

Syllabus

Astronomy 132
MWF 10:00 – 10:50

Spring 2019
DH 209

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Office: 524 or 230 Sequoia Hall
Office Hours: Wed: 1:00 – 2:00
also by appointment

Week of:	Material Covered:
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Jan. 23, 25	<i>Measuring the Brightnesses of Stars</i> (K Chapter 2.1 – 2.3, 2.4.2, 2.5, 2.7; Chapter 5.2.1) (CM Chapter 17.2, Chapter 3)
Jan 28, 30, Feb. 1	<i>Measuring the Brightnesses of Stars</i> (continued).
Feb. 4, 6, 8	<i>Understanding the Spectra of Stars</i> (K Chapter 3.1 – 3.4) (CM Chapter 4, and 17.3)
Feb. 11, 13, 15	<i>Understanding the Spectra of Stars</i> (continued).
Feb. 18, 20, 22	<i>The Sun.</i> (K Chapter 6) (CM Chapter 16)
Feb. 25, 27, Mar. 1	<i>Binary Stars and Stellar Masses.</i> (K Chapter 5.1, 5.3, 5.5; Chapter 2.6) (CM Chapter 17.7)
Mar. 4, 6, 8	<i>The Hertzsprung-Russell Diagram.</i> (K Chapter 3.5, Chapter 5.6, Chapter 13.4) (CM Chapter 17.5)
Mar. 11, 13, 15	<i>Stellar Evolution.</i> (K Chapter 15.1 - 15.3, 15.5 and Chapters 9, 10, 11, 12) (CM Chapter 19, 20, 21, 22)

March 18 – 22 SPRING BREAK

Mar. 25, 27, 29	<i>The Milky Way Galaxy.</i> (K Chapter 13.1, 13.5; 14.4, 14.5; 16) (CM Chapter 23)
Apr. 3, 5	<i>The Milky Way Galaxy</i> (continued).
Apr. 8, 10, 12	<i>External Galaxies.</i> (Chapter 17) (CM Chapter 24.1-.3, 25.1 - .3)
Apr. 15, 17, 19	<i>External Galaxies.</i> (continued)
Apr. 22, 24, 26	<i>Active Galactic Nuclei</i> (K Chapter 19) (CM Chapter 24.4 - .5, 25.4)
Apr. 29, May 1, 3	<i>Galaxy Distances and Large Scale Structure.</i> (K Chapter 18) (CM Chapter 25.5, 26)
May 6, 8, 10	<i>Cosmology</i> (K Chapter 20, 21) (CM Chapter 26, 27)

Final Exam: Tuesday, May 14, 8:00 AM – 10:00 AM

Additional Course Information:

Recommended Texts:

Astronomy: A Physical Perspective, 2nd edition by Kutner

Astronomy Today 9th edition Vol. 2: *Stars and Galaxies* by Chaisson and McMillan

You need to get one of these texts. If you have a strong science background, then you'll get the most out of the Kutner book. If you are not a science/technical major, then you should get the Chaisson and McMillan book. **Reading the text is essential.** It's best if you read the section of the book we will be covering any given day before we discuss that material in class.

Grades:

Your final course grades will be based upon 2 exams, a cumulative final exam, and class participation during in-class exercises.

Exam 1	15%
Exam 2	15%
Informal Class Writing	20%
Final Exam:	25%
Course Writing Project	25%

In-class writing will be done every other week, usually in the last half of class, and will be turned in at the end of that class. The topics will vary from “what did I learn in class today?”, to expressing your opinions about astronomy related public policy issues. Grammar and spelling are important, but more important is how clearly you express yourself and your ideas.

Letter grades will be assigned as follows:

A	$\geq 95\%$
A-	$\geq 90\%$
B+	$\geq 87\%$
B	$\geq 82\%$
B-	$\geq 77\%$
C+	$\geq 73\%$
C	$\geq 69\%$
C-	$\geq 66\%$
D+	$\geq 62\%$
D	$\geq 58\%$
D-	$\geq 55\%$
F	less than 55%

Contacting Me:

The best way is by e-mail, since I don't check my voice mail very often. Coming to office hours is also good, and any time my office door is open, please come in.

Attendance:

Attendance is not mandatory, but is *highly* encouraged. If you miss an informal writing exercise, then you will receive zero points for it, which will be reflected in your grade.

Make-up Exams:

I will announce exam dates at least 2 weeks in advance of the exam. If you have a conflicting activity that cannot be rescheduled, *you must see me at least two days before the exam*. If you don't come see me before the exam, there will be no opportunity to make it up. You must bring me documentation of your conflicting activity (i.e. If you have jury duty, show me the form they sent you, if you have a brain transplant scheduled for that day and can't change it, bring me a note from the surgeon, etc....).

Math:

Algebra is required in this course. I plan the exams so that you cannot get an A if you get all the math problems wrong. However, if you get every math problem wrong, but get everything else right, you can still get a B.

Calculators are allowed on the exams. Cell phones and other devices that can do math *are not allowed*.

Cell Phone Policy:

Please turn your cell phone to vibrate before class starts. Cell phones that ring in the middle of class are disrespectful to your fellow students and to me. If your cell phone goes off in class and it is a call that you must take, please go into the hallway to answer it.

Students with disabilities:

Please see me before the end of the first week of class.

Cheating:

The faculty of the Department of Physics and Astronomy do not tolerate academic dishonesty. Falsification of data, copying, unauthorized collaborations, plagiarism, alteration of graded materials or other actions (as described in, but not necessarily limited to the CSUS Policy Manual) *will be promptly reported to the Office of Student Affairs*. The offending student will be penalized on the assignment in question. Serious infractions will result in course failure and a recommendation for administrative sanctions.

Plagiarism:

Anyone caught plagiarizing material will fail this class!!

If you have any questions about plagiarism, come see me before you turn your project in!

Below is an excerpt from the CSUS official policy on plagiarism, which may be found in its entirety on the CSUS web page by searching on the term “plagiarism”.

Plagiarism is the use of distinctive ideas or works belonging to another person without providing adequate acknowledgment of that person's contribution. Regardless of the means of appropriation, incorporating another's work into one's own requires adequate identification and acknowledgment. Plagiarism is doubly unethical because it deprives the author of rightful credit and gives credit to someone who has not earned it. Acknowledgment is not necessary when the material used is common knowledge. When the course is not noted, the following would constitute plagiarism:

1. Word-for-word copying.
2. The mosaic (to intersperse a few words of one's own here and there while, in essence, copying another's work).
3. The paraphrase (the rewriting of another's work, yet still using the fundamental idea or theory).
4. Fabrication (inventing or counterfeiting sources).
5. Ghost-written material (submitting another's effort as one's own).

It is also plagiarism to neglect quotation marks on material that is otherwise acknowledged. Plagiarism and acts associated with it are cause for disciplinary and/or legal action.