# 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 1

**Portal**

Select one course numbered 188 (http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses/portal-course) 3

**Distribution**

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

Needed to reach 27 credit hour minimum in Distribution 3

**Capstone**

Select one course numbered 388 (http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses/capstone-course) 3

**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 49

## Unrestricted electives

Needed to reach 120 credit hour minimum 18

Total Credit Hours 120

*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.*

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 Biology 4
- **BIOL 360** Genetics 4
- **BIOL 450** Molecular Biology 3
- **BIOL 452** Techniques in Molecular Biology 3

Select 2 credit hours of one of the following:

- **BIOL 421** Seminar in Biology 2
- **BIOL 431** Research Methods II 2

Select 2 credit hours of the following:

- **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
- **CHEM 360** & **360L** Organic Chemistry and Organic Chemistry Laboratory
- **CHEM 361** & **361L** Organic Chemistry and Organic Chemistry Laboratory

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 49-59