MOLECULAR BIOLOGY COMPREHENSIVE, BACHELOR OF SCIENCE

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
</table>

**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) 3

**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) 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 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.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
</table>

**Major Option**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
</table>

**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.