

## Declaring/Changing a Major, Minor, or Applied Minor

### Section A: Policies and Instructions

#### Declaring a Major:

1. Students are required to file a declaration of major at the Registrar's Office no later than the end of their fourth semester.
2. A late fee of \$25.00 will be charged if the petition is submitted after the deadline.
3. A declared major may be changed at any time up to the add/drop deadline of the student's final semester by submitting a new major declaration form.

#### Declaring a Minor:

1. Minors are optional programs, you are not required to have a minor to graduate.
2. The deadline for declaring a minor is the 5th day of classes of the spring semester of the senior year.
3. Students must declare their Major Field of concentration before declaring a minor.

#### Declaring an Applied Minor:

1. Applied minors are optional programs, they are not required for graduation.
2. The deadline for declaring an applied minor is the 5th day of classes of the spring semester of the senior.

Progress towards completion of a major, a minor, and an applied minor will be tracked in DegreeWorks.

Complete Section B below and the relevant program section. Next to each requirement, indicate which semester (e.g. Fall 2023) you have taken or will take that course.

Your form must be signed by the Department/Program and your academic advisor (must be in your field of study for your major).

### Section B: Student Information

Student Name \_\_\_\_\_ ID# \_\_\_\_\_

Email \_\_\_\_\_ Date \_\_\_\_\_

Planned Date of Graduation: May \_\_\_\_\_ December \_\_\_\_\_ Year: \_\_\_\_\_

Select one:

- \_\_\_\_\_ I wish to declare my primary Major
- \_\_\_\_\_ I wish to declare a Minor
- \_\_\_\_\_ I wish to declare a second Major
- \_\_\_\_\_ I wish to declare an Applied Minor
- \_\_\_\_\_ I wish to change my Major

# Biology

Use this form to declare a major or a minor in [Biology](#).

Program [Biology](#)

## Declaration/Change of Major

To earn a Bachelor of Arts in Biology, you must complete seven (7) courses within the major core, one additional science course from the list below, and 4 to 5 courses within your desired concentration.

### Core requirements

Take all of the following courses:

Course Code	Course Title	Credit Hours	Semester
<input type="checkbox"/> BIOL 111	Ecological Biology	4	
<input type="checkbox"/> CHEM 111	Principles of Chemistry	4	
<input type="checkbox"/> BIOL 112	Cells, Genes & Inheritance	4	
<input type="checkbox"/> CHEM 221	Organic Chemistry I	4	
<input type="checkbox"/> BIOL 226	Biological Diversity	4	
<input type="checkbox"/> BIOL 225	Cell Biology	4	
<input type="checkbox"/> BIOL 480	Seminar	2	
<input type="checkbox"/> BIOL 488	Senior Capstone Experience	0	

One of the following courses:

Course Code	Course Title	Credit Hours	Semester
<input type="checkbox"/> CHEM 321	Organic Chemistry II	4	
<input type="checkbox"/> CHEM 331	Equilibrium & Analysis	5	
<input type="checkbox"/> CS 128	Programming & Problem Solving	4	
<input type="checkbox"/> ENSU 151	Environment, Science and Sustainability	4	
<input type="checkbox"/> GEOL 201	Earth and the Environment	3-4	
<input type="checkbox"/> MATH 120	Fundamentals of Statistics	3	
<input type="checkbox"/> MATH 180	Calculus A	4	
<input type="checkbox"/> MATH 280	Calculus B	4	
<input type="checkbox"/> PHYS 120	Matter in Motion (no calculus)	4	
<input type="checkbox"/> PHYS 125	Matter in Motion (with Calculus)	4	
<input type="checkbox"/> PSYC 245	Research Methods & Statistics	4	
<input type="checkbox"/> PSYC 250	Introduction to Neuroscience	4	

## Concentrations

Select one of the five (5) concentrations listed below to focus your studies.

### **Integrative Biology**

Majors should complete at least 16 additional credits in upper-level biology courses from courses below.

