

BIOTECHNOLOGY MAJOR

This worksheet is a guide to supplement your degree audit in Degree Works. All students need a minimum of 30 FSU course-credits to graduate. For students who change majors or enter FSU with transfer credits, your degree audit may appear differently, as previous coursework could fulfill Domains and Free Electives. Please see your Advisor and/or The Advising Center with any questions.

DOMAIN GENERAL EDUCATION (11 Courses Required):

The FSU General Education program consists of 11 requirements. In the Biotechnology major Domain II-B is satisfied through completion of the major (X). One (1) additional subdomain is met by a specific course in the major (see below), leaving **nine (9) courses to be completed** to satisfy the remaining General Education subdomains through courses taken outside the major department. Only courses designated (Gen. Ed. Domain) after the course title will meet General Education requirements. Please refer to the Undergraduate Catalog for full information.

Common Core

- A. ENWR 110 Composition II
- B. MATH/STAT XXX (credit-bearing): MATHxxx*

Domain I

A. Creative Arts: _____

B. Humanities: _____

C. Language: _____

Domain II

Domain III

A. Perspectives on the Past: _____

B. Perspectives on Contemporary World: _____

C. Global Competency, Ethical Reasoning,
and/or Human Diversity:

X = Fulfilled through completion of major

* = Required course in the major

MAJOR COURSES (19-20 courses, 19.5-22.5 credits):

Required Core Courses (9 courses, 10 credits):

BIOL 125	The Biology Experience
BIOL 135/135L	Foundations of Biological Science with Lab
BIOL 208/208L	Genetics with Lab
BIOL 230	Professional Communication in Biology
BIOL 402	Processes of Organic Evolution
CHEM 107/107L	Principles of Chemistry with Lab
CHEM 108/108L	Principles of Chemistry and Quantitative Analysis with Lab
MATH 180	Precalculus (CC-B) **
<u>or</u> MATH 219	Calculus I (CC-B) **
STAT 203	Statistics for the Natural Sciences (II-A)*
<u>or</u> ENVS 202	Data Analysis for Scientists
<u>or</u> STAA 127	Statistics for the Social Sciences (II-A)*

** Fulfills Gen. Ed. Domain II-A if taken.*

****Fulfills a General Education requirement.**

Required Capstone Course (1):

BIOL 460 Research Experience in Biology**

General Studies Concentration (9-10 courses, 9.5-12.5 credits):

CHEM 207/207L	Organic Chemistry I with Lab
PHYS 201/201L	Physics with Applications to Earth and Life
	Systems with Lab
<u>or</u> PHYS 211/211L	Principles of Physics I with Lab AND

One (1) Course from Molecular Systems (see below):

One (1) Course from Organismal and Physiological Systems (see below):

One (1) Course from Ecological Systems (see below):

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Three (3) Courses from Restricted Electives (see below):

Note: Choices are limited to those courses not previously taken for this concentration.

FREE ELECTIVES (0-2):

Molecular Systems

BIOL 262/262L Molecular Biology with Lab
CHEM 300/300L Principles of Biochemistry with Lab
CHEM 301/301L Biochemistry I with Lab

Cell Systems

BIOL 228/228L Microbiology with Lab
BIOL 260/260L Cellular Biology with Lab
BIOL 400 Trends in Biotechnology

Organismal and Physiological Systems

BIOL 212/212L Wildlife Specimen Preparation Techniques
BIOL 235/235L Principles of Human Physiology with Lab
BIOL 236/236L Ornithology with Lab
BIOL 241/241L Human Anatomy and Physiology I with Lab
BIOL 242/242L Human Anatomy and Physiology II with Lab
BIOL 251/251L Vascular Plant Taxonomy with Lab
BIOL 255/255L Plant Physiology with Lab
BIOL 323 Biology and Conservation of Crocodiles
NEUR 225 Biopsychology
NEUR 306 Neurophysiology

Ecological Systems

BIOL 203 Plants and Society
BIOL 233/233L Comparative Vertebrate Anatomy with Lab
BIOL 248/248L Principles of Ecology with Lab
BIOL 320/320L Animal Behavior with Lab
BIOL 321/321L Limnology with Lab
BIOL 335/335L Principles of Wildlife Biology with Lab
BIOL 358 Animal Physiological Ecology
BIOL 381 Theories of Infectious Diseases
BIOL 393 Wildlife Management and Conservation Topics

Restricted Electives

BIOL 218/218L Introduction to Bioinformatics with Lab
BIOL 228/228L Microbiology with Lab
BIOL 260/260L Cell Biology with Lab
BIOL 262/262L Molecular Biology with Lab
BIOL 356 Biology of Cancer
BIOL 400 Trends in Biotechnology
BIOL 426 Human Immunity
BIOL 432 Vertebrate Development
CHEM 208/208L Organic Chemistry II with Lab
CHEM 300 /300L Principles of Biochemistry with Lab
CHEM 332/332L *or* CHEM 301 /301L Biochemistry I with Lab
CSCI 156 Biochemistry II with Lab*
MATH 219 Python Programming for Applications
NEUR 380 Calculus I
Neuropharmacology

** Students who complete CHEM 332/332L Biochemistry II and its prerequisites are eligible for a Biochemistry minor.*