

## **PTYS 206**

### **Exploring our Solar System**

Spring 2021

Kuiper Building, room 308

Monday, Wednesday, Friday 10:00-10:50 AM

### **Description of Course**

Our Solar System is filled with an incredible diversity of objects. These include the sun and planets, of course, but also many hundreds of moons -- some with exotic oceans, erupting volcanoes, or dynamic atmospheres. Billions of asteroids and comets inhabit the space between and beyond the planets. Each body is unique, and has followed its own evolutionary history. This class will explore our current understanding of the Solar System and emphasize similarities that unite the different bodies as well as the differences between them. We will develop an understanding of physical processes that occur on these bodies, including tectonics, impact cratering, volcanism, and processes operating in their interiors, oceans, and atmospheres. We will also discuss planets around nearby stars and the potential for life beyond Earth. Throughout the class, we will highlight the leading role that the University of Arizona has played in exploring our Solar System.

**Course prerequisites or co-requisites:** None

### **Instructor and Contact Information**

Dr. Jeff Andrews-Hanna

preferred name: "Jeff"

preferred pronouns: (he, him, his)

Kuiper 438

[jcahanna@lpl.arizona.edu](mailto:jcahanna@lpl.arizona.edu) (preferred mode of contact)

Office hours: Wednesday, 1:00-2:00 PM

*I am also available to meet at other times – please e-mail me to set up a meeting at another time.*

*Teaching assistant:*

Nathan Hadland

[nkhadland@email.arizona.edu](mailto:nkhadland@email.arizona.edu)

office hours: Tuesdays 1:00-2:00 PM

Amanda Stadermann

[acs@lpl.arizona.edu](mailto:acs@lpl.arizona.edu)

office hours: Wednesday 11:00 AM - 12:00 PM

All office hours will be held at: <https://arizona.zoom.us/j/81460089222>

If the TA or professor is not present, please e-mail a reminder.

Web information: This course will use a D2L page:

<https://d2l.arizona.edu/d2l/home/880546>

**Meeting times for remote teaching:** We will be meeting remotely until the University notifies us that in-person meetings may commence. Remote meetings will be held during the regularly scheduled class time (MWF 10:00-10:50 AM) by Zoom for lectures.

**Meeting times and patterns for in-person teaching:** When the COVID-19 situation permits teaching on campus, and the instructor deems it safe and appropriate to do so, we may resume in-person lectures. If that is the case, we will notify you by D2L Announcement and email that we are moving to remote operations. An appropriate and safe plan for resuming in-person instruction will be announced at that time. If this happens:

- **Face coverings are required in our classroom:** Per UArizona's **Administrative Directive**, face coverings that cover the nose, mouth, and chin are required to be worn in all learning spaces at the University of Arizona (e.g., in classrooms, laboratories and studios). Any student who violates this directive will be asked to immediately leave the learning space, and will be allowed to return only when they are wearing a face covering. Subsequent episodes of noncompliance will result in a Student Code of Conduct complaint being filed with the Dean of Students Office, which may result in sanctions being applied. The student will not be able to return to the learning space until the matter is resolved.
- **Physical distancing is required in our classroom:** During our in-person class meetings, we will respect CDC guidelines, including restricted seating to increase physical distancing and appropriately-worn face coverings. Per UArizona's **Administrative Directive**, face coverings that cover the nose, mouth, and chin are required to be worn in all learning spaces at the University of Arizona (e.g., in classrooms, laboratories and studios). Any student who violates this directive will be asked to immediately leave the learning space, and will be allowed to return only when they are wearing a face covering. Subsequent episodes of noncompliance will result in a Student Code of Conduct complaint being filed with the Dean of Students Office, which may result in sanctions being applied. The student will not be able to return to the learning space until the matter is resolved.
  - The Disability Resource Center is available to explore face coverings and accessibility considerations if you believe that your disability or medical condition precludes you from utilizing any face covering or mask option. DRC will explore the range of potential options as well as remote course offerings. Should DRC determine an accommodation to this directive is reasonable, DRC will communicate this accommodation with your instructor.
- **Classroom attendance:**
  - If you feel sick, or may have been in contact with someone who is infectious, stay home. Except for seeking medical care, avoid contact with others and do not travel.
  - Notify your instructors if you will be missing an in person or online course meeting, or you will miss an assignment deadline.
  - Non-attendance for any reason does not guarantee an automatic extension of due date or rescheduling of examinations.
    - Please communicate and coordinate any request directly with your instructor.

