Biology, Chemistry and Physics 188L, 189L, 190L, 191 Senior Thesis Syllabus – 2021-2022 W.M. Keck Science Department Claremont McKenna College, Pitzer College, Scripps College

Coordinator:

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Registration:

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

2 semester thesis finishing in May ("2s"): registered for 188L or 189L in Fall AND 190L in Spring.

2 semester thesis finishing next December 2019 ("2f"): now registered for 188L.

Grading:

Senior Research in (Science) 188L

Participation (seminar summaries)	5%
Oral presentation	25%
Effort (1st 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 (1st reader)	25%
Written thesis (1st reader)	25%
Written thesis (2 nd reader)	20%
Poster	25%

Senior Thesis in (Science), 191

Participation (seminar summaries)	5%
Progress report	5%
Effort (1st reader)	20%
Written thesis (1st reader)	25%
Written thesis (2 nd reader)	20%
Poster	25%

Participation:

You are required to attend at least **six (6)** seminars in science, <u>each semester of thesis program registration</u>, of the many that are offered throughout the Claremont Colleges. If you are completing the second semester of a two-semester summer research thesis this spring, you are required to submit 6 seminar summaries. There are a variety of seminar programs in biology, chemistry and physics. For six of these, write a one page summary of the talk. Give these summaries to your first reader (or Keck reader if your first reader is off – campus). See thesis timetable for Deadlines.

Progress/Effort:

For 188L (**2f**) students, there will be a brief oral presentation early in the first semester. <u>See thesis timetable for Deadlines.</u>

For 190L (**2s**) and 191 (**1s**) students, there will be a poster session at the end of the semester. Your presentation will be evaluated by a panel of faculty. <u>See thesis timetable for Deadlines.</u>

For 188L (2f) students, a substantial progress report is due to your first and second readers late in the first semester. This should consist of <u>at least</u> 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. <u>This is a minimum</u>, 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 first reader research advisor as to upcoming meetings. Email communications go via the KSD thesis database, so it is critical you enter your thesis details and contact info.

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 usually the 3rd week of the semester. See thesis timetable for Deadline. 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 "Institutional Review Board"; each college has its own. - see your first reader as soon as possible.

https://www.pitzer.edu/irb/

http://www.scrippscollege.edu/academics/irb

https://www.cmc.edu/institutional-review-board

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).