

B.S.Ed. Earth and Space Science (126 Credits)

Name	ID#	Grad Date:			
Basic Skills Requirement for Candidacy (requirement suspended through July 2025)					
Candidacy req: 48 credits, 3 comp, 3 lit, 6 math, 2.9 GPA, Basic Skills Testing					
Praxis II – Earth and Space Science Content Test (take before student teaching, pass for certification)					
	CREDITS	COURSE	SEMESTER	GRADE	REP/W**
GENERAL EDUCATION REQUIREMENTS (61 less 36 Attributed to Major Requirements = 25 credits)					
First Year Experience	4				
WRT 120 Effective Writing	3				
WRT 200, or 204, 205, 206, 207, 208 Critical Writing	3				
Math	-	MAT 121			
Diverse Communities (J)	-	ENG 382			
Interdisciplinary (I)	-	EDF 300			
Ethics Course (E)	-	ERM 355			
Science (6 credits from two areas: CHEM, BIO, ESS, PHY, CSC)	-	BIO 110			
	-	CHE 103			
Behavior & Social Science (6 credits from two areas: ANT, SOC, PSY, ECO, GEO PSC)	3				
	3				
Humanities (must take a LIT course)	3	LIT (<i>REQ for Candidacy</i>)			
	3				
Art	3				
Speaking Emphasis Courses (s)		SED 200			
		EDS 411			
		EDS 412			
Writing Emphasis Courses (w)		LIT 165			
		SED 300			
		ESS 201			
Capstone		SED 411			
		SED 412			
EDUCATION CORE REQUIREMENTS (29 credits)					
EDF 300 Democracy and Education "I"	3				
EDP 280 — Developmental and Psychological Perspectives in Education	3				
EDA 103 — Foundations of Special Education	3				
EDA 303 — Special Education for Secondary Educators	2				
EDR 347 — Literacy Development & Sec Students w/Disabilities	3				
LAN/ENG 382 — ELL Strategies for Content Area Teachers	3				
ERM 355 Ethical and Effective Assessment for Learning 7 – 12 "E"	3				
SED 100 An Exploration of Secondary Education	3				
SED 200 Learning Environments & Field Experience in Secondary Schools. "S"	3				
SED 300 Principles of Teaching and Technology in Secondary Education "W"	3				
SCIENCE EDUCATION REQUIREMENTS (3 credits)					
SED 360 Science Education in the Secondary Schools	3				
EARTH & SPACE SCIENCE COURSES - CORE (40 CREDITS) *					
ESS 201 Field Geology "W"	3				
ESS 202 Physical Geology	3				
ESS 204 Historical Geology "W"	3				

ESS 301 Environmental Geochemistry	3				
ESS 302 Mineralogy	3				
ESS 343 Geomorphology	3				
ESS 405 Igneous and Metamorphic Petrology	3				
ESS 439 Hydrogeology	3				
ESS 450 Sedimentology and Stratigraphy	3				
ESS/SCB/ENV 102 Humans and the Environment OR SCB 210	3				
ESS 311 Introduction to Astronomy	3				
ESS 330 Introduction to Oceanography	3				
ESS 347 Seminar	1				
ESS 370 Introduction to Meteorology	3				
COGNATE REQUIREMENTS (18 CREDITS)					
MAT 115 Algebra & trigonometry or MAT 131 Pre-Calculus	3				
MAT 121 Statistics I	3				
BIO 110 General Biology I	4				
CHE 103 General Chemistry I	3				
CRL 103 General Chemistry I Lab	1				
PHY 130 General Physics I or PHY 170 Physics I	4				
CAPSTONE EXPERIENCE (12 CREDITS)					
*SED 411 — Student Teaching Stage IV Fields: Clearances Needed	6				
*SED 412 — Student Teaching Stage IV Fields: Clearances Needed	6				
TOTAL	127				

*must attain a C- or higher in all coursework

Semester	Suggested Courses	Credits
Year 1		
One (16 cr.)	ESS 102 Humans and the Environment OR SCB 102 The Origin of Life and the Universe MAT 115 Algebra, Functions, and Trigonometry OR MAT 121 Introduction to Statistics I WRT 120 Effective Writing I Behavioral & Social Science Gen Ed FYE 100X First Year Experience	3 3 3 3 4
Two (15 cr.)	ESS 202 Physical Geology MAT 115 Algebra, Functions, and Trigonometry OR MAT 121 Introduction to Statistics I WRT 2XX 200-level Writing Course SED 100 Exploration of Secondary Education EDP 280 Educational Psychology	3 3 3 3 3
Year 2		
Three (16 cr.)	ESS 201 Field Geology ESS 204 Historical Geology CHE 103 General Chemistry I CRL 103 General Chemistry I Lab EDA 103 Foundations of Special Education EDF 300 Democracy & Education	3 3 3 1 3 3
Four (18 cr.)	ESS 301 Environmental Geochemistry ESS 343 Geomorphology BIO 110 General Biology I SED 200 Learning Environments & Field Experience in Secondary Schools. "S" EDA 303 Special Education for Secondary Educators Humanities Gen Education (LIT COURSE)	3 4 3 3 2 3
Year 3		

Five (17 cr.)	ESS 302 Mineralogy	3
	ESS 330 Introduction to Oceanography	3
	ESS 347 Seminar	1
	PHY 130 General Physics I	4
	SED 300 Principles of Teaching and Technology in Secondary Education "W"	3
	Behavioral & Social Science Gen Ed 2	3
Six (15 cr.)	ESS 311 Astronomy	3
	ESS 405 Igneous and Metamorphic Petrology	3
	ESS 439 Hydrogeology	3
	LAN/ENG 382 ELL Strategies for Content Area Teachers	3
	ERM 355 Ethical & Effective Assessment for K-12 Learning	3
Year 4		
Seven (18 cr.)	ESS 370 Introduction to Meteorology	3
	ESS 450 Sedimentation & Stratigraphy	3
	SED 360 Science Education in the Secondary School	3
	EDR 347 Literacy Development and Secondary Students with Disabilities in Inclusive Classrooms	3
	Arts Gen Ed.	3
	Humanities Gen Education	3
Eight (12 cr.)	EDS 411 Student Teaching Secondary - 1 st half	6
	EDS 412 Student Teaching Secondary - 2 nd half	6