- Campus Health is testing for COVID-19. Please call (520) 621-9202 before you visit in person.
- Visit the UArizona COVID-19 page for regular updates.
- **Academic advising:** If you have questions about your academic progress this semester, or your chosen degree program, please note that advisors at the Advising Resource Center can guide you toward university resources to help you succeed.
- **Life challenges:** If you are experiencing unexpected barriers to your success in your courses, please note the Dean of Students Office is a central support resource for all students and may be helpful. The Dean of Students Office can be reached at 520-621-2057 or DOS-deanofstudents@email.arizona.edu.
- **Physical and mental-health challenges:** If you are facing physical or mental health challenges this semester, please note that Campus Health provides quality medical and mental health care. For medical appointments, call (520-621-9202. For After Hours care, call (520) 570-7898. For the Counseling & Psych Services (CAPS) 24/7 hotline, call (520) 621-3334.
- **Exams:** Midterm exams will be held during our regularly scheduled classtime (whether remote or in-person) and must be taken at that time. The final exam will be held during exam week. See below for more information.
- **Class Recordings:**
  - The lectures will be recorded and made available to students. If you do not wish for your name to be visible in the recording, please take appropriate measures in Zoom. Students may also opt to watch the recorded lectures in lieu of attending the live-stream.
  - For lecture recordings, which are used at the discretion of the instructor, students must access content in D2L only. Students may not modify content or re-use content for any purpose other than personal educational reasons. All recordings are subject to government and university regulations. Therefore, students accessing unauthorized recordings or using them in a manner inconsistent with UArizona values and educational policies are subject to suspension or civil action.

### **Course Format and Teaching Methods**

This is primarily a lecture course. Lectures will be supplemented by in-class discussions and activities.

### **Course Objectives**

Students in this class will become acquainted with the properties and histories of their neighbors in the solar system. This course will emphasize not only what we know, but also how we know it. Students will gain a basic understanding of the processes driving planetary evolution. We will also learn about the history of planetary exploration.

### **Expected Learning Outcomes**

General Education Program Outcomes:

- Think Critically
- Communicate Effectively
- Use Information Effectively

### **Absence and Class Participation Policy**

The UA's policy concerning Class Attendance, Participation, and Administrative Drops is available at <http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop>

The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable: <http://policy.arizona.edu/human-resources/religious-accommodation-policy>.

Absences preapproved by the UA Dean of Students (or dean's designee) will be honored. See <http://policy.arizona.edu/employmenthuman-resources/attendance>.

Participating in the course and attending lectures and other course events are vital to the learning process. As such, attendance is required at all lectures and discussion section meetings (either via the livestream or later viewing of the recorded lecture). Absences may affect a student's final course grade. If you anticipate being absent, are unexpectedly absent, or are unable to participate in class online activities, please contact me as soon as possible. To request a disability-related accommodation to this attendance policy, please contact the Disability Resource Center at (520) 621-3268 or [drc-info@email.arizona.edu](mailto:drc-info@email.arizona.edu). If you are experiencing unexpected barriers to your success in your courses, the Dean of Students Office is a central support resource for all students and may be helpful. The Dean of Students Office is located in the Robert L. Nugent Building, room 100, or call 520-621-7057

In exceptional cases, it may be permissible to miss a classroom activity or exam. In such cases, a makeup will be allowed only if you contact the professor in advance (as early as possible) for permission. Excuses after the fact will not be considered.

### **Makeup Policy for Students Who Register Late**

Students who register after the first class meeting may make up missed assignments/quizzes on a timeline set by the professor.

### **Course Communications**

Information pertinent to this course will be conveyed by announcements in class, through messages to your official University of Arizona e-mail address, and by D2L.

### **Required Texts or Readings**

*Introduction to Planetary science: The geological perspective* (Faure and Mensing)

Electronic textbook available for *FREE* through the library:

<https://link-springer-com.ezproxy1.library.arizona.edu/book/10.1007%2F978-1-4020-5544-7>

### **Required or Special Materials**

None.

### **Required Extracurricular Activities**

None. An optional telescopic observing session may be scheduled, conditions permitting.

## **Assignments and Examinations: Schedule/Due Dates**

*Grades will be based upon a combination of in-class and outside-of-class work.*

*In-class work: (does not require attendance in the live-streamed lecture but must be completed on time)*

*Daily comment/question:* In an attempt to maintain student engagement in the on-line format, each student is required to submit one point they found interesting and one question for each lecture. Anything relevant to the lecture will do. A few questions will be selected and answered by the professor in the next class period. Comment/questions must be submitted to D2L within 24 hours of the end of lecture. This is a pass/fail item and counts toward class participation grade. The four lowest “grades” will be dropped.

