B. S. in Education **Effective Fall 2016** 

The B.S. degree in Earth and Space Science Education prepares a student to teach science in secondary schools, grades 7-12. In addition to the required courses in Biology, Chemistry, Geoscience and Physics, the student will complete 31 hours of Professional Education courses, i.e. teacher-training courses, Special Education Competency course, and successfully pass the Praxis I and II exams. See the <u>IUP Three Step Process for Teacher Education</u>.

## **SUMMARY STATEMENT**

Liberal Studies Requirements	48cr
College of Education Requirements	31cr
Major Requirements	39cr
Free Electives	2cr
TOTAL	120cr

LIBERAL STUDIES REQUIREMENTS	48 credits total
Learning Skills: English Composition - Two Courses	6cr
ENGL 101 College Writing	3cr
ENGL 202 Research Writing	3cr
Learning Skills: Mathematics (specified by the Geoscience Dept.)	4cr
MATH 121 Calculus I for Natural and Social Sciences	4cr
Learning Skills: Dimensions of Wellness - One Course	3cr
any 143 course with prefix HPED, ECON, FDNT, NURS, FIN, FCSC	3cr
Learning Skills: Global and Multicultural Awareness - One Course	0cr*
*This course will most likely also be a Social Science course	
Knowledge Area: Humanities - Three Courses	9cr
HIST 196, 197, or 198	3cr
ENGL 121 Humanities Literature	3cr
PHIL 100, 101, 120, 122, 223; RLST 100, 110, 250, 290	3cr
Knowledge Area: Fine Arts - One Course from List	3cr
ARHI 101, DANC 102, FIAR 101, MUHI 101, MUHI 102, THTR 101	3cr
Knowledge Area: Natural Science (specified by the Geoscience Dept.)	8cr
CHEM 111 or CHEM 113	4cr
CHEM 112 or CHEM 114	4cr
Knowledge Area: Social Science - Three Courses from List*	9cr
PSYC 101 (specified by the Geoscience Department)	3cr
Course 2:	3cr
Course 3: (G. & M.A.)	3cr
*See Undergraduate Catalog for list; no course prefix may be used	d more than once
Liberal Studies Electives (specified by the Geoscience Dept.)	6cr
MATH 217	3cr
PHYS 111	3cr
Writing Across the Curriculum: Two "W" Courses	0cr*
*These courses will also count toward some other requirement; one course mu Writing Course #1:	· · · · · · · · · · · · · · · · · · ·
Writing Course #2:	<del></del>

