

# BIOCHEMISTRY MAJOR

## General Biochemistry and ACS Approved Concentrations

### DOMAIN GENERAL EDUCATION (10 Courses Required):

Domain II B is satisfied through completion of the Biochemistry major, leaving ten 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 for full information. (check off as completed)

- Common Core:   A. ENWR 110 Composition 2                   \_\_\_\_\_
- B. MATH XXX   \_\_\_\_\_
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- Domain I:        A. Creative Arts   \_\_\_\_\_
- B. Humanities   \_\_\_\_\_
- C. Language   \_\_\_\_\_
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- Domain II:       A. Analysis, Modeling, Problem-Solving           \_\_\_\_\_
- B. Sciences (two; one must be a lab science)     X   \_\_\_\_\_
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- Domain III:     A. Perspectives on the Past                           \_\_\_\_\_
- B. Perspectives on Contemp. World                   \_\_\_\_\_
- C. Global Comp., Eth. Reas., Human Div.           \_\_\_\_\_

### BIOCHEMISTRY MAJOR AND RELATED COURSES:

#### Required Major Related Core Courses (15)

- BIOL 130/130L Principles of Biology with Lab **OR** \_\_\_\_\_
- BIOL 161/161L Intro to Cell and Molecular Bio with Lab \_\_\_\_\_
- Choose Two (2) courses from the following:**
- BIOL 208/208L Genetics with Lab                           \_\_\_\_\_
- BIOL 260/260L Cell Biology with Lab                       \_\_\_\_\_
- BIOL 262/262L Molecular Biology with Lab               \_\_\_\_\_
- CHEM 107/107L Principles of Chemistry with Lab           \_\_\_\_\_
- CHEM 108/108L Principles of Chemistry & \_\_\_\_\_
- Quantitative Analysis with Lab                           \_\_\_\_\_
- CHEM 207/207L Organic Chemistry I with Lab               \_\_\_\_\_
- CHEM 208/208L Organic Chemistry II with Lab              \_\_\_\_\_
- CHEM 301/301L Biochemistry I with Lab                      \_\_\_\_\_
- CHEM 303/303L Physical Chemistry I with Lab               \_\_\_\_\_
- CHEM 321/321L Instrumental Analysis with Lab             \_\_\_\_\_
- CHEM 332/332L Biochemistry II with Lab                    \_\_\_\_\_
- MATH 219        Calculus I (CCM)                               \_\_\_\_\_
- MATH 220        Calculus II   \_\_\_\_\_
- PHYS 211/211L Principles of Physics I with Lab            \_\_\_\_\_
- PHYS 212/212L Principles of Physics II with Lab           \_\_\_\_\_

All students majoring in Biochemistry must choose (1) of two (2) concentrations ACS-Approved Program or General Biochemistry.

### General Biochemistry Concentration:

#### Concentration Requirements (4):

- BIOL 208/208L Genetics with Lab\* **OR**                       \_\_\_\_\_
- BIOL 260/260L Cell Biology with Lab\* **OR**               \_\_\_\_\_
- BIOL 262/262L Molecular Biology with\* Lab             \_\_\_\_\_
- BIOL 307/307L Microbiology with Lab                       \_\_\_\_\_
- BIOL 340/340L Immunology with Lab                         \_\_\_\_\_
- BIOL 409/109L Developmental Biology with Lab            \_\_\_\_\_
- BIOL 453/453L Seminar in Recombinant DNA Tech w/Lab    \_\_\_\_\_
- CHEM 304/304L Physical Chemistry II with Lab             \_\_\_\_\_
- CHEM 390        Special Topics in Chemistry               \_\_\_\_\_
- CHEM 401/401L Inorganic Chemistry with Lab              \_\_\_\_\_
- CHEM 480        Chemical Research I                           \_\_\_\_\_
- CHEM 481        Chemical Research II                         \_\_\_\_\_
- FDSC 405/405L Food Analysis with Lab                      \_\_\_\_\_
- FDSC 408/408L Food Chemistry with Lab                     \_\_\_\_\_

*\*Note: BIOL 208/208L Genetic with Lab, BIOL 260/260L Cell Biology with Lab and BIOL 262/262L Molecular Biology with Lab cannot be used as both a major core requirement and concentration elective.*

### American Chemical Society Approved Concentration:

#### Concentration Requirements (4):

- CHEM 401/401L Inorganic Chemistry with Lab             \_\_\_\_\_
- CHEM 480        Chemical Research I                         \_\_\_\_\_
- CHEM 481        Chemical Research II                        \_\_\_\_\_
- Choose one (1) elective from:**
- BIOL 208/208L Genetics with Lab\* **OR**                       \_\_\_\_\_
- BIOL 260/260L Cell Biology with Lab\* **OR**               \_\_\_\_\_
- BIOL 262/262L Molecular Biology with\* Lab             \_\_\_\_\_
- CHEM 304/304L Physical Chemistry II with Lab             \_\_\_\_\_
- CHEM 390        Special Topics in Chemistry               \_\_\_\_\_
- FDSC 405/405L Food Analysis with Lab                      \_\_\_\_\_
- FDSC 408/408L Food Chemistry with Lab                     \_\_\_\_\_

*\*Note: BIOL 208/208L Genetic with Lab, BIOL 260/260L Cell Biology with Lab and BIOL 262/262L Molecular Biology with Lab cannot be used as both a major core requirement and concentration elective.*

### FREE ELECTIVES (3):

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_