

## ☉♁♂ Preliminary Course Syllabus ♃♄♅

		<i>Wednesday, Aug. 28 (10 UT) Moon Waning Quarter</i> <i>Saturday, Aug. 31: (00 UT) Moon at Apogee; (17 UT) Jupiter 4° N of Moon</i>
Aug. 27, 29	♈	<b>Birth of Astronomy/Getting Started</b> <i>Prepare:</i> Evans: Chapter §§1.1-1.8 Duncan: Introductions and Chapter 1 <i>Observations:</i> Evans §§1.3, 1.7 in notebook <i>Assignments:</i> Evans §1.5 in notebook, timelines Make/use a shadow table (see §§1.5, 1.13) before, on, & after the equinox
		<i>Monday, Sept. 2 (10 UT) Mars 6° N of Moon</i> <i>Friday, Sept. 5: (12 UT) Moon New; (13 UT) Venus 1.8° N of Spica</i>
Sept. 3, 5	♉	<b>Birth of Astronomy (cont'd)</b> <i>Prepare:</i> Evans: Chapter §§1.9-1.18; Duncan: Chapt. 2 & 3 Zodiacal constellations <i>Observations:</i> Evans §§1.11, 1.16 in notebook <i>Assignments:</i> Evans §§1.13, 1.15, 1.18 in notebook Choose culture/calendar of interest
		<i>Sunday, Sept. 8: (15 UT) Spica 0.8° S of Moon; (21 UT) Venus 0.4° N of Moon</i> <i>Monday, Sept. 9 (17 UT) Saturn 2° N of Moon; Tuesday, Sept. 10 (13 UT) Mercury Superior Conjunction</i> <i>Thursday, Sept. 12 (17 UT) Moon Waxing Quarter</i>
Sept. 10, 12	♊	<b>Celestial Sphere</b> <i>Prepare:</i> Evans: Chapter §§2.1-2.8; Duncan: Chapt. 4 & 5 Aristotle: extracts from <i>On the Heavens</i> <i>Observation:</i> Evans §2.8 in notebook <i>Assignments:</i> Evans §§2.3, 2.7 in notebook Culture/calendar paper proposal written, corrected & critiqued, due 9/17
		<i>Sunday, Sept. 15 (17 UT) Moon at Perigee</i> <i>Thursday, Sept. 19 (11 UT) Moon Full</i> <i>Friday, Sept. 20 (00 UT) Venus 4° S of Saturn</i>
Sept. 17, 19	♋	<b>Celestial Sphere (cont'd)</b> <i>Prepare:</i> Evans: Chapter §§2.9-2.17; Duncan: Chapt. 6 & 7 <i>Observation:</i> Equinox; Evans §2.17 in notebook <i>Assignments:</i> Formal write-up of §1.18 due 9/24 Evans §§2.10, 2.12, 2.14 in notebook
		<i>Sunday, Sept. 22 (2044 UT) Autumnal Equinox</i> <i>Tuesday, Sept. 24 (19 UT) Mercury 0.8° N of Spica</i> <i>Friday, Sept. 27: (04 UT) Moon Waning Quarter; (18 UT) Moon at Apogee</i> <i>Saturday, Sept. 28 (09 UT) Jupiter 5° N of Moon</i>
Sept. 24, 26	♌	<b>Applications of Spherics</b> <i>Prepare:</i> Evans: Chapter §§3.1-3.4; Duncan: Chapt. 8 & 9 Aratus: <i>Phenomena</i> <i>Assignments:</i> Evans: §§3.3-3.4 in notebook Notebook check: notebooks due 10/3
		<i>Tuesday, Oct. 1 (06 UT) Mars 7° N of Moon</i> <i>Saturday, Oct. 5 (01 UT) Moon New</i>
Oct. 1, 3	♍	<b>Applications of Spherics (cont'd)</b> <i>Prepare:</i> Evans: Chapter §§3.5-3.8; Duncan: Chapt. 10 & 11 Janus astrolabe instructions <i>Assignments:</i> Submit finished sundial 10/12 Evans: §§3.6, 3.8 in notebook
		<i>Sunday, Oct. 6 (22 UT) Mercury 3° S of Moon; Monday, Oct. 7 (04 UT) Saturn 1.9° N of Moon</i> <i>Tuesday, Oct. 8 (12 UT) Venus 5° S of Moon; Monday, Oct. 9 (10 UT) Mercury at greatest ecliptic longitude East (25°)</i> <i>Thursday, Oct. 10: Mercury 5° S of Saturn; (23 UT) Moon at Perigee; Friday, Oct. 11 (23 UT) Moon Waxing Quarter</i>

