

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 I	
Reading	172
Writing	172
Math	172
OR	
ACT*	
Reading	19
English	19
Math	19
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
- PSYC2170 (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
- HIST3500 (3 hrs) History of Southern Africa
- HIST3410 (3 hrs) East Asian History
- HIST3550 (3 hrs) Islami: Religion, Politics, and Society
- 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

AYA Suggested Sequence

Asterisk (*) indicates a field component to the course

Year	FALL	SPRING	Total Hrs.
Fresh	ENGL 1101 (5) OR ENGL 1102 GEP (3) FINE ARTS GEP [3] [appropriate to content area] MATH GEP (3) [appropriate to content area] PSYC 1110 (3) SCIENCE GEP (3) [appropriate to content area]	EDUC 1115 (3)* ENGL 1105 GEP (3) SCIENCE GEP (4) [appropriate to content area] CONTENT COURSE (3) CONTENT COURSE (3)	Fall: 15 17 Spring: 16 31 33
Soph	EDUC 2230 (3) EDUC 2240 (3) PSYC 2130 (3) WESTERN GEP (3) CONTENT COURSE (3) CONTENT COURSE (3)	EDIS 2250 (2) } 3 courses EDUC 2245 (3) } taken EDUC 2248 (1)* } concurrently NON WESTERN GEP (3) CONTENT COURSE (3) CONTENT COURSE (3) CONTENT COURSE (3)	Fall: 18 Spring: 18 67 69
Jr	EDAE 3285 (3)* ETHICS GEP (3) CONTENT COURSE (3) CONTENT COURSE (3) CONTENT COURSE (3) CONTENT COURSE (3)	EDAE 3385 (3)* EDRE 3305 (3) EDUC 3310 (3) PSYC 2170 (3) CONTENT COURSE (3) CONTENT COURSE (3)	Fall: 18 Spring: 18 103 105
Sr	EDAE 4400 (2) Content Methods (3) CONTENT COURSE (3) CONTENT COURSE (3) CONTENT COURSE (3) CONTENT COURSE (3)	EDAE 4490 (10)* CAPSTONE GEP (3) CONTENT COURSE (3)	Fall: 17 Spring: 16 136 138

Middle Childhood Suggested Sequence

Year	FALL	SPRING	Total Hrs.
Fresh	ENGL 1101 (5) OR ENGL 1102 GEP (3) FINE ARTS GEP [3] [appropriate to content area] MATH GEP (3) [appropriate to content area] PSYC 1110 GEP (3) SCIENCE GEP (3) [appropriate to content area]	EDUC 1115 (3)* ENGL 1105 GEP (3) SCIENCE GEP (4) [appropriate to content area] CONTENT COURSE (3) CONTENT COURSE (3)	Fall: 15 17 Spring: 16 31 33
Soph	Level 1 Admittance to Teacher Education EDRE 2202 (3)* EDUC 2230 (3) EDUC 2240 (3) PSYC 2130 (3) WESTERN GEP (3) CONTENT COURSE (3)	EDRE 2204 (3)* } 3 courses EDIS 2250 (2) } taken EDUC 2245 (3) } concurrently EDUC 2248 (1)* } NON WESTERN GEP (3) CONTENT COURSE (3) CONTENT COURSE (3)	Fall: 18 Spring: 18 67 69
Jr	EDMC 3285 (3)* ENGL 3300 OR ENGL 3323 (3) ETHICS GEP (3) CONTENT COURSE (3) CONTENT COURSE (3) CONTENT COURSE (3)	Level 2 EDMC 3385 (3)* EDRE 3305 (3) EDUC 3310 (3) PSYC 2170 (3) CONTENT COURSE (3) CONTENT COURSE (3)	Fall: 18 Spring: 18 103 105
Sr	Level 3 EDMC 4470 (2) 2 Content Methods Courses* (6) CONTENT COURSE (3) CONTENT COURSE (3) CONTENT COURSE (3)	EDMC 4490 (10)* CAPSTONE GEP (3) CONTENT COURSE (3)	Fall: 17 Spring: 16 136 138