

AST 114 - Lab Schedule (Spring 2017)

This schedule is TENTATIVE after the second week of classes.

The schedule has changed, and may change weekly! (Last updated 01/13/2017)

You will meet in a DIFFERENT ROOM EACH WEEK, see your section schedule below.

Please scroll down to your appropriate section number or click on the section number below. (Your TA name and the correct room-numbers for each Mo-Th section during the first week of Labs [Jan. 17-Jan. 23 only] are given between parentheses):

Mo 7:30pm: [12532](#) (TA: M. Neric; Rm 450) Mo 7:30pm: [12533](#) (TA: S. Stawinski; Rm 456)

Mo 8:30pm: [12534](#) (TA: R. Holton; Rm 460) Mo 8:30pm: [12535](#) (TA: S. Harish; Rm 461)

Tu 7:30pm: [12536](#) (TA: V. Jones; Rm 450) Tu 7:30pm: [12537](#) (TA: D. Kim; Rm 456)

Tu 8:30pm: [12538](#) (TA: R. Holton; Rm 460) Tu 8:30pm: [12539](#) (TA: S. Stawinski; Rm 461)

We 7:30pm: [12540](#) (TA: M. Neric; Rm 450) We 7:30pm: [12541](#) (TA: D. Kim; Rm 456)

We 8:30pm: [12542](#) (TA: R. Jackson; Rm 460) We 8:30pm: [12543](#) (TA: S. Harish; Rm 461)

Th 7:30pm: [13035](#) (TA: M. Neric; Rm 450) Th 7:30pm: [13036](#) (TA: C. White; Rm 456)

Th 8:30pm: [13368](#) (TA: R. Jackson; Rm 461) Th 8:30pm: [13369](#) (TA: D. Kim; Rm 465)

Th 7:30pm: [16972](#) (TA: S. Harish; Rm 460)

Color Key to Labs:

Naked Eye Observing Labs **Telescope Observing Labs** **Observatory Data Labs** **Computer/Instrument Labs**

Print your Prelab+Lab BEFORE you go to class, clicking on the links below, or on the Lab Scripts button. (For the first week of the Labs only, the TA's will provide this printout for you).

ROOM ASSIGNMENTS: see Tables below. Except for the first week of Labs, these are subject to change AT ANY TIME WITHOUT NOTICE, so check this URL before going to class every week. The following rules of thumb ALWAYS apply:

(1) Follow your TA instructions as to schedule changes. The Labs planned below for any given date may change due to weather, etc. Even though a different Lab may be done on a given night, it will still be held in the room indicated in the Table below FOR THAT DATE AND SECTION, unless your TA says otherwise. Please watch for Email instructions from your TA, or signs on the door indicating any last-minute room changes. Your Lab will ALWAYS be held in one of the six possible rooms indicated below, so you can't get lost.

(2) ALL sections ALWAYS meet in either one of the rooms **PSH-450, 456, 457, 460, 461, or 465**. Unless indicated otherwise below, rooms **PSH 450, 456, 457, and 461** can be used for the **Computer/Instrument Labs**. Note that the Space Exploration Lab SES 123/124 will also use PSH457 and the telescope platform this semester during the nights of MTW 2/6-2/8, 2/20-2/22, 4/3-4/5. In case of an unforeseen room schedule conflict, sections that need a computer room that night will use PSH 450, 456, 461, or 457 (when 457 is available), and sections that do NOT need a computer room will use PSH 460 or 465. The TAs can outfit PSH 460 or 465 with laptops for the night, if needed. Raise and lower the computers in PSH-450 CAREFULLY after opening the lids in the desks. Do not leave liquids, food, sand or dirt near any of the computers. For some Labs (like the

Hubble Expansion Lab), two versions are available, one of which can be used without a computer room.

(3a) The observing platform for the sections listed above is the one on the PSH-5th floor, east of the double doors next to room PSH-563, which is one floor up from the PSH-4** rooms (use the stairwell in the middle of the PSH-4** corridor for quickest access to the observing platform, or use the elevators).

