

BIOTECHNOLOGY MAJOR

This worksheet is a guide to supplement your degree audit in Degree Works. All students need 32 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 catalog (p. 261) 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

- _____ A. Analysis, Modeling, Problem-Solving
 _____ B. Natural Sciences (2): Non-Lab Science: _____
 _____ X _____ Lab Science

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
_____	PHYS 212/212L	Principles of Physics II with Lab

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

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

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

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

Continued on next page

BIOTECHNOLOGY MAJOR

Continued from previous page

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

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

_____	_____
_____	_____
_____	_____

FREE ELECTIVES (1-4):

_____	_____
_____	_____
_____	_____
_____	_____

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 232/232L	Invertebrate Zoology with Lab
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 344/344L	Animal Physiological Ecology with Lab
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 <i>or</i> CHEM 301 /301L Biochemistry I with Lab
CHEM 332/332L	Biochemistry II with Lab*
CSCI 156	Python Programming for Applications
MATH 219	Calculus I
NEUR 380	Neuropharmacology

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