Physics 491: Senior Seminar  
Spring 2016

The purpose of this class is to develop skills for communicating scientific knowledge. There are two main parts to the course. First: reading, questioning, and discussing scientific articles. Second: writing papers and giving presentations on a research project of your choosing.

**Professor:** Phone Office E-mail  
Dr. Julie A. Rathbun x8661 AHON 129 julie_rathbun@redlands.edu

**Class meetings:** Sec 01: MW 1:00-2:20 PM, Sec 02: MW 2:30-3:50 PM (AHON 117)

**Office Hours:** MF from 10:30-11:30 am and W 10:00-11:00 am. You can also make an appointment or just stop by my office. I'll be glad to talk to you whenever I'm able. My schedule is available on my web site.

**Goals:**
1. To critically read scientific literature and engage in scientific discourse.
2. To communicate results through scientific writing and oral presentations.
3. To work productively in a group setting and establish a leadership position.
4. To supply constructive criticism when evaluating the work of peers.

**Text:** The Craft of Scientific Writing (3rd edition) by Michael Alley

**Course Policies:** Assignments are due at the beginning of class unless otherwise indicated. I am under no obligation to read any assignments turned in late, so they will not be part of your evaluation. If you have a pressing reason to extend a due date, you must request an extension well in advance of the original due date. I reserve the right to schedule pop quizzes if students are failing to attend meetings or come to meetings prepared.

**Writing:** All of the writing assignments must be typed. The draft and final versions of the senior thesis must be submitted by email. MS Word is the preferred form. You must check with the instructor if you want to use something else. Plagiarism of any type will not be tolerated and will result in failure of the course.

**Presentations:** There will be TWO senior symposiums this year. They will be on consecutive Thursdays, March 17th and 24th, beginning at 4 pm. Here, you will give a presentation of your work to the department. You will give a practice talk to this class beforehand. Section 2 will present on the 17th and Section 1 on the 24th. Dinner will be served after the first set of presentations. You are required to attend and participate in both symposiums.

**Grading:** You will not receive a numeric grade for this class. Instead, you will receive a narrative evaluation that comments on your participation and preparation for class discussions and your final research project, including outline and drafts, presentation, and final paper. You will be required to keep a portfolio of all the work you complete in class and turn it in, along with a self-evaluation of your work by Tuesday, April 19th.