Biology/Pre-Medicine (A.S.)

Division of Biology, Chemistry & Physics — Curriculum Code 0601

Will Earn Upon Program Completion: Associate in Science (A.S.) Degree

Biology is the primary life science from which students can enter specific fields of study as diverse as molecular biology, forestry, pathophysiology, neuroanatomy, and parasitology. Biology also provides the foundation for students who wish to become pharmacists, physicians, dentists, or other medical professionals. The curriculum is equivalent to the first two years of a bachelor's program in Biology. Emphasis is placed on the scientific method and critical analysis that will enable you to be a contributor to any scientific or medical team.

COURSES

Program Requirements

GENERAL EDUCATION REQUIREMENTS (33 CREDITS)

Written & Oral Communication (6 credits)
ENG 101 (3 credits)
ENG 102 (3 credits)

Quantitative Knowledge & Skills (4 credits)
MTH 119 (4 credits)

Scientific Knowledge & Reasoning (8 credits)
BIO 103 (4 credits)
BIO 104 (4 credits)

Society & Human Behavior (6 credits)
Choose two of the following courses: ANT 101ANT 105ECO 101ECO 102POL 101POL 104PSY 101PSY 102PSY 219SOC 101SOC 108or SOC 219 (two 3-credit courses)

Humanistic Perspective (6 credits)
Choose one of the following literature courses: ENG 205ENG 208ENG 215ENG 221ENG 222ENG 232ENG 237ENG 238ENG 242ENG 250ENG 263or ENG 264 (one 3-credit course)
AND
Choose one of the following art or music courses: ART 100ART 101ART 102MUS 100MUS 108MUS 109or MUS 117 (one 3-credit course)

Historical Perspective (3 credits)
Choose one of the following history courses: HST 101HST 102HST 111HST 112HST 121HST 122HST 131HST 132HST 134HST 135HST 136HST 137HST 161or HST 162 (one 3-credit course)

MAJOR COURSE REQUIREMENTS (28 CREDITS)

CHM 103 General Chemistry I (4 credits)
CHM 104 General Chemistry II (4 credits)
MTH 120 Pre-Calculus II (4 credits)
PHY 101 College Physics I and PHY 102 College Physics II (two 4-credit courses) or CHM 203 Organic Chemistry I and CHM 204 Organic Chemistry II (two 4-credit courses)

Choose two of the following Biology electives*: BIO 211 Microbiology, BIO 220 Introduction to Enviromental Science, Bio 225 Plant Science, BIO 228 Molecular Biology, Bio 230 Ecology and Evolution, BIO 237 Genetics and/or BIO 290 Honor Biology Research Seminar (two 4-credit courses)

Notes:

(1)*The sequence BIO 121 – BIO 122 (a total of 8 credits) may be substituted for one 4-credit Biology elective.

(2)The minimum passing grade for all courses designated BIO, CHM, MTH or PHY is "C." If you earn a grade below "C," you need to repeat that course.

RECOMMENDED SEQUENCE OF COURSES

Total Credits Required for Degree: 61

First Semester
BIO 103 General Biology I (4 credits)
ENG 101 College Composition I (3 credits)
CHM 103 General Chemistry I (4 credits)
MTH 119 Pre-Calculus I (4 credits)

Second Semester
BIO 104 General Biology II (4 credits)
ENG 102 College Composition II (3 credits)
CHM 104 General Chemistry II (4 credits)
MTH 120 Pre-Calculus II (4 credits)
Society & Human Behavior requirement (one 3-credit course)

Third Semester
PHY 101 College Physics I or CHM 203 Organic Chemistry I (4 credits)
Biology elective (one 4-credit course)
Society & Human Behavior requirement (one 3-credit course)
Humanistic Perspective literature requirement (one 3-credit course)

Fourth Semester
PHY 102 College Physics II or CHM 204 Organic Chemistry II (4 credits)

Biology elective (one 4-credit course)
Humanistic Perspective art or music requirement (one 3-credit course)
Historical Perspective requirement (one 3-credit course)

NOTES:

(1) The two General Education Integrated Course Goals, Ethical Reasoning & Action and Information Literacy, are both addressed by the required curriculum described above, regardless of specific choices made by the individual student.

(2) This plan assumes the completion of all required developmental courses in Reading, English, and Mathematics as well as other pre-requisites and co-requisites for some of the courses, as listed in the Course Descriptions section.