

# Biology

## Major

### a. Mathematics:

- a. Mathematics 408C, 408R, or 408N and 408S. Students who intend to take additional calculus coursework should begin the sequence with Mathematics 408C or 408N.

- b. Statistics and Data Sciences 320E.

### b. Primary science:

- a. Biology 206L, 311C, 311D, [325, or (315H and 325H)], Integrative Biology 370, Molecular Biosciences 320, Integrative Biology 373.

### b. Complete one of the following:

#### 1. Ecology, evolution, and biodiversity (4 courses total):

- One course from the following list: Integrative Biology 364, 448L, 463L, 440L, 359L, 369F, 369L, 453L, 455L, 470L.
- One course from the following list: Integrative Biology 322/122L, 374/174L, Biology 456L, Integrative Biology 478L, 373L, 448L, 463L, 440L, 369F, 369L, 453L, 455L, 321G, Biology 377.
- Two courses from the following list: Integrative Biology 322/122L, 323, 351, 359K, 364, 374/174L, 375, 471, Biology 456L, Integrative Biology 478L, 373L, 448L, 463L, 440L, 369F, 369L, 453L, 455L, 321G, 377; Marine Science 352C, 320, 357, 354E, 352E.

#### 2. Organismal biology and physiology (4 courses total):

- Three courses from the following list: Integrative Biology 346, 365S/165U, 361T, Molecular Biosciences 328, Integrative Biology 446L, 374/174L, 478L, 440L, 369F, 453L, 448L, Biology 377; Neuroscience 320; Marine Science 355C, 354U, 354C, 357, 354, 352D.
- One course from the following list: Integrative Biology 446L, 478L, 440L, 369F, 453L, 448L, 371L, Biology 377.

#### 3. Genetics, genomics, and computational biology (4 courses total):

- Three courses from the following list: Molecular Biosciences 325T, 350, 356E, 327G, 366, 366R, Biology 325L, 377, Integrative Biology 321G; Statistics and Data Sciences 322E; Marine Science 354E.
- One course from the following list: Biology 325L, Integrative Biology 321G, Biology 377.

#### 4. Molecular, cell, and developmental biology (4 courses total):

- Molecular Biosciences 350
- One course from the following list: Molecular Biosciences 349L, 320L, 331L, 226L, 230L, 260L, 361L, Biology 377.
- Two courses from the following list: Molecular Biosciences 344, 366R, 361, 336, 350M, 355, 349L, 320L, 331L, 230L, 260L, 361L, Biology 377; Biochemistry 369.

#### 5. Microbiology and infectious disease (4 courses total):

- Molecular Biosciences 326R
- Molecular Biosciences 226L
- Two courses from the following list: Molecular Biosciences 330, 360K, 361, 366, 339M, 260L, 361L

#### 6. Biochemistry (4 courses total):

- Biochemistry 219L
- Biochemistry 369 or 339F
- Molecular Biosciences 344
- One course from the following list: Biochemistry 339M, 339J, 370, 330M.

### c. Secondary science:

- i. Chemistry 301 or 301C; 302 or 302C; and 204 or 104M and 104N
- ii. Complete one of the following:
  - 1. Physics 302K and 105M(recommended)
  - 2. Physics 317K and 105M
  - 3. Physics 303K and 105M
  - 4. Physics 301 and 101L