

Microbiology 4998(H)/4999(H): Undergraduate Research in Microbiology

Microbiology is an experimental science, and a great way to understand microbiological principles and concepts is to become actively involved in research. The Department of Microbiology encourages students to engage in a research project in one of [our faculty's laboratories](#). Microbiology-related research in the laboratory of an OSU faculty member who is not in our department will be considered for MICRBIO 4998(H)/4999(H) credit on a case-by-case basis following a discussion with the Vice Chair for Undergraduate Studies or the Microbiology Honors Advisor. Undergraduate research experience will benefit you whether you are interested in pursuing graduate or professional degrees, or a microbiology-related job after graduation.

Below, we have provided information about credit-based research opportunities (e. g. MICRBIO 4998); students can also do research independent of academic credit (e. g. as a volunteer or a work-study student). Students have the option to enroll in MICRBIO 4999 or MICRBIO 4999H, which involve a written thesis and an oral defense. Completion of an undergraduate thesis leads to graduation with [Research Distinction](#) or [Honors Research Distinction](#). We encourage you to explore these opportunities. Please contact our [Microbiology Undergraduate Advisor](#) or [Undergraduate Honors Advisor](#) if you have questions about these or other programs.

A student who is interested in research opportunities should follow these steps:

- Many labs in our department accept undergraduate students but availability of space and projects for undergraduate research are constantly changing. Students are encouraged to identify ongoing research in the department that interests them and then email faculty members directly to inquire about available research opportunities.
- It is in your best interest to set up your research project a semester ahead of time.
- Undergraduate research is a serious commitment. Faculty members are often most interested in undergraduate researchers who can commit to at least 10h/week for at least two semesters.
- If a faculty member agrees to host you in their lab, you should discuss scheduling your research hours, a start date, and the number of credit hours.
- Enroll in 1-3 credit hours of MICRBIO 4998(H) or 4999(H) per semester. One credit hour is earned per 4 hours per week in a lab. These courses are graded S/U by your research mentor. Please note that a maximum of 3 h of S/U credit can be applied towards the 9 h of electives required for the Microbiology major. Students pursuing a thesis must have a total of 4 h of credit in MICRBIO 4999(H) to graduate with (Honors) Research Distinction. Typically, students enroll in MICRBIO 4999(H) in their senior year. Please read about the process of applying and completing an undergraduate thesis and graduating with [Research Distinction](#) or [Honors Research Distinction](#).
- You can only receive MICRBIO 4998(H) or 4999(H) credit for research-based projects. If your involvement in a lab is limited to washing dishes, pouring plates, entering data into a database, or similar tasks, you cannot receive research credit.
- If you are currently working in a lab and wish to enroll in MICRBIO 4998/M4999, past research accomplishments/hours cannot retroactively be counted as MICRBIO 4998/M4999 credit.
- **If you receive research credit, you cannot be simultaneously paid as a student research assistant.**