### Nebraska Wesleyan University

Catalog 2012-2013

#### Major:

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

### Departments/Programs:

Biology Chemistry

## Biochemistry and Molecular Biology Major (B.S., 62 hours)

Courses	
BIO 050 General Biology of Plants	4 hours
BIO 160 Cell Biology	4 hours
BIO 170 Genetics	4 hours
BIO 283 Molecular Biology	4 hours
CHEM 051 Chemical Principles <b>and</b> CHEM 051L Chemical Principles Laboratory	4 hours
CHEM 120 Organic Chemistry I and CHEM 120L Organic Chemistry I Laboratory	4 hours
CHEM 121 Organic Chemistry II: Synthesis and Mechanisms and CHEM 121L Organic Chemistry II Laboratory	4 hours
CHEM 122 Analytical and Inorganic Chemistry <b>and</b> CHEM 122L Analytical and Inorganic Chemistry Laboratory	4 hours
CHEM 221 Physical Chemistry I, Thermodynamics and Kinetics <b>and</b> CHEM 221L Physical Chemistry Laboratory	4 hours
CHEM 242 Instrumental Methods of Analysis	4 hours
BIO 281 Biochemistry <b>or</b> CHEM 255 Biochemistry	3 hours
BIO 282 Biochemistry Laboratory <b>or</b> CHEM 258 Biochemical Methods	1 hour
CHEM 256 Advanced Biochemistry	3 hours
CHEM 293 Chemistry Seminar	1 hours
PHYS 101 Principles of Physics I <b>or</b> PHYS 111 General Physics I	4 hours
PHYS 102 Principles of Physics II <b>or</b> PHYS 112 General Physics II	4 hours
MATH 105 Calculus I	5 hours
Senior Comprehensive	
BIO 299 Senior Research <b>or</b> CHEM 295 Independent Study	1 hour

CHEM 295 Independent Study

MATH 106 Calculus II is strongly recommended.