*In-class activities:* We have a number of in-class activities and discussions over the course of the semester. These are unannounced and participation is mandatory. Students attending the live-streamed lecture will typically complete these in pairs/groups in breakout rooms. Students watching the recorded lecture asynchronously will have the same time in which to do the activity, but will do the activities individually (unless otherwise instructed). These will not require any time outside of the normal lecture period. Completed activities must be submitted to D2L within 24 hours of the end of lecture. This counts toward class participation grade.

*Exams:* This course will include two mid-term exams and one final exam. The exams will cover all aspects of the course, including in-class work and homework. Exams must be taken during the normal class period. Exams may include multiple choice, fill in the blank, and short answer questions. The dates of the exams will be posted on the class web page and announced in class. Exhibiting suspicious behavior during an exam may result in confiscation of your exam and/or a zero for the exam grade. *Alternative exams will be available for students who are absent either for University-approved activities or due to illness (prior notice required).*

While this course is being taught remotely, exams will be “open-note” and “open-book”. However, no other resources are allowed during exams (e.g., internet, discussion with peers, Alexa, Siri). If in-person instruction (and exams) resume, this policy is subject to change.

*Out-of-class work:*

*Meet with the professor/TA:* Each student is required to meet with the professor or one of the TAs at least once during the semester. This meeting counts toward the class participation grade.

*Papers:* Students will be required to complete a writing assignment. All papers must be turned in electronically through D2L. Provisional due date: 4/16.

*Homework assignments:* Homework assignments will be assigned on a regular basis, due on the third class (one week) after assigned. All homework assignments must be turned in electronically through D2L. Each student is required to work independently, but may consult with the TA or professor. Answers to homework questions must be written in your own words.

## Writing Requirement

All Tier One and Tier Two General Education Courses are writing intensive (<http://gened.arizona.edu/content/writing-component>). In this course, these writing assignments will provide you with the opportunity to learn more deeply about a topic of interest. Specific topics or choices of topics will be provided.

## Final Examination

The final exam will be held on the date/time designated by the registrar, as indicated at: <https://www.registrar.arizona.edu/courses-catalog/final-examination-schedule-spring-2021>  
In Spring 2021, the final exam will be on Friday, May 7<sup>th</sup> from 10:30 AM – 12:30 PM

Final exam regulations can be found at:

<https://www.registrar.arizona.edu/courses/final-examination-regulations-and-information>

## Grading Scale and Policies

Letter grades will nominally be assigned based on the following distribution:

- A: 90% and higher
- B: 80-89%
- C: 70-79%
- D: 60-69%
- F: <60%

The professor may choose to apply a curve to raise the exam grades and the final letter grades if needed, but grades will not be curved down.

The different components of the course will be weighted as follows:

- Writing assignment: 15%
- Exams: 55% (15%, 15%, 25%)
- In-class activities/discussions, participation: 10%
- Homework: 20%

**Late work policy:** Late work (papers, homeworks) without an authorized excuse in advance of the due date will be penalized 10% the first day they are late, and 5% each subsequent day.

**Requests for incomplete (I) or withdrawal (W)** must be made in accordance with University policies, which are available at <http://catalog.arizona.edu/policy/grades-and-grading-system#incomplete> and <http://catalog.arizona.edu/policy/grades-and-grading-system#Withdrawal> respectively.

**Dispute of Grade Policy** An effort will be made to hand back material in a timely manner. Make sure to review all of your graded material as soon as possible. Occasionally errors in grading may occur. If you spot such an error, you must call it to the attention of the TA or instructor within one week.

## Honors Credit:

As this is a Tier Two course it is available for Honors credit. Honors contract information is

available at <https://www.honors.arizona.edu/honors-contracts>. See the instructor to discuss your ideas for an honors contract.

### **Classroom Behavior Policy**

To foster a positive learning environment, students and instructors have a shared responsibility. We want a safe, welcoming, and inclusive environment where all of us feel comfortable with each other and where we can challenge ourselves to succeed. To that end, our focus is on the tasks at hand and not on extraneous activities (e.g., texting, chatting, reading a newspaper, making phone calls, web surfing, etc.).

Students are asked to refrain from disruptive conversations with people sitting around them during lecture. Students observed engaging in disruptive activity will be asked to cease this behavior. Those who continue to disrupt the class will be asked to leave lecture or discussion and may be reported to the Dean of Students.

