

Syllabus for Research Credit in the Larson Lab

Requirements for each semester:

- Actively participate in journal club/lab meeting 1 - 1.5 hours/week, and lead at least one journal club each semester
- Engage in at least one outreach or DEI¹ project per semester and provide a short blog format post (200-500 words and a picture, if possible/appropriate) that will be included in the “accountability for action” portion of our website²
- Perform research duties (hours do not include lab meeting and are minimum requirements)
 - 1 credit hour = 4 hrs/week
 - 2 credit hours = 8 hrs/week
 - 3 credit hours = 12 hrs/week
- Complete “Undergraduate Research Semester Report” (available on lab website “Portal”³)

Note: I generally require undergraduates to commit at least 10 - 15 hrs/week in the lab, regardless of research credits requested. As we have already discussed, when physically in the lab, any time less than 10 hours a week is too little to gain a meaningful experience for yourself and too little to generate the amount of data useful to the lab as a whole to “compensate” for time lost during your training.

General goals and skills:

- Gain an intellectual foundation through reading primary literature and literature reviews, and engaging in scientific discussions with lab members
- Learn to write and communicate your ideas for/to your scientific community
- Learn how to access and evaluate resources, both intellectual and technical, efficiently and effectively
- Promote DEI in academic sciences by actively engaging with your scientific and broader communities
- Gain intellectual and technical autonomy through mastering basic skills and demonstrating a commitment to the principles our lab values (e.g., hard work, ethical integrity, reliability, professionalism, respect)
- Earn research credit through a fulfilling and meaningful experience

Grade:

10 pts	Outreach, inclusion or community service activity
20 pts	Presentation of research or article
<u>70 pts</u>	Active participation
100 pts	

Outreach and Inclusion:

Outreach and inclusion have always been important aspects to any academic researcher’s success. Until recently, many actions I and other scientists have taken have been largely “behind the scenes” and we have not necessarily been very transparent about how we engage in outreach and inclusion efforts. To increase transparency in the actions my lab members are taking, I have created a blog on our website that I will update at least once a semester to highlight the work we have been doing and hold us accountable for the larger goals I/we propose. In doing so, I hope to inspire other scientist to hold themselves accountable and

¹ Diversity, equity, and inclusion

² <https://www.tracyalarson.org/blog>

³ <https://www.tracyalarson.org/portal> or to navigate, go to “people” then click “portal” in upper corner.

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increase the overall effectiveness of our/their actions. I will expect you to provide a brief 3-5 sentence write-up on your service activity in the “Undergraduate Research Semester Report”

Possible ideas:

- Parter with a representative from the black student alliance at UVA, UVA Biology Club, or other stakeholders (i.e., other URM/BIPOC groups) to evaluate the policies and opportunities in UVA Biology using the equity framework established by the Division of Diversity and Inclusion (document available by request and on our website blog). Communicate a summary of findings to the standing Department of Biology’s Undergraduate Curriculum Committee, either directly, via me, or via the graduate student representative (TBD). This evaluation could be made specifically on: 1. course offerings, 2. policies and requirements for admittance to major and graduation, 3. opportunities for career development, or 4. other areas of interest or relevancy.
- Compile and maintain a list of opportunities for training and awards available within and beyond UVA. I will forward emails of opportunities I find to this person to be added to a list that we will maintain on the website. I still need to figure out the best format for maintaining a list and allowing students to access or subscribe.
- Tutoring in science, math, and English through various organizations at UVA or in Charlottesville

Active Participation:

For first semester students

Students are expected to attend every lab meeting or every journal club of the semester, depending on which the student is attending. If you can attend both, they are encouraged to do so, and will only be required to lead the discussion in one meeting. Leading a discussion entails presenting the background, major questions, hypotheses, methods, results, conclusions and limitations of the article to the Larson Lab group. Missing one meeting will not be counted against the student, but more than one without a reason that is out of the student’s control will result in a decrease in grade. Beyond attendance and your presentation, active participation includes coming to the meeting prepared to discuss whatever papers we have scheduled (i.e., having read the papers) and to discuss the details of your research project and progress. By actively participating in our lab meeting and/or journal club, you will no doubt identify research questions that could probably be addressed with existing data. I will ask you to compile a list of 5 - 10 research questions you’ve had throughout the semester to include in your “Undergraduate Research Semester Report”. We will use this list to proceed with generating a unique research experience for you.

Past first semester

Students are expected to be working on lab work in the lab for an average of 10 hours a week. Progress in data collection is expected. You will be expected to attend lab meeting and be ready to discuss your project and data in round table discussions in addition to present your research progress in a formal 10-12 min presentation during one lab meeting.

Schedule:

I will send the schedule, along with room location and hybrid access information in a separate document. During the first journal club meeting, students will be asked to pick a date to present. Lab meeting schedule is more flexible to accommodate the needs of researchers for practicing talks and gaining feedback on projects. Lab meeting agenda will be determined at least one week in advance, but will certainly vary week to week.