(3b) The lead TAs will use the PSF-wing observing platform on the nights that the PSH-wing observing platform gets too crowded. The PSF-wing is the building due south of PSH. To get to the PSF-7th floor from the lobby of PSF, either take (a) the easternmost elevator up to the PSF-7th floor --- it's the only elevator that goes there directly; (b) one of the two other elevators up to the PSF-6th floor, exit, and then press the up-button to take the easternmost elevator up to PSF-7th; or (c) take the easternmost stairwell up to PSF-7th. In emergencies, only take the stairwell down! It should be lit at night, but please be careful in the dark!

(4a) Be careful in the dark and use your flashlights! NEVER GO BEYOND THE ROOF WALLS OR FENCES!! Winter nights (Nov.-Feb.) in Arizona can be cold: Bring warm clothes!

(4b) If you get locked out in a PSH stairwell, walk back to the PSH front doors in the breezeway, and take the elevators back up to the 4th or 5th floor. The janitors and campus security have been instructed about leaving the PSH front doors unlocked till 10:30 at night.

(5) What to do in case of looming thunderstorms? Do NOT use the outside observing platform if thunderstorms or lightning are dangerously close. You will know this is the case if either: (1) you can SEE lightning all around you; or (2) you can HEAR the thunder; or (3) you can see thunderstorms/lightning higher than 30 degrees anywhere above the horizon; or (4) there is less than 15 seconds between a lightning bolt and its thunder (they are then within 3 miles); or (5) airplanes no longer take their normal East-west path into/from Sky Harbor. When in doubt, do not use the observing platform.

The URL Schedule below is kept up-to-date, but here's a PDF of the schedule as of Jan. 2017: [AST114Spring17Sched.pdf](#)

Print your Prelab+Lab BEFORE you go to class, clicking on the links below, or on the Lab Scripts button.

SLN 12532 - Monday 7:30 - 10:00 pm - TA Marko Neric

DAY	LAB TYPE	ROOM
January 09	First week of classes - no Labs!	PSH 450
January 16	MLK Day Holiday - no Labs!	PSH 450
January 23	Math Refresher Lab	PSH 450
January 30	Intro to the Night Sky	PSH 450
February 06	Intro to Telescopes	PSH 450
February 13	Variable Stars	PSH 450
February 20	Galaxy Morphology	PSH 450
February 27	Coordinate Systems	PSH 450
March 06	Spring Break - no Labs!	PSH 450
March 13	Magnitudes & Stellar Brightness	PSH 450
March 20	Hubble Expansion Lab	PSH 450
March 27	Color Magnitude Diagrams	PSH 450
April 03	General Observing	PSH 450
April 10	Spectroscopy Lab	PSH 450
April 17	Open Clusters	PSH 450
April 24	Parallax and Proper Motion	PSH 450
May 01	General Observing/Backup (TBD)	PSH 450

SLN 12533 - Monday 7:30 - 10:00 pm - TA Stephanie Stawinski

DAY	LAB TYPE	ROOM
January 09	First week of classes - no Labs!	PSH 456
January 16	MLK Day Holiday - no Labs!	PSH 456
January 23	Math Refresher Lab	PSH 456
January 30	Variable Stars	PSH 456
February 06	Galaxy Morphology	PSH 456
February 13	Intro to the Night Sky	PSH 456
February 20	Intro to Telescopes	PSH 456
February 27	Hubble Expansion Lab	PSH 456
March 06	Spring Break - no Labs!	PSH 456
March 13	Color Magnitude Diagrams	PSH 456
March 20	Coordinate Systems	PSH 456
March 27	Magnitudes & Stellar Brightness	PSH 456
April 03	Open Clusters	PSH 456
April 10	Parallax and Proper Motion	PSH 456
April 17	Spectroscopy Lab	PSH 456
April 24	General Observing	PSH 456
May 01	General Observing/Backup (TBD)	PSH 456

