PHYS 188 - Freshman Seminar
Information Sheet, Fall 2010

Goal: to become familiar with the faculty and research programs within the Department of Physics & Astronomy, to build academic skills, and to decide if physics is the best degree for you.

Instructor: Dr. Michael Allen
Office: Webster 1246
Credits: 1
Lab: Webster 249
Level: Tier II
Phone: 509-335-1279
Prereqs: none (intention to major in physics)
E-mail: mlfa@wsu.edu
Web Page: http://astro.wsu.edu/allen/courses/phys188/
Office Hours: TBA

Texts: Your college experience, strategies for success, by Gardner, Jewler, & Barefoot (assignments are taken from this book)

Meeting Places:
- Regular Lectures Th 4:10-5pm in Webster 11
- Planetarium Sloan Hall 231
- Observatory on Olympia Ave, near the racetrack and greenhouses, south-east end of campus

Assignments: Each student will be responsible for attendance at each class, and weekly submission of assignments.

1. Attendance at every class is mandatory. If you miss a class, then you must produce a WSU Class Absence Form or similar documentation.
2. Weekly assignments are taken from the textbook. They are in the style of reflective short papers. Each paper has a maximum length of 250 words (about one typed page). All papers must be submitted electronically (see below).
3. Three times in the semester a reflective journal is due concerning the faculty presentations. In each of these journals, you must answer three questions:
   1. What was the broad question or area of research of the speaker?
   2. What aspect (style, or material) of the seminar did you like best?
   3. How could you see yourself participating in this research?

   The 3rd question should occupy half or more of the paper’s word count.

   If you use references in your writing, then your paper must end with a list of references to the books, papers, and internet sites, that you used. You must use a consistent style of citation. For internet sites, give the full URL, the author (if possible), and the date accessed. In general, sites that fall into the domains .gov and .edu are reliable, whereas others are suspect. In particular, do not reply upon a single reference, i.e., “one-stop shopping”. If in doubt, the instructors will be happy to help. Reference: http://www.wsulibs.wsu.edu/electric/library/tutorial.html.

Submission of assignments: by email, to mlfa@wsu.edu. You will receive an acknowledgement of receipt. Please submit all material in pdf format, and help fight against the spread of proprietary and non-open source formats.

Holidays:
- Labor Day Mon Sep 6, 2010
- Veteran’s Day Thu Nov 11, 2010
- Thanksgiving Break Nov 22-26, 2010

A full academic calendar is available from the Registrar: http://www.registrar.wsu.edu

Course webpages: The web pages have all the information needed by the student, including sections for announcements, grading and evaluation, and references to any reading or notes.

Classroom Etiquette:

1. The course is conducted mostly by lecture format. There will be time during each lecture for discussion.
2. Please show courtesy to your fellow classmates and do not chat unnecessarily during the lecture. Turn your cell phones off, or better, leave them at home. Being disruptive is ground for expulsion.
Evaluation:

(1) Attendance Kept weekly
(2) Short papers Submitted weekly
(3) Reflective journals Three due by the end of the course

This course is graded pass/fail. To receive credit for this course, you must attend and submit a paper for every lecture. This class has no final examination.

Out-of-class opportunities: You are encouraged to participate in evening planetarium shows (dates announced in class) and star parties at the Jewett Observatory (http://astro.wsu.edu/observatory.html) or elsewhere, hosted by the Palouse Astronomical Society (http://www.palouseastro.wsu.edu).

Observing dates: Sat Aug 28 All observing begins at sunset
Sat Sep 18 Cancelled if cloudy
Fri Oct 15

List of possible topics

The topics covered in this class vary from year to year, depending upon the current profile of faculty and post-doctoral fellows. In general, the Dept of Physics & Astronomy specializes in four broad areas of research:

1. Astrophysics - stellar population modelling and galaxy evolution, gravitational wave detection and cosmology, observational studies of the Milky Way and local universe
2. Material science and optics - defects and atomic transport in crystalline matter, semi-conductor physics, anti-matter research, femtosecond-scale time resolution of atomic processes, surface effects at the nanoscale level, highly non-linear optical systems
3. Matter under extreme conditions - shocks and high static pressure physics, physical acoustics and the propagation of sound waves, biophysical investigations
4. Novel states of matter - theoretical and experimental investigations of Bose-Einstein condensates, chaotic behavior of quantum systems, statistical mechanics of model non-linear systems, nanoscale atomic clusters

Academic integrity: “Academic dishonesty” is anytime you represent someone else’s work as your own. All forms of cheating, plagiarism, and fabrication, are prohibited as stated in the WSU Handbook (WAC 504-25-015). Students receive zero credit for a first offense, and fail the course for subsequent offenses. A formal report is sent to the Office of Student Affairs. Reference: http://www.conduct.wsu.edu/. Lab groups can share data and calculations, but any other collaboration is strictly prohibited.

Students with disabilities: Reasonable accommodations are available for students who have a documented disability. Please visit the Disability Resource Center (DRC) during the first two weeks of every semester to seek information or to qualify for accommodations. All accommodations must be approved through the DRC, located in Washington Bldg 217, phone 509-335-3417 in Pullman, or http://www.drc.wsu.edu.

Campus Safety: The current Campus Safety Plan is available at http://safetyplan.wsu.edu. Please look at the general emergency information provided at http://oem.wsu.edu/emergencies from the Emergency Management Office. You can check any campus alerts at http://alert.wsu.edu. This site will have the most current information about any campus emergency. On your myWSU you can register your emergency contact information so you can be notified directly by phone and/or email about any crisis occurring on campus.

Strategies for success: Look up any word you do not understand in a good dictionary. Re-write your notes in your own words. Form a weekly study group that can meet for 30-60 minutes. Get an early start on assignments. Make good use of instructor office hours by arriving with a written list of questions. Mental and physical health go hand in hand: eat right, stay active, stop watching TV. Maintain an academic mindset, be not content with your knowledge.