

Clarification: Research, Research for Credit, Honors Research for Credit, Honors Distinction, and Capstone Credit

There is often some confusion concerning the distinctions among several related activities: participating in undergraduate research, performing undergraduate research for credit, completing research for honors credit, obtaining capstone credit for research, and obtaining the Honors Distinction in Biological Sciences. Let's clear up some of that confusion.

There are numerous mechanisms for doing undergraduate research (see [here](#), for example). One of these involves registering in Bio 4950, 4952, 4950H, or 4952H and receiving course credit for working on a research project. If you receive course credit for your research efforts, certain expectations must be fulfilled. Foremost among these is that you must be intellectually involved in the design and interpretation of your experiments, as well as in their technical execution. In general, you should spend about 4-5 hours of effort per week per credit hour on your research project and should obtain an advanced level of understanding of the scientific underpinnings and implications of your project.

If you have a GPA of 3.3 or higher, you may enroll in Bio 4950H and/or Bio 4952H. In addition to the expectations that apply to all students involved in research for credit, there are other requirements for enrolling in Bio 4950H or Bio 4952H. Most significantly, you must complete and submit to the Honors Director a specific application prior to enrollment. This application includes an abstract of the proposed research project and includes sections on Background, Experimental Approaches, Predicted Outcomes, and Overall Significance. Approval of this application by the Honors Director is necessary before you will be provided with permission to enroll in Bio 4950H or Bio 4952H. To obtain an Honors Distinction in Biological Sciences, you must have a GPA of 3.3 or higher, and must complete at least 3 hours each of Bio 4950H and Bio 4952H. Except in unusual circumstances and with the prior approval of the Honors Director, your research effort must extend over at least two semesters (the summer counts as a semester). You must also submit to the Honors Director a final presentation of your research project. In some cases, this may be a paper prepared in the format of a journal article; most commonly, it is a poster presentation at a campus-wide event or a scientific meeting. Some oral presentations may be acceptable, but require prior approval by the Honors Director.

Capstone credit can also be granted for research you perform under the auspices of Bio 4950, 4952, 4950H, or 4952H. Obtaining capstone credit is subject to the approval of John David, Director of the Division of Biological Sciences, and also requires evidence of a final presentation. Specific details can be obtained in the Biological Sciences advising office (Tucker 3).