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/degreerequirements/)).

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/msbiology/).
- 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 - MAT	H 1160 or MATH 1170	3
Objective 4		6
Objective 5 - BIOL	7	
Objective 6		6
Students must fulfill Objective 7 or Objective 8		3
Objective 7		
Objective 8		
Objective 9		3
Total Credits		37

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	Survey of Calculus (Satisfies General Education Objective 3)	3-4
or MATH 1170	Calculus I	
MATH 3350	Statistical Methods	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
Select two of the following:		7

CHEM 3302 Organic Chemistry II & CHEM 3304 and Organic Chemistry Laboratory II PHYS 1112 General Physics II and General Physics II Laboratory Biomedical Sciences Requirements Anatomy and Physiology 8 BIOL 3301 Advanced Human Anatomy and Physiology I and Advanced Human Anatomy and Physiology I Lab AND BIOL 3302 Advanced Human Anatomy and Physiology I Lab AND BIOL 3302 Advanced Human Anatomy and Physiology 2 Lab Physiology 2 Lab Alors Advanced Human Anatomy and Physiology 2 Lab Physiology 2 Lab Advanced Pathobiology BIOL 3304 Developmental Biology Lab BIOL 4415L Human Neurobiology Lab BIOL 4430/5523 General Parasitology BIOL 4430/5530 Bioethics BIOL 4432/5532 Biochemistry I BIOL 4437 Experimental Biochemistry BIOL 5337 and Experimental Biochemistry BIOL 4444/5544 Molecular Biology Lab BIOL 4444/5541 Molecular Biology Lab BIOL 4441/5541L Molecular Biology BIOL 4453/5531 Immunology BIOL 4453/5531 Foundations in Neuroscience BIOL 4453/5535 Foundations in Neuroscience BIOL 4453/5534 Advanced Immunology BIOL 4453/5535 Foundations in Neuroscience BIOL 4453/5535 Foundations in Neuroscience BIOL 4453/5534 Independent Problems BIOL 4453/5535 Foundations in Neuroscience BIOL 4453/5534 BIOL 4453/5535 Foundations in Neuroscience BIOL 4453/5535 Independent Problems BIOL 4453/5534 Independent Problems BIOL 4453/5535 Foundations in Neuroscience BIOL 4453/5535 Foundations in Neuroscience BIOL 4453/5530 Mentored Research Alliance CPH 4446 Epidemiology CPH 4442 Environmental Health in Community and Public Health Physiology of Exercise Laboratory PSCI 3301 Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology PSCI 3308 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology and Principles of Microbiology Lab BIOL 2233 Pri					
PHYS 1112 & PHYS 1114 BIOL 4432 Biochemistry Biomedical Sciences Requirements Anatomy and Physiology BIOL 3301 & 3301L & Physiology 1		·			
& PHYS 1114 and General Physics II Laboratory BIOL 4432 Biochemistry Biomedical Sciences Requirements Anatomy and Physiology BIOL 3301 Advanced Human Anatomy and & 3301L Physiology 1 and Advanced Human Anatomy and Physiology 1 Lab AND BIOL 3302 Advanced Human Anatomy and & 3302L Physiology 2 Lab Upper Division BMS Electives: (minimum of 13 credits) * 13 BIOL 3306 Advanced Human Anatomy and Physiology 2 Lab Upper Division BMS Electives: (minimum of 13 credits) * 13 BIOL 3304 Developmental Biology BIOL 3324 Developmental Biology BIOL 3324 Developmental Biology BIOL 432/5523 General Parasitology BIOL 4415L Human Neurobiology Lab BIOL 4423/5523 Biochemistry 1 BIOL 4437 Experimental Biochemistry BIOL 4437 Experimental Biochemistry and Experimental Biochemistry BIOL 4443 Endocrinology & BIOL 5543 and Endocrinology BIOL 44441/5544 Molecular Biology BIOL 44441/5544 Molecular Biology BIOL 4445/55551 Immunology BIOL 4451/5551 Immunology BIOL 4451/5551 Immunology BIOL 4445/5553 Foundations in Neuroscience BIOL 4451/5551 General Virology BIOL 4445/5553 Foundations in Neuroscience BIOL 4451/5551 Inmunology BIOL 4481/5581 Independent Problems BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3351 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology BIOL 2233 Principles of Microbiology Lab		, ,			
