

## Preliminary Course Syllabus

*Thursday, Aug. 20 (04 GMT), Venus at Greatest Eastern Elongation (46°)*

*Thursday, Aug. 20 (04 GMT), Mercury Stationary*

*Saturday, Sept. 3 (13 GMT), Mercury Inferior Conjunction*

*Thursday, Sept. 1 (1722 GMT), Moon Waning Quarter*

*Wednesday, Aug. 25 (0552 GMT), Moon at Apogee*

Aug. 31, Sept. 2



Birth of Astronomy/Getting Started

**Prepare:** Evans: Chapter §§1.1-1.8  
Duncan: Introductions and Chapter 1

**Observations:** Evans §§1.2, 1.7 in notebook

**Assignments:** Evans §1.5 in notebook, timelines  
Make/use a shadow table (see §§1.5, 1.13)  
before, on, & after the equinox

*Wednesday, Sept. 8 (1030 GMT), Moon New*

*Wednesday, Sept. 8 (0402 GMT), Moon at Perigee*

*Saturday, Sept. 11 (13 GMT), Venus 1° N of Moon*

Sept. 7, 9



Birth of Astronomy (cont'd)

**Prepare:** Evans: Chapter §§1.9-1.18; Duncan: Chaps. 2 & 3  
Zodiacal constellations

**Observations:** Evans §§1.11, 1.16 in notebook

**Assignments:** Evans §§1.13, 1.15, 1.18 in notebook  
Choose culture/calendar of interest

*Wednesday, Sept. 15 (0550 GMT), Moon Waxing Quarter*

*Sunday, Sept. 12 (03 GMT) Mercury Stationary*

*Monday, Sept. 22 (1545 GMT), Autumnal Equinox*

Sept. 14, 16



Celestial Sphere

**Prepare:** Evans: Chapter §§2.1-2.8; Duncan: Chaps. 4 & 5  
Aristotle: extracts from *On the Heavens*

**Observation:** Evans §2.8 in notebook

**Assignments:** Evans §§2.3, 2.7 in notebook  
Culture/calendar paper proposal written,  
corrected & critiqued, due 9/21

*Sunday, September. 19 (17 GMT), Mercury at Greatest Western Elongation (18°)*

*Tuesday, Sept. 21 (0804 GMT), Moon at Apogee*

*Thursday, Sept. 23 (0917 GMT), Moon Full*

*Thursday, Sept. 23 (0309 GMT), Autumnal Equinox*

Sept. 21, 23



Celestial Sphere (cont'd)

**Prepare:** Evans: Chapter §§2.9-2.17; Duncan: Chaps. 6 & 7

**Observation:** Equinox; Evans §2.17 in notebook

**Assignments:** Formal write-up of §1.18 due 9/28  
Evans §§2.10, 2.12, 2.14 in notebook

*Friday, Oct. 1 (0352 GMT), Moon Waning Quarter*

Sept. 28, 30



Applications of Spherics

**Prepare:** Evans: Chapter §§3.1-3.4; Duncan: Chaps. 8 & 9  
Aratus: *Phenomena*

**Assignments:** Evans: §§3.3-3.4 in notebook  
Notebook check: notebooks due 10/5

*Wednesday, Oct. 6 (1342 GMT), Moon at Perigee*

*Thursday, Oct. 7 (1844 GMT), Moon New*

*Thursday, Oct. 7 (19 GMT), Venus Stationary*

Oct. 5, 7



Applications of Spherics (cont'd)

