Syllabus for PHYS 419 Research Seminar – Spring 2015

Class Times: Wednesdays 8:00-8:50 AM, JC Long 219

Instructor Information: Dr. Mike Larsen

Office Phone: 843-953-2128

Office Hours: Mondays, 12-1 PM; Wednesdays 10-11 AM; Thursdays 5-6 PM, or by appointment. (I am here a lot. 95% of the time, I'll drop whatever I'm doing to help you if you need some help. Just ask. If you want to make sure I'm available, make an appointment with me.)

Office Locations: JC Long 217 (I also am sometimes in a research lab during office hours – JC Long 220, JC Long 221, or Lightsey 336. Check the door of my office for my current location.)

Email address: LarsenML@cofc.edu (please use sparingly; I'd rather talk to you in person if you have a question or a concern.)

Prerequisite or Corequisite: PHYS 370 or ASTR 377

Course Webpage: http://larsenml.people.cofc.edu/phys419_spr15.html (Please see course page for supplementary information).

Textbook: None.

Final Exam Time Period:

Wednesday, April 29th, 8-11 AM. (MAKE SURE TO KEEP THIS TIME FREE – WE WILL LIKELY BE USING THIS TIME, EVEN THOUGH THIS IS ONLY A 1 CREDIT COURSE!)

Attendance Policy

It is expected that you will attend class. I will. A portion of your course grade will be based on attendance.

Classroom Policies

This course is designed for students who are nearing graduation. It is expected that you will act in a professional manner.

Honor Code / Code of Conduct

It is expected that you will adhere to the university's honor code and student code of conduct, as can be found in your student handbook.

Students with Disabilities

The College will make reasonable accommodations for persons with documented disabilities. Students should apply at the Center for Disability Services/SNAP located on the first floor of the Lightsey Center, Suite 104. Students approved for accommodations are responsible for notifying your professor as soon as possible and subsequently contacting your professor again at least one week before any specific accommodation is needed.

Grading

Grades will be based on attendance, timely completion of homework assignments and presentations of various types.

Grading Scale: The formal numerical scale might move around a little bit depending on the class' performance, but the final grading scale will be *no more stringent* than:

| A | >90 | C+ | 79 |
|----|-------|----|-------|
| A- | 90 | С | 71-78 |
| B+ | 89 | С- | 70 |
| В | 81-88 | D | 60-69 |
| В- | 80 | F | <60 |

Course Goal

This course is designed to prepare students for their capstone 420/499 projects in Physics and Astronomy.

Learning Objectives

This course endeavors to aid the motivated student in the following tasks:

- Preparing a scientific proposal that adheres to basic scientific writing standards.
- Learning the professional standards associated with doing ethical work in the physical sciences.
- Learning the elements of a professional resume and/or CV.
- Learning about the paths available to students after graduation.
- Learning about the skills and methods appropriate for dissemination of scientific results.

Learning Outcomes

At the end of this course, successful students will be able to:

- Write a brief scientific proposal appropriate for a senior capstone (420/499) project.
- Construct a professional resume and/or CV for themselves.
- Outline the path necessary to accomplish their immediate post-graduation goals.
- Identify whether particular behaviors adhere to scientific ethical standards.