

College of Education

Bachelor of Science in Education: Secondary Education – Earth and Space Science

Program Code: UCOESEUES Version Number: 2168-Fall 2016 Program Effective: August 29, 2016 Credit Total: 122

		GENERAL EDUCATION		
I.	Un	iversity Core: 12 S.H.	GR.	S.H.
	a.	Oral Communication: COM 010 or above		3
	b.	Written Communication: ENG 023, 024 or 025		3
	C.	Mathematics: MAT 105 or above OR MAT 181 (suggested)		#
	d.	Wellness: Any 3 credit HEA course		3

II.	Uni	iversity Distribution: 15 S.H.	GR.	S.H.
	a.	Natural Sciences: Any lab or non-lab course with prefix AST, BIO, CHM, ENV, GEL, MAR, NSE or PHY; or certain GEG courses with advisement BIO 104 (suggested)		#
	b.	Social Sciences: Any course with prefix ANT, CRJ, ECO, HIS, MCS, POL, PSY, SOC, SSE or SWK; or certain GEG courses with advisement		3
	C.	Humanities: Any course with prefix ENG, HUM, PAG, PHI, WGS, WRI, or Modern Language ENG 010 or higher (English Literature) (suggested)		3
	d.	Arts: Any course prefix ARC, ARH, ART, CDE, CDH, CFT, DAN, FAR, FAS, MUP, MUS, or THE		3
	e.	Free Elective: Any course carrying university credit		3

IV. College Distribution: 21 S.H.	GR.	S.H.		
a. Math: MAT 105 or above OR MAT 182		#		
(suggested)				
b. Special Education: SPU 201 Cognitive		3		
Development				
c. Technology: ITC 321 Instructional		3		
Technology in Education				
 d. 12 credits required by major but fulfilling 				
General Education requirements				
COURSE: CHM 100 (suggested)				
COURSE: CHM 102 (suggested)				
COURSE: GEL 100 (suggested)		#		

III. Competencies Across the Curriculum	S.H.			
A. Writing Intensive (WI) (9 credits/3 three credit courses)				
COURSE: SEU 312				
COURSE: SEU 342	#			
COURSE: SEU 321-325, 410				
в. Quantitative Literacy (QL) (3 credits) OR				
Computer Intensive (CP) (3 credits)				
COURSE: ITC 321				
c. Visual Literacy (VL) (3 credits) OR				
Communication Intensive (CM) (3 credits)				
COURSE: SEU 342	#			
D. Cultural Diversity (CD) (3 credits)				
COURSE: SEU 312	#			
E. Critical Thinking (CT) (3 credits)				
COURSE: EDU 100	#			

A Competency Across the Curriculum (CAC) course is not a separate course, but rather an overlay that is "double counted" as fulfilling both the CAC requirement and another requirement in either General Education (except for the University Core), the major, or the minor.

RC = Minimum required number of credits

CR = Credits earned (fill in number of credits)

GR = Grade earned (fill in letter grade)

CAC = Competency Across the Curriculum (fill in designation)

TEACHER CANDIDACY REQUIREMENTS

Requirements must be met upon reaching 48 credit hours

- ☐ Required Basic Skills Assessment
- ☐ Required Grade Point Average
- ☐ C or better in ENG 023 or 025
- ☐ C or better in ENG literature course
- ☐ C or better in two mathematics courses
- $f \Box$ Completion of Education Exploration hours