**Prepare:** Evans: Chapter §§3.5-3.8; Duncan: Chaps. 10 & 11  
Janus astrolabe instructions

**Assignments:** Submit finished sundial 10/14  
Evans: §§3.6, 3.8 in notebook

	<i>Thursday, Oct. 14 (2127 GMT), Moon Waxing Quarter</i>
Oct. 12, 14	Calendars and Time Reconciling <i>Prepare:</i> Evans: Chapter §§4.1-4.6; Duncan: Chaps. 12 & 13 <i>Assignments:</i> Evans: §§4.2, 4.4 in notebook Culture paper due 10/21
	<i>Sunday, Oct. 17 (01 GMT), Mercury Superior Conjunction</i> <i>Wednesday, Oct. 18 (1819 GMT), Moon at Apogee</i> <i>Saturday, Oct. 23 (0137 GMT), Moon Full</i>
Oct. 19, 21	Calendars and Time Reconciling (cont'd) <i>Prepare:</i> Evans: Chapter §§4.7-4.12; Duncan: Chaps. 14 & 15 <i>Assignments:</i> Evans: §§4.6, 4.8, 4.12 in notebook Submit finished astrolabe with your plate 10/26
	<i>Saturday, Oct. 30 (1246 GMT), Moon Waning Quarter</i> <i>Friday, Oct. 29 (1 GMT), Venus Inferior Conjunction</i>
Oct. 26, 28	Calendars and Time Reconciling (cont'd) <b>MID-TERM EXAM</b> <i>Wednesday, Nov. 3 (1723 GMT), Moon at Perigee</i> <i>Saturday, Nov. 6 (0452 GMT), Moon New</i> <i>Friday, Nov. 5 (09 GMT), Venus 1° N of Moon</i>
Nov. 2, 4	Solar Theory <i>Prepare:</i> Evans: Chapter §§5.1-5.6 Ptolemy: Extracts from the <i>Almagest</i> <i>Assignments:</i> Evans: §§5.4, 5.6 in notebook
	<i>Saturday, Nov. 13 (1639 GMT), Moon Waxing Quarter</i>
Nov. 9, 11	Solar Theory (cont'd) <i>Prepare:</i> Evans: Chapter §§5.7-5.10 <i>Assignments:</i> Evans: §§5.8, 5.10 in notebook
	<i>Monday, Nov. 15 (1148 GMT), Moon at Apogee</i> <i>Tuesday, Nov. 16 (16 GMT), Venus Stationary</i>
Nov. 16, 18	The Fixed Stars <i>Prepare:</i> Evans: Chapter §§6.1-6.10 <i>Observation:</i> Evans §6.3 in notebook <i>Assignments:</i> Evans: §§6.5, 6.7 in notebook
	<i>Sunday, Nov. 21 (1727 GMT), Moon Full</i>
----- <b>THANKSGIVING VACATION</b> -----	
	<i>Sunday, Nov. 28 (2036 GMT), Moon Waning Quarter</i> <i>Tuesday, Nov. 30 (1910 GMT), Moon at Perigee</i> <i>Wednesday, Dec. 1 (16 GMT), Mercury at Greatest East Elongation (21.5°)</i>
Nov. 30, Dec. 2	Planetary Theory <i>Prepare:</i> Evans: Chapter §§7.1-7.14 <i>Observation:</i> Evans §7.3 in notebook <i>Assignments:</i> Evans: §§7.5, 7.8, 7.14 in notebook Calendar paper due 12/7
	<i>Friday, Dec. 10 (16 GMT), Mercury Stationary</i> <i>Sunday, Dec. 5 (1736 GMT), Moon New</i> <i>Monday, Nov. 6 (16 GMT), Mars very near Moon</i>
Dec. 7, 9	Planetary Theory (cont'd) <i>Prepare:</i> Evans: Chapter §§7.15-7.22 <i>Assignments:</i> Evans: §§7.16, 7.18, 7.22 in notebook
	<i>Monday, Dec. 13 (0836 GMT), Moon at Apogee</i> <i>Monday, Dec. 13 (1359 GMT), Moon Waxing Quarter</i>
Dec. 16, 1:30 pm	<b>FINAL EXAM (Thursday)</b> <i>Tuesday, Dec. 21 (2338 GMT), Winter Solstice</i> <i>Monday, Dec. 21 (15 GMT), Mars Stationary</i> <i>Tuesday, Dec. 21 (0813 GMT), Moon Full (Lunar Eclipse)</i> <i>Saturday, Dec. 25 (1210 GMT), Moon at Perigee</i> <i>Sunday, Jan. 3 (03 GMT), Earth at Perihelion</i>