PHYSICS 195A - Senior Thesis Research
Physical Sciences 110 - Monday 3:30-5:00pm
David P. Belanger Fall 2009

Text: *Enjoy Writing Your Science Thesis*,
by Daniel Holton & Elizabeth Fisher

TENTATIVE SCHEDULE OF LECTURES

WEEK	LECTURE NUMBER	DATE	TOPIC	TEXT READING
I	1	9/28	Introduction, Thesis Examples	
II	2	10/5	Good Presentation in Writing and Orally	Chapter 1, 2 & 3
III	3	10/12	Doing research	Chapter 4, 5 & 6
IV	4	10/19	How to Write a Thesis	Chapter 7, 8 & 9
V	5	10/26	Ethical Issues, Miscellaneous Topics	Chapter 10, 11 & 12
VI	6	11/2	Giving your Oral Presentation	Chapter 13 & 14
VII	7	11/9	Student Presentations	
VIII	8	11/16	Student Presentations	
IX	9	11/23	Student Presentations	
X	10	11/30	Student Presentations	

This course should help you write an excellent senior thesis, something you will be proud that you wrote. We will spend time talking about the basics of doing research and reporting on your work. In the spring quarter, if not sooner, you will turn in your written thesis. I sign it as the thesis coordinator and department chair. Your thesis supervisor will also sign it and will work closely with you in the writing of it. Hopefully, you will put the skills you learn in this course to good use when writing your thesis. This is a writing course and you will be doing many writing assignments. No matter what you end up doing for your career, excellent writing skills will serve you well and contribute to your success. It is important for you to attend all lectures because we will be doing most of the writing assignments in class.

The syllabus mostly reflects what I intend to cover, but I am flexible and you can request different topics for me to cover if you like. Also, many of these topics will come up in multiple classes, so the outline of topics is only suggestive.

In addition to the writing assignments, you will give a presentation this quarter, in Physics 195A, or next quarter, in Physics 195B. I will base your grade on the quality of writing and the quality of the presentation you make. It will not be based on the thesis itself because you will likely complete that after the course is done. You must take the writing assignments seriously. Attendance can have a big affect on your grade, because missed will lower your grade, especially if they are not excused. You must show up for your assigned

presentation date because the schedule is tight. You do not need to finish your project before doing a presentation. The presentation will be 10 to 12 minutes long with a few minutes for questions from the audience. We will talk about this much more as the quarter goes on.

The text book is quite good, though it is written with a British biologist's perspective. I will point out places where I suggest we might differ in approach. It is an enjoyable book to read and quite useful for this course and any time you will be writing scientific literature. Refer to it often.

I have posted some useful things on the website
http:/dave.ucsc.edu/physics195
to help you during the quarter. Included on the site are some helpful hints on writing, latex and doc versions of templates for the thesis, and, eventually, a schedule of presentations. If you find interesting or useful items to post, feel free to send them to me and I will post them on the website.

For your presentations, you can, if you wish, use computer slide shows. In this case, you must send me the electronic version, in any format you wish, a couple days before the presentation. I can then view it and give you feedback on it. If the final version is in pdf, it is easy for me to have it ready on my laptop for your presentation. Open office formats are also fine. If, for technical reasons, you must use something like power point, it may or may not work well on my laptop. In that case, you should make sure there will be a windows laptop available (usually another student in class will have one if you don't). In any case, I must have the presentation because I may want to view it when writing your evaluation at the end of the class.

My office is ISB 245. The best way to communicate with me is using email
dave@dave.ucsc.edu .
I will hold office hours at a time we agree to at the first class meeting.

I enjoy teaching this course and I hope you will also enjoy the course. Doing a presentation and writing a thesis will be important steps in preparation for your career in physics. These should be fun as well. Do not hesitate to let me know how your project is going or to get help when you need it.