B.S. in Secondary Education – Earth and Space Science

Program Code: UCOESEUES Version Number: 2168-Fall 2016

1. Required Courses: 40 S.H. GR. S.H AST 140QL Planetary Science 3 AST 142 Stellar and Galactic Astronomy 3 BIO 104 Principles of Biology # 4 CHM 100 General Chemistry # 4 CHM 102 General Chemistry # 4 GEL 100 Physical Geology # 4 GEL 102 Elements of Historical Geology 4 GEL 110 Introduction to Oceanography 3 GEG 204 Meteorology 3 PHY 40 General Physics OR PHY 100 Physics 4 PHY 42 General Physics I OR PHY 102 Physics 2 4 CAST 205 Planetary Surface Processes AST 240 The Planetarium 3 AST 350 Practical Astronomy 4 AST 342 Astrophysics 4 AST 342 Astrophysics 4 AST 345 Practical Astronomy 4 AST 346 Practical Astronomy 3 AST 347 GEL/MAR/ENV (with laboratory 3 beyond 100 level) Total 3. Geology Elective: (GEL prefix course with a lab beyond GEL 100) 3 S.H. GEL	V. SPECIALIZATION: 58-61 S	Н	
AST 140QL Planetary Science AST 142 Stellar and Galactic			SH
AST 142 Stellar and Galactic	AST 140QL Planetary Science	O.C.	
Astronomy			
BIO 104 Principles of Biology			3
CHM 100 General Chemistry # 4			4
CHM 102 General Chemistry II			4
GEL 100 Physical Geology # 4 GEL 102 Elements of Historical Geology 4 GEL 110 Introduction to Oceanography 3 GEG 204 Meteorology 3 PHY 40 General Physics I OR PHY 100 Physics I 4 PHY 42 General Physics II OR PHY 102 Physics 2 4 Zero Flanetary Physics Select One Course from below 3-4 S.H. 3 AST 205 Planetary Surface Processes 3 AST 240 The Planetarium 3 AST 350 Practical Astronomy 4 AST 342 Astrophysics 4 AST/GEL/MAR/ENV (with laboratory beyond 100 level) 3 Total 3 3. Geology Elective: (GEL prefix course with a lab beyond GEL 100) 3 S.H. 5 GEL 3 Total 4 4. Environmental Science: 6 S.H. 5 ENV 210 Environmental Geology 3 Total 5 5. Mathematics: 6-8 S. H. (MAT 105 or above at the student's level of competence.) MAT # 3-4 MAT # 3-4			4
GEL 102 Elements of Historical Geology 4 GEL 110 Introduction to Oceanography 3 GEG 204 Meteorology 3 PHY 40 General Physics I OR PHY 100 Physics I 4 PHY 42 General Physics II OR PHY 102 Physics 2 4 Total 2. Astronomy Electives: Select one course from below 3-4 S.H. AST 205 Planetary Surface Processes AST 240 The Planetarium 3 AST 350 Practical Astronomy 4 AST/GEL/MAR/ENV (with laboratory beyond 100 level) 3 Total 3. Geology Elective: (GEL prefix course with a lab beyond GEL 100) 3 S.H. GEL 3 Total 4. Environmental Science: 6 S.H. ENV 100 Introduction to Environmental Science 3 ENV 210 Environmental Geology 3 Total 5. Mathematics: 6-8 S. H. (MAT 105 or above at the student's level of competence.) MAT # 3-4 MAT # 3-4			4
Geology GEL 110 Introduction to Oceanography GEG 204 Meteorology PHY 40 General Physics I OR PHY 100 Physics I PHY 42 General Physics II OR PHY 102 Physics 2 Total 2. Astronomy Electives: Select one course from below 3-4 S.H. AST 205 Planetary Surface Processes AST 240 The Planetarium AST 350 Practical Astronomy AST 342 Astrophysics AST/GEL/MAR/ENV (with laboratory beyond 100 level) Total 3. Geology Elective: (GEL prefix course with a lab beyond GEL 100) 3 S.H. GEL Total 4. Environmental Science: 6 S.H. ENV 100 Introduction to Environmental Science ENV 210 Environmental Geology 3 Total 5. Mathematics: 6-8 S. H. (MAT 105 or above at the student's level of competence.) MAT # 3-4 MAT # 3-4 MAT # 3-4			4
SEG 204 Meteorology	Geology		4
PHY 40 General Physics I OR PHY 100 Physics I PHY 42 General Physics II OR PHY 102 Physics 2 Total 2. Astronomy Electives: Select one course from below 3-4 S.H. AST 205 Planetary Surface Processes AST 240 The Planetarium AST 350 Practical Astronomy AST 342 Astrophysics AST/GEL/MAR/ENV (with laboratory beyond 100 level) Total 3. Geology Elective: (GEL prefix course with a lab beyond GEL 100) 3 S.H. GEL 4. Environmental Science: 6 S.H. ENV 100 Introduction to Environmental Science ENV 210 Environmental Geology 3 Total 5. Mathematics: 6-8 S. H. (MAT 105 or above at the student's level of competence.) MAT MAT # 3-4 MAT MAT # 3-4	GEL 110 Introduction to Oceanography		3
Physics	GEG 204 Meteorology		3
Physics I PHY 42 General Physics II OR PHY 102 Physics 2 Total 2. Astronomy Electives: Select one course from below 3-4 S.H. AST 205 Planetary Surface Processes AST 240 The Planetarium 3 AST 350 Practical Astronomy 4 AST 342 Astrophysics 4 AST/GEL/MAR/ENV (with laboratory 5 beyond 100 level) Total 3. Geology Elective: (GEL prefix course with a lab beyond GEL 100) 3 S.H. GEL 3 Total 4. Environmental Science: 6 S.H. ENV 100 Introduction to Environmental Science ENV 210 Environmental Geology 3 Total 5. Mathematics: 6-8 S. H. (MAT 105 or above at the student's level of competence.) MAT # 3-4 MAT # 3-4 MAT # 3-4			1
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AST 342 Astrophysics 4 AST/GEL/MAR/ENV (with laboratory beyond 100 level) Total 3. Geology Elective: (GEL prefix course with a lab beyond GEL 100) 3 S.H. GEL 3 Total 4. Environmental Science: 6 S.H. ENV 100 Introduction to Environmental Science ENV 210 Environmental Geology 3 Total 5. Mathematics: 6-8 S. H. (MAT 105 or above at the student's level of competence.) MAT # 3-4 MAT # 3-4	AST 240 The Planetarium		3
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4. Environmental Science: 6 S.H. ENV 100 Introduction to Environmental Science ENV 210 Environmental Geology 3 Total 5. Mathematics: 6-8 S. H. (MAT 105 or above at the student's level of competence.) MAT # 3-4 MAT # 3-4	GEL		3
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ENV 210 Environmental Geology 3 Total 5. Mathematics: 6-8 S. H. (MAT 105 or above at the student's level of competence.) MAT # 3-4 MAT # 3-4	ENV 100 Introduction to Environmental		3
Total 5. Mathematics: 6-8 S. H. (MAT 105 or above at the student's level of competence.) MAT # 3-4 MAT # 3-4			3
5. Mathematics: 6-8 S. H. (MAT 105 or above at the student's level of competence.) MAT # 3-4 MAT # 3-4		Total	
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MAT # 3-4	•		3-4
		Total	

