

Shawnee State University

Bachelor of Science in Natural Sciences in Conjunction with Adolescent to Young Adult Integrated Science Licensure (Grades 7-12)

Basic Competency Skills Criteria

Completion of PRAXIS I or ACT tests with scores indicated below is required prior to taking any education courses EDUC 1115 or higher.

	Praxis 1	ACT*
<input type="checkbox"/> READ	172	19
<input type="checkbox"/> WRITE	172	19
<input type="checkbox"/> MATH	172	19
ACT Composite		21

*Multiple ACT tests may be combined to achieve this score.

Related Studies - (9 hrs)

A grade of C or higher is required in this component.

- PSYC1101 (3 hrs) Introduction to Psychology
- PSYC2130 (3 hrs) Child & Adolescent Psychology
- PSYC3112 (3 hrs) Educational Psychology

All of these courses must be completed prior to enrolling in methods courses.

Notes

Integrated Science Component & Subordinate areas located on back of sheet.

- Biology 83 hours.
- Chemistry 82 hours.
- Earth & Space 83 hours.
- Physics 82 hours.

Professional Education Requirements (41 hrs)

- EDUC1115 (3 hrs) Intro to the Teaching Profession *w/field*

A grade of C or higher and 3.0 GPA is required in the Professional Requirements

Level 3 Admission to the Licensure Program is required for the following course:

Level 1 Admission to Teacher Education is required for the following:

Level 2 Admission to the Licensure Program is required for the following courses:

- EDUC2230 (3 hrs) Educational Media, Technology & Computers
- EDUC2240 (3 hrs) School & Society
- EDUC2245 (2 hrs) Education in Multi-cultural Society
- EDUC2248 (1 hr) Diversity: Cultures & Exceptionalities *w/field*
- EDIS2250 (2 hrs) Exceptional Learning Needs
- EDAE3285 (3 hrs) Foundations of Secondary Education *w/field*

- EDRE3305 (3 hrs) Teaching Reading in the Content Area
- EDUC3310 (3 hrs) Curriculum & Assessment
- EDAE3385 (3 hrs) Action Research - Home, School & Community Relations *w/field*
- The following courses are to be taken together.*
- EDAE4400 (2 hrs) Secondary School Curriculum, Instruction & Management *w/field*
- EDAE4433 (3 hrs) Teaching Science in Grades 7-12 *w/field*

- EDAE4490 (10 hrs) Directed Teaching & Seminar *w/field*

Seminar meets 4-6 pm Tuesday and field time is Monday—Friday all day in school.

EDUC2230, 2240, 2245 should be taken prior to or with EDAE3285.

General Education Program (21-23 hrs) *A grade of C or higher is required in this component.*

English - 6 - 8 hours

Students will take either ENGL1101 or ENGL1102 depending on placement.

- ENGL1101 (5 hrs) Discourse and Composition
- ENGL1102 (3 hrs) Discourse and Composition
- ENGL1105 (3 hrs) Composition & Argumentation

Fine & Performing Arts - 3 hours (Select one)

- ARTH1101 (3 hrs) Introduction to Art
- ENGL2275 (3 hrs) American Film History
- MUSI1201 (3 hrs) Music Appreciation
- MUSI2210 (3 hrs) Music History 1
- PHIL3300 (3 hrs) Philosophy of Film
- THAR1000 (3 hrs) Introduction to Theatre

Social Sciences - 3 hours (Select one)

***Met in Related Studies Component**

Cultural Perspective - 6 hours

Western Perspective - 3 hours (Select one)

- FREN1111 (5 hrs) Elementary French 1
- IDST2225 (3 hrs) Civilization & Literature 1
- IDST2226 (3 hrs) Civilization & Literature 2
- PHIL2200 (3 hrs) Introduction to Philosophy
- SPAN1111 (5 hrs) Elementary Spanish 1

Non-Western Perspective - 3 hours (Select one)

- ANTH2250 (3 hrs) Principles of Cultural Anthropology
- ARTH3366 (3 hrs) Non-Western Survey
- GEOG2201 (3 hrs) Cultural Geography
- GEOG3351 (3 hrs) Reg. Geog. Of the Middle East
- GOVT3320 (3 hrs) Third World Politics
- HIST3400 (3 hrs) History of Southern Africa
- HIST3410 (3 hrs) East Asian History
- HIST3460 (3 hrs) Islamic Religion, Culture, & Civilization
- HIST4420 (3 hrs) Middle East in Modern Times
- IDST2227 (3 hrs) Civilization & Literature 3
- PHIL2284 (3 hrs) East Asian Philosophy

Quantitative Reasoning

This component of the GEP is satisfied by the requirements of the Bachelor of Science in Natural Science.

Natural Science

This component of the GEP is satisfied by the requirements of the Bachelor of Science in Natural Science.

Ethics - 3 hours (Select one)

- PHIL3320 (3 hrs) Ethics in Public and Private Life
- ROCI4485 (3 hrs) Reflections on Community Involvement

Capstone - 3 hours

- IDST4490 (3 hrs) Senior Seminar

A GPA of 3.0 is required in the Integrated Science component and the selected concentration area.

