

# Syllabus - 2014

Lecture date, number — Subjects

- M Jan 13: 1 Introduction, syllabus & class rules; units and scales, Earth rotation, time zones, constellations, ‘Grand Tour’
- W Jan 15: 2 Seasons, phases, eclipses
- M Jan 20: **MLK Day holiday**
- W Jan 22: 3 History 1: The Greeks, Copernicus, Tycho, Kepler
- M Jan 27: 4 History 2: Galileo, Newton
- W Jan 29: 5 How science works
- M Feb 3: 6 The nature of light, telescopes
- W Feb 5: **Exam 1: Lectures 1 — 6**
- M Feb 10: 7 How astronomers use spectra to learn about stars
- W Feb 12: 8 Stars: distance, luminosity, mass,..., star formation
- M Feb 17: 9 Stars: our Sun
- W Feb 19: 10 Stars: energy generation, main sequence life
- M Feb 24: 11 Stars: life from main sequence to white dwarf
- W Feb 26: 12 Stars: death — supernovae, neutron stars, black holes
- M Mar 3: **Exam 2: Lectures 7 — 12**
- W Mar 5: **Exam 3: Lectures 1 — 12**
- Mar 10 — 14: Spring Break**
- M Mar 17: 13 Our Galaxy — the Milky Way
- W Mar 19: 14 Galaxies: properties, clusters of galaxies, dark matter
- M Mar 24: 15 Galaxies: evolution, distances, expansion of Universe
- W Mar 26: 16 Galaxies: active galaxies, supermassive black holes
- M Mar 31: 17 Cosmology: Big Bang — evolution of the Universe
- W Apr 2: **Exam 4: Lectures 13 — 17**
- M Apr 7: 18 Solar System: introduction, formation
- W Apr 9: 19 Solar System: other solar systems, Jupiter—Neptune
- M Apr 14: 20 Solar System: outer parts: Pluto, Kuiper belt, comets
- W Apr 16: 21 Solar System: satellites, asteroids, Moon, Mercury
- M Apr 21: 22 Solar System: Mars and Venus
- W Apr 23: 23 Solar System: Earth
- M Apr 28: 24 History of life on Earth, life in the Universe
- W Apr 30: **Exam 5: 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.**