

SIO 103–2019 Provisional schedule

Lecture	Topic	Chapter	
1, Jan 7	Overview of class; origin of Earth and solar system	Class 1	Guy
2, Jan 9	Seismology: Linear elasticity, wave equation	Class-2, Fowler-4	Guy
3, Jan 14	Ray theory	"	Guy
4, Jan 16	Travel times and earthquake location	"	Guy
5, Jan 23	The seismic inverse problem: 1D and 3D structure	"	Guy
6, Jan 28	Faults and source mechanisms, seismicity, earthquake hazard	Class 2	Guy
7, Jan 30	Heat flow and Fourier's law, continental heat flow	Class-3, Fowler-7	Guy
8, Feb 4	Continental heat flow (continued), plate cooling	"	Guy
9, Feb 6	Oceanic heat flow and bathymetry, Review	"	Guy
10, Feb 11	Gravity and the shape of the Earth	Class-4, Fowler-5	Steve
11, Feb 13	Midterm		
12, Feb 20	Gravity and geoid anomalies	"	Steve
13, Feb 25	Moments of inertia, geoid, rotational dynamics	"	Steve
14, Feb 27	Geomagnetism; main field	Class-5	Steve
15, Mar 4	Dynamos, secular variation	"	Steve
16, Mar 6	Paleomagnetism and plate tectonics	"	Steve
17, Mar 11	Composition and state of the mantle	Class 6 Fowler-8	Steve
18, Mar 13	Composition and state of the core	"	Steve