SLN 12534 - Monday 8:30 - 11:00 pm - TA Rhonda Holton

DAY	LAB TYPE	ROOM
January 09	First week of classes - no Labs!	PSH 460
January 16	MLK Day Holiday - no Labs!	PSH 460
January 23	Math Refresher Lab	PSH 460
January 30	Variable Stars	PSH 460
February 06	Galaxy Morphology	PSH 461
February 13	Intro to the Night Sky	PSH 460
February 20	Intro to Telescopes	PSH 460
February 27	Hubble Expansion Lab	PSH 461
March 06	Spring Break - no Labs!	PSH 460
March 13	Color Magnitude Diagrams	PSH 461
March 20	Coordinate Systems	PSH 460
March 27	Magnitudes & Stellar Brightness	PSH 460
April 03	Open Clusters	PSH 460
April 10	Parallax and Proper Motion	PSH 461
April 17	Spectroscopy Lab	PSH 460
April 24	General Observing	PSH 460
May 01	General Observing/Backup (TBD)	PSH 460

SLN 12535 - Monday 8:30 - 11:00 pm - TA Santosh Harish

DAY	LAB TYPE	ROOM
January 09	First week of classes - no Labs!	PSH 461
January 16	MLK Day Holiday - no Labs!	PSH 461
January 23	Math Refresher Lab	PSH 461
January 30	Intro to the Night Sky	PSH 461
February 06	Intro to Telescopes	PSH 460
February 13	Variable Stars	PSH 461
February 20	Galaxy Morphology	PSH 461
February 27	Coordinate Systems	PSH 460
March 06	Spring Break - no Labs!	PSH 461
March 13	Magnitudes & Stellar Brightness	PSH 460
March 20	Hubble Expansion Lab	PSH 461
March 27	Color Magnitude Diagrams	PSH 461
April 03	General Observing	PSH 461
April 10	Spectroscopy Lab	PSH 460
April 17	Open Clusters	PSH 461
April 24	Parallax and Proper Motion	PSH 461
May 01	General Observing/Backup (TBD)	PSH 461

SLN 12536 - Tuesday 7:30 - 10:00 pm - TA Victoria Jones

DAY	LAB TYPE	ROOM
January 10	First week of classes - no Labs!	PSH 450
January 17	Math Refresher Lab	PSH 450
January 24	Variable Stars	PSH 450
January 31	Galaxy Morphology	PSH 450
February 07	Intro to the Night Sky	PSH 450
February 14	Intro to Telescopes	PSH 450
February 21	Hubble Expansion Lab	PSH 450
February 28	Color Magnitude Diagrams	PSH 450
March 07	Spring Break - no Labs!	PSH 450
March 14	Coordinate Systems	PSH 450
March 21	Magnitudes & Stellar Brightness	PSH 450
March 28	Open Clusters	PSH 450
April 04	Parallax and Proper Motion	PSH 450
April 11	Spectroscopy Lab	PSH 450
April 18	General Observing	PSH 450
April 25	General Observing/Backup	PSH 450
May 02	No Labs	PSH 450

SLN 12537 - Tuesday 7:30 - 10:00 pm - TA Duho Kim

DAY	LAB TYPE	ROOM
January 10	First week of classes - no Labs!	PSH 456
January 17	Math Refresher Lab	PSH 456
January 24	Intro to the Night Sky	PSH 456
January 31	Intro to Telescopes	PSH 460
February 07	Variable Stars	PSH 456
February 14	Galaxy Morphology	PSH 456
February 21	Coordinate Systems	PSH 460
February 28	Magnitudes & Stellar Brightness	PSH 460
March 07	Spring Break - no Labs!	PSH 456
March 14	Hubble Expansion Lab	PSH 456
March 21	Color Magnitude Diagrams	PSH 456
March 28	General Observing	PSH 460
April 04	Spectroscopy Lab	PSH 456
April 11	Open Clusters	PSH 456
April 18	Parallax and Proper Motion	PSH 456
April 25	General Observing/Backup	PSH 456
May 02	No Labs	PSH 456

