Senior Thesis in the time of COVID

Keck science labs will NOT be accessible to students during the Spring 2021 COVID lockdown.

This means that all theses will be what we have traditionally called “library” theses – i.e. an original exploration of a dataset derived from:

- Your own summer research (if applicable)
- Internet databases – see below
- Published literature.

The three possible types of thesis are:

- Summer ’20 +Spring ’21 (“2FR” – register for 189L(Fall) and 190L (spring).
- Spring 2021 one-semester (“1S” – no fall registration; register for 191 in Spring ’21)
- Fall 2020 + spring 2021 two-semester (“2S” – register for 188L in Fall and 190 in Spring)

Note: 188L, 189L, 190L, and 191 are listed as “BIOL188L”, or CHEM, or NEUR, or PHYS or EA as appropriate to your major)
Please note that a two-semester thesis is **two course credits, two grades, and TWICE as much work as a one-semester thesis.** Not all topics are suitable for a two-semester thesis. A one-semester thesis spread over two semesters is NOT a two-semester thesis. Consult your proposed Keck Science reader before committing to a two-semester thesis. Please see the KSD “Covid thesis” webpage for general information on syllabus, etc.

http://faculty.jsd.claremont.edu/dmcfarlane/Thesis/

**SPRING 2021 KSD Thesis Timetable**

**Warning:** Our deadlines differ from CMC/Scripps standard thesis deadlines and requirements. You follow the KSD timetable, regardless of your School.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Details</th>
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<tbody>
<tr>
<td>3rd week of January</td>
<td>Organizational meeting</td>
<td>Virtual, available from Jan 20th</td>
</tr>
<tr>
<td>Friday 12th Feb</td>
<td>KSD thesis “registration due”</td>
<td>Online, Google Sheets. Link via email.</td>
</tr>
<tr>
<td>Monday March 8th – March 12th</td>
<td>SPRING BREAK</td>
<td></td>
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<tr>
<td>Wed April 20th</td>
<td>Oral presentations for 2F</td>
<td>(these are rare)</td>
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<tr>
<td>Friday April 9th</td>
<td>Thesis drafts due for 1S, 2S</td>
<td>Critical deadline!</td>
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<tr>
<td>Monday 26th April</td>
<td>Abstract and Poster Uploads</td>
<td>(Posters will be virtual PPT’s)</td>
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<tr>
<td>Friday 30th April</td>
<td>Seminar Summaries due; Poster</td>
<td>(Poster presentations +/- 3 day grace period, must be completed by May 5th)</td>
</tr>
<tr>
<td>Monday 3rd May</td>
<td>Final thesis uploads</td>
<td>You are finished!</td>
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**Data Sources:**

Examples of open-access databases of research-quality data, with their internet links, can be found on the Covid Thesis webpage:

http://faculty.jsd.claremont.edu/dmcfarlane/Thesis/

**Seminars:**

All thesis students attend 6 research seminars per semester. Since we don’t have on-campus speakers this Spring, you will meet this requirement via webcasts and/or podcasts. Online seminars in any discipline of science are acceptable; consult with your keck reader if you are unsure. You are required to submit a short written summary of
each seminar to your first (or Keck) reader. These are worth a total of 10% of your final grade. The following web-“seminars” are optional, but you are welcome to use them. Your readers can direct you to other options.

- The Poetry of Science: Richard Dawkins and Neil deGrasse Tyson
  https://www.youtube.com/watch?v=9RExQFZzHXQ
- Something From Nothing - a conversation w/ Richard Dawkins & Lawrence Krauss
  https://www.youtube.com/watch?v=gH9UvnrARf8
- Royal Institution -Explosive Science - with Chris Bishop
  https://www.youtube.com/watch?v=uFQdcKJUijQ
- Stephen Fry & Steven Pinker on the Enlightenment Today
  https://www.youtube.com/watch?v=8aT61w3Q6vl
- Rachel Wood – What triggered the Cambrian Explosion?
  https://www.youtube.com/watch?v=ehkEltjGmpM&list=PLqEEIO8XWMvR51HUuj6faHGchABsp-tpM&index=14&t=3306s
- Harry Cliff – Beyond the Higgs:
  https://www.youtube.com/watch?v=edvdzh9Pggg

Posters:
In normal times, an important part of our thesis program is the poster presentation. As a COVID-19 substitute, you will prepare a narrated powerpoint, and that will be followed with a Zoom Q&A session with your two randomly assigned poster graders. Further details will be available later in the semester.

Deadlines:
Thesis deadlines (listed above) are taken seriously, and grade penalties apply for missing them (see syllabus for details). And of course, if your grades are late to the Registrar, you cannot graduate.

Questions?
If you have questions related to the science of your thesis, address those to your thesis readers. If you have questions related to thesis administration, rules, or grading, please don’t hesitate to contact me,

Donald McFarlane: dmcfarlane@kecksci.claremont.edu