

# Accelerated B.S. Biology, Biomedical Sciences Concentration

## Accelerated BS to MS Program

Students accepted into an accelerated undergraduate program may take departmentally approved graduate coursework as part of their undergraduate curriculum. These credits will count towards both their bachelor's and master's degrees and can fulfill major requirements, upper-division requirements, and/or free electives. For details on accelerated programs at Idaho State University, please see (Degree Requirements ([https://coursecat.isu.edu/undergraduate/degree\\_requirements/](https://coursecat.isu.edu/undergraduate/degree_requirements/))).

Once accepted into an accelerated degree program, it is strongly recommended for students to stay in close communication with their advisor regarding pursuit of acceptance into the Graduate School and the master's degree program at Idaho State University. Acceptance into an accelerated program during the bachelor's degree program is the first step in the admissions process. A separate application to the Graduate School is necessary for all accelerated programs. For more information regarding application and admission to the Graduate School at Idaho State University, please see the Graduate Admissions section of the graduate catalog (<http://coursecat.isu.edu/graduate/graduateadmissions/>).

## Biology Accelerated Criteria

This accelerated program gives outstanding bachelor's degree students in Biology a "fast-track" option to pursue their Master of Science in Biology degree.

Students accepted into the accelerated program may take up to 8 credit hours of 5000 level courses during the last two semesters of their bachelor's program that will apply to both the bachelor's and master's degree requirements. Students have to meet all requirements for both the bachelor's degree and master's degree.

Additional requirements for students in this program are:

- Students need to identify a suitable advisor for their MS program (see <https://www.isu.edu/biology/degree-programs/graduate-degrees/ms-biology/>).
- Students must earn at least a "B" (3.0) in each graduate-level course counted for the program.

Eligibility for this program:

- Completion of at least 70 undergraduate credits applicable to the Bachelor of Science in Biology program at the time of application.
- Overall GPA of at least 3.0 on a 4.0 scale at the time of application.

Students who wish to enroll in this program should submit an application no later than the end of the second semester of their junior year. Applicants are not required to take the Graduate Record Examination (GRE) test.

Meeting these eligibility requirements does not guarantee acceptance into the accelerated master's degree programs.

## Program Admissions Requirements

There are no program admission requirements for the BS in Biology, Biomedical Sciences Concentration.

## General Education

The listing below includes program requirements that also fulfill General Education requirements.

Code	Title	Credits
Objective 1		6
Objective 2		3
Objective 3 - MATH 1160 or MATH 1170		3-4
Objective 4		6
Objective 5 - BIOL 1101, BIOL 1101L, PHYS 1111		7
Objective 6		6
<b>Students must fulfill Objective 7 or Objective 8</b>		<b>3</b>
Objective 7		
Objective 8		
Objective 9		3
<b>Total Credits</b>		<b>37-38</b>

## Major Requirements

Code	Title	Credits
BIOL 1101 & 1101L	Biology I and Biology I Lab (Partially satisfies General Education Objective 5)	4
BIOL 1102 & 1102L	Biology II and Biology II Lab	4
BIOL 1191	Wonder about Biology	1
BIOL 2206 & BIOL 2207	Cell Biology and Cell Biology Laboratory	4
BIOL 2209 & 2209L	General Ecology and General Ecology Laboratory	4
BIOL 3316	Biometry Laboratory	1
BIOL 3358	Genetics	3
BIOL 4417	Organic Evolution	3
BIOL 4491/4492	Seminar	1
MATH 1160 or MATH 1170	Survey of Calculus (Satisfies General Education Objective 3) or Calculus I	3-4
MATH 3350	Statistics for Scientists	3
CHEM 1111 & 1111L	General Chemistry I and General Chemistry I Lab	5
CHEM 1112 & 1112L	General Chemistry II and General Chemistry II Lab	4
CHEM 3301 & CHEM 3303	Organic Chemistry I and Organic Chemistry Laboratory I	4
PHYS 1111 & PHYS 1113	General Physics I and General Physics I Laboratory (Partially satisfies General Education Objective 5)	4
<b>Select two of the following:</b>		<b>7</b>

CHEM 3302 & CHEM 3304	Organic Chemistry II and Organic Chemistry Laboratory II	
PHYS 1112 & PHYS 1114	General Physics II and General Physics II Laboratory	
BIOL 4432	Biochemistry	
<b>Biomedical Sciences Requirements</b>		
<b>Anatomy and Physiology</b>		<b>8</b>
BIOL 3301 & 3301L	Advanced Human Anatomy and Physiology 1 and Advanced Human Anatomy and Physiology 1 Lab	
AND		
BIOL 3302 & 3302L	Advanced Human Anatomy and Physiology 2 and Advanced Human Anatomy and Physiology 2 Lab	
<b>Upper Division BMS Electives: (minimum of 13 credits) *</b>		<b>13</b>
BIOL 3306	Healthspan	
BIOL 3324 & 3324L	Developmental Biology and Developmental Biology Lab	
BIOL 4415L	Human Neurobiology Lab	
BIOL 4423/5523	General Parasitology	
BIOL 4430/5530	Bioethics	
BIOL 4432/5532	Biochemistry <sup>1</sup>	
BIOL 4437/5537	Experimental Biochemistry	
BIOL 4444/5544	Molecular Biology	
BIOL 4451/5551	Immunology	
BIOL 4453/5553	Foundations in Neuroscience	
BIOL 4454/5554	Advanced Immunology	
BIOL 4475/5575	General Virology	
BIOL 4481/5581	Independent Problems	
BIOL 4482/5582	Independent Problems <sup>2</sup>	
BIOL 2280/4480/5580	Vertically Integrated Project <sup>2</sup>	
CPH 4406	Epidemiology	
CPH 4442	Environmental Health in Community and Public Health	
HPSS 3301 & 3301L	Physiology of Exercise and Physiology of Exercise Laboratory	
PSCI 3301	Introduction to Pharmacology	
HPSS 3302 & 3302L	Biomechanics and Biomechanics Laboratory	
PSCI 3368	Introduction to Toxicology	
NTD 3340	Nutrition for Health Professionals	
PSYC 3301	Psychopathology	
PSYC 3352	Cognitive Neuroscience	
<b>Microbiology</b>		<b>4</b>
BIOL 2233 & 2233L	Principles of Microbiology and Principles of Microbiology Lab	
<b>Total Credits</b>		<b>80-81</b>

<sup>3</sup> A minimum of 8 credits in BIOL and at least one lab course, (4cr) courses that have a lab integrated fulfil the lab requirement.

## Degree Totals

Code	Title	Credits
	Program Admission Requirements	0
	General Education	37-38
	Major Requirements (Required General Education credits removed)	70
	Upper Division Free Electives	0
	Free Electives	12-13
<b>Total Credits</b>		<b>120</b>

ISU Degree Requirements (<http://coursecat.isu.edu/undergraduate/degree/requirements/>)

ISU General Education (<http://coursecat.isu.edu/undergraduate/academicinformation/generaleducation/>)

Major Academic Plan (MAP) (<https://www.isu.edu/advising/maps/>)

**Master of Science in Biology** (<https://coursecat.isu.edu/graduate/scienceengineering/biologicalsciences/msbiology/>)

<sup>1</sup> BIOL 3324 Developmental Biology and BIOL 4432 Biochemistry are strongly recommended as these are often required by medical, dental, and veterinary schools.

<sup>2</sup> Up to 8 credits of Independent Problems and/or Vertically Integrated Projects can be applied to the student's undergraduate degree.