

**Syllabus for PHYS 419
Research Seminar – Fall 2018**

Class Time/Location: Tuesdays, 9:00-9:50 AM, RITA 363

Instructor Information: Dr. Mike Larsen

Office Phone: 843-953-2128

Office Hours: Mondays, Wednesdays, and Fridays from 7-8 AM (in room RITA 387), Mondays from 5-6 PM and Tuesdays from 8-9 AM (both in my office). If you need help outside of “official office hours”, try to find me and most often I’ll happily drop what I’m doing to help you. If I’m not where you expect me to be, check my office door. I will try to have some sort of sign indicating where I am.

Office Location: RITA 317

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_fall18.html (Please see course page for full description of course, rationale, and supplementary information).

Textbook: None.

Final Exam Time Period: Tuesday, December 11th, 8-11 AM. (Make sure to keep this time free – we WILL be using this time.)

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 (20%), timely completion of assorted homework assignments (15%), presentations of various types (20%), completion of your capstone proposal and associated drafts (35%), and completion of the departmental major field test assessment (10%).

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	C	71-78
B+	89	C-	70
B	81-88	D	60-69
B-	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.