Course Code	Course Title	Credit Hours	Semester
<input type="checkbox"/> BIOL 342	Medical School Prep course	2	
<input type="checkbox"/> BIOL 343	Immunology	3	
<input type="checkbox"/> BIOL 345	A&P I: Nervous and Endocrine Systems	4	
<input type="checkbox"/> BIOL 346	Vertebrate Zoology	4	
<input type="checkbox"/> BIOL 347	Anatomy and Physiology II: Cardiovascular, Respiratory, Renal and Digestive	4	
<input type="checkbox"/> BIOL 348	Ornithology	4	
<input type="checkbox"/> BIOL 350	Field Botany	4	
<input type="checkbox"/> BIOL 351	Human Genetics & Genomics	3	
<input type="checkbox"/> BIOL 353	Behavioral Neuroscience	3	
<input type="checkbox"/> BIOL 357	Animal Behavior	4	
<input type="checkbox"/> BIOL 359	Great Discoveries in Natural History Collections	4	
<input type="checkbox"/> BIOL 360	Conservation Biology	3-4	
<input type="checkbox"/> BIOL 362	Entomology	4	
<input type="checkbox"/> BIOL 382	Special Topics	3	
<input type="checkbox"/> BIOL 383	Bioinformatics: Code & Chromosomes	3	
<input type="checkbox"/> BIOL 410	Applications of Geographical Information Systems (GIS) in Ecology, Environmental and Health Sciences	4	
<input type="checkbox"/> BIOL 438	Circadian Biology	4	
<input type="checkbox"/> BIOL 455	Population & Community Ecology	4	
<input type="checkbox"/> BIOL 451	Evolutionary Biology	4	
<input type="checkbox"/> BIOL 456	Applied Biostatistics	4	
<input type="checkbox"/> BIOL 460	Plant Cell Biology	3	
<input type="checkbox"/> BIOL 461	Microbiology	4	
<input type="checkbox"/> BIOL 462	Parasitology	4	
<input type="checkbox"/> BIOL 463	Viral Disease Ecology	4	
<input type="checkbox"/> BIOL 464	Advanced Cell Physiology	4	
<input type="checkbox"/> BIOL 465	RNA Biology	3-4	

<input type="checkbox"/> BIOL 466	Molecular Genetics	4
<input type="checkbox"/> BIOL 467	Neuropharmacology	3
<input type="checkbox"/> BIOL 473	Natural History Field Course	4

### **Ecology and Evolutionary Biology**

Take both of the following:

Course Code	Course Title	Credit Hours	Semester
<input type="checkbox"/> BIOL 451	Evolutionary Biology	4	
<input type="checkbox"/> BIOL 455	Population & Community Ecology	4	

At least two (2) field organismal courses:

Course Code	Course Title	Credit Hours	Semester
<input type="checkbox"/> BIOL 350	Field Botany	4	
<input type="checkbox"/> BIOL 348	Ornithology	4	
<input type="checkbox"/> BIOL 346	Vertebrate Zoology	4	
<input type="checkbox"/> BIOL 357	Animal Behavior	4	
<input type="checkbox"/> BIOL 359	Great Discoveries in Natural History Collections	4	
<input type="checkbox"/> BIOL 362	Entomology	4	

### **Cellular and Molecular Biology**

Take at least four (4) of the following:

Course Code	Course Title	Credit Hours	Semester
<input type="checkbox"/> BIOL 343	Immunology	3	
<input type="checkbox"/> BIOL 345	A&P I: Nervous and Endocrine Systems	4	
<input type="checkbox"/> BIOL 347	Anatomy and Physiology II: Cardiovascular, Respiratory, Renal and Digestive	4	
<input type="checkbox"/> BIOL 351	Human Genetics & Genomics	3	
<input type="checkbox"/> BIOL 383	Bioinformatics: Code & Chromosomes	3	
<input type="checkbox"/> BIOL 461	Microbiology	4	
<input type="checkbox"/> BIOL 462	Parasitology	4	
<input type="checkbox"/> BIOL 464	Advanced Cell Physiology	4	
<input type="checkbox"/> BIOL 465	RNA Biology	3-4	
<input type="checkbox"/> BIOL 466	Molecular Genetics	4	

## **Physiology**

Take all of the following:

