COLLEGE OF HUMAN DEVELOPMENT & EDUCATION

MAJOR: CHEMISTRY EDUCATION

ACADEMIC YEAR:  2013-2014

DEGREE TYPE: B.A. or B.S.

REQUIRED DEGREE CREDITS TO GRADUATE: 136

GENERAL EDUCATION REQUIREMENTS – 40 CREDITS

Lower Division Requirements – 37 Credits

First Year Experience (F) - 1 Credit
HD&E 189 Skills for Academic Success 1 cr
Students transferring in 24 or more credits do not need to take HD&E 189.

Communication (C) - 9 Credits
ENGL 110 College Composition I 3 cr
ENGL 120 College Composition II 3 cr
COMM 110 Fund of Public Speaking 3 cr

Quantitative Reasoning (R) - 3 Credits
STAT 330 Introductory Statistics 3 cr

Science & Technology (S) - 10 Credits
BIOL 124/L Environmental Science/Lab 3/1 cr
GEOL 105 Physical Geology 3 cr
GEOL 106 The Earth Through Time 3 cr

Humanities & Fine Arts (A) - 6 Credits
Select from current general education courses www.ndsu.edu/registrar/gened/

Social & Behavioral Sciences (B) - 6 Credits
Select from current general education courses www.ndsu.edu/registrar/gened/

Wellness (W) - 2 Credits
Select from current general education courses www.ndsu.edu/registrar/gened/

Cultural Diversity (D)
Select from current general education courses www.ndsu.edu/registrar/gened/

Global Perspectives (G)
GEOL 105 Physical Geology

Bachelor of Arts (BA) Degree – An additional 6 credits of Humanities and Social Sciences and two years of one modern foreign language at the college level or equivalent are required.

Upper Division Requirements - Writing – 3 Credits
ENGL 324 Writing in the Sciences 3 cr

PROFESSIONAL EDUCATION REQUIREMENTS - 31 CREDITS

EDUC 321 Introduction to Teaching 3 cr
EDUC 322 Educational Psychology 3 cr
EDUC 451 Inst. Planning, Methods & Assess 3 cr
EDUC 481 Classroom Prac/Meth of Teach I-Science 3 cr
EDUC 485 Student Teaching Seminar 1 cr
EDUC 486 Classroom Mgt. for Diverse Learn 3 cr
EDUC 487 Student Teaching 9 cr
EDUC 488 Applied Student Teaching 3 cr
EDUC 489 Native American & Multicultural Instructional Prac 3 cr

TEACHING SPECIALITY REQUIREMENTS – 63 CREDITS

BIOL 150/Lor General Biology I/Lab 3/1 cr
151/L General Biology II/Lab
BIOC 460 Foundations of Biochemistry 3 cr
CHEM 341/L Organic Chemistry I/Lab 3/1 cr
CHEM 342/L Organic Chemistry II/Lab 3/1 cr
CHEM 364 Physical Chemistry I 3 cr
CHEM 365 Physical Chemistry II 3 cr
CHEM 425 Inorganic Chemistry I 3 cr
CHEM 431/L Analytical Chemistry I/Lab 3/2 cr
CHEM 491 Seminar (Senior Capstone) 2 cr
PHYS 251/L University Physics I/Lab 4/1 cr
PHYS 252/L University Physics II/Lab 4/1 cr
MATH 165 Calculus I 4 cr
MATH 166 Calculus II 4 cr
MATH 259 or Multivariate Calculus 3 or 4 cr
265 Calculus III
MATH 266 Intro to Differential Equations 3 cr

Choose Sequence A or B

Sequence A
CHEM 121/L General Chemistry I/Lab 3/1 cr
CHEM 122/L General Chemistry II/Lab 3/1 cr

Sequence B
CHEM 150/160 Principles of Chemistry I/Lab 3/1 cr
CHEM 151/161 Principles of Chemistry II/Lab 3/1 cr

Departmental Requirements – 2 Credits
GEOL 105L Physical Geology Lab 1 cr
GEOL 106L The Earth Through Time Lab 1 cr

Degree Requirements and Notes:
• Courses taken Pass/Fail may not be used to satisfy any requirements.

• GPA of 2.75 or better in the teaching specialty is required for placement in student teaching and exit from the program.

• A grade of ‘C’ or better is required in all Professional Education Requirement courses.

• A GPA of 2.75 or better in professional education as well as passing the appropriate Praxis II exam are required to exit the program.

• See School of Education for admission requirements.