

		8 am lecture	10 am lecture		Lab (Thursday)
<b>Week 1</b>	March 3/4th	L1: Earth composition 1: source of elements, supernova	L2: Earth composition 2: Core formation, Late Heavy Bombardment	JMS	Does plate tectonics occur on another planet? Mars
<b>Week 2</b>	March 12/13th	L3: Earth composition 3: A petrological perspective of the interior	L4: Earth composition 4: A geophysical perspective of the interior	JMS	Subduction Zones 1 - Google Earth + the earthquake record
<b>Week 3</b>	March 17/18th	L5: Earth composition 5 - First continents?	L6: Earth composition 6 - when did subduction begin?	JMS	Subduction Zones 2 - Construct a subduction zone
<b>Week 4</b>	March 24/25th	L7: Mantle melting 1: Subducting slabs, structure, influence on mantle	L8: Mantle melting 2: oceanic lithosphere	JMS	Subduction Zones 2 - continued
<b>(Week 5)</b>	<b>WEEK OF MARCH 29th - GEOL BORLAND/302 WEEK - NO CLASS</b>				
	<b>WEEK OF APRIL 5th - EASTER AND SEMESTER BREAK</b>				
<b>Week 6</b>	April 14/15th	L9: Mantle melting 3: ocean island basalts, plumes	L10: Mantle melting 4: large igneous provinces	JMS	Subduction Zones 3 - why does lithosphere subduct?
<b>Week 7</b>	April 21/22rd	L11: Mantle melting 5: Continental rifting and magmatism	L12: Zealandia 1: total lithosphere composition	JMS	G-Plates lab
<b>Week 8</b>	April 28/29th	L13 - Zealandia 2 - Continental Transform Faults & Alpine Fault	L14: Zealandia 3 - What lies beneath Dunedin?	JMS	Lithosphere structure and terranes of Zealandia
<b>Week 9</b>	May 5/6th	L15: Isostasy: how high are the mountains?	L16: Stress, strain, elasticity and viscosity	DJP	Isostasy and flexure
<b>Week 10</b>	May 12/13th	L17: Lithospheric strength profiles	L18: Numerical modelling: a strength profile for Europa	DJP	Viscous effects in isostatic adjustment
<b>Week 11</b>	May 19/20th	L19: Heat transfer in the Earth	L20: Thermal evolution of orogenic belts 2: Overthrust Belts	DJP	Mantle viscosity
<b>Week 12</b>	May 26//27th	L21: Thermal evolution of orogenic belts 2: erosion and density change	L22: Thermal properties of rocks	DJP	Heat capacity, latent heat and thermal conductivity
<b>Week 13</b>	June 2/3rd	L23: Numerical models of heat transfer.	L24: 2D and 3D heat transfer in tectonics	DJP	heat capacity, latent heat and thermal conductivity PART 2