BIOL 4432 Biochemistry Biomedical Sciences Requirements Anatomy and Physiology BIOL 3301 Advanced Human Anatomy and expression of the physiology 1 and Advanced Human Anatomy and Physiology 1 Lab AND BIOL 3302 Advanced Human Anatomy and Physiology 2 and Advanced Human Anatomy and Physiology 2 and Advanced Human Anatomy and Physiology 2 Lab Upper Division BMS Electives: (minimum of 13 credits) 13 BIOL 3306 Advanced Pathobiology BIOL 3324 Developmental Biology Lab BIOL 4423/5523 General Parasitology BIOL 44430/5530 Bioethics BIOL 4430/5532 Bioethics BIOL 4437 Experimental Biochemistry And Experimental Biochemistry and Experimental Biochemistry BIOL 4431 Endocrinology BIOL 4443 Endocrinology BIOL 4444/5544 Molecular Biology Lab BIOL 4454/5551 Immunology BIOL 4454/5551 Immunology BIOL 4454/5554 Advanced Immunology BIOL 4443/5553 Foundations in Neuroscience BIOL 4453/5532 Independent Problems BIOL 4453/5553 Foundations in Neuroscience BIOL 4453/5554 Advanced Immunology BIOL 4475/5575 General Virology BIOL 4481/5581 Independent Problems BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3351 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology and Principles of Microbiology Lab		•			
Biomedical Sciences Requirements Anatomy and Physiology BIOL 3301 & 3301L Physiology 1 and Advanced Human Anatomy and Physiology 1 Lab AND BIOL 3302 Advanced Human Anatomy and Physiology 2 Lab Upper Division BMS Electives: (minimum of 13 credits) * BIOL 3302 BIOL 3324 Advanced Pathobiology BIOL 3324 Developmental Biology BIOL 3324 BIOL 3324 BIOL 4415L BIOL 4415L BIOL 4423/5523 BIOL 4430/5530 BIOL 4430/5530 BIOL 4437 BIOL 537 BIOL 4437 BIOL 537 BIOL 4443 BIOL 5437 BIOL 4443 BIOL 4443 BIOL 4444 BIOL 4451 BIOL 44415 BIOL 44415 BIOL 4445 BIOL 4451 BIOL 44415 BIOL 4451		·			
Anatomy and Physiology BIOL 3301 & 3301L BIOL 3301 Advanced Human Anatomy and Physiology 1 Lab AND BIOL 3302 Advanced Human Anatomy and Physiology 2 Lab Upper Division BMS Electives: (minimum of 13 credits) * 13 BIOL 3306 Advanced Pathobiology BIOL 3324 Developmental Biology Lab BIOL 3324 BIOL 4435L BIOL 4415L BIOL 4423/5523 BIOL 4430/5530 BIOL 4430/5530 BIOL 4437 BIOL 537 BIOL 4437 BIOL 537 BIOL 4443 BIOL 5537 BIOL 4443 BIOL 4443 BIOL 5543 BIOL 4441/5544 Molecular Biology BIOL 4441/5541 Molecular Biology BIOL 4451L/5551 Immunology BIOL 4451L/5551 Immunology BIOL 4451L/5551 BIOL 4441/5554 BIOL 4451L/55551 BIOL 4451L/5551 BIOL 4451L/5551 BIOL 4451L/5551 BIOL 4451L/5551 BIOL 4475/5575 General Virology BIOL 4475/5575 BIOL 4480 BIOL 5330 BIOL 4490 BIOL 4406 Epidemiology CPH 4446 Epidemiology CPH 4446 Epidemiology CPH 4446 Epidemiology CPH 4446 BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4410 BIOL 2330 BIOL and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics Bi		•			
