

Syllabus: Fall 2013 Physics 8750-7

Course: Physics 8750 Section 7

Title: Introduction to Research:

Credits: 1 credit hour

Instructor: Dr. Terry M. Tritt, Dept. of Physics and Astronomy
Office 103 Kinard Lab., Phone 656-5319, email: ttritt@clermson.edu,
Dr. Jens Oberheide (email: joberhe@clermson.edu)
Office hours are by request. Just send me an email.

Class Time: Wednesdays @ 12:20-1:10 pm; **Room G01 Kinard**
Students should give the instructor 15 minutes before dismissing.

Colloquium Time: Typically Thursdays @ 4-5 pm, Room G01 (TBA) Kinard
Refreshments served either before or after colloquium

Course Description: Introduction to Research:

Acquaints students with current research in in the Department of Physics and Astronomy. Seminars are provided where research activities in various areas of Physics and Astronomy are summarized. Various faculty members will be recruited to give a brief (≈ 30 minutes) overview of their research and opportunities for student projects within their research group. This course should provide a basis to enable the students to choose a suitable topic for a potential thesis project or advisor. (Schedule of talks in progress.)

Prerequisites: (Level: First Year Graduate Students)

Textbooks: Required (None)

Grading Policy: (Phys. 8750: Graduate Students)

90 - 100: A

80 - 89: B

70 - 79: C

60 - 69: D

0 - 59: F

80%: Research Reports and Summaries (Described Below)

20%: Class and Colloquium Attendance

Class & Colloquium Attendance: Phys. 8750 Graduate Students:

Each student who is signed up for the Phys. 8750-Section 7 is expected to attend class (since we only meet once per week) and **then also attend N-1 colloquium presentations** during the semester. You will write up a short abstract ($\approx 1/2$ page) including: the class, date, your name and the Colloquium speaker and topic. This will be how we will record attendance. They must be handed in before departing the Colloquium. You will be allowed one free absence. There will be **N number of in class presentation** dates scheduled. We will use the **top N-1** of these in determining your grade, i.e., we will drop the lowest grade (or an absence for example). The same will be applied to Colloquium attendance.

Research Reports, Summaries & Attendance: (for 8750-7)

Seminars are provided where research activities in various areas of Physics and Astronomy are summarized. Various faculty members will be recruited to give a brief (≈ 30 minutes) overview of their research and opportunities for student projects within their research group. The specific grading procedure that will be used will be discussed in class on our first day of class. In the event of an emergency, the student should make direct contact with the course instructor, preferably before a class or presentation takes place. Students should speak with their course instructors regarding any scheduled absence as soon as possible and develop a plan for any make-up work.

Expectations & Requirements:

- (1.) The students will participate in the presentations and overviews of the respective research areas. Students are encouraged to interact and ask questions of the faculty members presenting.
- (2.) The students will provide a summary research report of the presentation. The report will be a maximum of two typed pages, double-spaced, (eg. #12 Times New Roman). The report will be due the following class period after the lecture. This will include a:
 - (a) Title,
 - (b) Faculty Presenter,
 - (c) Student's Name
 - (d) Synopsis of Presentation (2-3 sentences),
 - (e) A summary of 1-2 paragraphs of what they learned from the presentation, including the experimental or theoretical techniques involved, and some of the important results presented.
 - (f) A summary from further reading of a **minimum of 2 references** that expands on the research topic presented. The students will present a further discussion of the research topic and important questions that this area of research addresses. The references are to be included in the report. Figures may also be used in the writeup (please reference the source).

Statement of Integrity:

As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a high seminary of learning. Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form.

Policy Statement:

Students with disabilities who need accommodations should make an appointment with Dr. Arlene Stewart, Director of Disability Services, to discuss specific needs within the first month of classes. Students should present a Faculty Accommodation Letter from Student Disability Services when they meet with instructors. Student Disability Services is located in Suite 239 Academic Success Building (656-6848; sds-l@clemson.edu). Please be aware that accommodations are not retroactive and new Faculty Accommodation Letters must be presented each semester.