

Achievement-Centered Education (ACE)
Requirements for Secondary Sciences Grades 7 – 12
ACE courses may be used to satisfy education and endorsement requirements.
See undergraduate bulletin for list of ACE courses.

Achievement – Centered Education (ACE)	Course Taken Term and Grade Earned	Suggested Course(s)	Suggested Courses that if taken will meet an education or endorsement requirement as well as the ACE requirement
ACE 1. Written Communication		ENGL 101, 150, 151 or 254	
ACE 2. Communication Competence		COMM 109, 209 or 210	
ACE 3. Math, Statistics		MATH 106, STAT 218 or EDPS 459	
ACE 4. Scientific Method			ASTR 103, CHEM 109, 110, GEOL 103, 115, METR 200, PHYS 141, 142, 211/221, 212/222
ACE 5. History/Humanities			
ACE 6. Human Behavior			EDPS 251, 457
ACE 7. Arts			
ACE 8. Ethics			TEAC 331
ACE 9. Global Awareness			TEAC 330
ACE 10. Integration			TEAC 403B

Additional ACE Course Work Requirements

These may double dip with course work in the education and endorsement that are ACE courses.

- Speech course: COMM 109, 209, 210 (ACE 2 courses) or COMM 205 (ACE 7 course).** You may choose to meet the speech course requirement and an ACE 2 or ACE 7 requirement with one course.
- Two ACE courses at the 300/400 level. TEAC 330, Teac 331, EDPS 457, and TEAC 403B are courses that meet program requirements, ACE requirements, and also may satisfy this requirement.**
 - _____ _____
- Four additional ACE courses for a total of 14 ACE courses.**
You may choose to select ACE courses above that meet education or endorsement requirements
 - _____ _____
 - _____ _____

Advising Guide for Biology 7-12 Certification

This advising guide is for students on the following academic bulletins: 2013/2014

This advising guide and your personal long range planning guide are designed to accompany the Degree Audit. While every attempt has been made to accurately list all course requirements, please refer to the Undergraduate Bulletin and Degree Audit.

Last updated May, 2013- BJ

Achievement-Centered Education (ACE) requirements are found in the undergraduate bulletin.

Pre-Professional Education Courses (13 hrs)

TEAC 331	School and Society (Sophomores +)	3 hrs
EDPS 251	Adolescent Development for Ed	3 hrs
EDPS 297	Practicum (take with EDPS 251)	1 hr
TEAC 259	Instructional Technology	3 hrs
TEAC 330	Multicultural Education (Sophomores +)	3 hrs

Biology Endorsement (36 hrs)

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
<u>Select one of the following choices:</u>		4 hrs
BIOS 112/112L	Intro to Zoology w/lab	
ASCI 100	Fundamentals of Animal Biology and Industry	
BIOS 109	General Botany	
AGRO 131	Plant Science (HORT 131)	
<u>Select one of the following choices:</u>		4 hrs
BIOS 206	General Genetics	
AGRI 315	Genetics	
<u>Select one of the following choices:</u>		3 - 4 hrs
BIOS 220/222	Principles of Ecology (NRES 220/222)	
BIOS 207	Ecology and evolution	
PLPT 270	Biological Invaders (NRES/AGRO/HORT)	
<u>Select at least one of the following:</u>		4 - 5 hrs
BIOS 115	Insect Biology (ENTO 115)	
BIOS 213/213L	Human Physiology w/lab	
BIOS 312/313	Microbiology w/lab	
BIOS 205	Genetics, Molecular and Cellular Biology Lab	
NRES 281	Introduction to Water Science	
AGRI 115	Biotechnology: Food Health and Environment	

Select one of the following choices: 4 hrs

CHEM 109	General Chemistry I
CHEM 113	Fundamentals of Chemistry I

Select one of the following choices: 5 hrs

PHYS 141	Elementary General Physics I
PHYS 211/221	General Physics I w/lab
MSYM 109/109L	Physical Principles in Agriculture and Life Sciences

GEOL 101 Physical Geology 4 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 (27 hrs)

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