BIOL 3301 & 3301L Physiology I and Advanced Human Anatomy and Physiology I Lab AND BIOL 3302 Advanced Human Anatomy and Physiology 2 and Advanced Human Anatomy and Physiology 2 and Advanced Human Anatomy and Physiology 2 Lab Upper Division BMS Electives: (minimum of 13 credits)* BIOL 3306 Advanced Pathobiology BIOL 3324 BIOL 3324 BIOL 3324 BIOL 4415L BIOL 4415L BIOL 4423/5523 BIOL 4430/5530 Biochemistry BIOL 4430/5530 Biochemistry BIOL 4430/5531 BIOL 5337 BIOL 4431 Experimental Biochemistry BIOL 4443 Endocrinology BIOL 4444/5544 Molecular Biology BIOL 4444/5544 Molecular Biology BIOL 4445/5551 Immunology BIOL 4451/5551 Immunology BIOL 4451/5551 Immunology BIOL 4451/5551 BIOL 4457/5554 Advanced Immunology BIOL 4457/5575 General Virology BIOL 447/5575 General Virology BIOL 4481/5581 Independent Problems BIOL 4482/5582 BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise A301L A302L Biomechanics	-		8		
& 3301L Physiology 1		Advanced Human Anatomy and	Ū		
AND BIOL 3302 Advanced Human Anatomy and Physiology 2 Lab Upper Division BMS Electives: (minimum of 13 credits)* BIOL 3306 Advanced Pathobiology BIOL 3324 Developmental Biology & 3324L and Developmental Biology Lab BIOL 4415L Human Neurobiology Lab BIOL 4430/5530 Bioethics BIOL 4430/5530 Bioethics BIOL 4437 Experimental Biochemistry & BIOL 5537 and Experimental Biochemistry BIOL 4443 Endocrinology & BIOL 4444/5544 Molecular Biology BIOL 44441/5543 Immunology BIOL 44451/5551 Immunology BIOL 4451/5551 Ender and Endocrinology BIOL 4451/5551 Endocrinology BIOL 4475/5575 General Virology BIOL 4481/5881 Independent Problems BIOL 4482/5582 Independent Problems BIOL 4482/5582 Independent Problems BIOL 4482/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3301L and Physiology of Exercise Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3352 Cognitive Neuroscience Microbiology BIOL 2233 Principles of Microbiology Lab		·			
AND BIOL 3302		and Advanced Human Anatomy and			
BIOL 3302 Advanced Human Anatomy and Physiology 2 and Advanced Human Anatomy and Physiology 2 Lab Upper Division BMS Electives: (minimum of 13 credits) * 13 BIOL 3306 Advanced Pathobiology BIOL 3324 Developmental Biology & 3324L and Developmental Biology Lab BIOL 4415L Human Neurobiology Lab BIOL 4423/5523 General Parasitology BIOL 4430/5530 Bioethics BIOL 4437 Experimental Biochemistry & BIOL 5537 and Experimental Biochemistry & BIOL 5537 and Experimental Biochemistry BIOL 4443 Endocrinology & BIOL 5543 and Endocrinology BIOL 4444/5544 Molecular Biology BIOL 4441/5544L Molecular Biology Lab BIOL 4451/5551 Immunology BIOL 4451/5551 Immunology Laboratory BIOL 4454/5554 Advanced Immunology BIOL 4475/5575 General Virology BIOL 4487/5581 Independent Problems BIOL 4482/5582 Independent Problems BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3301L and Physiology of Exercise Laboratory PSCI 3308 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3308 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3352 Cognitive Neuroscience Microbiology BIOL 2233 Principles of Microbiology Lab		Physiology 1 Lab			
