NAME: _____ ID#: _____ Bulletin year: _____

Chemistry Education 7-12
Effective 2016-2017 academic year

I. ACHIEVEMENT CENTERED EDUCATION (ACE)
All UNL students are required to complete a minimum of 3 hours of approved course work in each of the 10 designated ACE areas.

ACE #1 Written Texts Incorporating Research & Knowledge Skills
ENGL150, 151, or 254 (3 hrs) _____

ACE #2 Communication Skills
COMM 101, 209, 210, or 286 (3 hrs) _____

ACE #3 Mathematical, Computational, Statistical, or Formal Reasoning Skills
MATH 106, STAT 218 or EDPS 459 (3 hrs) _____

ACE #4 Study of Scientific Methods & Knowledge of Natural & Physical World
LIFE 120/120L (4 hrs) √√√√√

ACE #5 Study of Humanities
(Any) (3 hrs) _____

ACE #6 Study of Social Sciences
EDPS 251 (3 hrs) √√√√√

ACE #7 Study of the Arts to Understand Their Context & Significance
(Any) (3 hrs) _____

ACE #8 Ethical Principles, Civics, Stewardship & Their Importance to Society
TEAC 331 (3 hrs) √√√√√

ACE #9 Global Awareness, Knowledge of Human Diversity through Analysis of an Issue
TEAC 330 (3 hrs) √√√√√

ACE #10 Integration of Abilities, Capacities in a Creative or Scholarly Product
TEAC 403B (3 hrs) √√√√√

II. PRE-PROFESSIONAL EDUCATION
No grade lower than "C"
All courses must be for a grade (not Pass/No Pass) with the exception of EPDS 297.
TEAC 331 & EDPS 251 must average a 2.5 GPA

TEAC 331 School and Society _____ (3 hrs) _____

EDPS 251 Adolescent Development for Ed _____ (3 hrs) _____

EDPS 297 Practicum (take with EDPS 251) _____ (1 hr) _____

TEAC 330 Multicultural Ed _____ (3 hrs) _____

TEAC 259 Instructional Technology _____ (3 hrs) _____

Electives II (to meet 120 hour requirement for graduation)

_____ (3 hrs) _____

_____ (3 hrs) _____

III. ENDORSEMENT
No grade lower than "C"

Students must complete a minimum of 24 hours in chemistry from the following list plus a minimum of 4 hours each in biology, physics, and earth & space science.

CHEM 109 General Chemistry I _____ (4 hrs) _____
CHEM 110 General Chemistry II _____ (4 hrs) _____
CHEM 221 Elementary Quantitative Analysis _____ (4 hrs) _____

Select one of the following: _____ (4 hrs) _____
CHEM 251/253 Organic Chemistry w/lab **OR**
CHEM 255/257 Biologic Organic Chemistry w/lab

CHEM 421/423 Analytical Chemistry w/lab _____ (5 hrs) _____
Offered Spring semester only
(Prerequisite: Chem 471 or 481)

Select one of the following: _____ (4 hrs) _____
CHEM 471 Physical Chemistry **OR**
(Prerequisite: Chem 221, Math 107)
CHEM 481 Physical Chemistry I
(Prerequisite: Chem 221, Math 208, Phys 212)

LIFE 120/120L Fundamentals of Biology I w/lab _____ (4 hrs) _____

GEOL 101 Physical Geology _____ (4 hrs) _____

Select one of the following sequences: _____ (10 hrs) _____
A. Non-calculus based physics **OR**
PHYS 141 Elementary General Physics I _____ (5 hrs) _____
PHYS 142 Elementary General Physics II _____ (5 hrs) _____
B. Calculus based physics
PHYS 211/221 General Physics I _____ (5 hrs) _____
PHYS 212/222 General Physics II _____ (5 hrs) _____

Acceptance into the Science Teacher Education Program is required before enrollment in the Professional Education courses. 80% of the endorsement courses must be completed prior to enrolling in TEAC 451V. The professional education sequence begins spring semester, continues in the fall semester, and is followed by a semester of student teaching.

Professional Education Courses
*All grades must be a minimum of "C+" or above, except for *EDPS 457 minimum of a "C"*

Methods
TEAC 451V Teaching Principles _____ (3 hrs) _____
TEAC 452V Curriculum Principles _____ (3 hrs) _____
TEAC 397V Practicum _____ (3 hrs) _____
EDPS 457* Learning and Motivation _____ (3 hrs) _____
SPED 401B Mainstreaming _____ (3 hrs) _____

Student Teaching
TEAC 497V Student Teaching _____ (9 hrs) _____
TEAC 403B Student Teaching Seminar (ACE 10) _____ (3 hrs) _____