

WCU BIOLOGY RESEARCH REQUIREMENT simplified ☺.

- 3 hours of research is required, but could be more.

Option 1: BIOL389 (3CH) Cooperative Education in Biology

This is usually an internship that has some science content. It cannot be simply shadowing a doctor or vet, or working as an administrative assistant at a doctor's office or hospital. Talk to Dr. Powell before you can register for BIOL389.

Option 2: BIOL480 classes (3CH)

Two of the BIOL480 sections offered every semester are classes that can be used for the research requirement. One of the classes is usually ecology-themed, and the second is molecular-themed. These are usually literature reviews (ecology/molecular), or data analysis (ecology), or genome analysis (cell and mol. bio.), etc. These classes have been offered for the past couple of years to accommodate students who do not want to do hands-on research.

Option 3: BIOL480 (2CH) + BIOL480 (1CH)

Students can do one semester of hands-on research under a faculty mentor and get 2 hours credit for it. This BIOL480 section is created for the faculty mentor and registration is by permission of the mentor.

Along with the 2 credit hour section of BIOL480, a student has to register for a second 1 credit hour BIOL480 section. This section has a number of assignments to complete through the semester, and a 10-minute presentation on the research completed.

Option 4: BIOL493 + BIOL480

Students can do two semesters of hands-on research under a faculty mentor by registering for one semester of BIOL493 (1-3 CH), and one semester of BIOL480 (2CH + 1CH; option 3).

Option 5: Senior Thesis (BIOL495 1CH; BIOL498 2CH; BIOL499 1CH)

Senior thesis is usually a three-semester affair. It could be a semester of planning, a semester of doing, and a semester of analyzing and writing, but it could also be three semesters of planning/doing/writing simultaneously (the latter situation is common). A three-person committee (mentor + 2 others) is formed in the first semester, and it is expected (but not mandatory) that they will meet at least once a semester to give input on the project and progress. This helps the student present their work multiple times. The student has to write a Senior Thesis (a report) on the research conducted.

A BIOL493 or 480 can be substituted for BIOL495, if a student decides after a semester to do a Senior Thesis.

Co-registration for BIOL495 and BIOL498 in the same semester is sometimes possible, but this is usually allowed if a student has been working on a project for a past semester without actually registering for the work.

Option 5: BIOL493 (1 -2 CH) + Senior Thesis

This is a four-semester option; a student might register for Independent Study (BIOL493, usually 1-2CH), and then decide to do a Senior Thesis in the following three semesters.