.2.3-4.2.4	Seismic reflection velocity analysis
03.02	Fourier series and seismic wavelets	2.2-2.4	
05.02	Transmission, reflection and Synthetic seismogram	3.6.1 and 4.14.3-4.14.4	

Table 4: Week 4, seismogram's.

Date (dd/mm)	Lecture	Reading	Lab for the current week
08.02	Synthetic ties, digital sampling, and fold	Blackfoot example and 2.5, 4.3.1-4.3.3, 4.4.2-4.4.3	Convolutional model and synthetic seismogram's
10.02	Data processing, filter, and decon	Proc. flow example and 4.5 and 4.8	
12.02	Weathering and NMO	North sea example and 4.6-4.7	

Table 5: Week 5, Synthetic ties and data processing.

Date (dd/mm)	Lecture	Reading	Lab for the current week
15.02	<b>Reading week - no lecture</b>		<b>No lab</b>
17.02			
19.02			

Table 6: Week 6, reading week

Date (dd/mm)	Lecture	Reading	Lab for the current week
22.02	Stack and migration	4.9	<b>No lab</b>
24.02	Seismic imaging of simple structures		
26.02	<p style="text-align: center;"><b>Midterm 1</b></p> Stress, strain, moduli, Hooke Seismic waves and velocity Snell's Law and critical refraction 2-, 3-, and multi-layer refraction Dipping-layer refraction and non-planar $\pm$ method Single reflector and $\alpha_{RMS}$ Dix equation Dipping reflector and multiple raypaths Fourier series and seismic wavelets T, R and synthetic seismogram Synthetic ties, digital sampling, and fold Data processing and decon	3.2 3.3-3.4 3.6.2-3.6.3 5.2.1-5.2.3 5.2.4 and 5.4.1 5.4.2 4.2.1-4.2.2 4.4.2 4.2.3-4.2.4 2.2-2.4 3.6.1 and 4.14.3-4.14.4 2.5, 4.3.1-4.3.3 and 4.4.2-4.4.3 4.5 and 4.8	

Table 7: Week 7

Date (dd/mm)	Lecture	Reading	Lab for the current week
01.03	Seismic resolution	4.4.1, 4.14	Offshore Van. Isl. structural interpretation
03.03	Seismic attributes		
05.03	Seismic stratigraphy		

Table 8: Week 8

Date (dd/mm)	Lecture	Reading	Lab for the current week
08.03	Carbonate seismology	4.16	Offshore Taranaki Basin interpretation
10.03	Seismic interpretation		
12.03	3D seismic		

Table 9: Week 9

Date (dd/mm)	Lecture	Reading	Lab for the current week
15.03	Well logs	11.1-11.4, 11.6-11.9	Rainbow reef carbonate interpretation
17.03	Gravity	6.1-6.7	
19.03	Gravity reduction	6.8	

Table 10: Week 10

Date (dd/mm)	Lecture	Reading	Lab for the current week
22.03	Gravity interpretation	6.10	Gravity reductions
24.03	Magnetism	7.1-7.4	
26.03	Magnetic survey	7.6	

Table 11: Week 11

Date (dd/mm)	Lecture	Reading	Lab for the current week
29.03	Magnetic anomalies	7.10	<b>No lab</b>
31.03	<b>Midterm 2</b>		
02.04	<b>Easter - no lecture</b>		

Table 12: Week 12

Date (dd/mm)	Lecture	Reading	Lab for the current week
05.04	Resistivity	8.1-8.2	Darnley Bay gravity anomalies
07.04	Magnetotellurics and GPR	9.11-9.12	
09.04	Geochronology	10.1-10.3	

Table 13: Week 13

Date (dd/mm)	Lecture	Reading	Lab for the current week
12.04	Catch up day		Magnetics
14.04	Catch up day		
16.04	Review		

Table 14: Week 14