Astronomy 203

Tier 2 Natural Sciences: Stars (Fall 2015)

Lectures: 12:30PM-1:45PM T/TH in Steward N210

Instructor: Prof. Kratter

Office: SO N328 TA: Michelle Wilson

Class Email: ASTRKratter@as.arizona.edu

Office hours:

Prof. Kratter: 2:00-3:30PM Tuesdays

Michelle Wilson: 11:00-12:00 Tuesdays, Wednesday

Course Description

In this course we will focus on the role of stars in the universe and in our daily lives. We will learn where stars come from, how they change in time, and how they die. Along the way we will examine the most important physical processes that govern the behavior of these astronomical objects. We will supplement the study of stars with readings of science news articles that will be the subject of regular in class writing assignments.

Topics to be covered

Method of Scientific Inquiry
Order of Magnitude Reasoning
Scales in the Universe
Motions on the Sky
Star Formation
Stellar Evolution
Supernovae
Black holes
Special and General Relativity
Planet Formation
Exoplanets

GRADING: Your course grade will be based on:

- Homework and Online Quizzes (drop lowest two scores): 15%
- In class activities / writing (drop lowest two scores): 25%

• In class tests (drop lowest score): 40%

• Final Exam: 20%

The class will not be curved, grades are absolute. The correspondence between final percentages and letter grades will be: A: 85% - 100%; B: 70% - 85%; C: 50% - 70%, D: 30% - 50%; E: 0% - 30%.

TEXTBOOK For this course we will use "21st Century Astronomy, 4th Edition," by Kay, Palen, Smith, & Blumenthal. You are only required to purchase the "Stars and Galaxies" split, available in the bookstore. NOTE: You are welcome to purchase a used copy of the textbook.

ONLINE QUIZZES: Homework for the course will consist primarily of textbook readings and online assignments (or "quizzes") administered through D2L. The due dates are listed on the class schedule, and reminders will appear on D2L. You can drop your TWO lowest scores.

IN-CLASS ACTIVITIES / WRITING We will have 6 in-class writing assignments throughout the semester based on portrayals of science in the media. You will be asked to read articles in advance, and come to class ready to write and discuss with your peers. There will also be periodic, unannounced, in-class activities to reinforce challenging concepts. You can drop your TWO lowest scores.

IN-CLASS TESTS There will be THREE in class tests during the semester. Your ONE lowest score is dropped. No makeup tests without a prior approved Deans Excuse. Do not ask for exceptions: this is why your lowest score is dropped. They will be held on:

Thursday, September 17th Tuesday, October 20th Thursday, December 3rd

FINAL EXAM The final exam will be held on Dec 17th 10:30-12:30. Your final exam will not be a traditional cumulative exam. The exam will build on our discussion of science articles throughout the semester.

Course Conduct and Expectations

Please come to class ready to learn and engage with your peers. Student participation is required! In order to ensure a productive learning environment for all students, please note the following strict class rules:

- 1. NO cellphones in class. They must be kept in a bag or pocket and on silent.
- 2. Laptops / tablets ONLY for note taking. All students using such devices must sit in the center section in the front three rows.
- 3. No class disruptions (talking, note passing, etc).

- 4. Follow the University of Arizona Code of Academic Integrity
- 5. Bring your student photo-ID to class every day and to the final exam.

If a student violates any of the above conduct rules the following punitive actions will be taken:

- First offense: ejected from that class, lose any relevant points for in class work that day
- Second offense: ejected from class that day, lose any relevant points for in class work that day, and automatic 5% deduction from your final course grade
- Third offense: ejected from class, automatic course failure

Course Email and Websites:

In this class we will make regular use of D2L. It is your responsibility to check D2L regularly for course notifications / updates/ and assignments.

Email: All emails regarding the course should be sent to ASTRKratter@as.arizona.edu. Emails sent to ANY OTHER email address will not get a response. If you ask a question that is *clearly* answered on the course syllabus (e.g. when is the final exam) you WILL NOT get a reply. We will aim to respond to all other emails in 48 hours or less.

Students with disabilities who require reasonable accommodations to fully participate in course activities or meet course requirements are encouraged to register with the Disability Resource Center (http://drc.arizona.edu) and contact Prof. Kratter to discuss accessibility issues.

Code of conduct: Students are expected to understand and follow the Student Code of Conduct, which is available at http://w3.arizona.edu/~studpubs/policies/ppmainpg.html.

Acknowledgment of Course Syllabus and Conduct Rules

NAME:	
STUDENT ID #:	
By signing below, I acknowledge that I have received and read the c for ASTR203 Fall 2015 with Prof. Kratter. I understand that all poli- those on course conduct, apply to me. I understand that if I am found these policies my course grade may suffer.	cies, including
Signature:	
Date:	