

# Biology Department Curriculum



## B.S., Biology – Cell & Molecular Biology Major Concentration

### Course Offerings

<i>Beginning and Intermediate Courses</i>	<i>Advanced Level Courses (Juniors &amp; above)</i>
BIOL 211 – General Biology	BIOL 310 – Developmental Biology
BIOL 212 – General Biology	BIOL 320 – Pathophysiology
BIOL 322 – Comparative Vertebrate Anatomy	BIOL 330 – Advanced Physiology
BIOL 350 – Genetics	BIOL 340 – Plant Physiology
BIOL 360 – Ecology	BIOL 410 – Molecular Biology
BIOL 370 – Microbiology	BIOL 420 – Cellular Biology
BIOL 380 – Ornithology	BIOL 440 – Advanced Human Anatomy
BIOL 390 – Systematic Botany	BIOL 465 – Biological Research
BIOL 430 – Histology	BIOL 475 – Field Experience
BIOL 460 – Invertebrate Zoology	BIOL 490 – Biological Explorations

- Group1 - Field studies emphasis: BIOL 360, 380, 390, or 460
- Group2 - Diversity emphasis: BIOL 322, 370, 380, 390, or 460
- Group3 - Form/function emphasis: BIOL 310, 322, 330, 340 or 440
- Group4 - Molecular/cell emphasis: BIOL 350, 410, 370, or 420
  
- A total of 34 semester hours in Biology are required.
  - Students must complete the courses for the major.
    - BIOL 211, 212 – General Biology
    - CHEM 211, 212 – General Chemistry
    - CHEM 331, 332 – Organic Chemistry
    - MATH 190 – Pre-Calculus (or above)
    - BIOL 490 – Biological Explorations (Juniors)
  - Students must take:
    - BIOL 370 Microbiology
    - BIOL 420 Cell Biology
    - BIOL 350 Genetics
    - BIOL 410 Molecular Biology
  - Students must take 1 course from among the following:
    - BIOL 310 Developmental Biology or
    - BIOL 330 Advanced Physiology or
    - BIOL 322 Comparative Vertebrate Anatomy or
    - BIOL 430 Histology
  - Students must choose 1 course from Group 1.
  - ***Students are strongly encouraged to take CHEM 341, 342 - Biochemistry.***