### Advanced Human Anatomy and Physiology 2 Lab Comparison Compar	AND				
and Advanced Human Anatomy and Physiology 2 Lab Upper Division BMS Electives: (minimum of 13 credits) * 13 BIOL 3306 Advanced Pathobiology BIOL 3324 Developmental Biology Lab BIOL 4415L Human Neurobiology Lab BIOL 44423/5523 General Parasitology BIOL 44430/5530 Bioethics BIOL 4430/5530 Bioethics BIOL 4437 Experimental Biochemistry & BIOL 5537 and Experimental Biochemistry & BIOL 5537 and Experimental Biochemistry BIOL 4443 Endocrinology & BIOL 44443 Endocrinology & BIOL 4445 Holecular Biology BIOL 4444/5544 Molecular Biology BIOL 4445/5551 Immunology BIOL 4451L/5551 Immunology BIOL 4451L/5551 Immunology BIOL 4454/5554 Advanced Immunology BIOL 4445/5553 Foundations in Neuroscience BIOL 4454/5582 Independent Problems BIOL 4481/5881 Independent Problems BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise & 3301L and Physiology of Exercise & 3301L and Physiology of Exercise & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3352 Cognitive Neuroscience Microbiology BIOL 2233 Principles of Microbiology Lab		· · · · · · · · · · · · · · · · · · ·			
Physiology 2 Lab Upper Division BMS Electives: (minimum of 13 credits) * 13 BIOL 3306 Advanced Pathobiology BIOL 3324 Developmental Biology Lab BIOL 3324 And Developmental Biology Lab BIOL 4415L Human Neurobiology Lab BIOL 44430/5523 General Parasitology BIOL 4430/5530 Bioethics BIOL 4432/5532 Biochemistry BIOL 4437 Experimental Biochemistry & BIOL 5537 and Experimental Biochemistry & BIOL 5537 and Experimental Biochemistry BIOL 4443 Endocrinology & BIOL 5543 and Endocrinology BIOL 4444/5544 Molecular Biology Lab BIOL 4441/5545 Molecular Biology Lab BIOL 44451/5551 Immunology BIOL 4451/5551 Immunology BIOL 4451/5551 Immunology BIOL 4451/5554 Advanced Immunology BIOL 4454/5554 Advanced Immunology BIOL 4480/5580 Independent Problems BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology And Principles of Microbiology Lab	& 3302L				
Upper Division BMS Electives: (minimum of 13 credits) * BIOL 3306 Advanced Pathobiology BIOL 3324 Developmental Biology & 3324L and Developmental Biology Lab BIOL 4415L Human Neurobiology Lab BIOL 4423/5523 General Parasitology BIOL 4430/5530 Bioethics BIOL 4437 Experimental Biochemistry & BIOL 4537 and Experimental Biochemistry & BIOL 5537 and Experimental Biochemistry BIOL 4443 Endocrinology BIOL 4444 Endocrinology BIOL 4445 Molecular Biology BIOL 4441/5544 Molecular Biology Lab BIOL 4441/5544 Molecular Biology BIOL 44451/5551 Immunology BIOL 44451/5551 Immunology BIOL 4445/5553 Foundations in Neuroscience BIOL 4445/5554 Advanced Immunology BIOL 44475/5575 General Virology BIOL 4481/5581 Independent Problems BIOL 4482/5582 Independent Problems BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology BIOL 2233 Principles of Microbiology Lab		*			
BIOL 3306 Advanced Pathobiology BIOL 3324 Developmental Biology & 3324L and Developmental Biology Lab BIOL 4415L Human Neurobiology Lab BIOL 4423/5523 General Parasitology BIOL 4430/5530 Bioethics BIOL 4437 Experimental Biochemistry & BIOL 5537 and Experimental Biochemistry & BIOL 5537 and Experimental Biochemistry BIOL 4443 Endocrinology & BIOL 5543 and Endocrinology BIOL 4444/5544 Molecular Biology Lab BIOL 4451/5551 Immunology BIOL 4451/5551 Immunology BIOL 4451/5551 Immunology Laboratory BIOL 4451/5551 Foundations in Neuroscience BIOL 4454/5554 Advanced Immunology BIOL 4454/5554 Advanced Immunology BIOL 4481/5581 Independent Problems BIOL 4482/5582 Independent Problems BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology BIOL 2233 Principles of Microbiology Lab	Upper Division BMS Electi		13		