Please do not use your phones during class unless prompted by the instructor. Turn cell phone ringers off during class. If you absolutely must use your phone during class please inform the instructor before class begins, sit in a seat near the door, and quietly step out of the room when to use the device. Only class-related use of your laptop is allowed (e.g., taking notes, following D2L notes, etc). If your use of a phone, laptop or other device creates a distraction to the instructor or to other students you will be asked to leave, will be considered to be absent for that class, and will not be allowed to return to class until meeting with the instructor. If the behavior continues you will be dropped from the class and reported to the Dean of Students for violating the UA Code of Student Conduct.

### **Threatening Behavior Policy**

The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself. See <http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students>

### **Accessibility and Accommodations**

At the University of Arizona, we strive to make learning experiences as accessible as possible. If you anticipate or experience barriers based on disability or pregnancy, please contact the Disability Resource Center (520-621-3268, <https://drc.arizona.edu/>) to establish reasonable accommodations.

### **Code of Academic Integrity**

Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See <http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity>.

*Selling class notes and/or other course materials to other students or to a third party for resale or distributing materials to others is not permitted without the instructor's express written consent.* Violations to this and other course rules are subject to the Code of Academic Integrity

and may result in course sanctions. Additionally, students who use D2L or UA e-mail to sell or buy these copyrighted materials are subject to Code of Conduct Violations for misuse of student e-mail addresses. This conduct may also constitute copyright infringement.

### **Policy on plagiarism**

In this class, we use the *Turnitin* software to evaluate writing assignments for plagiarism, making it virtually impossible to get away with plagiarism. The consequences of a violation are far worse than the consequences of a poorly written essay.

The University of Oxford defined plagiarism as “presenting someone else’s work or ideas as your own, with or without their consent, by incorporating it into your work without full acknowledgement” (<https://www.ox.ac.uk/students/academic/guidance/skills/plagiarism>).

Plagiarism of any form or amount will not be tolerated in this class. Willful acts of plagiarism will be met with the strictest penalties, up to and including immediate failure of the class. Even unintentional plagiarism will be penalized. You are responsible for understanding what constitutes plagiarism and avoiding it in your writing.

The writing assignments may require the use of information from a variety of sources. In such cases, the information must be written in your own words. You need to understand and synthesize such information in order to incorporate it into your writing. It is then necessary to cite the source of the information. Even reproducing the organization of an external source (e.g., taking text from a source and rewriting each sentence, but otherwise preserving the flow of ideas and information) can be considered to be plagiarism. Reproducing words and even phrases is common, and not considered plagiarism until a sufficiently large number of phrases are reproduced in the same order as the source that it becomes clear that the work and ideas are not fully your own. Quotations of sources with appropriate citations do not qualify as plagiarism, but are still discouraged in the writing assignments. I am not interested in what someone else wrote or thought – I am interested in you and your work. Writing assignments must be original work done for this class – writing that you previously turned in for other classes will not be accepted.

The University Libraries have some excellent tips for avoiding plagiarism, available at <http://new.library.arizona.edu/research/citing/plagiarism>.

### **Policy on exams**

Exams during remote instruction: Exams will be open-note and open-book. No other resources will be allowed (e.g., internet, google, discussions with peers). Exam answers must be written in your own words. Exams must be taken during the normal class period (or exam period during finals week).

If in-person instructions and exams resume: No phones or other electronic devices (including smart watches) will be permitted during exams for any reason. Such devices must be turned off before the start of the exam and remain out of sight throughout the exam. Any device brought out during an exam for any reason will be considered as an instance of cheating, and an automatic grade of 0 will be assigned. No one is permitted to leave the room during exams for



any reason other than a medical emergency. Use restrooms prior to beginning the exam and bring a water bottle with you if you may need a drink.

### **UA Nondiscrimination and Anti-harassment Policy**

The University is committed to creating and maintaining an environment free of discrimination; see <http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy>

Our classroom is a place where everyone is encouraged to express well-formed opinions and their reasons for those opinions. We also want to create a tolerant and open environment where such opinions can be expressed without resorting to bullying or discrimination of others.

### **Additional Resources for Students:**

UA Academic policies and procedures are available at <http://catalog.arizona.edu/policies>

#### **Campus Health**

<http://www.health.arizona.edu/> Phone: 520-621-9202

Campus Health provides quality medical and mental health care services through virtual and in-person care.

