## BIOLOGY MAJOR

## Biotechnology Concentration

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 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: $\qquad$
B. Humanities:
C. Language: $\qquad$

Domain II
$\qquad$ A. Analysis, Modeling, Problem-Solving
B. Natural Sciences (2): Non-Lab Science: $\qquad$ Lab Science

## Domain III

A. Perspectives on the Past: $\qquad$
B. Perspectives on Contemporary World:
C. Global Competency, Ethical Reasoning, and/or Human Diversity: $\qquad$
$\mathrm{X}=$ Fulfilled through completion of major

* $=$ Required course in the major


## MAJOR COURSES (18 or 19):


*Students proficient at the precalculus level should enroll in MATH219 Calculus 1 to satisfy the Gen. Ed. Domain Common Core Math Requirement.
** Fulfills a General Education requirement
Required Capstone Course (1):
BIOL 460
Research Experience in Biology**
**An original research project is required of all Biology Majors. Prior to enrollment in BIOL469 Research Experience in Biology, the student should meet with their academic advisor and with other Biology faculty to tailor the research project to the student's interests and career goals.

Biotechnology Concentration (6 or 7):
$\qquad$ BIOL 260/260L Cell Biology with Lab
CHEM 301/301L Biochemistry I with Lab
or CHEM 300/300LPrinciples of Biochemistry with Lab
PHYS 201/201L Physics for Earth and Life Scientists
or PHYS 211/211L Principles of Physics I AND
PHYS 212/212L Principles of Physics II

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## 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 $400 \quad$ Trends in Biotechnology
BIOL 426 Human Immunity
BIOL 432 Vertebrate Development
CHEM 300/300L Principles of Biochemistry with Lab
or CHEM 301/301L Biochemistry I with Lab
Choose Two (2) additional courses from the list below:
$\qquad$
$\qquad$

Biology Courses
CHEM 208/208L
200-level or above

CHEM 332/332L
Organic Chemistry II with Lab
MATH 219
Calculus I

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 (1-5): May be used toward a minor or courses from the list below*

| FFor students who plan to pursue an advanced degree in Biology, the following |  |
| :--- | :--- |
| courses are strongly recommended: |  |
| CHEM 300/300L | Principles of Biochemistry with Lab |
| MATH219 | Calculus I <br> PHYS 201/201L |
| Physics for Earth and Life Scientists with Lab <br> PHYS 211/211L | Physics I with Lab AND <br> PHYS 212/212L |

