MOLECULAR BIOLOGY COMPREHENSIVE, BACHELOR OF SCIENCE

Offered by Department of Biology (http://catalog.unk.edu/undergraduate/departments-programs/biology)

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**General Studies**

*Foundational Core (Written, Math, Oral, Democracy)*

Foundational Core courses (http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses) 12

Including:

- MATH 102 College Algebra

**Portal**

Select one course numbered 188 (http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses/portal-course)

**Distribution**

ENG 101 Introduction of Academic Writing 3

If ENG 101 is not taken as a prerequisite for ENG 102 then additional hours may be required to meet the 27 credit hour minimum in the Distribution Area of General Studies.

Aesthetics (http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses/aesthetics) 3

Humanities (http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses/humanities) 6

Social Sciences (http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses/social-sciences) 6

Natural Sciences (http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses/natural-sciences) 9

Including:

- BIOL 105 Biology I
- PHYS 205 General Physics I
- PHYS 205L Physics I Laboratory

Analytical and Quantitative Thought (http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses/analytical-quantitative-thought) 0

Wellness (http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses/wellness) 0

**Capstone**

Select one course numbered 388 (http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses/capstone-course)

**BS Science-related course requirements**

CHEM 160 General Chemistry 3

CHEM 160L General Chemistry Laboratory 1

CHEM 161 General Chemistry 3

CHEM 161L General Chemistry Laboratory 1

**Major Option**

Complete all required courses 47-57

**Unrestricted electives**

Needed to reach 120 credit hour minimum 10-20

Total Credit Hours 120

A minimum 2.5 GPA is required in all courses counting toward this major.

**Major Option**

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**Molecular Biology Comprehensive Core Requirements**

- BIOL 106 Biology II 4
- BIOL 231 Research Methods I 3
- BIOL 290 Evolution 3
- BIOL 309 Cellular & Molecular Biology 4
- BIOL 360 Genetics 4
- BIOL 450 Advanced Molecular Biology 4
- BIOL 431 Research Methods II 2
- BIOL 482 Seminar in Molecular Biology 2

**Biology Comprehensive Supporting Course Requirements**

Select one of the following options: 5-10

- CHEM 250 & 250L Elementary Organic Chemistry and Elementary Organic Chemistry Lab

or

- CHEM 360 & 360L Organic Chemistry and Organic Chemistry Laboratory

- & CHEM 361 & 361L Organic Chemistry and Organic Chemistry Laboratory

- CHEM 351 Biochemistry 3

- CHEM 351L Biochemistry Lab 1

Select one of the following: 3-5

- MATH 115 Calculus I with Analytic Geometry
- MATH 123 Applied Calculus I

Select 9-12 credit hours of the following: 9-12

- BIOL 305 BioStatistics
- BIOL 311 Bioethics
- BIOL 325 Medical Terminology
- BIOL 401 Principles of Immunology
- BIOL 404 Developmental Biology
- BIOL 440 Infectious Diseases
- BIOL 461 Human Genetics
- BIOL 465 Physiology
- CHEM 352 Biochemistry II
- CHEM 352L Biochemistry II Lab

Total Credit Hours 47-57

1 The Molecular Biology degree requires a minimal mathematical competency at the level of calculus. Students with sufficient preparation may enter the mathematics program at a higher level, reducing the total credit hours needed. See advisor for math placement.