COLLEGE REQUIREMENTS:	31 credits total	
Pre-professional Education Sequence:		
COMM 103 Digital Instructional Technology	3cr	
EDSP 102 Educational Psychology	3cr	
Professional Education Sequence:		
EDEX 301 Education of Students with Disabilities in	2cr	
Inclusive Secondary Settings		
EDEX 323 Instruction of English Language Learners with Special Needs	2cr	
EDSP 477 Assessment of Student Learning: Design and	3cr	
Interpretation of Educational Measures Outcomes		
EDUC 242 Pre-Student Teaching Clinical Experience I	1cr	
EDUC 342 Pre-Student Teaching Clinical Experience II	1cr	
EDUC 441 Student Teaching	12cr	
EDUC 442 School Law	1cr	
EDUC 451 Teaching Science in the Secondary School	3cr	
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MAJOR REQUIREMENTS:	39 credits total	
Required Courses:		
Required Courses: GEOS 201 Foundations of Geology	4cr	
•	4cr 2cr	
GEOS 201 Foundations of Geology		
GEOS 201 Foundations of Geology GEOS 202 Quantitative Methods in the Geosciences	2cr	
GEOS 201 Foundations of Geology GEOS 202 Quantitative Methods in the Geosciences GEOS 341 Planetary Geology	2cr 4cr	
GEOS 201 Foundations of Geology GEOS 202 Quantitative Methods in the Geosciences GEOS 341 Planetary Geology GEOS 342 Stellar Astronomy	2cr 4cr 4cr	
GEOS 201 Foundations of Geology GEOS 202 Quantitative Methods in the Geosciences GEOS 341 Planetary Geology GEOS 342 Stellar Astronomy GEOS 353 Paleontology	2cr 4cr 4cr 4cr	
GEOS 201 Foundations of Geology GEOS 202 Quantitative Methods in the Geosciences GEOS 341 Planetary Geology GEOS 342 Stellar Astronomy GEOS 353 Paleontology GEOS 370 Oceanography	2cr 4cr 4cr 4cr 4cr	
GEOS 201 Foundations of Geology GEOS 202 Quantitative Methods in the Geosciences GEOS 341 Planetary Geology GEOS 342 Stellar Astronomy GEOS 353 Paleontology GEOS 370 Oceanography GEOS 371 Meteorology	2cr 4cr 4cr 4cr 4cr 3cr	
GEOS 201 Foundations of Geology GEOS 202 Quantitative Methods in the Geosciences GEOS 341 Planetary Geology GEOS 342 Stellar Astronomy GEOS 353 Paleontology GEOS 370 Oceanography GEOS 371 Meteorology BIOL 201 Principles of Ecology and Evolution	2cr 4cr 4cr 4cr 4cr 3cr 4cr	
GEOS 201 Foundations of Geology GEOS 202 Quantitative Methods in the Geosciences GEOS 341 Planetary Geology GEOS 342 Stellar Astronomy GEOS 353 Paleontology GEOS 370 Oceanography GEOS 371 Meteorology BIOL 201 Principles of Ecology and Evolution PHYS 121 Physics I Lab	2cr 4cr 4cr 4cr 4cr 3cr 4cr 1cr	
GEOS 201 Foundations of Geology GEOS 202 Quantitative Methods in the Geosciences GEOS 341 Planetary Geology GEOS 342 Stellar Astronomy GEOS 353 Paleontology GEOS 370 Oceanography GEOS 371 Meteorology BIOL 201 Principles of Ecology and Evolution PHYS 121 Physics I Lab  Controlled Electives:	2cr 4cr 4cr 4cr 4cr 3cr 4cr 1cr	
GEOS 201 Foundations of Geology GEOS 202 Quantitative Methods in the Geosciences GEOS 341 Planetary Geology GEOS 342 Stellar Astronomy GEOS 353 Paleontology GEOS 370 Oceanography GEOS 371 Meteorology BIOL 201 Principles of Ecology and Evolution PHYS 121 Physics I Lab  Controlled Electives: Select 9 credits from the following list:	2cr 4cr 4cr 4cr 4cr 3cr 4cr 1cr	
GEOS 201 Foundations of Geology GEOS 202 Quantitative Methods in the Geosciences GEOS 341 Planetary Geology GEOS 342 Stellar Astronomy GEOS 353 Paleontology GEOS 370 Oceanography GEOS 371 Meteorology BIOL 201 Principles of Ecology and Evolution PHYS 121 Physics I Lab  Controlled Electives: Select 9 credits from the following list: GEOS 203 Surficial Geology	2cr 4cr 4cr 4cr 4cr 3cr 4cr 1cr	
GEOS 201 Foundations of Geology GEOS 202 Quantitative Methods in the Geosciences GEOS 341 Planetary Geology GEOS 342 Stellar Astronomy GEOS 353 Paleontology GEOS 370 Oceanography GEOS 371 Meteorology BIOL 201 Principles of Ecology and Evolution PHYS 121 Physics I Lab  Controlled Electives: Select 9 credits from the following list: GEOS 203 Surficial Geology Any 300-level GEOS course	2cr 4cr 4cr 4cr 4cr 3cr 4cr 1cr	

Controlled Electives (9 cr)		Free Electives (2 cr)	
Course	# Credits	Course	# Credits