VI. Clinical Component: 37 S.H.	GR	S.H
EDU 100 Perspectives on American		3
Education		3
SPU 314 Effective Instructional		
Strategies for Students with		3
Disabilities in Inclusive Settings		
SEU 312 Principles of Learning ¹		3
SEU 313 Principles of Learning Clinical		
Lab (must be taken with		3
accompanying lecture-SEU 312) 1		
SEU 342 Principles of Teaching ¹		3
SEU 343 Principles of Teaching		
Clinical Lab (must be taken with		3
accompanying lecture-SEU 342) 1		
EDU 326 Introduction to Middle Level		3
Education		3
SEU 410 Science Instructional Methods for		3
Middle and High School ¹		3
SEU 390/391 Clinical Experience and		12
Practicum I and II		12
EDU 392 Managing an Inclusive		1
Classroom		<u>'</u>
•	Total	

¹Teacher Candidacy must be achieved for these courses and a minimum grade of B is required.

Program:	BSED SEU/EARTH & SPACE SCIE	NCE			
		FIRS	T YEAR		
	Fall Semester			Spring Semester	
Course	Title	C.H.	Course	Title	C.H.
EDU 100CT	Perspectives on American Education	3	SPU 201	Cognitive Development of Diverse Learners in a Standards Aligned System Mathematics General Education	3
COM 010	Fundamentals of Oral Communication	3	MAT 017 or above	Requirement ENG Literature Course (Humanities	3 or 4
ENG 23, 24 or 25	College Composition	3		General Education Requirement)	3
MAT 017 or above	Mathematics General Education Requirement	3 or 4		ESS Required Course	3 or 4
	ESS Required Course	3 or 4		ESS Required Course	3 or 4
Total		15 or 17	Total		15 or 18
		SECO	ND YEAR		
	Fall Semester			Spring Semester	
Course	Title	C.H.	Course	Title	C.H.
ITC 321CPVL	Instructional Technology in Education	3	SPU 314	Effective Instructional Strategies for Students with Disabilities in Inclusive Settings	3
	General Education Requirement (Wellness, Social Sciences, Natural Sciences, or Arts)	3 or 4		General Education Requirement (Wellness, Social Sciences, Natural Sciences, or Arts)	3 or 4
	General Education Requirement (Wellness, Social Sciences, Natural Sciences, or Arts)	3 or 4		General Education Requirement (Wellness, Social Sciences, Natural Sciences, or Arts)	3 or 4
	ESS Required Course	3 or 4		ESS Required Course	3 or 4
	ESS Required Course	3 or 4		ESS Required Course	3 or 4
Total		15 or 19	Total		15 or 19
		THIR	D YEAR		
	Fall Semester	,		Spring Semester	_
Course	Title	C.H.	Course	Title	C.H.
SEU 312WICD	Principles of Learning	3	SEU 342WIVL	Principles of Teaching	3
SEU 313	Principles of Learning Clinical Component General Education Requirement(Free	3	SEU 343	Principles of Teaching Clinical Component	3
	Elective)	3 or 4		ESS Required Course	3 or 4
	ESS Required Course	3 or 4		ESS Required Course	3 or 4
	ESS Required Course	3 or 4		ESS Required Course	3 or 4
Total		15 or 18	Total		15 or 18
		FOUR	TH YEAR		
Fall Semester			Spring Semester		
Course	Title	C.H.	Course	Title	C.H.
SEU 410WI	Science Instructional Methods for Middle & High School	3	SEU 390	Clinical Experience & Practicum I	6
	ESS Required Course	3 or 4	SEU 391	Clinical Experience & Practicum II	6
	ESS Required Course	3 or 4			
	ESS Required Course	3 or 4			
EDU 326	Introduction to Middle Level Education	3			

Total	45 40	Tatal	40
Total	15 or 18	Total	12