

Physics Seminar PHY 300 Spring 14

Instructor: Dr. Matt Marone Room 243 Science and Engineering Building

Phone 301-2597, e-mail: marone_mj@mercer.edu

Office Hours: T 10:30-12:00, outside of these hours please make an appointment. You may email me your questions as well.

Lecture: M 4:30-5:30 SEB 110 Auditorium

Prerequisite: Phy 142 or 162

General: Physics seminar is a weekly one-hour seminar, which familiarizes students with current topics in physics and other areas of science and engineering. Seminar speakers will consist of a mixture of students, Mercer faculty members and invited guests. Attendance is mandatory. Students are expected to provide written summaries of each presentation, and present one seminar. The details of these requirements are described below. The goal of this class is to prepare you for giving a seminar. Attending a wide range of seminars will help you learn by example.

Attendance: Attendance is mandatory. You are expected to attend all seminars and to actively participate by asking questions or joining the discussion. If you miss a class due to a valid excuse, as defined by the university handbook you will be given a make up assignment. Missing a class due to an unexcused absence will result in a **grade of U for the corresponding summary**. Participation is also a factor in your grade. You are expected to ask intellectually relevant questions. I will keep track of who is actively participating and who is deficient in that area.

Summaries: You will write a summary of each presentation. The summary should include definitions of new terms, a description of the main idea, discussion of any experiments, and conclusions. Your summaries are to be submitted electronically by **e-mail**. The subject of the e-mail must contain "PHY 300", as my mail program will automatically sort them. Summaries are due by 5:00pm Friday before the next seminar. Should you experience a computer problem while sending the e-mail, you must contact me by other means and explain the problem. Summaries are graded satisfactory or unsatisfactory. (S/U). If I do not receive your summary on time, it will be treated as an unsatisfactory. You are allowed one unsatisfactory grade before receiving a deduction.

Presentation: Each student is required to give a presentation and a practice session. Your presentation must be on a topic of historical importance to science. You can choose an important discovery, concept, or invention. You must include the original paper in which this idea was made known to the world. If the original paper is not in English, you should also include the first English translation of the paper. Also include other papers from the same time period that discuss the idea or perhaps even try to refute the idea. We want to get the historical perspective and understand how the idea fits into science of the day. Of course, you must also explain how the idea is relevant today. Students may find the following journal helpful in selecting topics; *Physics Today*, *Physical Review*,

Scientific American, Nature and Science. Once you have a topic in mind, you must get my **written approval**. Before you are allowed to give your presentation, you must give a practice session. This session will be shorter than your final presentation so that we can fit in several in one class period. The other students in the class will assist me in critiquing your practice session. We will point out the strong points and make suggestions regarding any weak areas. I would like the practice sessions to occur around midterm. Your practice presentation will be about 20-30 minutes long and presented in a professional manner. The practice presentation will comprise 20% and the final presentation will comprise 40% of the student's grade.

Grades: Presentations are graded on a 100-point scale, and evaluated in the following categories.

1. Demonstrated understanding the material (25)
2. Engaged the audience (25)
3. Answered questions/ discussion (25)
4. Presentation well organized. (25)

Practice seminar 20%, final presentation 40%, summaries 30%, and participation 10%

A (90 and above), B+ (85-89), B (80-84), C+ (75-79), C (70-74), D (60-69) F (below 60)

Honor code: You are bound by the Mercer honor code. The College's academic misconduct policy will be followed. All work, for which a grade is received, must be the **original** work of the **student** without aid or assistance of another party, or any printed and or electronic data/information. Academic misconduct cases will be referred to the honor council and the student will automatically receive a grade of incomplete (IC) pending a ruling by the honor council.

Cell Phone and Pager Usage: Out of courtesy for all those participating in the learning experience, all cell phones and pagers must be turned off before entering any classroom, lab, or formal academic or performance event

Classroom etiquette: You are expected to conduct yourself as a mature student, respectful of your classmates and instructor. You may be asked to leave the room if your behavior is disturbing the instructor or your fellow students. You may use a laptop to take notes or access the e-book during class. Please do not use a computer for any other

purpose such as facebook, twitter, myspace, social networking, email, stock trading and the like.

Documented Disability

Students with a documented disability should inform the instructor at the close of the first class meeting or as soon as possible. If you are not registered with Disability Services, the instructor will refer you to the Student Support Services office for consultation regarding documentation of your disability and eligibility for accommodations under the ADA/504. In order to receive accommodations, eligible students must provide each instructor with a Faculty Accommodation Form from Disability Services. Students must return the completed and signed form to the Disability Services office on the 3rd floor of the Connell Student Center. Students with a documented disability who do not wish to use accommodations are strongly encouraged to register with Disability Services and complete a Faculty Accommodation Form each semester. For further information please contact Disability Services at 301-2778 or visit the website at http://www.mercer.edu/stu_support/swd.htm.

Evaluation forms: In an ongoing effort to improve the quality of instruction, each student enrolled in this course is required to complete an end-of-semester course evaluation, to be administered in class on our last day.

Important Dates

First Day of Class January 6

Late Registration & Drop/Add January 6-10

Holiday – Martin Luther King, Jr. Day January 20

Mid Term March 5

Spring Break March 10-14

Last Day for Course Withdrawal March 20

Holiday – Good Friday April 18

Last Class Day April 25

There is no final exam for this class