Integrated Science Component		
Quantitative Reasoning (11 hrs)		
<input type="checkbox"/>	MATH2110 (4 hrs)	Calculus 1
<input type="checkbox"/>	MATH2120 (4 hrs)	Calculus 2
<input type="checkbox"/>	MATH2500 (3 hrs)	Statistics 1
*Students are required to select one principle area of study from the following:		
Biology (27 hrs)		
<input type="checkbox"/>	BIOL1130 (4 hrs)	Principles of Anatomy & Physiology
<input type="checkbox"/>	BIOL1151 (4 hrs)	General Biology 1
<input type="checkbox"/>	BIOL1152 (4 hrs)	General Biology 2
<input type="checkbox"/>	BIOL3750 (4 hrs)	Microbiology
<input type="checkbox"/>	BIOL3770 (4 hrs)	Genetics & Molecular Biology
<input type="checkbox"/>	BIOL3850 (4 hrs)	Ecology
<input type="checkbox"/>	NTSC1110 (3 hrs)	Scientific Reasoning & Methodology
Chemistry (26 hrs)		
<input type="checkbox"/>	CHEM1141 (4 hrs)	General Chemistry 1
<input type="checkbox"/>	CHEM1142 (4 hrs)	General Chemistry 2
<input type="checkbox"/>	CHEM3305 (4 hrs)	Organic Chemistry 1
<input type="checkbox"/>	CHEM3306 (4 hrs)	Organic Chemistry 2
<input type="checkbox"/>	CHEM3323 (4 hrs)	Analytical Chemistry 1
<input type="checkbox"/>	CHEM4411 (3 hrs)	Biochemistry
<input type="checkbox"/>	NTSC1110 (3 hrs)	Scientific Reasoning & Methodology
Earth & Space (25 hrs)		
<input type="checkbox"/>	BIOL3852 (4 hrs)	Marine Biology
<input type="checkbox"/>	GEOL1201 (4 hrs)	Physical Geology & Human Environment
<input type="checkbox"/>	GEOL1202 (4 hrs)	Historical Geology
<input type="checkbox"/>	GEOL2203 (4 hrs)	Mineralogy
<input type="checkbox"/>	GEOG2227 (3 hrs)	Foundations of Meteorology
<input type="checkbox"/>	NTSC1110 (3 hrs)	Scientific Reasoning & Methodology
<input type="checkbox"/>	PHYS2210 (3 hrs)	Introductory Astronomy
Physics (25 hrs)		
<input type="checkbox"/>	NTSC1110 (3 hrs)	Scientific Reasoning & Methodology
<input type="checkbox"/>	PHYS2210 (3 hrs)	Introductory Astronomy
<input type="checkbox"/>	PHYS2211 (4 hrs)	Calculus-based Physics 1
<input type="checkbox"/>	PHYS2212 (4 hrs)	Calculus-based Physics 2
<input type="checkbox"/>	PHYS2250 (3 hrs)	Modern Physics
<input type="checkbox"/>	PSCI2251 (4 hrs)	Physical Science 1
<input type="checkbox"/>	PSCI2252 (4 hrs)	Physical Science 2

Subordinate Areas		
Integrated science students must complete three areas not chosen as their principal area of study. Students do not duplicate their principal area as a subordinate area of study. (Example: Students who choose biology as their principal areas of study must take chemistry, earth and space, and physics as their subordinate areas of study.)		
Biology (16 hrs)		
<input type="checkbox"/>	BIOL1130 (4 hrs)	Principles of Anatomy & Physiology 1
<input type="checkbox"/>	BIOL1151 (4 hrs)	General Biology 1
<input type="checkbox"/>	BIOL1152 (4 hrs)	General Biology 2
<input type="checkbox"/>	BIOL3750 (4 hrs)	Microbiology
Chemistry (16 hrs)		
<input type="checkbox"/>	CHEM1141 (4 hrs)	General Chemistry 1
<input type="checkbox"/>	CHEM1142 (4 hrs)	General Chemistry 2
<input type="checkbox"/>	CHEM2200 (4 hrs)	Introduction to Organic Chemistry
<input type="checkbox"/>	CHEM3323 (4 hrs)	Analytical Chemistry 1
Earth & Space (14 hrs)		
<input type="checkbox"/>	GEOL1201 (4 hrs)	Physical Geology & Physical Environment
<input type="checkbox"/>	GEOL1202 (4 hrs)	Historical Geology
<input type="checkbox"/>	GEOG2227 (4 hrs)	Foundations of Meteorology
<input type="checkbox"/>	PHYS2210 (3 hrs)	Introductory Astronomy
Physics (15 hrs)		
<input type="checkbox"/>	PHYS2211 (4 hrs)	Calculus-based Physics 1
<input type="checkbox"/>	PHYS2212 (4 hrs)	Calculus-based Physics 2
<input type="checkbox"/>	PHYS2250 (3 hrs)	Modern Physics
<input type="checkbox"/>	PSCI2251 (4 hrs)	Physical Science 1