

Biology 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*
ENGL 150, 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 (3 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) _____

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.

Electives (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 biology from the following list plus a minimum of 4 hours each in chemistry, physics, and earth & space science.

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

LIFE 121/121L Fundamentals of Biology II w/lab _____ (4 hrs) _____

Select one of the following choices: _____ (4 hrs) _____

BIOS 112 Intro to Zoology w/lab **OR**

ASCI 100 Fundamentals of Animal Biology and Industry **OR**

BIOS 109 General Botany **OR**

AGRO 131/132 Plant Science w/lab (HORT 131/133)

Select at least one of the following: _____ (4-6 hrs) _____

BIOS 115 Insect Biology (ENTO 115) **OR**

BIOS 213/213L Human Physiology w/lab **OR**

BIOS 312/313 Microbiology w/lab **OR**

BIOS 205 Genetics, Molecular and Cellular Biology Lab **OR**

NRES 281 Introduction to Water Science **OR**

AGRI 115 Biotechnology: Food Health and Environment

Select one of the following: _____ (4 hrs) _____

BIOS 206 General Genetics **OR**

AGRO 315 Genetics

Select one of the following Ecology choices: _____ (3-4 hrs) _____

BIOS 220/222 Principles of Ecology (NRES 220/222) **OR**

BIOS 207 Ecology and Evolution **OR**

PLPT 270 Biological Invaders (NRES/AGRO/HORT)

Select one of the following Chemistry choices: _____ (4 hrs) _____

CHEM 109 General Chemistry I **OR**

CHEM 113 Fundamentals of Chemistry I

Select one of the following Physics choices: _____ (5 hrs) _____

PHYS 141 Elementary General Physics I **OR**

PHYS 211/221 General Physics I w/lab **OR**

MSYM 109/109L Physical Principles in Agriculture and Life Sciences

GEOL 101 Physical Geology _____ (4 hrs) _____

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) _____

