

The Ohio State University
College of Arts and Sciences
Department of Evolution, Ecology, and Organismal Biology
Research Methods in Biological Sciences Certificate - Type 1b (RMBS1B-CR)

Academic Advising Contact: Sue Ellen Dehority, Acad. Adv.
Department of Evolution, Ecology, & Organismal Biology
388 Aronoff Lab
318 W. 12th Ave.
dehority.2@osu.edu

The certificate program aims to train students in logical and quantitative reasoning, research design, data collection, and statistical analyses commonly used in ecology and evolutionary biology. All aspects of the research process are covered in this program, including methods, ethics, protocols, grant writing, dissemination of results, and exploring career opportunities that require research skills in biological sciences.

The Research Methods in Biological Sciences certificate requires a minimum of 12 credits as follows:

Core Courses (3 courses; 7 CH):

EEOB 3494 - Entering Independent Research (3 CH)
EEOB 3495 - Research Ethics and Protocols (2 CH)
EEOB 3496 - Career Exploration in Research in Biological Sciences (2 CH)

Methods & Practical Applications Electives (2-4 courses; min. 5 CH):

Choose from the following:

EEOB 3498 - Undergraduate Research in Behavioral Ecology (4 CH)
EEOB 3420 - Behavioral Ecology (4 CH)
EEOB 4430 - Ecological Methods I (2 CH)
EEOB 5360 - Biodiversity Informatics (3 CH)
EEOB 2260 - Discovering Biodiversity (4 CH)
ANIMSCI 3480: Animal Welfare Laboratory (0.5 CH)
ANIMSCI 3420: Animal Lab Res Methods (0.5 CH)
AGSYSMT 5560: UAS & Remote Sensing in Agriculture (3 CH)
AGSYSMT 5580: Data Analytics in Production Agriculture (3 CH)
ENR 4345- Methods in Aquatic Ecology (4 CH)
ENR 5362 - Wildlife Ecology Methods (3 CH)
GEOG 5210 - Fundamentals of GIS (3 CH)
HCS 3420 - Seed Science (3 CH)
MICRO 4140 - Molecular Microbiology Lab (3 CH)
MICRO 5161 - Introduction to Computational Genomics (3 CH)
MOLGEN 5601 - Eukaryotic Molecular Genetics Lab (3-4 CH)
MOLGEN 5602 - Eukaryotic Cell and Developmental Biology Laboratory (3-4 CH)
PLNTPH 5006 - Practical Computing Skills for Omics Data (3 CH)

Research Methods in Biological Sciences Certificate Guidelines:

Credit hours required: A minimum of 12 CH.

Overlap with courses in degree:

- The certificate must be in a different subject than the major.
- Max 100% overlap with courses in a major, minor, other certificate, or GE.

Grades required:

- Min C- for a course to be counted on the certificate.
- Minimum 2.00 cumulative GPA for all certificate coursework.

X193 credits: Not permitted.

Declaring the certificate

Students should see their assigned academic advisor to declare the certificate prior to the filing of the certificate completion paperwork and/or graduation application. Students do not need the approval of the Department of Evolution, Ecology and Organismal Biology to declare the certificate.

Approval of coursework

Approval of the certificate coursework.

Students who complete the certificate following the guidelines on this sheet need only verify with their academic advisor that the certificate appears complete on the Degree Audit Report. No approval from the Department of Evolution, Ecology and Organismal Biology is required.

Approval for courses not listed on this form to apply to the certificate program:

To apply courses not listed on this sheet toward the Research Methods in Biological Sciences certificate, the coursework must be approved by the Department of Evolution, Ecology, and Organismal Biology. Please email Sue Ellen Dehority.2 to request approval.

College of Arts and Sciences Curriculum and Assessment Services
306 Dulles Hall, 230 Annie & John Glenn Ave.
<http://artsandsciences.osu.edu/>
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