#### **Counseling and Psych Services (CAPS)**

<https://health.arizona.edu/counseling-psych-services> Phone: 520-621-3334

CAPS provides mental health care, including short-term counseling services.

#### **The Dean of Students Office's Student Assistance Program**

<http://deanofstudents.arizona.edu/student-assistance/students/student-assistance>

Student Assistance helps students manage crises, life traumas, and other barriers that impede success. The staff addresses the needs of students who experience issues related to social adjustment, academic challenges, psychological health, physical health, victimization, and relationship issues, through a variety of interventions, referrals, and follow up services.

Email: [DOS-deanofstudents@email.arizona.edu](mailto:DOS-deanofstudents@email.arizona.edu) Phone: 520-621-7057

#### **Survivor Advocacy Program**

<https://survivoradvocacy.arizona.edu/>

The Survivor Advocacy Program provides confidential support and advocacy services to student survivors of sexual and gender-based violence. The Program can also advise students about relevant non-UA resources available within the local community for support.

Email: [survivoradvocacy@email.arizona.edu](mailto:survivoradvocacy@email.arizona.edu) Phone: 520-621-5767

#### **Campus Pantry**

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live and believes this may affect their performance in the course, is urged to contact the Dean of Students for support. In addition, the University of Arizona Campus Pantry is open for students to receive supplemental groceries at no cost. Please see their website at: [campuspantry.arizona.edu](http://campuspantry.arizona.edu) for open times.

Furthermore, please notify me if you are comfortable in doing so. This will enable me to provide any resources that I may possess.

### **Preferred Gender Pronoun**

This course affirms people of all gender expressions and gender identities. If you prefer to be called a different name than what is on the class roster, please let me know. Feel free to correct instructors on your preferred gender pronoun. If you have any questions or concerns, please do not hesitate to contact me directly in class or via email (jcahanna@lpl.arizona.edu). If you wish to change your preferred name or pronoun in the UAccess system, please use the following guidelines:

**Preferred name:** University of Arizona students may choose to identify themselves within the University community using a preferred first name that differs from their official/legal name. A student's preferred name will appear instead of the person's official/legal first name in select University-related systems and documents, provided that the name is not being used for the purpose of misrepresentation. Students are able to update their preferred names in UAccess.

**Pronouns:** Students may designate pronouns they use to identify themselves. Instructors and staff are encouraged to use pronouns for people that they use for themselves as a sign of respect and inclusion. To change your listed pronoun on UAccess, navigate to the Student Self Service page, go to the personal information section, and click on "Names". Options include (he, him, his), (she, her, hers), (they, them, theirs), (xe, xem, xyr), and (ze, zir).

More information on updating your preferred name and pronouns is available on the Office of the Registrar site at <https://www.registrar.arizona.edu/>.

### **Confidentiality of Student Records**

<http://www.registrar.arizona.edu/personal-information/student-information>

### **Subject to Change Statement**

Information contained in the course syllabus, other than the grade and absence policy, may be subject to change with advance notice, as deemed appropriate by the instructor.

### **Land acknowledgement**

The University of Arizona resides on ancestral lands of the Tohono O'odham and Pascua Yaqui nations, where many today continuously reside in their ancestral land. I acknowledge the privilege it is to teach and learn in this region and I express my gratitude to these nations. I also acknowledge the historical and present-day injustices that many indigenous peoples have suffered at the hands of those in power, including the loss of their ancestral lands, and the grave inequities that persist today as a result.

### **Classroom community**

My goal is to establish this class as a community of mutual respect. I believe that diversity is a critical part of science – diversity of ideas, diversity of perspectives, and diversity of individuals. I appreciate the fact that each student brings their own history and perspective to the class. I expect that everyone in this class will treat everyone else with respect at all times. If at any time you feel that I have failed to treat you with respect, I ask you to speak with me to help me to understand my failing or to clear up any misunderstanding.

I recognize that many in our campus community have faced discrimination and bias throughout their educations and their lives, particularly people of color and other under-

represented minorities. I stand in solidarity with the Black Lives Matter movement, as well as the [Coalition of Black students and Allies](#) at the University of Arizona.

I recognize that our country was founded by immigrants, and yet many immigrants today face discrimination, persecution, and prosecution. I understand that immigrants from all over the world have helped to make this university a great place of learning, and that they contribute to the high caliber of the faculty, staff, and students who make up our community. I support the concept of the university as a [sanctuary](#) in which all can learn without fear of prosecution based on immigration status.

