

ASTRONOMY 14 – SPRING 2017

GENERAL SCHEDULE OF ACTIVITIES

WEEK #	LAB MEETING DAYS	TOPICS AND LAB EXERCISES	TEXTBOOK READING	FIELD ACTIVITY	MOON PHASE
1	1/24 1/26	Introduction and enrollment check. Overview of course and equipment to be used (telescopes, cameras, film, accessories, CCD's and software). Measuring Angles in the Sky Lab –Using the Sky I-A		—	New
2	1/31 2/2	Telescope set-up and take down, Tel-Rad, eyepieces and focusing. Telescopes, parameters and definitions. Lab – Celestial Tools I-B (parts I and II) Or Lab- Essentials of the Telescope I-E	Ch. 1	Telescope use and Sky Tour <i>Pilot Hill/Rocklin</i>	1st Qtr
3	2/7 2/9	Cameras, lenses, film, terminology Astrophotography documentation (the green book). Lab – Intro to digital astrophotography II-B (parts I and II) Or Lab – Celestial Tools I-B (part III) Lab- Essentials of the Telescope I-E OR Lab – The Workings of a Telescope I-D (parts I and II)	Ch. 4 (pp. 62-82)	Sky Tour/Star Trails/ Tripod Wide Field/Lunar <i>Pilot Hill</i>	Full
4	2/14 2/16 Friday Holiday	Piggyback imaging and more Telescope parameters Lab- Essentials of the Telescope I-E Lab – Celestial Tools (part III) OR Lab – Afocal/prime focus photography (terrestrial and solar) II-C OR Lab – FOV I-C (1 or 2 parts) OR Lab – The Workings of a Telescope I-D (parts I and II)	Ch. 4 (pp. 62-82) Supplemental handout(5)	Telescope use and Sky Tour/Lunar (if needed) <i>Pilot Hill</i>	Wan. Gib.
5	2/21 2/23 Monday Holiday	Tracking, polar alignment, barn door tracker Prime focus photography (planets, moon and sun) Lab – FOV I-C and Quiz! OR Lab – Afocal/prime focus photography (terrestrial and solar) II-C	Supplemental handout(9)	Wide field digital/ Piggyback <i>Blue Canyon</i>	Wan. Cres.
6	2/28 3/2	Lab – Afocal/Prime focus photography (terrestrial and solar) II-C OR CCD Imagery II-D OR Lab – Using a Robotic Telescope II-F		Prime Focus <i>Blue Canyon</i>	Wax. Cres.
7	3/7 3/9	Mid-Term Plus perhaps Lab – Using a Robotic Telescope II-F		Digital / afocal photography/lunar or CCD <i>Blue Canyon</i>	Wax. Gib.

GENERAL SCHEDULE OF ACTIVITIES (continued)

WEEK #	LAB MEETING DAYS	TOPICS AND LAB EXERCISES	TEXTBOOK READING	FIELD ACTIVITY	MOON PHASE
8	3/14 3/16	CCD imaging, focus, calibration (bias, darks, flats). Imaging session planning, data management. Lab – Using a Robotic Telescope II-F Lab – CCD Imagery II-D Take Pictures with Robotic Telescope?	Ch. 3 (pp 36-53) Ch. 5 (pp 94-104; pp. 117-120) Supplemental handout(11)	Astrophotography / CCD imaging <i>Pliot Hill/Blue Canyon/NCC</i>	Wan. Gib.
9	3/21 3/23	Scanning pictures and Basic Image Processing w/ PhotoShop Lab - Image processing III-A (Photoshop) Lab – TheSky Review or Lab – Afocal photography (solar) II-C Take Pictures with Robotic Telescope?	Ch. 4	Astrophotography / CCD imaging <i>PILOT HILL/Blue Canyon/NCC</i>	Wan. Cres.
10	3/28 3/30	MaxIm DL / CCD imaging . Lab – MaxIm DL III-B	Ch. 2,3 Supplemental (12)	Astrophotography / CCD imaging <i>PILOT HILL/Blue Canyon</i>	Wax. Cres.
11	4/4 4/6	Work on Images.	Ch. 2,3,4 Supplemental (13,14)	Astrophotography / CCD imaging <i>PILOT HILL/Blue Canyon</i>	Wax. Gib.
		SPRING BREAK			
12	4/18 4/20	Work on Images.	-		Wan. Gib.
13	4/25 4/26	Final – Display/Turn-in Portfolio	-		3 rd Qtr.
14	5/2 5/4	Pick up Final and Portfolio	-		New Moon
15	5/9 5/11	Make-up	-		1 st Qtr.
16	5/16 5/18	Make-up	-		Full