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version of 19 Sept 2015
Astr 203 , Section 001, Fall 2015
Dr. Edward Olszewski and TA Chris Bilinski
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 2:00-2:50am. 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.
2) I will take attendance on 6 random days.
Note that there is no Astronomy class in this room from 1:00-1:50 (There is an ARE class from 1:00-1:50 here on MW, not Friday). There IS a 3pm class MWF. So we need to vocate pretty promptly at 2:50-2:55,
and I'll be setting up from 1:50-2:00.
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/~qdo/astr203 fall2015
 (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 get and to hand in writing assignments and homeworks.
It is up to you to know when 1 ve made changes to this syllabus, I will amnounce them in class and post them on the website.
Instructor: Professor Edward W. Olszewski
                                                             (propounced "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.
                                will check it once daily, typically around 5 or 6 am.)
                 tel: 621-1973
Teaching assistant:
                 Chris Bilinski
                 Steward T110 (trailer)
tel 760 622 4392
Office Hours: Olszewski- Tues and Thurs to be voted upon
                                AND BY APPOINTMENT
                  Bilinski Mon and Weds, to be voted upon
                                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: In principle, you must have taken two Science Tier 1's.
 In practice, all the courses are self-contained since Tier 2 Amtronomy does not have a prerequisite of Tier 1 Astronomy. So I will not throw
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"): SOON (waiting to hear back from publisher)
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 accommodation
                     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 accompodation 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 accommodated occurs. Again, you must ask for
                    accomodation IN ADVANCE.
                   If you will need testing accommodation (Disabilities
                   Resource Center programs and the like),
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it is YOUR RESPONSIBILITY to let me know IN ADVANCE of the event to be accomposated. 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 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.

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)

Handling 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. Luckily, except for the labs, most "homework" will be handed in on D2L.

Important UA dates: registrar.arizona.edu/dates-and-deadlines/view-dates?field display term_value=154 YOU must be aware of these dates, I provide them here for information only. I might be wrong.

The above URL is correct, and you have to know if something is due at 5pm or later.

Aug 31: Last day to use UAccess for adding or changing classes. Sept 1- a) costs \$25 to drop a class.

Extra credit: There is NO extra credit.

Septing a) costs 3/3 to Grop a Class.

b) need add/drop form with instructor signature to add class.

Sept 6- last day to drop without a W on your record.

Sept7-Nov 1- drop using UAccess with a W. No Instructor action required.

Nov 2: "Course withdrawals may be processed only with the approval of the student's college Dean on a Late Change Petition now through November 20th.

Students must have an extraordinary reason for approval.

How your grade is calculated: a) 4 midterms, drop the lowest (so really 3 midterms) b) Final exam (1 hour 4th midterm, 1 hour comprehensive) 1.6% 4 in-class exercises (labs) 13% 5% e) Ray White Telescope Lab 5% f) writing g) Attendance

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 (0.13). 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, not doing 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 dilegently 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.

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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, Oct 02
                                                                             CLOSED BOOK, CLOSED NOTES.
Midterm 2. Pri, Oct 30
                                                                             CLOSED BOOK, CLOSED NOTES.
Midterm 3. Mon. Nov 23
                                                                            CLOSED BOOK, CLOSED NOTES.
Midterm 4, first hour of final exam CLOSED BOOK, CLOSED HOTES.
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: Weds, Dec 16, 1:00-3:00pm, IN THIS ROOM.
      By University Policy, the final exam must be taken at this time, https://www.registrar.arizona.edu/schedule2154/exams/mwf.htm
 Final exam is CLOSED BOOK, CLOSED BOTES.
 It consists of two separate parts: exam 4, and the comprehensive final.
 c) Homeworks: Homeworks are done on D2L.
Depending if they are multiple choice or written answers, they will be in the quizzes area or dropbox.
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}:
   There will be 4 labs, Dates will be announced as soon as possible.
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, Nov 13.
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
         one in-class, and 3 out-of-class writing assignments.
You each will produce a hand-written document during class.
        Usually what I do is to give you a short article from a popular science magazine and ask you to do something with it.

On the first one, 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. \label{eq:complexity} \begin{picture}(100,00) \put(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.00)(0.
        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": 73-62,99%
                                         "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: Again, add-drop dates, monetary penalty dates, and the like,
                                  can be found at
registrar.arizona.edu/dates-and-deadlines/view-dates?field_display_term_value=154
Academic Integrity: The UA ACADEMIC INTEGRITY policies are posted at
                                 http://deanofstudents.arizonaledu/academicintegrity
                                 It's worth stating that we believe in the
                                 University's Code of Academic Integrity. Any work that you
                                 hand it is assumed to be your own, unless we've given you
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It is a really bad idea (ie, you'll get an awful grade) to maiss two midterms. Because sometimes life intrudes in unexpected ways, you may ask for a waiver of the "no makeup"

But, ALMOST WITHOUT EXCEPTION, you must ask in advance,

rule.

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://azregents.asu.edu/rrc/Policy%20Manua1/5-301-Code%20Conduct%20-%20Jurisdiction,%20Philosophy,%20Purpose%20and%20Limitat http://policy.web.arizona.edu/arizona-board-regents

http://policy.web.arizona.edu/education-and-student-affairs/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 Chris 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 50-ish 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.
- visit the TA (he's a different voice from what you heard from Instructor).
 Dig up another book from the Library.
- 4) 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.

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.