

Astronomy 170B1, section 001, Spring 2015, Dr Olszewski Syllabus

version of 12 Jan 2015

Astr 170B1 , Section 001, Spring 2015
OLSZEWSKI AND unknown TA

The class meets in Room N210, the large lecture hall of Steward Observatory. It is actually outside of the majority of Steward, in the courtyard near the dome. Class time is MWF 9:00-9:50am. You are expected to arrive promptly and to stay the entire class period.

Note, you may choose not to come to class. BUT,

- 1) If you missed a lab or an exam or a writing day, that's a zero. No makeups. no complaints.
- 2) I will take attendance on 6 random days.

Note that there is apparently no class at 8am in this room. There IS a 10am class. So we need to vacate pretty promptly at 9:50-9:55.

Please note that there will be informational announcements at the beginning of most classes. These announcements supercede any schedules that may be handed out on the first day (and at any time). They are also available on the website.

This document, the schedule of lectures and assignments, and other information, is only available on the web at http://adansonia.as.arizona.edu/~edo/astr170b1_spring2015 (note the tilde and the underscore and the lower-case)

All updates and addenda to this syllabus will be made on MY (adansonia) website. D2L will only be used for grades and to hand in writing assignments. It is up to you to know when I've made changes to this syllabus. I will announce them in class and post them on the website.

Instructor: Professor Edward W. Olszewski (pronounced "Ol shef ski")
Steward 316 (note the lack of an "N" in this number)
eoteaching@gmail.com (you must use this email,
my other email addresses are for other purposes.
I will check it once daily, typically around 5 or 6 am.)
tel: 621-1973

Teaching assistant:
xxx ????

Office Hours: Olszewski- Mon and Weds from 10:00-11:00AM
AND BY APPOINTMENT

TA ?
AND BY APPOINTMENT

Note: We guarantee to be in our offices during office hours, except
to get a drink of water, or under exceptional circumstances.
We will announce if office hours cannot be held.

"AND BY APPOINTMENT" means that you can call or email us
(email is preferred) to make a specific appointment
outside of the above hours.
YOU ARE ALWAYS WELCOME to do so, we will do our best
to fit you in. You and we might have to find a time
that is mutually convenient.

YOU ARE FREE TO DROP BY ANYTIME, but we may have to ask you
to come back at a mutually convenient time.

Prerequisites: The only prerequisite is that you are admitted
to the UA in good standing.

BUT, All students are expected to remember simple math, which includes algebra
(it's a requirement for being at the University), or to re-become conversant

with simple math on their own time. We will use it!

OUR TEXT ("required text"): Our required text is the 2nd edition of UNDERSTANDING THE UNIVERSE by Palen, Kay, Smith and Blumental (3-hole punch version) bundled with SmartWork and some other material.

You can get the regular text but then you'd have to get SmartWork a la carte. You can get it from NORTON, and presumably from other places. But it's up to you to solve those problems.

WE MAY SUPPLEMENT THIS MATERIAL WITH OTHER ONLINE MATERIAL and we'll keep you informed. All material we give you is "part of the course" and thus subject to testing on exams or in homework or labs.

University Activities (Athletics and the like): The UA allows accomodation for absences because of UA-sanctioned events such as athletics, cheerleading, band, and the like. Your responsibility is to notify me in writing in advance of the activity. The UA will provide an official note. It's up to you to provide me this official note IN ADVANCE of your absence. Late notes will not be accepted nor will accomodation be made for late notification.

Accomodation: We provide accomodation for religious observances and for disabilities. Please see us as soon as possible before the event to be accomodated occurs. Again, you must ask for accomodation IN ADVANCE.

If you will need testing accomodation (Disabilities Resource Center programs and the like), it is YOUR RESPONSIBILITY to let me know IN ADVANCE of the event to be accomodated. I STRONGLY suggest that you talk to me after the first one or two classes to get this set up.

Students with Disabilities: If you anticipate barriers related to the format or requirements of this course, please meet with me so that we can discuss ways to ensure your full participation in the course. If you determine that disability-related accommodations are necessary, please register with Disability Resources (621-3268; drc.arizona.edu) and notify me of your eligibility for reasonable accommodations. We can then plan how best to coordinate your accommodations.

Cell Phones: Please turn off your cell phone. You may not answer your cell phone during class. During exams, cell phones may not be in your possession (backpacks will be placed against the wall). We will ask you to leave the class if you disrupt the class with any electronic device ("disrupt" means that you are not obeying the rules).

iPods and Laptops: During exams, Smart Phones, Ipods and laptops (and the like) may not be in your possession (backpacks will be placed against the wall).

