

Astronomy 4: Astronomy of the Solar System

Section 2290 – Course Syllabus

Instructor

Dr. Anne Metevier

- Office hours:
 - Weekly check-ins (optional) via Zoom: Thursdays at 11am [at this link](#) (Meeting ID 995 1724 6662)
 - Please contact me to schedule a Zoom appointment at another time
- Email: ametevier@santarosa.edu (or message me on Canvas)
I aim to respond to students within a day or two. If you do not receive a response from me within 48 hours, please re-send your message, as it is possible I did not see it in my inbox.

Course Description

A descriptive introduction to the Solar System including the Sun, Moon, planets, asteroids, and comets. Topics will include lunar phases, eclipses, historical geocentric and heliocentric models of the cosmos, planetary geology, planetary atmospheres and climates, the formation of the Solar System, and extra-solar planetary systems.

Course Format

This course will be conducted primarily online. Mini-lectures, discussions, and assignments will all be conducted through Canvas and will be self-paced, but will have specific due dates. Midterm exams and the final exam will be conducted through Canvas, timed, and will also have specific due dates noted below. Each week, there will be an optional Zoom check-in where I will review tricky concepts, remind you of assignments, and answer any questions you may have.

Student Learning Outcomes

Upon completion of this course, students will be able to:

1. Critically analyze astronomical observations and the scientific theories used to explain them.
2. Recognize, differentiate, and describe the various astronomical bodies within the universe, concentrating on the celestial bodies in the Solar System.
3. Explain why some astronomical bodies exhibit phases.
4. Recognize the factors affecting planetary seasons and atmospheres, and relate these to Earth.

Recommended Preparation

Completion or concurrent enrollment in Math 150A and English 100 or ESL 100

Textbook

OpenStax Astronomy by Fraknoi, Morrison, and Wolff

The course textbook is free online and can be [downloaded or viewed here](#).

If you prefer a paper copy of the book, you may be able to buy one at the SRJC bookstore or online booksellers, or you can check out the book at the library for a few hours at a time:

- call number QB2.A1 F73 2017 (Petaluma campus library)
- call number QB2.A1 F73 PersCopy Sparks (Doyle library)

Canvas Site and Announcements

This course will rely on the Canvas course website and modules for lectures, assignments, discussions, exams, sharing resources, and viewing grades. Please familiarize yourself with Canvas, and note that [this site](#) is a helpful resource if you have any Canvas-related questions.

Any important messages about the course (such as changes to the course schedule) will be made via email and/or Canvas announcements. Please be sure to check both regularly.

Special Needs

Students with disabilities who may need accommodations in this class are strongly encouraged to contact [Disability Resources](#) as soon as possible to better ensure such accommodations are made in a timely fashion. It is important to me that every student has a fair opportunity to learn.

Important Dates

Date Class Begins: 2/1/2021 Date Class Ends: 5/16/2021

Last Day to Add without add code: 2/5/2021 Last Day to Add with add code: 2/23/2021

Last Day to Drop and be eligible for refund: 2/10/2021

Last Day to opt for Pass/No Pass option: 5/16/2021

Last Day to Drop without a 'W' symbol: 2/23/2021

Last Day to Drop with a 'W' symbol: 4/22/2021

Date/time of Final Exam: two hour timed exam, must be taken between Thurs 5/13/2021 at noon and Fri 5/14/2021 at 10pm

Dropping the Class

If you decide to discontinue this course, it is your responsibility to officially drop it to avoid getting no refund, a 'W' symbol, or a grade.

Pass–No Pass (P/NP)

You may take this class P/NP. If you choose to do this, you must file for the P/NP option by 5/16/2021. You can add the option online with TLC or file the P/NP form with Admissions and Records. With a grade of a C or better, you will get a P.

Once you decide to opt for P/NP, you cannot change back to a letter grade. If you are taking this course as part of a certificate program, check with a counselor to be sure that you can take the class P/NP and still get the credit you need toward your certificate.

Online Etiquette and Standards of Conduct

Students who register in SRJC classes are required to abide by the SRJC Student Conduct Standards. Violation of the Standards is basis for referral to the Vice President of Student Services or dismissal from class or from the College. For more information, see the [Student Code of Conduct](#).

Students in this course are expected to treat each other and the instructor respectfully, including in all online interactions. Students are encouraged to adopt the following good habits for Zoom check-ins and other Zoom meetings in this course:

- Remember that Zoom meetings may be recorded at any time
- Be on time
- Do your coursework and join Zoom meetings from a dedicated workspace if possible
- Keep your camera on during Zoom meetings
- Mute your microphone unless you have a question or comment
- Use your preferred, real first and last name

Academic Honesty

Collaborating on or copying of tests or homework in whole or in part will be considered an act of academic dishonesty and result in a grade of 0 for that test or assignment. I encourage students to share information and ideas, but not their work. Please refer to the SRJC Student Conduct Standards (see link above) for more information on how to avoid plagiarism.

Some examples of cheating or plagiarism that will not be tolerated are:

- Copying work from another student, or giving work to another student to copy
- Copying and pasting text from internet sources into homework assignments or projects
- Viewing, comparing, or copying the work of another student during an exam
- Intentionally allowing another student to view your work during an exam
- Using a phone or “cheat sheet” during an exam

Grading Policy – General Notes

Visit “Grades” in Canvas to keep track of your grades. If you have questions about grades, please check with me during office hours or schedule a meeting with me (I do not provide grade information over email out of concern for your privacy).

