

**Physics 475/575:
Stellar Astronomy
Summer 2005
Portland State University**

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Instructor:

Makenzie Lystrup

I prefer you contact me via the WebCT email tool

alternate email: makenzie@pdx.edu

Required Text:

Astronomy: Journey to the Cosmic Frontier by John D. Fix, McGraw-Hill (available at the PSU Bookstore)

The fourth edition is in the bookstore. If you have or can get the second or third edition, it will work fine. The content is virtually identical.

Course Summary:

Physics 475/575 is an online course in stellar astronomy. You will not attend class on campus, but rather access lectures and other course materials via WebCT. WebCT manages all course functions: lectures and other course materials, quizzes, assignments, communication with the instructor, and grading. Everything related to this course will happen on WebCT.

I recommend you look over the chapter outlines and lectures notes before reading the corresponding chapter in the text. The chapter lecture notes contain the text of the lecture as it would be given in class. The outlines consist of highlights of the chapter. Quizzes are self-tests to help you know if you have understood the main points of the chapter. These self-tests **are not** the quizzes on which you will be graded. The chapter reviews highlight some things you need to know from each chapter. I suggest you don't try to move too quickly through the first two chapters; a lot of information is presented and you don't want to overload yourself! *Note: there are some animations embedded in the lectures. To properly view, you will have to have Quicktime installed on your computer. It's a free media player that can be downloaded from the web.*

I strongly encourage you to ask questions and start discussions on WebCT. Asking questions is the best way to learn and will make the course more interesting for us all. When you have a question, I ask that you post it on the Bulletin Board section of WebCT. This way everyone in the class has the benefit of seeing it (and the answer), much like in a traditional classroom lecture. However, if you have a question you would like to ask privately you may always do so from the email section of WebCT.

Topics:

What is a Star?: The Basic Properties

The Sun

Stellar Evolution: Formation, H-R Diagrams, Death

White Dwarfs, Neutron Stars, and Black Holes

Star Systems: Binary Stars, Galaxies, Galaxy Clusters

HOW THIS COURSE IS GRADED

- 8 quizzes - 120 points total
- 4 homework assignments and 2 small papers - 60 points total
- For graduate students only: grant proposal - 35 points

Chapter Quizzes:

Go to the Quiz section of the WebCT course homepage to take the quizzes. You will have access to the quizzes during a range of dates. You may take the quiz any time in that window, but you will have only 60 minutes to complete the quiz. For those ranges of dates, see the Quiz section of the WebCT homepage. The calendar also has reminders of when the quizzes open and close.

Homework:

You will turn in homework to the Assignments section of the WebCT course homepage. There will be a due date for each assignment and WebCT will not allow you to turn them in late.

If you are an educator you will develop four lesson plans. Each should be designed to engage 20 students for one hour at the grade-level of your interest. You will find descriptions of and instructions for each lesson plan in the Assignments section of WebCT.

If you are not an educator, you will find the homework assignments in the Assignments section of WebCT.

Small Article Review Papers:

You will turn in the small article review papers to the Assignments section of the WebCT course homepage. There will be a due date for each paper and WebCT will not allow you to turn them in late. Acceptable articles must be more than two printed pages long and be from a popular level publication like Astronomy, Sky & Telescope, New York Times science page, or Discover magazine. Website papers from NASA or Goddard Space Center reports won't do. If in doubt, ask me first. Pick something that you find interesting!

NO LATE PAPERS OR QUIZZES WILL BE ACCEPTED.