

Week	Date	Lecture/Lab	Topic
1	Aug 20, 2018	Lecture 1	Course outline and solar system overview
	Aug 22, 2018	Lecture 2	Brief history of planetary science and the methods of solar system exploration
	Aug 24, 2018	Lab 1	<a href="#">Basic concepts of planetary geology; history of solar system exploration (BE 204)</a>
2	Aug 27, 2018	Lecture 3	Orbital dynamics and gravity: solar system organization, measuring and predicting the motion of bodies
	Aug 29, 2018	Lecture 4	Origin of the solar system 1; the solar nebula, elemental abundances, stellar classification
	Aug 31, 2018	Lab 2	<a href="#">Kepler's Laws, Newtonian Gravitation, clockwork of the solar system (BE 204)</a>
3	Sep 3, 2018	<b>NO LECTURE</b>	<b>LABOR DAY</b>
	Sep 5, 2018	Lecture 5	Origin of the solar system 2: origin of the Sun and planets, short-lived radionuclides and early chronology
	Sep 7, 2018	Lab 3	<a href="#">Isotope geochronology exercises; age of the Earth and solar system materials (BE 204)</a>
4	Sep 10, 2018	Lecture 6	Sources and transfer of thermal energy within planets
	Sep 12, 2018	Lecture 7	The Earth 1: internal structure, geochemistry, differentiation
	Sep 14, 2018	Lab 4	<a href="#">Petrological Lab 1 – Earth materials from different tectonic environments (not graded) (BE 401)</a>
5	Sep 17, 2018	Lecture 8	The Earth 2: atmosphere–hydrosphere–lithosphere interactions, magnetism
	Sep 19, 2018	Lecture 9	The Earth 3: plate tectonics, changing regimes throughout Earth history
	Sep 21, 2018	Lab 5	<a href="#">Landing site selection (BE 204)</a>
6	Sep 24, 2018	Lecture 10	Meteorites: general classification, history, and geochemistry
	Sep 26, 2018	Lecture 11	Impacts and impactors; cratering
	Sep 28, 2018	Lab 6	<a href="#">Meteorites, cratering, and early solar system evolution (BE 204)</a>
7	Oct 1, 2018	Lecture 12	The Moon 1: formation, differentiation, and general geology
	Oct 3, 2018	Lecture 13	The Moon 2: landforms of the lunar surface, isotopic dating, lunar meteorites
	Oct 5, 2018	Lab 7	<a href="#">Group oral presentations on key topics of planetary science interest (BE 204)</a>
8	Oct 8, 2018	Lecture 14	The Moon 3: volatile content, utilization of lunar resources
	Oct 10, 2018	Lecture 15	Recap of weeks' 1–8 lecture and lab material in preparation for Midterm
	Oct 12, 2018		<b>MIDTERM</b>
9	Oct 15, 2018	<b>NO LECTURE</b>	<b>FALL BREAK</b>
	Oct 17, 2018	Lecture 16	The geology of Mercury: history of observations, pre- and post-MESSENGER views and models
	Oct 19, 2018	Lab 8	<a href="#">Petrological Lab 2 – Earth material analogues for extraterrestrial lid-tectonic regimes (BE 401)</a>
10	Oct 22, 2018	Lecture 17	Venus: atmosphere, surface, and interior; current and past plate tectonics
	Oct 24, 2018	Lecture 18	Mars 1: history of investigation (telescopic and spacecraft exploration), general geology of surface and interior
	Oct 26, 2018	Lab 9	<a href="#">Mars evolution, and petrological calculations on volatile abundance and transport (BE 204)</a>
11	Oct 29, 2018	Lecture 19	Mars 2: atmosphere, volcanoes, geological and geomorphological evidence for volatiles
	Oct 31, 2018	Lecture 20	Mars 3: Martian meteorites, impact cratering, geological history, potential for resource exploration and colonization
	Nov 2, 2018	Lab 10	<a href="#">Origin and behavior of asteroids (not graded) (BE 204)</a>
12	Nov 5, 2018	Lecture 21	Asteroids: formation, classification, and resource potential
	Nov 7, 2018	Lecture 22	Jupiter 1: formation, physical and orbital properties, atmosphere, and rings
	Nov 9, 2018	Lab 11	<a href="#">Geochemistry of the Earth and its various spheres (BE 204)</a>
13	Nov 12, 2018	Lecture 23	Jupiter 2: Galilean satellites (Io, Europa, Ganymede, and Callisto)
	Nov 14, 2018	Lecture 24	Saturn, Titan, and regular satellites
	Nov 16, 2018	Lab 12	<a href="#">Individual student oral presentations (1): review of key paper on planetary science (BE 204)</a>
14	Nov 19, 2018	Lecture 25	Uranus, Neptune, and Pluto
	Nov 21, 2018	<b>NO LECTURE</b>	<b>NO-CLASS DAY PRE-THANKSGIVING</b>
	Nov 23, 2018	<b>NO LAB</b>	<b>THANKSGIVING</b>
15	Nov 26, 2018	Lecture 26	Comets: anatomy, short- and long-period sources, chemical composition
	Nov 28, 2018	Lecture 27	Origin of life on Earth and its possibility elsewhere in the solar system
	Nov 30, 2018	Lab 13	<a href="#">Individual student oral presentations (2): review of key paper on planetary science (BE 204)</a>
16	Dec 3, 2018	Lecture 28	Exoplanets
	Dec 5, 2018	Lecture 29	Course summary, future directions, open discussion
	Dec 7, 2018	Lab 14	<a href="#">Recap of weeks' 9–16 lecture and lab material; revision session for final exam (not graded) (BE 204)</a>
	<b>Week starting Dec 10, 2018</b>		<b>FINAL</b>