Course Code	Course Title	Credit Hours	Semester
<input type="checkbox"/> BIOL 345	A&P I: Nervous and Endocrine Systems	4	
<input type="checkbox"/> BIOL 347	Anatomy and Physiology II: Cardiovascular, Respiratory, Renal and Digestive	4	
<input type="checkbox"/> AWPE 341	Exercise Physiology	2	

At least one of the following:

Course Code	Course Title	Credit Hours	Semester
<input type="checkbox"/> BIOL 343	Immunology	3	
<input type="checkbox"/> BIOL 461	Microbiology	4	
<input type="checkbox"/> BIOL 346	Vertebrate Zoology	4	
<input type="checkbox"/> BIOL 348	Ornithology	4	
<input type="checkbox"/> BIOL 456	Applied Biostatistics	4	
<input type="checkbox"/> BIOL 464	Advanced Cell Physiology	4	

## **Zoology and Wildlife Ecology**

At least three (3) of the following:

Course Code	Course Title	Credit Hours	Semester
<input type="checkbox"/> BIOL 346	Vertebrate Zoology	4	
<input type="checkbox"/> BIOL 348	Ornithology	4	
<input type="checkbox"/> BIOL 350	Field Botany	4	
<input type="checkbox"/> BIOL 357	Animal Behavior	4	
<input type="checkbox"/> BIOL 359	Great Discoveries in Natural History Collections	4	
<input type="checkbox"/> BIOL 362	Entomology	4	
<input type="checkbox"/> BIOL 462	Parasitology	4	

at least one of the following:

Course Code	Course Title	Credit Hours	Semester
<input type="checkbox"/> BIOL 360	Conservation Biology	3-4	
<input type="checkbox"/> BIOL 410	Applications of Geographical Information Systems (GIS) in Ecology, Environmental and	4	

	Health Sciences	
<input type="checkbox"/> BIOL 455	Population & Community Ecology	4

### **Conservation Ecology**

**Required course:**

Course Code	Course Title	Credit Hours	Semester
<input type="checkbox"/> BIOL 360	Conservation Biology	3-4	

**Select two (2) of the following courses:**

Course Code	Course Title	Credit Hours	Semester
<input type="checkbox"/> BIOL 340	Restoration Ecology	4	
<input type="checkbox"/> BIOL 410	Applications of Geographical Information Systems (GIS) in Ecology, Environmental and Health Sciences	4	
<input type="checkbox"/> BIOL 455	Population & Community Ecology	4	

**Take one of the following courses:**

Course Code	Course Title	Credit Hours	Semester
<input type="checkbox"/> BIOL 346	Vertebrate Zoology	4	
<input type="checkbox"/> BIOL 348	Ornithology	4	
<input type="checkbox"/> BIOL 350	Field Botany	4	
<input type="checkbox"/> BIOL 357	Animal Behavior	4	
<input type="checkbox"/> BIOL 362	Entomology	4	

## **Minor/Applied Minor Declaration Form**

Declared Major(s) \_\_\_\_\_

To minor in biology, you must complete a total of 24 credits in biology, including at least two of the following courses:

Course Code	Course Title	Credit Hours	Semester
<input type="checkbox"/> BIOL 111	Ecological Biology	4	
<input type="checkbox"/> BIOL 112	Cells, Genes & Inheritance	4	
<input type="checkbox"/> BIOL 226	Biological Diversity	4	

Twenty-one (21) credits must be in courses numbered below BIOL 472. Four credits for the minor may be

from [CHEM 111](#) or [CHEM 221](#).

Note: [CHEM 221](#) is included as an option for the minor for those students who test out of [CHEM 111](#) but still want to take more chemistry.

This student is hereby approved to pursue a major \_\_\_\_\_ / minor \_\_\_\_\_ in accordance to the above plans (please enter your full name below).

Academic advisor \_\_\_\_\_ Date \_\_\_\_\_

Department/Program Convener \_\_\_\_\_ Date \_\_\_\_\_

This completed form must be emailed to [registrar@earlham.edu](mailto:registrar@earlham.edu) for processing. Your adviser and the Department/Program Convener must be copied on the email.

Registrar \_\_\_\_\_ Date \_\_\_\_\_