# NATURAL SCIENCES DEPARTMENT

# Senior Thesis Syllabus – Fall 2024

# Biology, Chemistry, EA, Neuroscience and Physics 188L, 189L, 190L, 191

Claremont McKenna College, Pitzer College, Scripps College

## Coordinator:

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## Registration:

1. Semester Thesis finishing in December (“**1f**”): Registered for 191L in Fall’24
2. Semester Thesis finishing in December (“**2f**”): Registered for 188L in Spring’24 and 190L in Fall’24

2 Semester Thesis finishing in May 2025 (“**2s**”): Registered for 188L in Fall’24 and 190L in Spring‘25

2 Semester Summer Research Thesis (“**2fR**” or “**2sR**’): Completing first semester during Summer 2024;  
 - Completing the second semester Fall 2024: Registered for both 189L and 190L in Fall’24  
 - Completing the second semester Spring 2025: Registered for 189L Fall’24, and 190L Spring’25

## 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 (2nd reader) | 20% |
| Poster | 25% |

**Senior Thesis in (Science) 191**

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| --- | --- |
| Participation (seminar summaries) | 5% |
| Progress report | 5% |
| Effort (1st reader) | 20% |
| Written thesis (1st reader) | 25% |
| Written thesis (2nd reader) | 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 Claremont Colleges. If you are completing the second semester of a two-semester summer research thesis this fall, 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 NSD reader if your first reader is off-campus). See Thesis Calendar for Deadlines.

## Progress/Effort:

For 188L (**2s**) students, there will be a brief oral presentation early in the first semester. See Thesis Calendar for Deadlines.

For 190L (**2f, 2fR**) and 191L (**1f**) students, there will be a mandatory poster session at the end of the semester. Your presentation will be evaluated by a panel of faculty. See Thesis Calendar for Deadlines.

For 188L (**2s**) students, a substantial progress report is due to your first and second readers late in the first semester. 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:

All seminars are posted on the NSD Science website – [www.kecksci.claremont.edu](http://www.kecksci.claremont.edu). Also check with your first reader research advisor as to upcoming meetings. Email communication goes via the NSD thesis database, so it is critical you enter your thesis details and contact info under Student Resources, NSD Thesis Sign-up Page on the NSD Science website.

## 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 a 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 NSD Animal Care and Use Committee, which in turn is bound by complex legal regulations. Applications are due no later than September 4th. **There are no exceptions** – miss the deadline and you cannot use animals in your research. See Thesis Calendar for further information.

## 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/>

<https://www.scrippscollege.edu/academics/irb>

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## Penalties for Late Theses:

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