During class, if you want to use a laptop or other electronic device to take notes, you **MUST** sit in the first 3 rows. Otherwise we will ask you to put the laptop away.

Basically, the rule is no electronic media whatsoever will be used by you at any time during the class hour except for computers as discussed above. Please do not make us be electronics police.

Late material: NO LATE MATERIAL IS ACCEPTED. (see the midterm section below for the RARE exceptions)

Handing in material: So that you may be assured that we lose none of your work, all written work is to be handed in in my "sacred box," which I'll have with me. We simply will not accept early or late material, there's too much room for chaos.

Homework will be done on MASTERING ASTRONOMY.

How your grade is calculated:

a) 4 midterms, drop the lowest (so really 2 midterms)	39%
b) Final exam (1 hour 4th midterm, 1 hour comprehensive)	13%
c) 4 in-class exercises (labs)	20%
d) homeworks	5%
e) Ray White Telescope Lab	5%
f) writing	15%
g) Attendance	3%

Extra credit: There is NO extra credit.

Grade calculation: How do you calculate your grade at any time? Turn each grade item into percent. Average the items within a CATEGORY like labs. Multiply that particular part (say labs) by the above weighting factor (0.2). Add up all such factors and you'll get a total percent. You can use this to see what you need to earn on as-yet-untaken parts (like the final) to see if you can earn a specific grade.

So to make it completely clear, things are graded by POINTS and are turned into PERCENT for grade calculation. So a 38 POINT exam is worth the same as a 53 point exam. For the labs, EACH lab is worth the same amount in the grade calculation, once turned into a percent. Ditto for homeworks. Homework 1 is worth the same as homework 17, no matter how many "points" each is.

And to be even more clear, blowing off even a 5% piece of the course is like lowering your grade 1/2 LETTER grade. Another way to say this is that it all adds up, and you can get better grades by diligently doing everything that's assigned, or you can die the death of 1000 cuts by blowing off a bit of this and a bit of that.

We will now discuss each part of the graded material in turn.

More information will be made available on the website.

a) Midterms

Midterms: The lowest of the four midterms will be automatically dropped. Because of this free drop, any missed exam will automatically become the dropped exam, and **NO MAKEUPS WILL BE GIVEN.**

It is a really bad idea (ie, you'll get an awful grade) to miss two midterms. Because sometimes life intrudes in unexpected ways, you may ask for a waiver of the "no makeup" rule.

But, **ALMOST WITHOUT EXCEPTION**, you must ask in advance, and only the most extreme explanations will be accepted (ie, "normal excuses" will not work). Some typical examples of "good excuses" are: pregnancy, call-up to military, death in the family, severe auto accident. We may require documentation.

Midterm 1: Fri, Feb 13 CLOSED BOOK, CLOSED NOTES.

Midterm 2. Fri, Mar 13 CLOSED BOOK, CLOSED NOTES.

Midterm 3. Fri, Apr 17 CLOSED BOOK, CLOSED NOTES.

Midterm 4. first hour of final exam CLOSED BOOK, CLOSED NOTES.

Note that it's easy to forget to study between midterm 3 and midterm 4 at the final. For the typical student, not studying hard after midterm 3 is not a good idea.

b) **FINAL EXAM:** Thurs, May 15, 10:30am-12:30pm, IN THIS ROOM.

By University Policy, the final exam must be taken at this time.

Final exam is CLOSED BOOK, CLOSED NOTES.

It consists of two separate parts: exam 4, and the comprehensive final.

c) **Homeworks:** Homeworks are done on SmartWork.

You must work alone.

d) **"Lab" writeups:** we will assign four "labs" during the semester.

Class dates are set aside for them.

All work will be submitted into a D2L dropbox so it either has to be "typed" or scanned (depending on circumstances).

WE WILL NOT ACCEPT EARLY

OR LATE WORK. More later.

We will inform you if you can work together. Unless we tell you otherwise, the default is NOT working together.

In-Class Lab dates (mandatory attendance or automatic zero):

Feb 11: Mars lab

Mar 9: Spectroscopy Lab

Mar 30: Solar Flux Lab (might be moved in case of clouds)

Apr 24: Galaxies Lab

e) **Ray White telescope (formerly known as the 21") observing:** You will go to the 21" on one clear night (we'll explain about signups), do the observing (there's an operator), and hand in a TYPED writeup. If the weather is bad, you have to sign up again! This is the telescope in the dome you walk past to get into our classroom. The due date is Friday, April 10.

f) **writing classes and assignments:**

There is a University-mandated writing component to this class.