SLN 12538 - Tuesday 8:30 - 11:00 pm - TA Rhonda Holton

DAY	LAB TYPE	ROOM
January 10	First week of classes - no Labs!	PSH 460
January 17	Math Refresher Lab	PSH 460
January 24	Variable Stars	PSH 460
January 31	Galaxy Morphology	PSH 456
February 07	Intro to the Night Sky	PSH 460
February 14	Intro to Telescopes	PSH 460
February 21	Hubble Expansion Lab	PSH 456
February 28	Color Magnitude Diagrams	PSH 456
March 07	Spring Break - no Labs!	PSH 460
March 14	Coordinate Systems	PSH 460
March 21	Magnitudes & Stellar Brightness	PSH 460
March 28	Open Clusters	PSH 460
April 04	Parallax and Proper Motion	PSH 456
April 11	Spectroscopy Lab	PSH 460
April 18	General Observing	PSH 460
April 25	General Observing/Backup	PSH 460
May 02	No Labs	PSH 460

SLN 12539 - Tuesday 8:30 - 11:00 pm - TA Stephanie Stawinski

DAY	LAB TYPE	ROOM
January 10	First week of classes - no Labs!	PSH 461
January 17	Math Refresher Lab	PSH 461
January 24	Variable Stars	PSH 461
January 31	Galaxy Morphology	PSH 461
February 07	Intro to the Night Sky	PSH 461
February 14	Intro to Telescopes	PSH 461
February 21	Hubble Expansion Lab	PSH 461
February 28	Color Magnitude Diagrams	PSH 461
March 07	Spring Break - no Labs!	PSH 461
March 14	Coordinate Systems	PSH 461
March 21	Magnitudes & Stellar Brightness	PSH 461
March 28	Open Clusters	PSH 461
April 04	Parallax and Proper Motion	PSH 461
April 11	Spectroscopy Lab	PSH 461
April 18	General Observing	PSH 461
April 25	General Observing/Backup	PSH 461
May 02	No Labs	PSH 461

SLN 12540 - Wednesday 7:30 - 10:00 pm - TA Marko Neric

DAY	LAB TYPE	ROOM
January 11	First week of classes - no Labs!	PSH 450
January 18	Math Refresher Lab	PSH 450
January 25	Intro to the Night Sky	PSH 450
February 01	Intro to Telescopes	PSH 450
February 08	Variable Stars	PSH 450
February 15	Galaxy Morphology	PSH 450
February 22	Coordinate Systems	PSH 450
March 01	Magnitudes & Stellar Brightness	PSH 450
March 08	Spring Break - no Labs!	PSH 450
March 15	Hubble Expansion Lab	PSH 450
March 22	Color Magnitude Diagrams	PSH 450
March 29	General Observing	PSH 450
April 05	Spectroscopy Lab	PSH 450
April 12	Open Clusters	PSH 450
April 19	Parallax and Proper Motion	PSH 450
April 26	General Observing/Backup	PSH 450
May 03	No Labs	PSH 450

SLN 12541 - Wednesday 7:30 - 10:00 pm - TA Duho Kim

DAY	LAB TYPE	ROOM
January 11	First week of classes - no Labs!	PSH 456
January 18	Math Refresher Lab	PSH 456
January 25	Intro to Telescopes	PSH 456
February 01	Intro to the Night Sky	PSH 456
February 08	Variable Stars	PSH 456
February 15	Galaxy Morphology	PSH 456
February 22	Coordinate Systems	PSH 456
March 01	Magnitudes & Stellar Brightness	PSH 456
March 08	Spring Break - no Labs!	PSH 456
March 15	Hubble Expansion Lab	PSH 456
March 22	Color Magnitude Diagrams	PSH 456
March 29	General Observing	PSH 456
April 05	Spectroscopy Lab	PSH 456
April 12	Open Clusters	PSH 456
April 19	Parallax and Proper Motion	PSH 456
April 26	General Observing/Backup	PSH 456
May 03	No Labs	PSH 456

