

BIOLOGY – MAJOR (SCIENCE) – BACHELOR OF SCIENCE (HONOURS)

Plans of study for students who were admitted to a Biology Plan after May 1, 2016

BIOL-M-BSH

Subject: Administered by the Department of Biology.

Plan: Consists of 72.0 units as described below.

Program: The Plan, alone, or in combination with a Minor in another subject, and with sufficient electives to total 120.0 units, will lead to a Bachelor of Science (Honours) Degree.

Code	Title	Units
1. Core		
Biology:		
A. Complete the following:		
BIOL 102	Fundamentals of Biology: Molecular and Cell Biology	3.00
BIOL 103	Fundamentals of Biology: Organisms to Ecosystems	3.00
B. Select 12.00 units from the following:		12.00
BIOL 200	Diversity Of Life	
BIOL 205	Mendelian and Molecular Genetics	
BIOL 206	Evolutionary Genetics	
BIOL 212	Scientific Methods in Biology	
C. Select 3.00 units from the following:		3.00
BIOL 300	Ecology	
D. Select 3.00 units from the following:		3.00
BIOL 339	Animal Physiology	
BIOL 334	Comparative Biochemistry	
BIOL 341	Plant Physiology	
E. Complete the following:		3.00
BIOL 330	Cell Biology	
Other:		
F. Select 3.00 units from the following:		3.00
BIOL 243	Introduction to Statistics	
STAT 269	Statistics and Probability II	
2. Option		
A. CHEM at the 200 level or above		3.00
B. Select 27.0 units from the following seminar or research options:		27.00
i. Seminar Option:		
a. 6 units from BIOL at the 400 level or above		
b. 12.00 units from the following:		
BIOL at the 300 level or above		
BIOL_Sub_A		

c. Select 9.00 units from the following:

BIOL at the 300 level or above

BIOL_Sub_A

BIOL_Sub_B

ii. Research Option:

a. Complete the following:

BIOL 537 Research in Biology

b. Select 6.00 units from the following:

BIOL at the 300 level or above

BIOL_Sub_A

c. Select 9.00 units from the following:

BIOL at the 300 level or above

BIOL_Sub_A

BIOL_Sub_B

3. Supporting

A. Complete the following:

CHEM 112 General Chemistry 6.00

B. Select 6.00 units from the following: 6.00

MATH 120 Differential and Integral Calculus

MATH 121 Differential and Integral Calculus

MATH 123 Differential and Integral Calculus I & MATH 124 and Differential and Integral Calculus II

Elective

Elective Courses 48.00

Total Units 120.00

4. Substitutions

A. BCHM 310 General Biochemistry (or the combination of BCHM 315 Proteins and Enzymes and BCHM 316 Metabolism) may be substituted for 3.0 units from (BIOL 339 Animal Physiology or BIOL 341 Plant Physiology or BIOL 334 Comparative Biochemistry) with the remaining units applied toward Option Course requirements in the degree program.

B. MATH 126 Differential and Integral Calculus may be substituted for Supporting Courses 3.B. with prior approval from the Chair of Undergraduate Studies in the Department of Biology.

C. Students registered in a BIOL Plan prior to May 1, 2016 may use BCHM 218 Molecular Biology as an alternative to BIOL 330 Cell Biology to satisfy requirement 1.E.



5. Notes

A. PHYS 117 Introductory Physics (or PHYS 104 Fundamental Physics or PHYS 106 General Physics or PHYS 118 Basic Physics) is highly recommended but not required.

B. A maximum of 6.0 units from courses offered by other Faculties and Schools may be counted toward the program and/or Plan Requirements. This includes courses in BMED, COMM, GLPH, LAW, NURS and courses in the Faculty of Engineering and Applied Science.

Biology Course Lists

The following lists contain courses offered through other Departments. In accordance with Academic Regulation 2.5 (Access to Classes), students do not have enrolment priority in all of these courses. Access to these courses may only be made available during the Open Enrolment period, and then only if space permits.

BIOL_Sub_A

Code	Title	Units
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Biology Substitutions List A

ANAT at the 300 level and above

BCHM at the 300 level and above

MICR 221	Basic Microbiology	3.00
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MICR 271	Introduction to Microbiology	3.00
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MICR at the 300 level and above

LISC at the 300 level and above

PATH at the 300 level and above

PHGY at the 300 level and above

BIOL_Sub_B

Code	Title	Units
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Biology Substitutions List B

APSC 400	Technology, Engineering & Management (TEAM)	7.00
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CHEE 400	Technology, Engineering & Management (TEAM)	7.00
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CHEM at the 200 level and above

ENSC 301	Environmental Assessment	3.00
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ENSC 307	Marine Environmental Issues	3.00
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ENSC 320	Wildlife Issues in a Changing World	3.00
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ENSC 390	Sustainability	3.00
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ENSC 425	Ecotoxicology	3.00
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ENSC 471	Environmental Analysis Methods	3.00
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EPID 301	Principles of Epidemiology	3.00
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GEOL 337	Paleontology	3.00
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GEOL 466	Isotopes and the Environment	3.00
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GPHY 304	Northern and Arctic Environments	3.00
GPHY 306	Natural Environmental Change	3.00
GPHY 310	Landscape Ecology	3.00
GPHY 314	Climate Change	3.00
GPHY 315	Advanced Field Measurements and their Analysis	3.00
GPHY 318	Advanced Biogeography	3.00
GPHY 339	Medical Geography	3.00
HLTH 323	Epidemiology	3.00
PHAR 340	Principles of General Pharmacology I	3.00
PHAR 370	Fundamentals of Pharmacology and Therapeutics	3.00
PHIL 301	Bioethics	3.00
PSYC 235	Abnormal Psychology	6.00
PSYC 236	Introduction to Clinical Psychology	3.00
PSYC 271	Brain and Behaviour I	3.00
PSYC 370	Brain and Behaviour II	3.00
PSYC 470	Advanced Topics in Behavioural Neuroscience	3.00
STAT 353	Probability II	3.00