### Nebraska Wesleyan University

Catalog 2014-2015

#### Major:

# **Biochemistry and Molecular Biology (B.S.)**

### Departments/Programs:

Biology Chemistry

## Biochemistry and Molecular Biology Major (B.S., 61 hours)

Courses	
BIO 1400 Introduction to Biological Inquiry	4 hours
BIO 2200 Genetics and Cell Biology	4 hours
BIO 2300 Ecology and Evolution	4 hours
BIO 3800 Molecular Genetics	3 hours
BIO 3850 Molecular Genetics Lab	1 hour
CHEM 1110 Chemical Principles I and CHEM 1110L Chemical Principles I Laboratory	4 hours
CHEM 1120 Chemical Principles II and CHEM 1120L Chemical Principles II Laboratory	4 hours
CHEM 2100 Organic Chemistry I and CHEM 2100L Organic Chemistry I Laboratory	4 hours
CHEM 2110 Organic Chemistry II: Synthesis and Mechanisms and CHEM 2110L Organic Chemistry II Laboratory	4 hours
CHEM 3410 Biochemistry and CHEM 3410L Biochemical Methods	4 hours
CHEM 3510 Physical Chemistry I, Thermodynamics and Kinetics and CHEM 3510L Physical Chemistry Laboratory	4 hours
CHEM 3440 Instrumental Analysis	4 hours
CHEM 4420 Advanced Biochemistry	3 hours
CHEM 4980 Chemistry Seminar	1 hour
PHYS 1600 Principles of Physics I or PHYS 2000 General Physics I	4 hours
PHYS 1700 Principles of Physics II or PHYS 2100 General Physics II	4 hours
MATH 1600 Calculus I	5 hours
Senior Comprehensive	
BIO 4990 Senior Research or CHEM 4950 Independent Study	1 hour

CHEM 4950 Independent Study

MATH 1610 Calculus II is strongly recommended.