

Name:

SID:

GENERAL EDUCATION REQUIREMENTS

English Composition

ENGL 101 or 107 3

ENGL 102 or 108 3

Or

ENGL 109H 3

Second Language

4th Semester Proficiency or higher 4-5

Introduction to General Education

UNIV 101 1

Exploring Perspectives

Artist 3

Humanist 3

Natural Scientist (*fulfilled by CHEM 181 or PHYS 141*)

Social Scientist 3

Building Connections

Course 1 3

Course 2 3

Course 3 3

General Education Portfolio

UNIV 301 1

FOUNDATIONAL MATH & SCIENCE

Mathematics

MATH 122A & B or MATH 125 – *Calculus* 3-5MATH 263 – *Biostatistics (recommended)* 3Or MATH 129 – *Calculus 2*

Biology

MCB 181R – *Intro Biology 1* 3MCB 181L – *Intro Biology Lab 1* 1ECOL 182R – *Intro Biology 2* 3ECOL 182L – *Intro Biology Lab 2* 1

Physics

PHYS 102 or 140 or 141 or 161H – *Intro Mechanics* 4PHYS 103 or 240 or 241 or 261H – *Intro Electricity & Magnetism* 4

General Chemistry

CHEM 181 – *General Chemistry 1* 4CHEM 182 – *General Chemistry 2* 4

BIOCHEMISTRY MAJOR REQUIREMENTS

CBC Majors First-Year Colloquium

CHEM 195A (F) 1

Organic Chemistry

CHEM 241A – *Organic Chemistry 1* 3CHEM 243A – *Organic Chemistry 1 lab* 1CHEM 241B – *Organic Chemistry 2* 3CHEM 243B – *Organic Chemistry 2 lab* 1

Biochemistry Core

BIOC 296B – *Intro to Biochemical Research* 1BIOC 462A (F) – *Biochemistry 1* 4BIOC 462B (S) – *Biochemistry 2* 4BIOC 463A – *Biochemical Lab Techniques* 4Biochemistry Electives (*6 units minimum*)

See Page 2 for complete electives list

Course 1 3

Course 2 3

UNIVERSITY REQUIREMENTS

UA Graduation Requirements

Total Units: 120

Upper-Division Units: 42

Cumulative GPA: 2.000+

Major GPA: 2.000+

Mid-Career Writing Assessment

Units in Residence @ UA: 30+

Upper-Division Units @ UA: 18+

Biochemistry Electives (6 units minimum)

BIOC 395B – Scientific Writing	1	NSC 408 – Nutritional Biology	3
BIOS 376 – Intro. to Biostats (cannot also receive credit for MATH 263)	3	NSC 475 (S) – Nutrigenomics for Dis. Prev. & Inter.	3
BME 486 – Biomaterial-Tissue Interactions	3	NROS 307 – Cellular Neurophysiology	3-4
CHEE 377 – Microbiology for Engineers	3	NROS 310 – Molecular & Cellular Biology of Neurons	3-4
CHEM 325 – Analytical Chemistry	2	NROS 430 – Neurogenetics	3
CHEM 326 – Analytical Chemistry Lab	2	PCOL 320 – Toxicology of Substances	3
CHEM 405A – Basic Lab Safety	1	PCOL 410 – Medicinal Chemistry	5
CHEM 405B – Advanced Lab Safety	1	PHCL 412 – Intro. To Pharmacology	3
CHEM 405C – Chemical Hygiene & Regulations	1	PHCL 445 – Drugs of Abuse	3
CHEM 450 – Synthetic & Mechanistic Organic Chemistry	3	PHYS 431 – Molecular Biophysics	3
CHEM 485 – Advanced Physical Chemistry	3	PLP 320 – Microbiomes	3
ECOL 320(H) – Genetics	4-5	PLP 329A – Microbial Diversity	3
ECOL 326 – Genomics	3	PLP 428R – Microbial Genetics	3
ECOL 346 – Bioinformatics	4	PLS 312 – Animal & Plant Genetics	4
ENVS 474 – Aquatic Plants & the Environment	4	PLS 340 – Intro. To Biotechnology	3
ENVS 477 – Principles of Ecotoxicology	3	PLS 359 – Plant Cell Structure & Function	3
IMB 401 – Medicinal Microbiology & Immunology	4	PLS 360 – Plant Growth & Physiology	3
MATH 363 – Intro. To Statistical Methods	3	PLS 448A – Plant Biochemistry & Metabolic Engineering	3
MCB 304 – Molecular Genetics	4-5	PSIO 380 – Fundamentals of Human Physiology	4
MCB 325 – The Biology of Cancer	3-4	PSIO 404 – Advanced Topics in Cellular Physiology	3
MCB 410 – Cell Biology	3-4	PSIO 420 – Exercise & Environmental Physiology	3
MCB 411 – Molecular Biology	3-4	PSIO 431 – Physiology of the Immune System	3
MCB 416A – Bioinformatics & Funct. Genomic Analysis	3	PSIO 465 – Neurophysiology	3
MCB 425 – Cancer Discoveries	3	PSIO 484 – Cardiovascular Muscle Biology & Disease	3
MCB 480 – Intro. To Systems Biology	3	PSY 413 – Drugs, Brain, and Behavior	3
MIC 328R – Microbial Physiology	3	BIOC 362(H), 462(H) – Directed Research	1-3
MIC 419 – Immunology	4	BIOC 399(H), 499(H) – Independent Study	1-3
MIC 452 – Antibiotics-A Biological Perspective	3	BIOC 498(H) – Senior Capstone/Thesis	3

Course offerings per semester are subject to change; if students cannot find the elective they desire, they can email an inquiry to the offering department. Please check the Schedule of Classes for most updated course information. Students are responsible for completing any pre-requisites or contacting the offering department if permission is required.

Recommended Academic Plan Additional MATH pre-requisite coursework may be required to start Math & Chemistry. Please consult CBC Advisor for individualized academic plan.

1st Semester	2nd Semester	3rd Semester	4th Semester
CHEM 181 (F) 4	CHEM 182 (S) 4	CHEM 241A 3	CHEM 241B 3
MATH 122A & 122B 5	MATH 263 or 129 3	CHEM 243A 1	CHEM 243B 1
CHEM 195A (F) 1	ENGL 102 3	MCB 181R/L 3/1	2 nd Language 4-5
ENGL 101 3	Gen Ed EP or BC 3	BIOC 296B 1	ECOL 182R/L 3/1
UNIV 101 1	Gen Ed EP or BC 3	2 nd Language 4-5	
Total Units 14	Total Units 16	Total Units 15	Total Units 12
5th Semester	6th Semester	7th Semester	8th Semester
BIOC 462A 4	BIOC 462B 4	BIOC 498(H) (1 st) 3	Bioc elective 3
PHYS 102 or 140 3	BIOC 463A 4	Bioc Elective 3	BIOC 498(H) (2 nd) 3
2 nd Language 4-5	PHYS 103 or 240 3	Gen Ed EP or BC 3	UNIV 301 1
Gen Ed EP or BC 3	2 nd Language 4-5	Gen Ed EP or BC 3	Gen Ed EP or BC 3
Total Units 15	Total Units 15	Total Units 12	Total Units 10