Along with the in-class labs and the Ray White Lab, we will have three in-class writing days.

You each will produce a hand-written document during class.

I will mark up that document with science suggestions and for grammar.

You will then improve the document and hand it in through a dropbox on D2L, and it will be passed through turnitin.com.

I will then grade it.

There are three such writing times/assignments.

g) **Attendance:** I will take attendance at a random time on 6 random days.

How letter grades will be assigned:

We set the HARDEST POSSIBLE grading scale here. We reserve the right to make the scale easier. No one scoring less than 50% in total will get a passing grade in any grading scheme.

A grade of "A": 83% or above

"B": 73-82.99%

"C": 63-72.99%

"D": 53-62.99%

YOU ARE THEREFORE NOT COMPETING AGAINST OTHER STUDENTS IN THIS CLASS.

This grading scheme is the result of 20+ years of teaching these sorts of classes, so THE CURVE IS BUILT IN. It contains a built-in curve for the types of exam questions I ask.

Important dates: add-drop dates, monetary penalty dates, and the like, can be found at

see http://registrar.arizona.edu/dates-and-deadlines/view-dates?field_display_term_value=151

Academic Integrity: The UA ACADEMIC INTEGRITY policies are posted at <http://deanofstudents.arizona.edu/academicintegrity>

It's worth stating that we believe in the University's Code of Academic Integrity. Any work that you hand in is assumed to be your own, unless we've given you

permission to work in groups.

Yes, cutting and pasting from websites is plagiarism (if you don't give credit)! In my class, it is NEVER ok to cut and paste, even if you do give credit.

Any work that you did not do that you are claiming as your own is plagiarism and/or cheating. By handing in any work, you are claiming it as your own.

You must do all homework entirely on your own. Labs will be done as a team in class, and we will let you know the policy for writeups at each such class.

If you're found to be cheating on any item in the class, there WILL be severe sanctions. A typical sanction is failure of the class, no matter what your grade is at that point.

In some circumstances we might announce that it's ok to work in groups. Assume the answer is "no" unless we announce that you may work in groups.

All exams are to be entirely your own work, without the benefit of aids, unless stated by us otherwise.

The codes gives each of us rights and responsibilities. With your rights come responsibilities.

Conduct: <http://deanofstudents.arizona.edu/studentcodeofconduct>
<http://policy.web.arizona.edu/threatening-behavior-students>
We expect you to know that all prohibited conduct, especially threats against the professor, TA, or other students, will be dealt with in accordance with UA policy.

You've heard a lot about disruptive behavior. My attitude is that one of your many jobs is to be polite to me and to Ben and to your

fellow students. This politeness includes (but is not exclusive to) not having cell phones go off in class, not reading newspapers in class, not watching videos or movies on your computer, not talking during class (except when appropriate), not arriving late or leaving early. With 100 of you in the class, seemingly little things add up to chaos.

Questions: It's sometimes scary to ask questions during a lecture. We encourage questions in class. We may suggest that specific questions be answered outside of class time. In either case, research shows that if you wrestle with the ideas, you're far more likely to understand the material than if you let the material wash over you.

We suggest that for academic questions, you try the following experiment:

- 1) Don't wait till the last minute. Ask while the topic is fresh in your mind.
- 2) Dig up another book from the Library.
- 3) Visit our office hours.

You are of course welcome to ask, outside of class, other questions, for instance, grading, studying, or suggestions for science courses to take next semester.

Tier II classes: For your information, the Astronomy Dept also offers a number of Tier II classes to fulfill gen-ed requirements. Not all are taught every semester.

ASTR201 - COSMOLOGY

ASTR202 - LIFE IN THE UNIVERSE

ASTR203 - STARS

ASTR204 - GREAT DEBATES ASTRONOMY

ASTR206 - OUR GOLDEN AGE OF PLANETARY EXPLORATION

(this is a Planetary Sciences class crosslisted)

ASTR208 - ENERGY, SOCIETY, AND THE ENVIRONMENT

ASTR214 - ASTROBIOLOGY: A PLANETARY PROSPECTIVE

(again cross listed with Planetary Sciences)

AND LASTLY:

The lectures and accompanying website are my intellectual property. If you want to record them or videotape them you must ask my permission. Of course, I will grant permission, but only for your use in studying for this class. The material cannot be retransmitted, passed on to other people, put on a website, or any such thing, without my expressed written permission.