

☉☉☉ Preliminary Course Syllabus ☽☽☽

Friday, Aug. 31 (1358 UT) Moon Full

Aug. 28, 30

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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

Saturday, Sept. 8 (0 UT) Aldebaran 4.5° S of Moon; (11 UT) Jupiter 0.6° N of Moon/Occ'n; (1315 UT) Moon Waning Quarter

Sept. 4, 6

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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

Monday, Sept. 10 (13 UT) Mercury Superior Conjunction

Wednesday, Sept. 12 (15 UT) Venus 3.6° N of Moon

Friday, Sept. 14 (09 UT) Regulus 5.5° N of Moon

Sept. 11, 13

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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 9/18

Sunday, Sept. 16 (0211 UT) Moon New; (11 UT) Mercury 5.5° N of Moon

Tuesday, Sept. 18 (04 UT) Spica 0.8° N of Moon; (11 UT) Saturn 4.8° N of Moon

Wednesday, Sept. 19 (20 UT) Mars 0.2° N of Moon

Friday, Sept. 21 (09 UT) Antares 5.6° S of Moon

Saturday, Sept. 22 (14 UT) Autumnal Equinox; (19 UT) Moon Waxing Quarter

Sept. 18, 20

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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 9/25
Evans §§2.10, 2.12, 2.14 in notebook

Sept. 25, 27

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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 10/4

Sunday, Sept. 30 (0319 UT) Moon Full

Wednesday, Oct. 1 (12 UT) Mercury 1.6° N of Spica

Wednesday, Oct. 3 (07 UT) Venus 0.1° S of Regulus

Thursday, Oct. 4 (13 UT) Jupiter Stationary; (23 UT) Moon at Apogee

Friday, Oct. 5 (08 UT) Aldebaran 4.3° S of Moon; (10 UT) Mercury 3.2° S of Saturn; (21 UT) Jupiter 0.9° N of Moon/Occ'n

Oct. 2, 4

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Applications of Spherics (cont'd)

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

Assignments: Submit finished sundial 10/13
Evans: §§3.6, 3.8 in notebook

Monday, Oct. 8 (0733 UT) Moon Waning Quarter

Thursday, Oct. 11 (19 UT) Regulus 5.6° N of Moon

Friday, Oct. 12 (14 UT) Venus 5.9° N of Moon

Oct. 9, 11	Calendars and Time Reconciling
Ω	<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 10/18 <i>Monday, Oct. 15 (1202 UT) Moon New; (14 UT) Spica 0.7° N of Moon/Occultation</i> <i>Tuesday, Oct. 16 (02 UT) Saturn 4.5° N of Moon</i> <i>Wednesday, Oct. 17 (02 UT) Mercury 1.2° S of Moon</i> <i>Thursday, Oct. 18 (13 UT) Mars 1.9° S of Moon; (16 UT) Antares 5.7° S of Moon</i>
Oct. 16, 18	Calendars and Time Reconciling (cont'd)
$\mathfrak{M}$	<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 10/23 <i>Sunday, Oct. 21 (00 UT) Mars 3.6° N of Antares</i> <i>Monday, Oct. 22 (0332 UT) Moon Waning Quarter</i> <i>Thursday, Oct. 25: (08 UT) Saturn at conjunction</i> <i>Friday, 26 Oct. (15 UT) Mercury at greatest ecliptic longitude east (24°)</i>
Oct. 23, 25	Calendars and Time Reconciling (cont'd)
	MID-TERM EXAM
	<i>Monday, Oct. 29 (1949 UT) Moon Full</i> <i>Thursday, Nov. 1 (14 UT) Aldebaran 4.3° S of Moon</i> <i>Friday, Nov. 2 (01 UT) Jupiter 0.8° N of Moon/Occultation</i>
Oct. 30, Nov. 1	Solar Theory
$\nearrow$	<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>Wednesday, Nov. 7: (0036 UT) Moon Waning Quarter; (00 UT) Mercury stationary</i> <i>Thursday, 8 Nov. (04 UT) Regulus 5.7° N of Moon</i>
Nov. 6, 8	Solar Theory (cont'd)
$\bowtie$	<i>Prepare:</i> Evans: Chapter §§5.7-5.10 <i>Assignments:</i> Evans: §§5.8, 5.10 in notebook <i>Sunday, Nov. 11 (14 UT) Venus 5.0° N of Moon</i> <i>Monday Nov. 12 (01 UT) Spica 0.7° N of Moon/Occ'n; (18 UT) Saturn 4.1° N of Moon</i> <i>Tuesday, Nov. 13: (2208 UT) Moon New/Eclipse</i> <i>Wednesday, Nov. 14 (10 UT) Mercury 0.9° S of Moon/Occ'n; Moon at perigee</i> <i>Friday Nov. 16 (09 UT) Mars 3.9° S of Moon</i> <i>Saturday, Nov. 17 (04 UT) Venus 3.8° N of Spica; (16 UT) Mercury inferior conjunction</i>
Nov. 13, 15	The Fixed Stars
$\mathfrak{W}$	<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>Tuesday, Nov. 20 (1431 UT) Moon Waxing Quarter</i>
	----- THANKSGIVING VACATION -----
	<i>Monday, Nov. 26 (23 UT) Mercury Stationary</i> <i>Tuesday, Nov. 27 (01 UT) Venus 0.5° S of Saturn</i> <i>Wednesday, Nov. 28 (1446 UT) Moon Full/Eclipse; (21 UT) Aldebaran 4.2° S of Moon</i> <i>Thursday, Nov. 29 (01 UT) Jupiter 0.6° N of Moon/Occultation</i>
Nov. 27, 29	Planetary Theory
$\mathfrak{H}$	<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 12/4 <i>Monday, Nov. 3 (01 UT) Jupiter at opposition</i> <i>Wednesday, Dec. 5: (06 UT) Mercury at greatest ecliptic longitude west (21°); (11 UT) Regulus 5.7° N of Moon</i> <i>Thursday, Dec. 6 (1531 UT) Moon Waning Quarter</i>
Dec. 4	Planetary Theory (cont'd)
$\text{♀} \text{♀} \text{♂} 2 \text{♂}$	<i>Prepare:</i> Evans: Chapter §§7.15-7.22 <i>Assignments:</i> Evans: §§7.16, 7.18, 7.22 in notebook
Dec. 11, 1:30 pm	FINAL EXAM (Tuesday)