Overall grade policy:

A	90-100%
B	80-89%
C	70-79%
D	60-69%

Course components:

Participation in discussions	15% of total course grade
Weekly assignments	24% of total course grade
Midterm Exams 1, 2	each worth 18% of total course grade
Final Exam	25% of total course grade

If you are taking this course Pass/No Pass, you will need at least a 70% to pass the class.

Grading Policy – Details

Each week (except for exam weeks) students will be expected to participate in 1-2 discussions and complete a “weekly assignment”, such as a quiz or written assignment, on Canvas. Discussion posts will be due on Fridays, and replies will be due on Sundays. Weekly assignments will be due on Sundays.

Midterms and the final exam will take place on Canvas and will consist of multiple choice, short answer, and written questions. They will be timed exams that must be taken within a specific window of time:

- Midterm 1 is a 90 minute exam that will cover material from weeks 2-6 and must be taken between Thursday 3/11 at noon and Friday 3/12 at 10pm
- Midterm 2 is a 90 minute exam that will cover material from weeks 7-11 and must be taken between Thursday 4/22 at noon and Friday 4/23 at 10pm
- The Final Exam is a two-hour exam that will be cumulative and must be taken between Thursday 5/13 at noon and Friday 5/14 at 10pm

Extra credit is available for watching astronomy-related videos (a list will be provided) and submitting write-ups of what you learned. Specific instructions will be provided on Canvas. Students may submit up to two extra credit assignments, each worth up to 2.5% of the course grade, or up to 5% total. Extra credit assignments are accepted until the Sunday before the final exam, May 9.

Feedback on your work

I aim to provide feedback on your submitted work within one week. Please note: I have high expectations and can be a tough grader, but will only give you assignments that I know you can succeed with. If you have any questions along the way, please do not hesitate to contact me. I am here to help you learn.

Late policy

- **Exams:** the Midterms and Final Exam must be taken within the designated time window noted above (and in the schedule below). Late exams are not accepted, unless arranged with Dr. Metevier prior to the exam date, and only under very serious circumstances.
- **Weekly assignments and discussions:** Credit for any late weekly assignments or discussions will be reduced by 10% for each day the work is late. For instance, if an assignment is submitted 3 days late, the maximum credit possible for the assignment is 70%.

Approximate Course Schedule

If any major changes are made to the class schedule during the semester, I will update this schedule and post an announcement on Canvas.

Week / Module	Dates	Chapter Reading	Topics, Assignments, Tests
1	Feb 1-7	--	Getting Started Discussion: post due 2/5, response due 2/7 Weekly assignment: due 2/7
2	Feb 8-14	1	The Scale of the Cosmos Discussion: post due 2/12, response due 2/14 Weekly assignment: due 2/14
3	Feb 15-21	2.2, 2.4, 3.1-3.4	A Scientific Approach Discussion: post due 2/19, response due 2/21 Weekly assignment: due 2/21
4	Feb 22-28	4	Earth, Moon, and Sky Discussion: post due 2/26, response due 2/28 Weekly assignment: due 2/28
5	March 1-7	5.2, 6.1-6.2, 7.1-7.2	Observing the Solar System Discussion: post due 3/5, response due 3/7 Weekly assignment: due 3/7
6	March 8-14	7.3	Measuring Ages in the Solar System Midterm 1 opens 3/11 at noon, due by 3/12 at 10pm
7	March 15-21	7.4, 8	Solar System Origins; Earth and Life Discussion: post due 3/19, response due 3/21 Weekly assignment: due 3/21
--	March 22-28	--	Spring Break – enjoy!
8	March 29- April 4	9, 10.1-10.3	Inner Worlds Discussion: post due 4/2, response due 4/4 Weekly assignment: due 4/4
9	April 5-11	10.4-10.6, 11.1-11.2	Mars and the Giant Planets Discussion: post due 4/9, response due 4/11

			Weekly assignment: due 4/11
10	April 12-18	11.3, 12	Atmospheres, Moons, and Rings Discussion: post due 4/16, response due 4/18 Weekly assignment: due 4/18
11	April 19-25	13.1-13.2	Asteroids Midterm 2 opens 4/22 at noon, due by 4/23 at 10pm
12	April 26- May 2	13.3-13.4, 14	Comets and Meteoroids Discussion: post due 4/30, response due 5/2 Weekly assignment: due 5/2
13	May 3-9	15.1-15.3, 16.1, 16.3	The Sun Discussion: post due 5/7, response due 5/9 Weekly assignment: due 5/9 Extra credit: due 5/9
14	May 10-14	21.3-21.6	Beyond our Solar System Final Exam opens 5/13 at noon, due by 5/14 at 10pm

SRJC Resources for Students

Many important resources are available to SRJC students, even online. These include:

- [Student Resource Center](#) provides support for basic needs (food, housing support, emergency grants, etc.) as well as for academics
- [SRJC Online Student Academic Resources](#)
- [Disability Resources](#)
- [Resources for Undocumented Students](#)
- [Student Health Services](#) offers remote physical and mental health support
- [Online Academic Counseling Services](#)
- [Transfer Center](#)
- [Academic Tutoring](#)
- [Student Success Coaches](#) are fellow students provide support for navigating technology and college requirements, improving study skills, and staying on track with your educational goals