

# SECONDARY EDUCATION (SECONDARY EDUCATION GENERAL SCIENCE) - BACHELOR OF SCIENCE IN EDUCATION

General education and professional education requirements are similar for all degree programs in the College of Education. Students should meet with an advisor to plan appropriate general education courses for a secondary education major. The below programs are labeled as Concentrations in the catalog and on student transcripts, but are also recognized at "Teaching Fields" for the Teacher Education Program.

Students must complete all University degree requirements, which include: General Education requirements, Viewing a Wider World requirements, and elective credits to total at least 121 credits with 48 credits in courses numbered 300 or above. Developmental coursework will not count towards the degree requirements and/or elective credits, but may be needed in order to take the necessary English and Mathematics coursework.

Prefix	Title	Credits
<b>General Education</b>		
<i>Area I: Communications</i>		
<i>English Composition - Level 1</i>		
ENGL 1110G	Composition I <sup>1</sup>	4
<i>English Composition - Level 2</i>		
Choose one from the following: <sup>1</sup>		3
ENGL 2130G	Advanced Composition	
ENGL 2215G	Advanced Technical and Professional Communication	
ENGL 2221G	Writing in the Humanities and Social Science	
<i>Oral Communication</i>		
Choose one from the following:		3
COMM 1115G	Introduction to Communication	
COMM 1130G	Public Speaking	
ACOM 1130G	Effective Leadership and Communication in Agriculture	
HNRS 2175G	Introduction to Communication Honors	
<i>Area II: Mathematics</i>		
MATH 1220G	College Algebra <sup>1, 2</sup>	3-4
	or MATH 1250G Trigonometry & Pre-Calculus	
<i>Area III/IV: Laboratory Sciences and Social/Behavioral Sciences</i>		
BIOL 2610G & BIOL 2610L	Principles of Biology: Biodiversity, Ecology, and Evolution and Principles of Biology: Biodiversity, Ecology, and Evolution Laboratory	4
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
CEPY 1120G	Human Growth and Behavior	3
<i>Area V: Humanities</i>		
Choose one from the following		3
HIST 1110G	United States History I	
HIST 1120G	United States History II	
HIST 1130G	World History I	

HIST 1140G	World History II	
HIST 1150G	Western Civilization I	
HIST 1160G	Western Civilization II	
HIST 2245G	Islamic Civilizations to 1800	
HIST 2246G	Islamic Civilizations since 1800	
HIST 2250G	East Asia to 1600	
HIST 2251G	East Asia since 1600	
<i>Area VI: Creative and Fine Arts</i>		
Choose one from the following: <sup>3</sup>		3
ARTH 1115G	Orientation in Art	
DANC 1110G	Dance Appreciation	
MUSC 1110G	Music Appreciation: Jazz	
MUSC 1130G	Music Appreciation: Western Music	
THEA 1110G	Introduction to Theatre	
<i>General Education Elective</i>		
Choose one additional Creative and Fine Arts course from above		3
<b>Viewing A Wider World</b>		
LIBR 311V	Information Literacy	3
The 2nd VWV requirements will be satisfied with the concentration/teaching field courses <sup>4</sup>		
<b>Departmental/College Requirements</b>		
<i>Education Core Courses</i>		
EDUC 1185	Introduction to Secondary Education and Youth <sup>1, 5</sup>	3
EDUC 3120	Multicultural Education <sup>1</sup>	3
SPED 3105	Introduction to Special Education in a Diverse Society <sup>1</sup>	3
EDLT 3110	Integrating Technology with Teaching <sup>1</sup>	3
EDUC 3997	Secondary Field Experience	3
BLED 3120	Sheltered English Instruction for the ESL Classroom <sup>6</sup>	3
EDUC 4510	Data Literacy and Assessment <sup>6</sup>	3
EDUC 4530	Science for Educators <sup>6</sup>	3
EDUC 4520	Contemporary Issues in Education <sup>5, 6</sup>	3
EDUC 4410	Teaching Science at the Middle and High School Level <sup>5, 6</sup>	3
READ 4330	Content Area Literacy <sup>6</sup>	3
SPED 4150	Secondary Curriculum, Methods, and Materials for Special Education in a Diverse Society <sup>6</sup>	3
<i>Student Teaching</i>		
EDUC 4820	Secondary Student Teaching <sup>6</sup>	9
EDUC 4821	Middle and High School Student Teaching Seminar <sup>6</sup>	3
<i>General Science Concentration/Teaching Field Courses</i>		
BIOL 2110G & BIOL 2110L	Principles of Biology: Cellular and Molecular Biology and Principles of Biology: Cellular and Molecular Biology Laboratory	4
CHEM 1225G	General Chemistry II Lecture and Laboratory for STEM Majors	4
Choose one from the following:		4
PHYS 1230G & PHYS 1230L	Algebra-Based Physics I and Algebra-Based Physics I Lab	
PHYS 2110 & 2110L	Mechanics and Experimental Mechanics	
PHYS 1310G & PHYS 1310L	Calculus -Based Physics I and Calculus -Based Physics I Lab	