BIOL 3324 Developmental Biology & 3324L and Developmental Biology Lab BIOL 4415L Human Neurobiology Lab BIOL 4423/5523 General Parasitology BIOL 4430/5530 Bioethics BIOL 4437 Experimental Biochemistry & BIOL 5537 and Experimental Biochemistry & BIOL 5537 and Experimental Biochemistry BIOL 4443 Endocrinology & BIOL 5543 and Endocrinology BIOL 4444/5544 Molecular Biology Lab BIOL 4441/5544 Molecular Biology Lab BIOL 4451/5551 Immunology BIOL 4451/5551 Immunology BIOL 4451/5553 Foundations in Neuroscience BIOL 4454/5554 Advanced Immunology BIOL 4454/5554 Advanced Immunology BIOL 4481/5581 Independent Problems BIOL 4482/5582 Independent Problems BIOL 4280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology BIOL 2233 Principles of Microbiology Lab					
BIOL 4415L BIOL 4423/5523 BIOL 4430/5530 BIOL 4437 BIOL 4443 BIOL 5537 BIOL 4443 BIOL 5537 BIOL 4444/5544 BIOL 445/5551 BIOL 4445/5551 BIOL 4445/5551 BIOL 4445/5551 BIOL 4445/5551 BIOL 4445/5551 BIOL 4445/5551 BIOL 445/5551 BIOL 445/55551 BIOL 445/55551 BIOL 445/55551 BIOL 445/55551 BIOL 445/55553 BIOL 445/55554 BIOL 445/55554 BIOL 445/55554 BIOL 445/55554 BIOL 445/55554 BIOL 445/55555 BIOL 445/55554 BIOL 445/55554 BIOL 4481/5581 BIOL 4482/5582 BIOL 4482/5582 BIOL 2280/4480/5580 BIOL 2280/4480/5580 CPH 4442 Environmental Health in Community and Public Health HPSS 3301 BY Physiology of Exercise BY 3301 BY Physiology of Exercise Laboratory BY SCI 3301 BY Physiology of Exercise Laboratory BY SCI 3301 BY Physiology of Exercise Laboratory BY SCI 3302 BY STORMAN AND STORMAN AND STORMAN STO		•••			
BIOL 4423/5523 General Parasitology BIOL 4430/5530 Bioethics BIOL 4437 Experimental Biochemistry & BIOL 5537 and Experimental Biochemistry & BIOL 5537 and Experimental Biochemistry BIOL 4443 Endocrinology & BIOL 5543 and Endocrinology BIOL 4444/5544 Molecular Biology BIOL 4445/5545 Immunology BIOL 4451L/5551 Immunology BIOL 4451L/5551 Immunology BIOL 4453/5553 Foundations in Neuroscience BIOL 4453/5554 Advanced Immunology BIOL 445/55575 General Virology BIOL 4481/5581 Independent Problems BIOL 4482/5582 Independent Problems BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology Lab					
BIOL 4423/5523 General Parasitology BIOL 4430/5530 Bioethics BIOL 4437 Experimental Biochemistry & BIOL 5537 and Experimental Biochemistry & BIOL 5537 and Experimental Biochemistry BIOL 4443 Endocrinology & BIOL 5543 and Endocrinology BIOL 4444/5544 Molecular Biology BIOL 4445/5545 Immunology BIOL 4451L/5551 Immunology BIOL 4451L/5551 Immunology BIOL 4453/5553 Foundations in Neuroscience BIOL 4453/5554 Advanced Immunology BIOL 445/55575 General Virology BIOL 4481/5581 Independent Problems BIOL 4482/5582 Independent Problems BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology Lab	BIOL 4415L	Human Neurobiology Lab			
BIOL 4432/5532 Biochemistry BIOL 4437 Experimental Biochemistry & BIOL 5537 and Experimental Biochemistry BIOL 4443 Endocrinology & BIOL 5543 and Endocrinology BIOL 4444/5544 Molecular Biology Lab BIOL 4444L/5544L Molecular Biology Lab BIOL 4451L/5551 Immunology BIOL 4451L/5551 Immunology Laboratory BIOL 4453/5553 Foundations in Neuroscience BIOL 4453/5554 Advanced Immunology BIOL 4475/5575 General Virology BIOL 4481/5581 Independent Problems BIOL 2480/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology and Principles of Microbiology Lab	BIOL 4423/5523				
