

ADVISING TRACK: CELL/MOLECULAR

The BIOS B.S. requirements are the same for all BIOS students. However, the courses you take beyond the required courses are flexible and can be chosen to best fit your area of interest. Below are course recommendations for students who are most interested in cell/molecular biology and/or pre-professional health. The emphasis name, however, does not show up officially on your transcript.

REQUIRED BIOS COURSEWORK

Non-negotiable coursework: http://catalog.niu.edu/preview_program.php?catoid=43&poid=9701

Course Number	Course Name	Credits	Typical Timing
BIOS 208	Fundamentals of Cellular Biology	3	Fall and Spring
BIOS 210	Fundamentals of Cellular Biology Lab	1	Fall and Spring
BIOS 209	Fundamentals of Organismal Biology	3	Fall and Spring
BIOS 211	Fundamentals of Organismal Biology Lab	1	Fall and Spring
BIOS 308	Genetics	5	Fall and Spring
BIOS 494	Senior Assessment	1	Fall and Spring

Current recommended schedule: <https://www.niu.edu/biology/academics/undergraduate-studies/4-year-plan.shtml>

HIGHLY RECOMMENDED BIOS ELECTIVES

Course Number	Course Name	Credits	Typical Timing
BIOS 300	Introduction to the Biology Major	1	Every fall (?)
BIOS 302/303	Molecular Biology/ Cell Biology	3	Fall and Spring
BIOS 313	Microbiology	4	Fall and Spring
BIOS 355	Human Physiology	4	Fall and Spring

OTHER SUGGESTED COURSES

Course Number	Course Name	Credits	Typical Timing
BIOS 370/495/499	Research Experience	1-12	All terms
BIOS 417	Pathogenic Microbiology	4	Every spring
BIOS 423	Principles of Virology	3	Spring of odd years
BIOS 440	Immunology	3	Not currently available
BIOS 445	Histology	4	Spring of even years

BIOS 311 OR BIOS 446	Functional Human Anatomy OR Advanced Human Anatomy (requires strong anatomy background)	4	Fall and Spring Every fall
BIOS 450	Molecular Biology of Cancer	3	Fall of even years
BIOS 454	Developmental Biology	4	Every Spring
BIOS 461	Endocrinology	3	Fall of odd years
BIOS 463	Pharmacology/Toxicology	3	Not currently offered
BIOS 465	Cellular Physiology		Every spring
BIOS 470X OR BIOS 472/473X	Biochemistry	3-6	Every fall (summer) Fall/Spring
BIOS 432	Radiation Biology	3	Fall of odd years
BIOS 429	Human Embryology	3	Spring of odd years
BIOS 459	Neurobiology		Spring of odd years