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 Requirements (LOPERS 1-4) 12-14

Including:

LOPER 4: Mathematics, Statistics, and Quantitative Reasoning

Take 1 of the following: 1

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

Broad Knowledge Requirements (LOPERS 5-8) 13

Including:

LOPER 8: Natural Science

- CHEM 160 General Chemistry and General Chemistry Laboratory

Dispositional Requirements (LOPERS 9-10) 2 6

Wellness (LOPER 11) Optional 0

BS Science-related course requirements 5

- PHYS 205 General Physics I and Physics I Laboratory

Program-Specified Requirements 4

- CHEM 161 General Chemistry and General Chemistry Laboratory

Major Option

Complete all required courses 46-54

Unrestricted electives

Needed to reach 120 credit hour minimum 34-24

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 105 Biology I 4
- 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

Take two hours from the following: 2

- BIOL 421 Seminar in Biology

BIOL 431A Research Methods IIA & BIOL 431B Research Methods IIB

Biology Comprehensive Supporting Course Requirements

Select one of the following options: 5-10

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

or


Take the following:

- CHEM 351 Biochemistry & 351L and Biochemistry Lab

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 301 Analytical Chemistry & 301L and Analytical Chemistry Lab
- CHEM 352 Biochemistry II & 352L and Biochemistry II Lab

Total Credit Hours 46-54

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. Students are required to take a LOPERs 4: Mathematics, Statistical, and Quantitative Reasoning course regardless of entry level. See advisor for math placement.

2 Designated courses with the appropriate content may be approved to satisfy one of the Broad Knowledge requirements plus LOPER 9 or Broad Knowledge plus LOPER 10. Courses may be approved to satisfy LOPER 9 or LOPER 10 alone. (Courses satisfying LOPER 9 or LOPER 10 alone must be 3 credit hours.) Students applying this option will need to take additional hours in other categories to meet the required GS hours.