BIOL 4437 & BIOL 5537 and Experimental Biochemistry BIOL 4443 & Endocrinology & BIOL 5543 BIOL 4444/5544 BIOL 4444/5544 Molecular Biology BIOL 4444L/5544L BIOL 4451/5551 Immunology BIOL 4451/5551 Immunology Laboratory BIOL 4451/5553 Foundations in Neuroscience BIOL 445/5554 BIOL 445/5555 BIOL 445/5555 BIOL 445/5555 BIOL 445/5555 BIOL 4481/5581 Independent Problems BIOL 4482/5582 Independent Problems BIOL 2280/4480/5580 Mentored Research Alliance CPH 4446 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology BIOL 2233 Principles of Microbiology Lab	BIOL 4430/5530	Bioethics			
& BIOL 5537 and Experimental Biochemistry BIOL 4443 Endocrinology & BIOL 5543 and Endocrinology BIOL 4444/5544 Molecular Biology BIOL 4444/5544L Molecular Biology Lab BIOL 4451/5551 Immunology BIOL 4451L/5551L Immunology Laboratory BIOL 4453/5553 Foundations in Neuroscience BIOL 445/5554 Advanced Immunology BIOL 4475/5575 General Virology BIOL 4481/5581 Independent Problems BIOL 4482/5582 Independent Problems BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology BIOL 2233 Principles of Microbiology Lab	BIOL 4432/5532	Biochemistry ¹			
BIOL 4443 & BIOL 5543 BIOL 4444/5544 BIOL 4444/5544 BIOL 4444L/5544L BIOL 4444L/5541 BIOL 4451/5551 BIOL 4451/5551 BIOL 4451/5551L BIOL 4451/5553 BIOL 4453/5553 BIOL 445/5554 BIOL 445/5554 BIOL 445/5554 BIOL 4475/5575 BIOL 4475/5575 BIOL 4481/5581 BIOL 4481/5581 BIOL 4480/5580 BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L BIOL 3301 BIOL 4301 BIOL 4451/5551 BIOL 4451/551 BIOL 4451/551 BIOL 4451/551 BIOL	BIOL 4437	Experimental Biochemistry			
& BIOL 5543 and Endocrinology BIOL 4444/5544 Molecular Biology BIOL 4444/5544L Molecular Biology Lab BIOL 4451/5551 Immunology BIOL 4451/5551 Immunology Laboratory BIOL 4453/5553 Foundations in Neuroscience BIOL 4453/5554 Advanced Immunology BIOL 4475/5575 General Virology BIOL 4481/5581 Independent Problems BIOL 4482/5582 Independent Problems BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology BIOL 2233 Principles of Microbiology Lab	& BIOL 5537	and Experimental Biochemistry			
BIOL 4444/5544L Molecular Biology BIOL 4444L/5544L Molecular Biology Lab BIOL 4451/5551 Immunology BIOL 4451L/5551L Immunology Laboratory 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 BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology BIOL 2233 Principles of Microbiology Lab	BIOL 4443	Endocrinology			
BIOL 4444L/5544L Molecular Biology Lab BIOL 4451/5551 Immunology BIOL 4451L/5551L Immunology Laboratory BIOL 4453/5553 Foundations in Neuroscience BIOL 4454/5554 Advanced Immunology BIOL 4475/5575 General Virology BIOL 4481/5581 Independent Problems BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3351 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology Lab	& BIOL 5543	and Endocrinology			
BIOL 4451/5551 Immunology BIOL 4451L/5551L Immunology Laboratory 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 BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology Lab	BIOL 4444/5544	Molecular Biology			
BIOL 4451L/5551L Immunology Laboratory 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 BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology Lab	BIOL 4444L/5544L	Molecular Biology Lab			
BIOL 4453/5553 Foundations in Neuroscience BIOL 4454/5554 Advanced Immunology BIOL 4475/5575 General Virology BIOL 4481/5581 Independent Problems BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology Lab	BIOL 4451/5551	• •			
