

Syllabus - 2015

Lecture date, number — Subjects

Tu Jan 20: 1 Introduction, syllabus & class rules; units and scales,
Earth rotation, time zones, constellations, 'Grand Tour'

Th Jan 22: 2 Seasons, phases, eclipses

Tu Jan 27: 3 History 1: The Greeks, Copernicus, Tycho, Kepler

Th Jan 29: 4 History 2: Galileo, Newton

Tu Feb 3: 5 How science works

Th Feb 5: 6 The nature of light, telescopes

Tu Feb 10: Exam 1: Lectures 1 — 6

Th Feb 12: 7 How astronomers use spectra to learn about stars

Tu Feb 17: 8 Stars: distance, luminosity, mass,..., star formation

Th Feb 19: 9 Stars: our Sun

Tu Feb 24: 10 Stars: energy generation, main sequence life

Th Feb 26: 11 Stars: life from main sequence to white dwarf

Tu Mar 3: 12 Stars: death — supernovae, neutron stars, black holes

Th Mar 5: Exam 2: Lectures 7 — 12

Tu Mar 10: Exam 3: Lectures 1 — 12

Th Mar 12: Exam 4: Lectures 1 — 12

Mar 16 — 21: Spring Break

Tu Mar 24: 13 Our Galaxy — the Milky Way

Th Mar 26: 14 Galaxies: properties, clusters of galaxies, dark matter

Tu Mar 31: 15 Galaxies: evolution, distances, expansion of Universe

Th Apr 2: 16 Galaxies: active galaxies, supermassive black holes

Tu Apr 7: 17 Cosmology: Big Bang — evolution of the Universe

Th Apr 9: Exam 5: Lectures 13 — 17

Tu Apr 14: 18 Solar System: introduction, formation

Th Apr 16: 19 Solar System: other solar systems, Jupiter—Neptune

Tu Apr 21: 20 Solar System: outer parts: Pluto, Kuiper belt, comets

Th Apr 23: 21 Solar System: satellites, asteroids, Moon, Mercury

Tu Apr 28: 22 Solar System: Mars and Venus

Th Apr 30: 23 Solar System: Earth

Tu May 5: 24 History of life on Earth, life in the Universe

Th May 7: Exam 6: Lectures 18 — 24

There will be no final exam.

There will be no makeup exams.

**There will be a help session from 5 – 6:30 PM
on the night before every exam.**