ASTR 122 – The Life and Death of Stars
Summer 2023, CRN 41165

CLASS MEETING TIME
Asynchronous! There are no set meeting times for our class.

MY CONTACT INFORMATION
Dr. Scott Fisher
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541.346.4799

OFFICE HOURS
Live Zoom office hours are:

Monday, Tuesday, Wednesday, Thursday  2:00 – 3:00 pm

Link:  https://uoregon.zoom.us/j/9615441031

You are welcome to contact me by email if you would like to setup an appointment for a different time or if you would like a guaranteed appointment.
WELCOME STATEMENT
Hello All! Welcome to our online class. I want you to know that I am committed to our course—to experiencing our course material together, learning, questioning, and growing as a class community, even given our physical distance. Although we will not be meeting in person we can:

- Be moved and inspired by learning about our Universe
- Develop an understanding of our place in the Universe and the sky above us
- Affirm our hopefulness about the future by continuing to learn
- Improve our understanding of science and what it brings to our lives
- Experience how astronomy can both inspire awe and ground us by appreciating the beauty of the sky, even in a time of great challenges

INTRODUCTION
The goal of this course is to give you knowledge about the Universe we inhabit and a conceptual understanding of basic astronomical topics. We begin by considering the Universe that we see with our naked eyes — for example, the appearance of the night sky and the phases of the moon. We also ask basic questions like “What is the place of the Earth in the Universe?” and “How can I understand the astronomy I encounter in my life?” Answers to those questions give us the perspective needed to deeply appreciate the physical world we live in and to start to understand the vast scales of time and distance of the Universe itself. At the same time, we develop an appreciation for the tools and concepts used by astronomers that form the practical basis for their work. These tools are both broad, such as the so-called Scientific Method, and specific, such as those used to determine the sizes and compositions of stars and planets.

We will then delve into the science of modern observational astronomy, with an emphasis on how the largest telescopes in the world operate. Once we learn about the facilities, we will investigate how they are used to study the cosmos.

The course uses the text as a complement to the information covered in the class lectures. We will also use several on-line resources in our class. Along with learning how to use these services, we will develop ways to help determine of astronomy information you encounter in day-to-day life is truthful or a fabrication.
The lectures form the core of the class. I will often suggest readings in the book or share on-line resources that give more detail and a deeper presentation of the material we cover in class together.

You should keep up with the class, keep up with the readings, and get engaged in our live office hours! Experience shows that students who do well are those who are actively engaged in the learning process as a team with me.

**The exam dates for the term are fixed and will be announced on the class Canvas site. The dates of the exams are set and cannot be changed.**

Generally, a class module will consist of me giving a lecture (through pre-recorded videos) about the topic for the day. During my class lectures I will:

- Discuss important facts, figures, and problems relevant to the topic we are covering
- Highlight and explain difficult concepts related to the topic. We will be especially interested in top-level concepts that help form an overarching cosmic perspective
- Incorporate additional material into the lectures to connect the topic to modern astronomy and current research

**CORE EDUCATION STATEMENT**

The course is designated as a Natural Science Core Education course. At UO, core education is designed to provide a broad, interdisciplinary education that helps students, think critically and creatively, communicate clearly, and reflect ethically. Specifically, in this class, you will learn and practice **critical thinking** through assignments that require you to analyze astronomical problems; and **creative thinking** through conceptual quizzes and homework assignments that will probe your ability to make connections between astronomical concepts that we study.

**LEARNING OUTCOMES**

To give you an idea of what I want you to learn in our class, I’ve written the following learning outcomes:

- You will gain a “cosmic perspective” that will give you a true and accurate idea of the scale of the universe. This perspective will include a basic understanding of the relative and absolute size of astronomical objects as well as the age of the universe.
• You will learn to identify constellations, planets, and other objects in the sky and where to look for more information about them.
• You will gain an appreciation of modern astronomy and an understanding of how the biggest telescopes operate and what their limitations are with respect to discoveries.
• You will gain critical thinking skills in astronomy that will allow you to start to discern whether or not an image is real or “photoshopped”.
• You will gain astronomical knowledge that will allow you to form educated opinions about astronomy and space related topics that you encounter in the media.

GRADING
Your final grade will be made up of several components that will include grades on exams, grades on homework assignments, quizzes, and class activities. There will also be opportunities for extra credit. The most important thing to understand about how your grade is determined is this:

I do not give you a grade – I assess your performance in the class.

Ultimately, your grade will be determined by your performance in the class, not by me. The way I will assess your performance is through exams, homework, class participation, and extra-credit. Here are the components of your final grade:

• Homework – 20%
• Quizzes – 30%
• Exam #1 – 25%
• Final Exam – 25%

Here are important notes about the grading scale:
• The exams are cumulative.
• Anything that is said in lecture, displayed on slides, or discussed within reading assignments is testable.
• There are no scheduled makeup exams.
• Extra credit opportunities will be clearly explained.
• These conditions are subject to change.
REQUIRED TEXT
We will be using a free open source Astronomy text from Openstax. The online and PDF versions of the textbook can be found at this link:

https://openstax.org/details/books/astronomy

FREQUENTLY ASKED QUESTIONS

Q: Do I need to buy the book?
A: The book FREE and it will be used throughout the term. Please access the online or PDF version of the text.