SLN 12542 - Wednesday 8:30 - 11:00 pm - TA Rebecca Jackson

DAY	LAB TYPE	ROOM
January 11	First week of classes - no Labs!	PSH 460
January 18	Math Refresher Lab	PSH 460
January 25	Variable Stars	PSH 460
February 01	Galaxy Morphology	PSH 461
February 08	Intro to the Night Sky	PSH 460
February 15	Intro to Telescopes	PSH 460
February 22	Hubble Expansion Lab	PSH 461
March 01	Color Magnitude Diagrams	PSH 461
March 08	Spring Break - no Labs!	PSH 460
March 15	Coordinate Systems	PSH 460
March 22	Magnitudes & Stellar Brightness	PSH 460
March 29	Open Clusters	PSH 460
April 05	Parallax and Proper Motion	PSH 461
April 12	Spectroscopy Lab	PSH 460
April 19	General Observing	PSH 460
April 26	General Observing/Backup	PSH 460
May 03	No Labs	PSH 460

SLN 12543 - Wednesday 8:30 - 11:00 pm - TA Santosh Harish

DAY	LAB TYPE	ROOM
January 11	First week of classes - no Labs!	PSH 461
January 18	Math Refresher Lab	PSH 461
January 25	Intro to the Night Sky	PSH 461
February 01	Intro to Telescopes	PSH 460
February 08	Variable Stars	PSH 461
February 15	Galaxy Morphology	PSH 461
February 22	Coordinate Systems	PSH 460
March 01	Magnitudes & Stellar Brightness	PSH 460
March 08	Spring Break - no Labs!	PSH 461
March 15	Hubble Expansion Lab	PSH 461
March 22	Color Magnitude Diagrams	PSH 461
March 29	General Observing	PSH 461
April 05	Spectroscopy Lab	PSH 460
April 12	Open Clusters	PSH 461
April 19	Parallax and Proper Motion	PSH 461
April 26	General Observing/Backup	PSH 461
May 03	No Labs	PSH 461

SLN 13035 - Thursday 7:30 - 10:00 pm - TA Marko Neric

DAY	LAB TYPE	ROOM
January 12	First week of classes - no Labs!	PSH 450
January 19	Math Refresher Lab	PSH 450
January 26	Intro to Telescopes	PSH 450
February 02	Intro to the Night Sky	PSH 450
February 09	Variable Stars	PSH 450
February 16	Galaxy Morphology	PSH 450
February 23	Coordinate Systems	PSH 450
March 02	Magnitudes & Stellar Brightness	PSH 450
March 09	Spring Break - no Labs!	PSH 450
March 16	Hubble Expansion Lab	PSH 450
March 23	Color Magnitude Diagrams	PSH 450
March 30	General Observing	PSH 450
April 06	Spectroscopy Lab	PSH 450
April 13	Open Clusters	PSH 450
April 20	Parallax and Proper Motion	PSH 450
April 27	General Observing/Backup	PSH 450
May 04	No Labs	PSH 450

SLN 13036 - Thursday 7:30 - 10:00 pm - TA Cameron White

DAY	LAB TYPE	ROOM
January 12	First week of classes - no Labs!	PSH 456
January 19	Math Refresher Lab	PSH 456
January 26	Variable Stars	PSH 456
February 02	Galaxy Morphology	PSH 456
February 09	Intro to the Night Sky	PSH 456
February 16	Intro to Telescopes	PSH 456
February 23	Hubble Expansion Lab	PSH 456
March 02	Color Magnitude Diagrams	PSH 456
March 09	Spring Break - no Labs!	PSH 456
March 16	Coordinate Systems	PSH 456
March 23	Magnitudes & Stellar Brightness	PSH 456
March 30	Open Clusters	PSH 456
April 06	Parallax and Proper Motion	PSH 456
April 13	Spectroscopy Lab	PSH 456
April 20	General Observing	PSH 456
April 27	General Observing/Backup	PSH 456
May 04	No Labs	PSH 456

