PHSC 2B (Introduction to Astronomy)
Basic Course Information: Fall Semester, 2015

Instructor: Professor John F. C. Wardle
Office: Abelson 329
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Class Hours: MWTh 10:00 – 10:50 a.m. (Block C). I shall also have 5 Wednesday evening sessions during the semester (see below). These are not required, but should be very useful.

Location: Most likely Abelson 131, but classrooms have not been assigned yet.

My Office Hours: M, W, Th 11 - 12 (right after class), or by appointment, or just drop by. I am here nearly all the time.

Teaching assistant: TBA
Office:
Telephone:
e-mail:
Office Hours:

TEXT BOOK: “Astronomy: The Universe at a Glance,” by Eric Chaisson and Steve McMillan, published by Pearson. It comes with on-line access to MasteringAstronomy with eText Edition: 2015. You MUST have this access because MasteringAstronomy has the tutorials and tests you will be using. The price at the Brandeis bookstore is $90.25. This is far less than any comparable book on the market ($150 and up), which is one of the reasons I have chosen it. I have to warn you against trying to save a few bucks by going to Amazon. They do have copies for sale, but many/most do not come with access to MasteringAstronomy. They also have “used” copies, but the book is new this summer, so that makes no sense at all. And the quoted prices are all over the place, from $72 to well over $200; this also makes no sense and I do not trust them. Again, you MUST have access to Mastering Astronomy. Please purchase from the Brandeis bookstore.

You also need to purchase a black or green, bound notebook from the bookstore for some naked eye observing projects. It must be quad-ruled (looks like graph paper), not blank or regular lined, and it must not be spiral bound. It will only cost you $2.50 or so. This is your “Black Book.”
SHORT FORM SYLLABUS:

In principle the whole book could be the syllabus, but that is far too much material. Instead, I want to focus on a smaller number of topics and cover them in greater depth, and bring in other resources. The chapters I will draw from are
Chapter 1: The night sky
Chapter 2: Light and telescopes
Chapter 3: The solar system
...........................
Chapter 7: Formation of planetary systems
Chapter 8: The Sun
Chapter 9: Measuring the stars
Chapter 10: Star formation and evolution
Chapter 11: Stellar explosions
Chapter 12: Black holes
Chapter 13: The Milky Way Galaxy
Chapter 14: Galaxies
Chapter 15: Cosmology and the Universe

A detailed, day-by-day syllabus with the readings, MasteringAstronomy activities, observing projects etc will appear soon.

WHAT I EXPECT OF YOU:

- Weekly reading. This must be done before class, so that in class we can discuss the material rather than just have me give old fashioned lectures (so boring).
- Regular tutorials and tests on MasteringAstronomy
- One observatory session and an observatory report. The observatory will be open every clear M, T, W, Th night, and there will be sign-up sheets in class. New England weather being what it is, it will be tough to get everyone up there. Don’t pass up a good night.
- Black book naked eye observing projects. Some of these are required, some are for extra credit. (Yes, I know the books may be green, but usually they are black and I like the alliteration.)
- Two short exams – 45 minutes, in class, about 1/3 and 2/3 of the way through the course.
- Final exam - three hours, scheduled by registrar. This will be a 90 minute exam with three hours to do it.
IMPORTANT DATES:

- **Wednesday October 7:** Evening class -- review session for first exam
- **Thursday October 8:** First in-class exam
- **Wednesday October 14:** Evening class – go over exam

- **Wednesday November 4:** Evening class -- review session for exam
- **Thursday November 5:** Second in-class exam
- **Wednesday November 11:** Evening class – go over exam

**Exam week (December 11-18):** Final exam, date and time will be determined by the registrar. There will be one or more review sessions scheduled prior to the final exam.

It is not possible to take the exam early under any circumstances whatsoever (university rules). If you miss the final exam, you must take an incomplete, and do a make-up exam in January.

**GRADING:** Your grade will be determined from the six required components, and augmented by extra credit work. (The percentages are approximate.)

- Participation..............................15%*
- Mastering Astronomy activities.....15%
- Observatory report ......................10%
- Black book projects.......................10%
- In-class exams (2)..........................10% each
- Final exam ....................................30%

* There are many ways to participate, even if you feel shy about speaking up in class. Just showing up is a huge one. Another is making use of my office hours (by all means come in pairs or small groups). Ask me about other ways.

If you complete **ALL** the work listed above, your grade will not be lower than a C-. You cannot fail this course unless you really try to do so! Correspondingly, if you DO NOT complete **ALL** the required work listed above, your grade will never be higher than a B. That means you **cannot earn an A by just acing the exams.** Last timed I taught this class the students earned 28 A's, 71 B's, 10 C's : GPA=3.19. No D's or E’s.

I hope everything on this sheet is correct. However, the following disclaimer is necessary:

All information on this sheet is subject to change. Any changes will be announced in class. It is the responsibility of each student to be aware of changes, deadlines, and all information about the course.

Also, any student with special needs or who needs accommodations should see me as soon as possible.