

Course Description

Syllabus

[Course Description](#)

[Instructor](#)

[Course Outline](#)

[Reading Assignments](#)

[Exam Schedule](#)

[Exams](#)

[Astronomy Course Project](#)

[Grading](#)

Class Notes

Homework Assignments

TAs

Internet Resources For This

Class

Astronomy 121

Astronomy 123

Some More Internet

Resources, Just For Fun

Syllabus

[pdf version](#) of the syllabus

Astronomy 122 introduces students to the structure and evolution of our Sun and other stars. The course includes an introduction to the theories of the forces of nature as they pertain to the study of stellar birth, structure, evolution, and death. The course includes an introduction to the physics required for this study.

<http://pages.uoregon.edu/jimbrau/astr122>

Instructor:

[Prof. Jim Brau](#)

Telephone: (541) 346-4766

414B Willamette (enter through 414 Willamette)

e-mail: jimbrau@uoregon.edu



Class Hours

MWF 9:00 pm - 9:50 pm
100 Willamette Hall

Office Hours

Mon 11-11:30 am
Wed 11-11:30 am
(or by appointment)

Text

Astronomy Today
Chaisson and McMillan
Eighth Edition, 2014
[associated web site](#)

[Contact](#)

Course Outline for Astronomy 122 (TENTATIVE)

DATE	CHAPTER	TOPIC
SEP 26 SEP 28	CHAPTERS 1 & 2 1.1, 1.2, 1.3, 1.6 2.1, 2.3, 2.7, 2.8	INTRODUCTION CHARTING THE HEAVENS ... AND THE COPERNICAN REVOLUTION
SEP 30 OCT 3 OCT 5 OCT 7 OCT 10	CHAPTER 3 CHAPTER 4 CHAPTER 5 CHAPTERS 1-5 CHAPTERS 1-5	RADIATION SPECTROSCOPY TELESCOPES REVIEW EXAM #1
OCT 12 OCT 14 OCT 17 OCT 19 OCT 21 OCT 24 OCT 26	CHAPTER 16 CHAPTER 16 CHAPTER 17 CHAPTER 17 CHAPTER 17 CHAPTERS 16 & 17 CHAPTERS 16 & 17	THE SUN MEASURING THE STARS RED GIANTS AND WHITE DWARFS REVIEW EXAM #2
OCT 28 OCT 31	CHAPTER 18 CHAPTER 18	THE INTERSTELLAR MEDIUM

NOV 2	CHAPTER 19	STAR FORMATION
NOV 4	CHAPTER 19	
NOV 7	CHAPTER 20	STELLAR EVOLUTION
NOV 9	CHAPTER 20	
NOV 11	CHAPTERS 18, 19 & 20	REVIEW
NOV 14	CHAPTERS 18, 19 & 20	EXAM #3
NOV 16	CHAPTER 21	STELLAR EXPLOSION
NOV 18	CHAPTER 21	
NOV 21	CHAPTER 22	NEUTRON STARS AND BLACK HOLES
NOV 23	-- PROJECT DUE --	(NO LECTURE)
NOV 25	THANKSGIVING	HOLIDAY
NOV 28	CHAPTER 22	
NOV 30	CHAPTERS 21 & 22	REVIEW
DEC 2	CHAPTERS 21 & 22	EXAM #4

Reading Assignments

Students should read the material before the lecture in order to benefit most from the discussions in class.

Chapter	Read before class on:
Chapters 1 & 2	Sep 28
Chapter 3	Sep 30
Chapter 4	Oct 3
Chapter 5	Oct 5
Chapter 16	Oct 12
Chapter 17	Oct 17

Chapter	Read before class on:
Chapter 18	Oct 28
Chapter 19	Nov 2
Chapter 20	Nov 7
Chapter 21	Nov 16
Chapter 22	Nov 21

see also the list of [Recommended Homework](#).

Quizzes and Exams

There will be frequent quizzes in class. **Clickers** will be used for the quizzes.

You will need a clicker the 2nd week of class. If you don't have one already, they are available at the Duck Store.

Then, be sure to [register your clicker ID](#) on the Canvas.

Tentative Exam Schedule (Caution: dates may change and will be finalize during term.)

Exam	Date	Material Covered
#1	Monday, Oct 10	Chapters 1, 2, 3, 4 & 5
#2	Wednesday, Oct 26	Chapters 16 & 17
#3	Monday, Nov 14	Chapters 18, 19 & 20
#4	Friday, Dec 2	Chapters 21 & 22

[Exams - reviews, answers, and grades](#)

Astronomy Course Project:

An astronomy course project is required of each student. The project might be a report on a topic of interest, a report of an observational exercise, or a report on the design of an astronomical instrument, to name a few possibilities. For more information refer to the [project web page](#).

Grading:

Four midterm exams will be given, with 75% course grade based on the three highest midterm scores. The breakdown for the course grade is

Three best midterm exams 75% (25% each)

Quizzes 10%

[Course project](#) 15%

There will be no make-up exams. Successful completion (C or better grade) on three of the exams is required to pass the course. One exam is optional, as long as three exams are passed with a grade of C or better. Class attendance is mandatory as the exams will contain material from the lectures as well as the textbook. There will also be occasional short quizzes given in class for extra credit. Students must be able to calculate numerical problems using fundamental algebra to earn an A in the course.

Academic Dishonesty:

Academic dishonesty will not be tolerated. This includes any form of cheating, plagiarism, or fabrication. All work must be your own, produced exclusively for this course. For additional information on plagiarism, refer to the [UO Library information](#). Academic dishonesty can result in receipt of a failing grade on the specific assignment or even receiving an F in the course. Additional information on academic conduct is available from the [Student Conduct Code page](#). Every violation will be dealt with seriously and noted on student disciplinary records.