SLN 13368 - Thursday 8:30 - 11:00 pm - TA Rebecca Jackson

DAY	LAB TYPE	ROOM
January 12	First week of classes - no Labs!	PSH 461
January 19	Math Refresher Lab	PSH 461
January 26	Variable Stars	PSH 461
February 02	Galaxy Morphology	PSH 461
February 09	Intro to the Night Sky	PSH 461
February 16	Intro to Telescopes	PSH 460
February 23	Hubble Expansion Lab	PSH 461
March 02	Color Magnitude Diagrams	PSH 461
March 09	Spring Break - no Labs!	PSH 461
March 16	Coordinate Systems	PSH 460
March 23	Magnitudes & Stellar Brightness	PSH 460
March 30	Open Clusters	PSH 461
April 06	Parallax and Proper Motion	PSH 461
April 13	Spectroscopy Lab	PSH 461
April 20	General Observing	PSH 460
April 27	General Observing/Backup	PSH 461
May 04	No Labs	PSH 461

SLN 13369 - Thursday 8:30 - 11:00 pm - TA Duho Kim

DAY	LAB TYPE	ROOM
January 12	First week of classes - no Labs!	PSH 465
January 19	Math Refresher Lab	PSH 465
January 26	Intro to the Night Sky	PSH 457
February 02	Intro to Telescopes	PSH 457
February 09	Variable Stars	PSH 457
February 16	Galaxy Morphology	PSH 457
February 23	Coordinate Systems	PSH 457
March 02	Magnitudes & Stellar Brightness	PSH 457
March 09	Spring Break - no Labs!	PSH 457
March 16	Hubble Expansion Lab	PSH 457
March 23	Color Magnitude Diagrams	PSH 457
March 30	General Observing	PSH 457
April 06	Spectroscopy Lab	PSH 457
April 13	Open Clusters	PSH 457
April 20	Parallax and Proper Motion	PSH 457
April 27	General Observing/Backup	PSH 457
May 04	No Labs	PSH 457

SLN 16972 - Thursday 7:30 - 10:00 pm - TA Santosh Harish

DAY	LAB TYPE	ROOM
January 12	First week of classes - no Labs!	PSH 460
January 19	Math Refresher Lab	PSH 460
January 26	Intro to the Night Sky	PSH 460
February 02	Intro to Telescopes	PSH 460
February 09	Variable Stars	PSH 460
February 16	Galaxy Morphology	PSH 461
February 23	Coordinate Systems	PSH 460
March 02	Magnitudes & Stellar Brightness	PSH 460
March 09	Spring Break - no Labs!	PSH 460
March 16	Hubble Expansion Lab	PSH 461
March 23	Color Magnitude Diagrams	PSH 461
March 30	General Observing	PSH 460
April 06	Spectroscopy Lab	PSH 460
April 13	Open Clusters	PSH 460
April 20	Parallax and Proper Motion	PSH 461
April 27	General Observing/Backup	PSH 460
May 04	No Labs	PSH 460

Note that all four nights of the week (MoTuWeTh) hold 12 regular scheduled Lab classes + one Math Refresher Lab during the semester. The last regular nights of Lab classes are Mo-Th Apr. 24-Apr. 27. Scheduled backup dates (Lab Type = Backup) are for in-class make-up work, or if needed to repeat/complete labs that were previously affected by bad weather. They also serve as a backup date this semester for the General Observing or Lunar Observing Labs, which need clear weather. No regular Lab classes are scheduled for the week of finals (Dec. 5-9). Monday May 1 can be used as a last Lab night at the discretion of your TA, since we lost two Mondays due to holidays this semester (MLK Day and Spring Break). If all is well, everyone will be done by May. 1.

Planetarium shows will be given for AST 114, this semester associated with the Coordinate Systems Labs. Your TA's will announce the Planetarium show that you will attend this semester during class time on MTWTh from 7:40-8:30 pm or 8:40-9:10 pm, during the night that the Coordinate Systems Lab is done by your section. Please follow your TA's instructions on the actual Planetarium Show times.

These shows will be held in the Marston Exploration Theater auditorium of ISTB-4. This building is just west of Parking Structure 4, South of the Biodesign Building, and its entrance is on the building's north-side. It's about a 10 min walk from the PSH/PSF. For more information, click on Contacts button or see: <http://sese.asu.edu/planetarium/>

Have a good semester!