

## Preliminary Course Syllabus

Thursday, Aug. 27 (1142 GMT), Moon Waxing Quarter  
Monday, Aug. 31 (10 GMT), Moon at Apogee

Sept. 1, 3



### 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

Friday, Sept. 4 (1603 GMT), Moon Full  
Sunday, Sept. 6 (17 GMT), Mercury Stationary

Sept. 8, 10



### 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

Saturday, Sept. 12 (0216 GMT), Moon Waning Quarter  
Sunday, Sept. 13 (16 GMT) Mars 1.0° S of Moon  
Wednesday, Sept. 16 (07 GMT), Moon at Perigee  
Monday, Sept. 22 (1545 GMT), Autumnal Equinox

Sept. 15, 17



### 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 9/24

Friday, Sept. 18 (1844 GMT), Moon New  
Tuesday, Sept. 22 (2118 GMT), Autumnal Equinox  
Sunday, Sept. 20 (10 GMT), Mercury inferior conjunction  
Sunday, Sept. 20 (12 GMT), Venus 0.5° N of Regulus

Sept. 22, 24



### 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 9/24  
Evans §§2.10, 2.12, 2.14 in notebook

Saturday, Sept. 26 (0450 GMT), Moon Waxing Quarter  
Monday, Sept. 28 (03 GMT), Moon at Apogee  
Monday, Sept. 28 (18 GMT), Mercury Stationary

Sept. 29, Oct. 1



### 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 10/8

Sunday, Oct. 4 (0610 GMT), Moon Full  
Tuesday, Oct. 6 (3 GMT), Mercury at Greatest West Elongation (18°)

Oct. 6, 8









### Applications of Spherics (cont'd)

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

**Assignments:** Submit finished sundial 10/15  
Evans: §§3.6, 3.8 in notebook

Sunday, Oct. 11 (0856 GMT), Moon Waning Quarter  
Monday, Oct. 12 (01 GMT) Mars 1.1° N of Moon  
Tuesday, Oct. 13 (12 GMT), Moon at Perigee

Oct. 13, 15		<p><i>Tuesday, Oct. 13 (10 GMT), Venus 0.5° S of Saturn</i></p> <p><b>Calendars and Time Reconciling</b></p> <p><i>Prepare:</i> Evans: Chapter §§4.1-4.6; Duncan: Chaps. 12 &amp; 13</p> <p><i>Assignments:</i> Evans: §§4.2, 4.4 in notebook</p> <p>Culture paper due 10/22</p>
Oct. 20, 22		<p><i>Sunday, Oct. 18 (0533 GMT), Moon New</i></p> <p><b>Calendars and Time Reconciling (cont'd)</b></p> <p><i>Prepare:</i> Evans: Chapter §§4.7-4.12; Duncan: Chaps. 14 &amp; 15</p> <p><i>Assignments:</i> Evans: §§4.6, 4.8, 4.12 in notebook</p> <p>Submit finished astrolabe with your plate 10/29</p>
Oct. 27, 29		<p><i>Monday, Oct. 26 (0042 GMT), Moon Waxing Quarter</i></p> <p><i>Sunday, Oct. 25 (22 GMT), Moon at Apogee</i></p> <p><b>Calendars and Time Reconciling (cont'd)</b></p> <p><b>MID-TERM EXAM</b></p>
Nov. 3, 5		<p><i>Saturday, Nov. 7 (07 GMT), Moon at Perigee</i></p> <p><i>Monday, Nov. 2 (1914 GMT), Moon Full</i></p> <p><i>Thursday, Nov. 5 (08 GMT), Mercury superior conjunction</i></p> <p><b>Solar Theory</b></p> <p><i>Prepare:</i> Evans: Chapter §§5.1-5.6</p> <p>Ptolemy: Extracts from the <i>Almagest</i></p> <p><i>Assignments:</i> Evans: §§5.4, 5.6 in notebook</p>
Nov. 10, 12		<p><i>Thursday, Nov. ?? (21 GMT), Mercury at Greatest W Elongation</i></p> <p><i>Monday, Nov. 9 (1556 GMT), Moon Waning Quarter</i></p> <p><b>Solar Theory (cont'd)</b></p> <p><i>Prepare:</i> Evans: Chapter §§5.7-5.10</p> <p><i>Assignments:</i> Evans: §§5.8, 5.10 in notebook</p>
Nov. 17, 19		<p><i>Monday, Nov. 16 (1914 GMT), Moon New</i></p> <p><b>The Fixed Stars</b></p> <p><i>Prepare:</i> Evans: Chapter §§6.1-6.10</p> <p><i>Observation:</i> Evans §6.3 in notebook</p> <p><i>Assignments:</i> Evans: §§6.5, 6.7 in notebook</p>
<p><i>Tuesday, Nov. 24 (2139 GMT), Moon Waxing Quarter</i></p> <p><i>Sunday, Nov. 22 (19 GMT), Moon at Apogee</i></p> <p>----- <b>THANKSGIVING VACATION</b> -----</p>		
Nov. 24, Dec. 2, 4		<p><i>Tuesday, Dec. 2 (0710 GMT), Moon Full</i></p> <p><i>Thursday, Dec. 4 (14 GMT), Moon at Perigee</i></p> <p><b>Planetary Theory</b></p> <p><i>Prepare:</i> Evans: Chapter §§7.1-7.14</p> <p><i>Observation:</i> Evans §7.3 in notebook</p> <p><i>Assignments:</i> Evans: §§7.5, 7.8, 7.14 in notebook</p> <p>Calendar paper due 12/4</p>
Dec. 9		<p><i>Tuesday, Dec. 9 (0013 GMT), Moon Waning Quarter</i></p> <p><b>Planetary Theory (cont'd)</b></p> <p><i>Prepare:</i> Evans: Chapter §§7.15-7.22</p> <p><i>Assignments:</i> Evans: §§7.16, 7.18, 7.22 in notebook</p>
Dec. 15, 8:00 am		<p><i>Wednesday, Dec. 16 (1202 GMT), Moon New</i></p> <p><i>Friday, Dec. 18 (09 GMT), Mercury at Greatest East Elongation (30°)</i></p> <p><b>FINAL EXAM (Tuesday)</b></p> <p><i>Sunday, Dec. 20 (14 GMT), Moon at Apogee</i></p> <p><i>Monday, Dec. 21 (1747 GMT), Winter Solstice</i></p> <p><i>Monday, Dec. 21 (15 GMT), Mars Stationary</i></p> <p><i>Thursday, Dec. 24 (1736 GMT), Moon Waxing Quarter</i></p> <p><i>Sunday, Jan. 3 (19 GMT), Earth at Perihelion</i></p>