Syllabus for PHYS 419 Research Seminar – Spring 2016

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

Instructor Information: Dr. Mike Larsen

Email address: LarsenML@cofc.edu (please use sparingly; I'd rather talk to you in person

if you have a question or a concern.)

Office Phone: 843-953-2128

Office Hours: Monday 9:30-10:30 AM (HWWE 106/209); Tuesday 12:30-1:30 PM (JC Long 217); Friday 9:30-10:30 AM (HWWE 106/209). If you need help outside of "official office hours", try to find me [my office door has a Dr. Larsen finder that can sometimes be helpful]; most often I'll happily drop what I'm doing to help you).

Office Location: JC Long 217. Since our classes are at the Harbor Walk facility, I am also holding some of my office hours in Harbor Walk West. See above for details.

Course Webpage: http://larsenml.people.cofc.edu/phys419_spr16.html

(Please see course page for full description of course, rationale, and supplementary information).

Prerequisite or Corequisite: PHYS 370 or ASTR 377

Textbook: None.

Final Exam Time Period: Wednesday, April 27th, 12-3 PM. (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, presentations of various types, and completion of the departmental major field test assessment.

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	C-	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.