

**Biology, Chemistry and Physics 188L, 189L, 190L, 191**  
**Senior Thesis Syllabus –Fall 2018**  
**W.M. Keck Science Department**  
**Claremont McKenna College, Pitzer College, Scripps College**

**Coordinator:**

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**Registration:**

1 semester thesis finishing in December (“1f”): registered for 191 in Fall.

1 semester thesis finishing in May (“1s”): registered for 191 in Spring.

2 semester thesis finishing in May (“2s”): registered for 188L in Fall AND 190L in Spring.

2 semester thesis finishing next December 2018 (“2f”): now registered for 190L.

2 semester summer research thesis completing first semester during summer after junior year (“2f” or “2s”): registered for 189L in Fall and 190L in either Fall or Spring.

**Grading:**

**Senior Research in (Science) 188L**

|   |     |
|---|-----|
| Participation (seminar summaries)         | 5%  |
| Oral presentation                         | 25% |
| Effort (1 <sup>st</sup> reader)           | 25% |
| Semester end progress report (1st reader) | 20% |
| Semester end progress report (2nd reader) | 25% |

**Senior Thesis in (Science) 190L**

|   |     |
|---|-----|
| Participation (seminar summaries)       | 5%  |
| Effort (1 <sup>st</sup> reader)         | 25% |
| Written thesis (1 <sup>st</sup> reader) | 25% |
| Written thesis (2 <sup>nd</sup> reader) | 20% |
| Poster                                  | 25% |

## Senior Thesis in (Science) 191

|   | 1 <sup>st</sup> reader | 2 <sup>nd</sup> reader |
|---|------------------------|------------------------|
| Participation (seminar summaries)       | 5%                     |                        |
| Effort (1 <sup>st</sup> reader)         | 15%                    |                        |
| Progress Report                         | 8%                     | 7%                     |
| Written thesis (1 <sup>st</sup> reader) | 20%                    | 20%                    |
| Poster                                  |                        | 25%                    |

### Participation:

You are required to attend at least **six (6)** seminars in science, each semester of thesis program registration, of the many that are offered throughout the Claremont Colleges. If you are registering for a two-semester summer research thesis (189L & 190L), you are required to submit 6 seminar summaries in the second semester (190L) only regardless of which semester it is completed. There are a variety of seminar programs in biology, chemistry and physics. For six of these, write a one page summary on the talk. Give those to your first reader (or Keck reader if your first reader is off – campus) by December 7<sup>th</sup>.

### Progress/Effort:

For 188L (**2s**) students, there will be a brief oral presentation during the week of October 8<sup>th</sup> – October 12<sup>th</sup>. Contact your first reader for logistics.

For 190L (**2f**) and 191 (**1f**) students, there is a poster session on Friday, December 7<sup>th</sup>. Your presentation will be evaluated by a panel of faculty.

For 191 (**1f**) students, a progress report consisting of a minimum of 5 pages of literature review and methods with a bibliography and an outline or description of the thesis is due Monday, October 8<sup>th</sup>.

For 188L and 189L (**2s**) students, turn in a substantial progress report on December 7<sup>th</sup>. This should consist of at least seven pages of literature survey and proposal as well as three pages of materials, methods and a description of progress to date. It should also include a bibliography. This is a minimum, as your first reader may want additional pages or materials.

### Meetings with Thesis Readers:

Your readers are responsible for submitting your grade, so it is your responsibility to meet regularly with them and keep them informed about your progress.

### Thesis Program Communications:

Regularly check the bulletin board outside the Administration office (Keck 110). Information on seminars and other useful information will be posted here and around Keck. Also check with your research advisor as to upcoming meetings.

### **Satisfactory Work and an Admonition:**

Thesis is usually one-fourth of your academic load and you should expect to devote 10-15 hours per week to the effort. Successful field or laboratory work often requires significant amount of continuous effort – schedule your work week accordingly.

Students doing two semester theses will be graded on their first semester work. A thesis project may be terminated and/or converted to a one semester thesis if, in the judgment of the thesis readers, inadequate effort has been made and successful completion is unlikely.

### **Animals:**

Any and ALL theses involving experimental work with animals (including fieldwork) require formal approval from the KSD Animal Care and Use Committee, which in turn is bound by complex legal regulations. Consult the AUC website (<https://kecksci.claremont.edu/bio/animalcare>) for details and forms. The deadline for turning in these forms is 12 noon, Thursday, September 20<sup>th</sup> in the KSD Administration office. **There are no exceptions** – miss the deadline and you cannot use animals in your research.

### **Experimentation involving Humans:**

Experimentation involving humans requires the approval of the appropriate “Human Subjects Research Committee” - see your first reader as soon as possible.

### **Penalties for Late Theses:**

- i. One grade point reduction (i.e., A to A-) for theses turned in up to 24 hours late.
- ii. Two grade point reductions (i.e., A to B+) for theses turned in from 24 to 72 hours late.
- iii. Three grade points (i.e., from A to B) for theses turned in from 3 days to one week (5 days) late.
- iv. Additional full letter grade (three grade points) for each subsequent week (5 days) of lateness (or part thereof).