- Oct. 8, 10  
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Calendars and Time Reconciling  
*Prepare:* Evans: Chapter §§4.1-4.6; Duncan: Chapt. 12 & 13  
*Assignments:* Evans: §§4.2, 4.4 in notebook  
Culture paper due 10/17  
*Monday, Oct. 14 (22 UT) Mars 1.0° N of Regulus*  
*Wednesday, Oct. 16 (16 UT) Venus 1.6° N of Antares*  
*Saturday, Oct. 19: (00 UT) Moon Full, Penumbral Lunar Eclipse*
- Oct. 15, 17  
♉  
Calendars and Time Reconciling (cont'd)  
*Prepare:* Evans: Chapter §§4.7-4.12; Duncan: Chapt. 14 & 15  
*Assignments:* Evans: §§4.6, 4.8, 4.12 in notebook  
Submit finished astrolabe with your plate 10/22  
*Monday, Oct. 21 (15 UT) Mercury stationary*  
*Friday, Oct. 25: (14 UT) Moon at Apogee; (22 UT) Jupiter 5° N of Moon*
- Oct. 22, 24  
MID-TERM EXAM  
*Sunday, Oct. 27 (00 UT) Moon Waning Quarter*  
*Wednesday, Oct. 30 (01 UT) Mars 6° N of Moon*  
*Friday, Nov. 1: (08) Venus at greatest ecliptic longitude East (47°); (20 UT) Mercury in inferior conjunction*  
*Saturday, Nov. 2 ((07 UT) Spica 0.8° S of Moon*
- Oct. 29, 31  
♊  
Solar Theory  
*Prepare:* Evans: Chapter §§5.1-5.6  
Ptolemy: Extracts from the *Almagest*  
*Assignments:* Evans: §§5.4, 5.6 in notebook  
*Sunday, Nov. 3: (13 UT) Moon New: Total Solar Eclipse (partial here)*  
*Friday, Nov. 6: (09 UT) Moon at Perigee; (12 UT) Saturn conjunction*  
*Thursday, Nov. 7: (01 UT) Venus 8° S of Moon; (07 UT) Jupiter stationary*
- Nov. 5, 7  
♋  
Solar Theory (cont'd)  
*Prepare:* Evans: Chapter §§5.7-5.10  
*Assignments:* Evans: §§5.8, 5.10 in notebook  
*Sunday, Nov. 10: (06 UT) Moon Waxing Quarter; (14 UT) Mercury stationary*
- Nov. 12, 14  
♌  
The Fixed Stars  
*Prepare:* Evans: Chapter §§6.1-6.10  
*Observation:* Evans §6.3 in notebook  
*Assignments:* Evans: §§6.5, 6.7 in notebook  
*Sunday, Nov. 17 (15 UT) Moon Full*  
*Monday, Nov. 18 (03 UT) Mercury at greatest ecliptic longitude West (19°)*  
*Friday, Nov. 22: (05 UT) Jupiter 5° N of Moon; (10 UT) Moon at Apogee*  
----- **THANKSGIVING VACATION** -----  
*Sunday, Nov. 25 (19 UT) Moon Waning Quarter*  
*Monday, Nov. 26: (04 UT) Mercury 0.3° S of Saturn; (23 UT) Mercury Stationary*  
*Tuesday, Nov. 27 (16 UT) Mars 6° N of Moon*  
*Friday, Nov. 29 (17 UT) Spica 0.9° S of Moon*
- Nov. 26, 28  
♍  
Planetary Theory  
*Prepare:* Evans: Chapter §§7.1-7.14  
*Observation:* Evans §7.3 in notebook  
*Assignments:* Evans: §§7.5, 7.8, 7.14 in notebook  
Calendar paper due 12/3  
*Sunday, Dec. 1 (10 UT) Saturn 1.3° N of Moon*  
*Tuesday, Dec. 3 (00 UT) Moon New*  
*Wednesday, Nov. 4 (10 UT) Moon at Perigee*  
*Saturday, Dec. 21 (1711 UT) Winter Solstice*
- Dec. 3  
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Planetary Theory (cont'd)  
*Prepare:* Evans: Chapter §§7.15-7.22  
*Assignments:* Evans: §§7.16, 7.18, 7.22 in notebook
- Dec. 13, 7:30 am  
FINAL EXAM (Friday)