

Astronomy 203
Tier 2 Natural Sciences: Stars
(Spring 2015)

Lectures: 11:00AM-11:50AM MWF in Steward N210

Instructor: Prof. Kratter

Office: SO N328

TA: Vanessa Bailey

Preceptor: Hayley Keith

Class Email: ASTRKratter@as.arizona.edu

Office hours:

Prof. Kratter: 2:30-3:30PM Wednesdays

TA V. Bailey: 1-3PM Tuesdays, location TBA

Preceptor H. Keith: by appointment only

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: 25% (drop lowest score)
- 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, but you must also purchase an account on SmartWork for \$20 from Norton. See the instruction sheet attached to this syllabus for more information.

MIDTERM TESTS There will be THREE in class tests during the semester. Only your best TWO scores will count. 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:

Friday, February 6th
Friday, March 13th
Monday, April 27th

FINAL EXAM The final exam will be held on May 11th 10:30-12:30.

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 and Norton's SmartWork online system. 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 course syllabus for ASTR203 Spring 2015 with Prof. Kratter. I understand that all policies, including those on course conduct, apply to me. I understand that if I am found in violation of these policies my course grade may suffer.

Signature: _____

Date: _____