PHYS 2230G & PHYS 2230L	General Physics for Life Science I and Laboratory to General Physics for Life Science I	
Choose one from the following:		4
PHYS 1240G & PHYS 1240L	Algebra-Based Physics II and Algebra-Based Physics II Lab <sup>1</sup>	
PHYS 2140 & 2140L	Electricity and Magnetism and Electricity & Magnetism Laboratory	
PHYS 1320G & PHYS 1320L	Calculus -Based Physics II and Calculus -Based Physics II Lab	
PHYS 2240G & PHYS 2240L	General Physics for Life Science II and Laboratory to General Physics for Life Science II	
BIOL 301	Principles of Ecology	3
BIOL 305	Principles of Genetics	3
BIOL 467	Evolution	3
BIOL 300+ Plant Science Elective		3
<b>Second Language: (not required)</b>		
<b>Non-Departmental Requirements</b>		
Choose one from the following:		3-4
MATH 1430G	Applications of Calculus I	
MATH 1511G	Calculus and Analytic Geometry I	
MATH 1521G	Calculus and Analytic Geometry II	
MATH 2350G	Statistical Methods	
A ST 311	Statistical Applications	
GEOG 1120G	World Regional Geography	3
or GEOG 1130G	Human Geography	
Choose an additional Area IV from the following		3
ANTH 1137G	Human Ancestors	
ANTH 1140G	Introduction to Cultural Anthropology	
ANTH 1115G	Introduction to Anthropology	
ANTH 1160G	World Archaeology	
SOCI 1110G	Introduction to Sociology	
SOCI 2310G	Contemporary Social Problems	
<b>Electives, to bring the total credits to 121</b>		<b>0</b>
<b>Total Credits</b>		<b>121-123</b>

1

Courses are prerequisites for Teacher Education Program (TEP)

2

MATH 1220G College Algebra or MATH 1250G Trigonometry & Pre-Calculus is required for the degree but students may need to take any prerequisites needed to enter MATH 1220G or MATH 1250G first.

3

See the General Education (<http://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/>) section of the catalog for a full list of courses

4

The 9 credits of Upper-Division BIOL courses that are apart of the Concentration/Teaching Field coursework will meet the 2nd VWW requirement.

5

Courses require Field Experience

6

Courses require admission to the TEP

## A Suggested Plan of Study for Students

This roadmap assumes student placement in MATH 1220G College Algebra and ENGL 1110G Composition I. The contents and order of this roadmap may vary depending on initial student placement in mathematics and English. It is only a suggested plan of study for students and is not intended as a contract. Course availability may vary from fall to spring semester and may be subject to modification or change.

