BIOLOGY MAJOR

Biotechnology Concentration

This worksheet is a guide to <u>supplement</u> 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 Biology 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. 256) for full information.

Common Core		
	A. ENWR 110 Composition II	
	B. MATH/STAT XXX (credit-bearing): MATH 180*	
Domain I		
	A. Creative Arts:	
	B. Humanities:	
	C. Language:	
Domain II		
	A. Analysis, Modeling, Problem-Solving	
	B. Natural Sciences (2): Non-Lab Science:	
<u>X</u>	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

MAJOR COURSES (18 or 19):

Required Cor	e Courses (11):			
110441104 001	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 262/262L	Molecular Biology with Lab		
	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		
	CHEM 207/207L	Organic Chemistry I with Lab		
	MATH 180	Precalculus* (CC-B) **		
	STAT 208	Biostatistics		
	<u>or</u> ENVS 202	Data Analysis for Scientists		
** Fulfills a Ge	eneral Education requir	on Core Math Requirement. ement.		
Required Cap	stone Course (1):			
	BIOL 460	Research Experience in Biology**		
**An original	research project is requ	uired of all Biology Majors. Prior to enrollment		
in BIOL469 Re	esearch Experience in B	Biology, the student should meet with their		
academic advisor and with other Biology faculty to tailor the research project to the				
student's intere	ests and career goals.			
Biotechnology	Concentration (6 or	<u>7):</u>		
	BIOL 260/260L	Cell Biology with Lab		
	CHEM 301/301L	Biochemistry I with Lab		
	<u>or</u> CHEM 300/300	0LPrinciples of Biochemistry with Lab		
	PHYS 201/201L	Physics for Earth and Life Scientists		
	<u>or</u> PHYS 211/211	L Principles of Physics I AND		
	PHYS 212/212	L Principles of Physics II		

Continued on next page

Rev. 9.20.3

^{* =} Required course in the major

BIOLOGY MAJOR

Biotechnology Concentration

Continued from previous page

One (1) Course from Group A (see below)

Group A: Cellular and Molecular Biology Electives BIOL 218/218L Introduction to Bioinformatics with Lab BIOL 228/228L Microbiology with Lab BIOL 260/260L Cellular Biology with Lab BIOL 356 Biology of Cancer BIOL 381 Theories of Infectious Diseases BIOL 400 Trends in Biotechnology BIOL 426 Human Immunity

CHEM 300/300L Principles of Biochemistry with Lab

Vertebrate Development

or CHEM 301/301L Biochemistry I with Lab

Choose Two (2) additional courses from the list below:

Biology Courses	200-level or above

CHEM 208/208L Organic Chemistry II with Lab
CHEM 332/332L Biochemistry II with Lab

MATH 219 Calculus I

BIOL 432

Note: A student who selects CHEM 208/208L Organic Chemistry II with Lab, CHEM 301/301L Biochemistry I with Lab and CHEM 332/332L Biochemistry II with Lab may complete a Biochemistry minor in addition to the Biotechnology Concentration.

Note: If the student is enrolled in the PSM 4+1 program up to two (2) of the science graduate courses may be used toward this concentration in place of the additional courses

FREE ELECTIVES	S (1-5): May be used toward a minor or courses from
the list below*	
	
*For students who plan	to pursue an advanced degree in Biology, the following
courses are strongly rec	commended:
CHEM 300/300L	Principles of Biochemistry with Lab
MATH219	Calculus I
PHYS 201/201L	Physics for Earth and Life Scientists with Lab
or PHYS 211/211L	Physics I with Lab AND

PHYS 212/212L Physics II with lab

Rev. 9.20.3 2023-2024 Catalog