

BIOCHEMISTRY – GENERAL (SCIENCE) – BACHELOR OF SCIENCE

BCHM-G-BSC

Subject: Administered by the Department of Biomedical and Molecular Sciences.

Plan: Consists of 48.00 units as described below.

Program: The Plan, with sufficient electives to total 90.00 units, will lead to a Bachelor of Science Degree.

Code	Title	Units
1. Core		
A. Complete the following:		
CHEM 112	General Chemistry	6.00
B. Complete the following:		
BIOL 102	Fundamentals of Biology: Molecular and Cell Biology	3.00
BIOL 103	Fundamentals of Biology: Organisms to Ecosystems	3.00
C. Complete the following:		
BCHM 218	Molecular Biology	3.00
One course at the 200-level from ASC_Science		3.00
D. Complete the following:		
CHEM 211	Main Group Chemistry	3.00
CHEM 212	Principles of Chemical Reactivity	3.00
CHEM 222	Methods of Structure Determination	3.00
CHEM 223	Organic Reactions	3.00
E. Complete the following:		
BCHM 315	Proteins and Enzymes	3.00
BCHM 316	Metabolism	3.00
BCHM 317	Introductory Biochemistry Laboratory	6.00
2. Additional Requirements		
A. Complete an additional 6.00 units from the following course list:		6.00
ASC_Science		
Electives		
Elective Courses		42.00
Total Units		90.00

3. Substitutions

A. BCHM 310 and a further 3.00 units in the natural and physical sciences and mathematics may be substituted for 1.E.

4. Notes

A. Students who may wish later to change to a chemistry program should take one of PHYS 106 or PHYS 104; students who may wish later to change to a physics program should take PHYS 104.

B. Students wishing to take upper-year BIOL courses as electives should take BIOL 206 as an elective.

C. A maximum of 6.00 units from courses offered by other Faculties and Schools may be counted toward the program and/or Plan requirements. This includes courses in COMM, LAW, NURS and courses in the Faculty of Engineering and Applied Science.

Biochemistry Course Lists

The following lists contain courses offered through other Departments. In accordance with Academic Regulation 2.6 (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.

ASC_Science

Code	Title	Units
Natural and Physical Science Courses		
ANAT		
ASTR		
BCHM		
BIOL		
BIOM		
BMED 384	Integrative Laboratory Course	3.00
BMED 470	Principles of 'Omics'	3.00
BMED 480	Clinical Applications of Human Anatomy	3.00
CANC		
CHEE 209	Analysis Of Process Data	3.50
CHEM		
CISC		
COGS		
COMM 162	Managerial Statistics	3.00
COMP		
CRSS		
DDHT		
ECON 250	Introduction to Statistics	3.00



ENSC 201	Environmental Toxicology and Chemical Risks	3.00
ENSC 301	Environmental Assessment	3.00
ENSC 307	Marine Environmental Issues	3.00
ENSC 320	Wildlife Issues in a Changing World	3.00
ENSC 407	Global Water Issues	3.00
ENSC 425	Ecotoxicology	3.00
ENSC 471	Environmental Analysis Methods	3.00
ENSC 480	Special Topics in Environmental Science	3.00
EPID		
GEOL		
GLPH 472	Special Populations: Neonatal to End-of-Life-Care	3.00
GPHY_Physical Course List		
GPHY_Tech/Methods Course List		
HLTH 230	Basic Human Nutrition	3.00
HLTH 331	Advanced Human Nutrition	3.00
HSCI 270	Fundamentals of Health Research Methodology	3.00
KNPE 125	Introduction to Human Physiology	3.00
KNPE 153	Introductory Biomechanics	3.00
KNPE 225	Advanced Human Physiology	3.00
KNPE 227	Exercise Physiology	3.00
KNPE 251	Introduction to Statistics	3.00
KNPE 254	Biomechanical Analysis of Human Movement	3.00
KNPE 255	Physical Activity, Fitness, and Health	3.00
KNPE 261	Theory of Motor Behaviour and Motor Learning	3.00
KNPE 327	Exercise Physiology Laboratory	3.00
KNPE 339	Advanced Exercise Metabolism	3.00
KNPE 354	Occupational Biomechanics and Physical Ergonomics	3.00
KNPE 355	Lifestyle and Cardiometabolic Assessment Laboratory	3.00
KNPE 425	Physiology of Stress	3.00
KNPE 429	Skeletal Muscle Oxygen Delivery: Demand Matching in Exercise	3.00
KNPE 439	Critical Appraisal and Translation of Muscle Physiology Research	3.00
KNPE 450	Ergonomics	3.00
KNPE 454	Clinical Biomechanics	3.00
KNPE 455	Advanced Physical Activity and Health	3.00
KNPE 459	Clinical Exercise Physiology	3.00
KNPE 493	Special Topics in Kinesiology	3.00
LISC		

MATH		
MICR		
NSCI		
NURS 323	Introduction to Statistics	3.00
NURS 324	Research in Nursing	3.00
PATH		
PHAR		
PHGY		
PHYS		
POLS 285	Introduction to Statistics	3.00
PSYC 100	Principles of Psychology	6.00
PSYC 101	Principles of Psychology I	3.00
PSYC 102	Principles of Psychology II	3.00
PSYC 103	Principles of Psychology III	3.00
PSYC 202	Statistics in Psychology	3.00
PSYC 203	Research Methods in Psychology	3.00
PSYC 221	Cognitive Psychology	3.00
PSYC 271	Brain and Behaviour I	3.00
PSYC 299	Introduction to Directed Research in Psychology	3.00
PSYC 301	Advanced Statistical Inference	3.00
PSYC 302	Advanced Research Methods	3.00
PSYC 450	Advanced Topics in Developmental Psychology	3.00
PSYC_Cognitive Course List		
PSYC_BehaviouralNeuroscience Course List		
REPD		
SOCY 210	Social Research Methods	3.00
SOCY 211	Introduction to Statistics	3.00
SOFT		
STAM		
STAT		