### First Year

Semester 1		Credits
ENGL 1110G	Composition I <sup>1</sup>	4
CEPY 1120G	Human Growth and Behavior	3
MATH 1220G	College Algebra <sup>1</sup>	3
BIOL 2610G & BIOL 2610L	Principles of Biology: Biodiversity, Ecology, and Evolution and Principles of Biology: Biodiversity, Ecology, and Evolution Laboratory <sup>1</sup>	4

Students who need to enroll in 15 credits for Financial Aid purposes will need to take additional electives

	Credits	14
<b>Semester 2</b>		
COMM 1115G	Introduction to Communication	3
MATH 1430G	Applications of Calculus I <sup>1</sup>	3
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors <sup>1</sup>	4
EDUC 1185	Introduction to Secondary Education and Youth	3
GEOG 1120G or GEOG 1130G	World Regional Geography or Human Geography	3
<b>Credits</b>		<b>16</b>

### Second Year

Semester 1		Credits
BIOL 2110G & BIOL 2110L	Principles of Biology: Cellular and Molecular Biology and Principles of Biology: Cellular and Molecular Biology Laboratory <sup>1</sup>	4
ENGL 2221G	Writing in the Humanities and Social Science <sup>1</sup>	3
Area V: Any "G" Course with a HIST Prefix <sup>2</sup>		3
Area VI: Creative and Fine Arts Course <sup>2</sup>		3
Area IV: Social/Behavioral Science Course		3
<b>Credits</b>		<b>16</b>

### Semester 2

CHEM 1225G	General Chemistry II Lecture and Laboratory for STEM Majors <sup>1</sup>	4
EDUC 3120	Multicultural Education	3
BIOL 301	Principles of Ecology <sup>1</sup>	3
SPED 3105	Introduction to Special Education in a Diverse Society	3
Area VI: Creative and Fine Arts Course <sup>2</sup>		3
<b>Credits</b>		<b>16</b>

### Third Year

Semester 1		Credits
APPLY TO TEACHER EDUCATION PROGRAM (TEP)		
LIBR 311V	Information Literacy	3
EDLT 3110	Integrating Technology with Teaching	3
EDUC 3997	Secondary Field Experience (Fall Only)	3
BIOL 305	Principles of Genetics <sup>1</sup>	3

PHYS 2230G & PHYS 2230L	General Physics for Life Science I and Laboratory to General Physics for Life Science I	4
<b>Credits</b>		<b>16</b>

**Semester 2**

APPLY TO STUDENT TEACHING		
BLED 3120	Sheltered English Instruction for the ESL Classroom <sup>1</sup>	3
EDUC 4510	Data Literacy and Assessment (Spring Only) <sup>1</sup>	3
EDUC 4520	Contemporary Issues in Education (Spring Only) <sup>1</sup>	3
EDUC 4530	Science for Educators (Spring Only) <sup>1</sup>	3
PHYS 2240G & PHYS 2240L	General Physics for Life Science II and Laboratory to General Physics for Life Science II <sup>1</sup>	4
<b>Credits</b>		<b>16</b>

**Fourth Year**
**Semester 1**

SUBMIT STEP PACKET		
READ 4330	Content Area Literacy (Fall Only) <sup>1</sup>	3
EDUC 4410	Teaching Science at the Middle and High School Level (Fall Only) <sup>1</sup>	3
SPED 4150	Secondary Curriculum, Methods, and Materials for Special Education in a Diverse Society <sup>1</sup>	3
300-Level Plant Science Elective Course		3
BIOL 467	Evolution <sup>1</sup>	3
<b>Credits</b>		<b>15</b>

**Semester 2**

EDUC 4820	Secondary Student Teaching <sup>1</sup>	9
EDUC 4821	Middle and High School Student Teaching Seminar <sup>1</sup>	3
<b>Credits</b>		<b>12</b>
<b>Total Credits</b>		<b>121</b>

1

These courses may have prerequisites and/or co-requisites, and it is the students responsibility for checking and fulfilling all those requirements.

2

See the General Education (<http://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/#viewingawiderworldtext>) section of the catalog for a full list of courses.