Q: Can I turn in my homework late?
A: No. I will be very clear with homework deadlines.

Q: Will you curve the class grades?
A: No. Your grade is determined by how well you learn the class material.

Q: Will this class be awesome?
A: Not just awesome.... astronómically awesome.
**Academic Disruption due to Campus Emergency**

In the event of a campus emergency that disrupts academic activities, course requirements, deadlines, and grading percentages are subject to change. Information about changes in this course will be communicated as soon as possible by email, and on Canvas. If we are not able to meet face-to-face, students should immediately log onto Canvas and read any announcements and/or access alternative assignments. Students are also expected to continue coursework as outlined in this syllabus or other instructions on Canvas.

**Accessible Education**

Please let me know within the first two weeks of the term if you need assistance to fully participate in the course. Participation includes access to lectures, web-based information, in-class activities, and exams. The Accessible Education Center ([http://aec.uoregon.edu/](http://aec.uoregon.edu/)) works with students to provide an instructor notification letter that outlines accommodations and adjustments to class design that will enable better access. Contact the Accessible Education Center for assistance with access or disability-related questions or concerns.

**Academic Misconduct**

The University Student Conduct Code (available at [conduct.uoregon.edu](http://conduct.uoregon.edu)) defines academic misconduct. Students are prohibited from committing or attempting to commit any act that constitutes academic misconduct. By way of example, students should not give or receive (or attempt to give or receive) unauthorized help on assignments or examinations without express permission from the instructor. Students should properly acknowledge and document all sources of information (e.g. quotations, paraphrases, ideas) and use only the sources and resources authorized by the instructor. If there is any question about whether an act constitutes academic misconduct, it is the students’ obligation to clarify the question with the instructor before committing or attempting to commit the act.

Additional information about a common form of academic misconduct, plagiarism, is available at [https://researchguides.uoregon.edu/citing-plagiarism](https://researchguides.uoregon.edu/citing-plagiarism).
Reporting Obligations

I am an assisting employee. For information about my reporting obligations as an employee, please see Employee Reporting Obligations on the Office of Investigations and Civil Rights Compliance (OICRC) website. Students experiencing sex or gender-based discrimination, harassment or violence should call the 24-7 hotline 541-346-SAFE [7244] or visit safe.uoregon.edu for help. Students experiencing all forms of prohibited discrimination or harassment may contact the Dean of Students Office at 541-346-3216 or the non-confidential Title IX Coordinator/OICRC at 541-346-3123. Additional resources are available at investigations.uoregon.edu/how-get-support. I am also a mandatory reporter of child abuse. Please find more information at Mandatory Reporting of Child Abuse and Neglect.

See https://investigations.uoregon.edu/suggested-syllabus-language for additional recommended syllabus language.

Mental Health and Wellness

Life at college can be very complicated. Students often feel overwhelmed or stressed, experience anxiety or depression, struggle with relationships, or just need help navigating challenges in their life. If you’re facing such challenges, you don't need to handle them on your own—there's help and support on campus.

As your instructor if I believe you may need additional support, I will express my concerns, the reasons for them, and refer you to resources that might be helpful. It is not my intention to know the details of what might be bothering you, but simply to let you know I care and that help is available. Getting help is a courageous thing to do—for yourself and those you care about.

University Health Services help students cope with difficult emotions and life stressors. If you need general resources on coping with stress or want to talk with another student who has been in the same place as you, visit the Duck Nest (located in the EMU on the ground floor) and get help from one of the specially trained Peer Wellness Advocates. Find out more at health.uoregon.edu/ducknest.

University Counseling Services (UCS) has a team of dedicated staff members to support you with your concerns, many of whom can provide identity-based support. All clinical services are free and confidential. Find out more at counseling.uoregon.edu or by calling 541-346-3227 (anytime UCS is closed, the After-Hours Support and Crisis Line is available by calling this same number)."
**Basic Needs**

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 Office (346-3216, 164 Oregon Hall) for support.

This UO webpage includes resources for food, housing, healthcare, childcare, transportation, technology, finances, and legal support: [https://blogs.uoregon.edu/basicneeds/food/](https://blogs.uoregon.edu/basicneeds/food/)

**Accommodation for Religious Observances**

The university makes reasonable accommodations, upon request, for students who are unable to attend a class for religious obligations or observance reasons, in accordance with the university discrimination policy which says “Any student who, because of religious beliefs, is unable to attend classes on a particular day shall be excused from attendance requirements and from any examination or other assignment on that day. The student shall make up the examination or other assignment missed because of the absence.” To request accommodations for this course for religious observance, visit the Office of the Registrar's website ([https://registrar.uoregon.edu/calendars/religious-observances](https://registrar.uoregon.edu/calendars/religious-observances)) and complete and submit to the instructor the “Student Religious Accommodation Request” form prior to the end of the second week of the term.