



Northern

Associate of Science
BIOLOGY

This program prepares you to pursue a baccalaureate degree in biology for the pre-professional medical studies. While some positions are open to holders of the associate degree, most of the opportunities exist at the bachelor's, master's, and doctoral levels.

GENERAL EDUCATION (35)

COMPLETED **Planned Timeline**
(By Semester)

Area I: Communications (9)

ENG 111 English Composition I (3)

Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation

SPCH 130 Public Speaking (3)

*Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation*Choose one of the following courses:

ENG 112 English Composition II (3)

Pre-requisite: ENG 111

ENG 116 Technical Writing (3)

*Pre-requisite: ENG 111***Area II: Mathematics (3 crs)****Choose one course from the following list.**

MATH 145 Introduction to Probability & Statistics (3)

Pre-requisite: MATH 130

MATH 150 College Algebra (3)

Pre-requisite: MATH 130 or adequate score on the Course Placement Evaluation

MATH 151 Conceptual Mathematics*

MATH 155 Trigonometry (3)

Pre-requisite: MATH 150 or adequate score on the Course Placement Evaluation

MATH 162 Calculus I (4)

Pre-requisite: MATH 155 or MATH 160

MATH 163 Calculus II (4)

Pre-requisite: MATH 162 or adequate score on the Course Placement Evaluation

MATH 264 Calculus III (4)

Pre-requisite: MATH 163 or adequate score on the Course Placement Evaluation

* Conceptual mathematics will satisfy the mathematics requirement for all AA/BA/BBA/BM degrees

Area III: Laboratory Sciences (8)

BIOL 201/L Introduction to Molecular and Cell Biology with lab (4) (Fall)

Pre-requisite: CHEM 121/L

CHEM 202/L Principles of Genetics with lab (4)

*Pre-requisite: BIOL 201/L***Area IV: Social/Behavioral Sciences (6-9 crs)*****Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation****You must select courses from at least two different discipline areas from the following list:**

ANTH 101/L Physical Anthropology w/Lab (4)

ANTH 102 Intro to Social & Cultural Anthropology (3) (Fall)

ANTH 111 Language and Culture (3)

ANTH 207 Cultures of New Mexico (3)

ANTH 110 Indian Culture of the Southwest

ECON 200 Macroeconomics (3)

ECON 201 Microeconomics (3)

GEOG 111 World Geography (3)

PSCI 110 The Political World (3)

PSCI 120 Contemporary Political Issues (3)

PSCI 200 American Politics (3)

PSCI 210 State and Local Government (3)

PSCI 212 The American Presidency (3)

- PSY 105 General Psychology (3)
- PSY 210 Theories of Personality (3)
- PSY 229 Adolescent Psychology (3)
- PSY 230 Psychology of Adjustment (3)
- PSY 232 Abnormal Behavior (3)
- PSY 270 Social Psychology (3)
- PSY 290 Developmental Psychology (3)
- SOC 101 Introduction to Sociology (3)
- SOC 213 Deviant Behavior (3)
- SOC 216 Ethnic and Intercultural Relations (3)
- SOC 220 Social Problems (3)
- SOC 225 Marriage and the Family (3)

* Plus, topic courses with student advisor's approval

Area V: Humanities and Fine Arts (6-9 crs)*

Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation

You must select courses from at least two different discipline areas from the following list:

- ART 105 Introduction to Art (3)
- ART 107 History of Art I (3)
- ART 208 History of NM Art & Architecture (3)
- ART 211 History of Art II (3)
- DANC 240 Dance Appreciation (3)
- ENG 270 Children's Literature (3)
- Pre-requisite ENG 111*
- ENG 262 Literature of the Southwest (3)
- Pre-requisite ENG 112*
- ENG 265 Native American Literature 1 (3)
- Pre-requisite ENG 111*
- ENG 266 Native American Literature II (3)
- Pre-requisite: ENG 111*
- ENG 280 Readings in Literature (3)
- Pre-requisite ENG 111*
- ENG 290 Study of Literature
- Pre-requisite ENG 111*
- ENG 294 Mythology (3)
- Pre-requisite ENG 111*
- HIST 101 Western Civilization I (3)
- HIST 102 Western Civilization II (3)
- HIST 161 History of the U.S. to 1877 (3)
- HIST 162 History of the U.S. from 1877 (3)
- HIST 200 History of the World Religions (3)
- HIST 220 Southwestern Women's History (3)
- HIST 230 Chicano Experience in the US (3)
- HIST 250 American Indian History (3)
- HIST 260 History of New Mexico (3)
- HUM 105 Humanities of the Southwest (3)
- HUM 311 Why the Social Sciences Matter ** (3)
- HUM 414 Humanity and Creativity ** (3)
- HUM 421 History, Literature, Art & Philosophy ** (3)
- MUS 103 Music History & Literature I (3)
- MUS 105 Music Appreciation (3)
- MUS 218 Music History & Literature II (3)
- PHIL 110 Intro to Philosophical Problems (3)
- PHIL 111 History of Philosophy (3)
- PHIL 150 Critical Thinking (3)
- PHIL 220 Ethics (3)
- PIS 200 Introduction to Pueblo Indian Studies (3)
- THE 120 Introduction to Theatre I (3)
- THE 130 History of Theatre (3)

Plus, topic courses with advisor's approval

* If your major is in the area of the Humanities/Fine Arts, unless otherwise regulated by a given department, you should select 9 hrs from Area V and 6 hrs. from Area IV; if in the Social/Behavioral Sciences, you should select 9 hrs from Area IV and 6 hrs from Area V. Consult your major advisor. In any case, you must complete a minimum spread of 15 hrs between Areas IV and V. .

** Students in associate degree programs are advised that upper-division courses are not covered under financial aid.

HEALTH, PHYSICAL EDUCATION & RECREATION (1)

Electives (1) _____

PROGRAM REQUIREMENTS (35)

BIOL 203/L Ecology and Evolution with lab (4) (Fall)

Pre-requisite: BIOL 202/L and MATH 150

BIOL 204/L Plant and Animal Form and Function with lab (4) (Spring)

Pre-requisites: BIOL 203/L and CHEM 122/L

BIOL 210/L Microbiology with lab (4)

Pre-requisite: CHEM 110/L

CHEM 121/L General Chemistry I with lab (4)

Pre-requisite: MATH 130, high school chemistry, or an ACT score of 19 or higher in Natural Science.

CHEM 122/L General Chemistry II with lab (4)

Pre-requisite: CHEM 121/L

MATH 145 Introduction to Probability and Statistics (3)

Pre-requisite: MATH 130 or adequate score on the Course Placement Evaluation

PHYS 121/L Applied Physics I with lab (4)

Pre-requisite: MATH 130 or adequate score on the Course Placement Evaluation

Electives (choose 8 crs from the following):

*BIOL 151/L Science and Society w/lab**

Pre-requisite: ENG 111

BIOL 160/L Biotechnology Seminar I with lab (4) (Fall)

Pre-requisite: BIOL 110/L or higher-level BIOL

BIOL 260/L Biotechnology Seminar II with lab (4) (Spring)

Pre-requisite: BIOL 160/L

BIOL 290 Undergraduate Research Experience I (3)

BIOL 292 Undergraduate Research Experience II (3)

Pre-requisite: BIOL 290

CHEM 210/L Integrated Organic and Biochemistry with lab (4)

Pre-requisite: CHEM 110/L or CHEM 121/L

CHEM 221/L Quantitative Analysis with lab (4) (Spring)

Pre-requisites: CHEM 122/L and MATH 145

ES 112/L Environmental Science with lab (4) (Fall)

*MATH 155 Trigonometry (3)**

Pre-requisite: MATH 150

*MATH 162 Calculus I (4)**

Pre-requisites: MATH 150 and MATH 155 or MATH 160

** Courses in italics are also program requirements for the B.S. in Biology.*

TOTAL CREDIT HOURS 71

Educational Planning Form (Semester)

Fall Semester	Spring Semester	Summer
Total Units	Total Units	Total Units
Fall Semester	Spring Semester	Summer
Total Units	Total Units	Total Units
Fall Semester	Spring Semester	Summer
Total Units	Total Units	Total Units

Advisor's Signature _____

Student Signature _____