### **Sexual harassment**

The University of Arizona is committed to removing educational barriers created by sex discrimination and sexual harassment. Sex discrimination under Title IX can include acts of violence based on sex, such as sexual assault, domestic violence, dating violence, and stalking. If you (or someone you know) has experienced or experiences any of these incidents, you have options for help at the University. The University of Arizona has staff members trained to support you in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, helping with legal protective orders, and more.

Please be aware that UA faculty and instructors who work with students are required to report allegations of sex discrimination to the Title IX Office. This means that if you tell me about a situation involving sexual harassment, sexual assault, dating violence, domestic violence, or stalking that involves another student or employee, or that happens on campus or in a UA program, I must share that information with the Title IX Coordinator. Although I have to make that notification, you will have choices regarding whether or not you want to pursue a formal complaint against anyone on campus. Our goal is to make sure you are aware of the range of options available to you and have access to the resources you need.

If you wish to speak to someone privately, you can contact any of the following on-campus resources:

- Counseling & Psych Services (CAPS), <https://health.arizona.edu/counseling-psych-services>, 520-621-6490, 520-570-7898 (after hours)
- Oasis Sexual Assault, Relationship Violence, and Trauma Services, <https://health.arizona.edu/counseling-oasis> (same phone as CAPS)
- Campus Health, <https://health.arizona.edu/home>, (520) 621-6490
- University of Arizona Ombuds, <https://ombuds.arizona.edu/>, (520)-626-5589
- Title IX section on sexual assault support & resources (<https://titleix.arizona.edu/title-ix/sexual-harassment-violence>) has more information, as well as a link explaining options if you have a concern, need assistance/support, or would like to file a complaint.

### **Reporting of harassment**

If a student has any concerns related to this class or this department, they are encouraged to bring them to either the instructor of this class, Department Head Tim Swindle ([tswindle@lpl.arizona.edu](mailto:tswindle@lpl.arizona.edu)), Assistant Department Head Shane Byrne ([shane@lpl.arizona.edu](mailto:shane@lpl.arizona.edu)), or the chair of the Department Life Committee Jeff Andrews-Hanna ([jcahanna@lpl.arizona.edu](mailto:jcahanna@lpl.arizona.edu)).

The University of Arizona policy on discrimination and harassment can be found at:  
<https://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy>

**Scheduled Topics/Activities:**

**Provisional schedule**

*NOTE: All dates, topics, etc are subject to change. Please pay attention to course announcements*

Lecture	date	day	Lecture topic	Lecture	date	day	Lecture topic
1	1/13/21	W	Overview	24	3/8/21	M*	Mars
2	1/15/21	F	Ancient astronomies		3/10/21	W	READING DAY
	1/18/21	M	No class - MLK day	25	3/12/21	F	Jupiter
3	1/20/21	W	Fundamentals	26	3/15/21	M	TBD
4	1/22/21	F	Solar System origin	27	3/17/21	W	TBD
5	1/25/21	M	Solar System origin	28	3/19/21	F	TBD
6	1/27/21	W	Earth	29	3/22/21	M	Jupiter and its Moons
7	1/29/21	F	Earth	30	3/24/21	W	Jupiter and its Moons
8	2/1/21	M	Moon	31	3/26/21	F	Jupiter and its Moons
9	2/3/21	W	Moon	32	3/29/21	M	Astrobiology
10	2/5/21	F	Moon	33	3/31/21	W	EXAM 2
11	2/8/21	M	Moon		4/2/21	F*	READING DAY
12	2/10/21	W	Mercury	34	4/5/21	M	Astrobiology
13	2/12/21	F	Mercury	35	4/7/21	W	Astrobiology
14	2/15/21	M	Venus	36	4/9/21	F	Saturn and its Moons
15	2/17/21	W	Venus	37	4/12/21	M	Saturn and its Moons
16	2/19/21	F	EXAM 1	38	4/14/21	W	Saturn and its Moons
17	2/22/21	M	Venus	39	4/16/21	F	Uranus and Neptune
18	2/24/21	W*	Venus	40	4/19/21	M	Uranus and Neptune
19	2/26/21	F	Mars		4/21/21	W	READING DAY
20	3/1/21	M	Mars	41	4/23/21	F	Pluto and Charon
21	3/3/21	W	Mars	42	4/26/21	M	Pluto and Charon
22	3/5/21	F	Mars	43	4/28/21	W	Extrasolar planets
23	3/8/21	M*	Mars	44	4/30/21	F	Extrasolar planets
				45	5/3/21	M	Discussion
				46	5/5/21	W	Wrap up