BIOL 4454/5554 Advanced Immunology BIOL 4475/5575 General Virology BIOL 4481/5581 Independent Problems BIOL 4482/5582 Independent Problems BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology Lab	BIOL 4451L/5551L	Immunology Laboratory			
BIOL 4475/5575 General Virology BIOL 4481/5581 Independent Problems BIOL 4482/5582 Independent Problems BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology Lab	BIOL 4453/5553	Foundations in Neuroscience			
BIOL 4481/5581 Independent Problems BIOL 4482/5582 Independent Problems BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology Lab	BIOL 4454/5554				
BIOL 4482/5582 Independent Problems BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology Lab	BIOL 4475/5575	General Virology			
BIOL 2280/4480/5580 Mentored Research Alliance CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology Lab	BIOL 4481/5581	Independent Problems			
CPH 4406 Epidemiology CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology Lab		•			
CPH 4442 Environmental Health in Community and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology BIOL 2233 Principles of Microbiology Lab		Mentored Research Alliance			
and Public Health HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology Lab		. •••			
HPSS 3301 Physiology of Exercise & 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology Lab	CPH 4442	· · · · · · · · · · · · · · · · · · ·			
& 3301L and Physiology of Exercise Laboratory PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology Lab	HDGG 2201				
PSCI 3301 Introduction to Pharmacology HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology Lab		•			
HPSS 3302 Biomechanics & 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology & 2233L and Principles of Microbiology Lab					
& 3302L and Biomechanics Laboratory PSCI 3368 Introduction to Toxicology NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology & 2233L and Principles of Microbiology Lab					
NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology & 2233L and Principles of Microbiology Lab					
NTD 3340 Nutrition for Health Professionals PSYC 3301 Psychopathology PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology & 2233L and Principles of Microbiology Lab		·			
PSYC 3352 Cognitive Neuroscience Microbiology 4 BIOL 2233 Principles of Microbiology & 2233L and Principles of Microbiology Lab	NTD 3340	Nutrition for Health Professionals			
Microbiology BIOL 2233 Principles of Microbiology & 2233L and Principles of Microbiology Lab	PSYC 3301	Psychopathology			
Microbiology BIOL 2233 Principles of Microbiology & 2233L and Principles of Microbiology Lab	PSYC 3352	Cognitive Neuroscience			
& 2233L and Principles of Microbiology Lab					
	BIOL 2233	Principles of Microbiology			
Total Credits 80-81	& 2233L	and Principles of Microbiology Lab			
	Total Credits		80-81		

- BIOL 3324 Developmental Biology and BIOL 4432 Biochemistry are strongly recommended as these are often required by medical, dental, and veterinary schools.
- * a minimum of 8 credits in BIOL and at least one lab course

Degree Totals

Code	Гitle	Credits
Program Admission Requirements		
General Education		37
Major Requirements (Required General Education credits removed)		70
Upper Division Free Electives		
Free Electives		
Total Credits		120

ISU Degree Requirements (http://coursecat.isu.edu/undergraduate/degreerequirements/)

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/)