Teaching Specialty - Earth Science

Major Requirements

Major: Earth Science Education

Degree Type: B.A. or B.S.

Required Degree Credits to Graduate: 139

General Education Requirements

First Year Experience (F):

HD&E 189 Skills for Academic Success (Students transferring 1 in 24 or more credits do not need to take HD&E 189.)

Communication (C):

Communication (C).				
ENGL 110	College Composition I	3		
ENGL 120	College Composition II	3		
ENGL 324	Writing in the Sciences	3		
COMM 110	Fundamentals of Public Speaking	3		
Quantitative Reasoning (R):				
MATH 165	Calculus I	4		
Science & Technology (S):				
The 10 credits required in the Science and Technology category will be satisfied by completing the requirements for the teaching specialty.				
Humanities & Fine Arts (A): Select from current general education list				

Social & Behavioral Sciences (B): Select from current general

Wellness (W): Select from current general education list
Cultural Diversity (D): Select from current general education list

Physical Geology

Major Requirements

Global Perspectives (G):

education list

GEOL 105

Total Credits

General Education Requirements				
Earth Science Education Requirements				
GEOL 105	Physical Geology	4		
& 105L	and Physical Geology Lab			
GEOL 106	The Earth Through Time	4		
& 106L	and The Earth Through Time Lab			
STAT 330	Introductory Statistics	3		
Professional Education Requirements				
EDUC 321	Introduction to Teaching	3		
EDUC 322	Educational Psychology	3		
EDUC 451	Instructional Planning, Methods and Assessment	3		
EDUC 481	Classroom Practice Methods of Teaching I: (Science)	3		
EDUC 485	Student Teaching Seminar	1		
EDUC 486	Classroom Management for Diverse Learners	3		
EDUC 487	Student Teaching	9		

EDUC 489 Teaching Students of Diverse Backgrounds Teaching Specialty Requirements BIOL 124 Environmental Science 4 8 124L and Environmental Science Laboratory BIOL 150 General Biology I 4 8 150L and General Biology II Laboratory BIOL 151 General Biology II Laboratory BIOL 151 General Biology II Laboratory Biological Elective CHEM 121 General Chemistry I 4 8 121L and General Chemistry I Laboratory CHEM 122 General Chemistry II Laboratory CHEM 122 General Chemistry II Laboratory CHemistry Elective GEOL 303 Paleontology Field Course 4 8 GEOL 350 and Invertebrate Paleontology GEOL 412 Geomorphology 3 GEOL 421 and Mineralogy Laboratory GEOL 422 Petrology 3 GEOL 421 and Mineralogy Laboratory GEOL 423 Petrography 1 GEOL 491 Seminar 1 Geology Electives Electives PHYS 110 Introductory Astronomy 3 PHYS 211 College Physics I Laboratory PHYS 212 College Physics II Laboratory SOIL 217 Introduction to Meteorology & Climatology 3 CSCI 122 Visual BASIC 3			
Teaching Specialty Requirements BIOL 124 Environmental Science 4 8 124L and Environmental Science Laboratory BIOL 150 General Biology I 4 8 150L and General Biology II Laboratory BIOL 151 General Biology II Laboratory BIOL 151 General Biology II Laboratory Biological Elective CHEM 121 General Chemistry I 4 8 121L and General Chemistry I Laboratory CHEM 122 General Chemistry II Laboratory CHEM 122 General Chemistry II Laboratory CHEM 122 General Chemistry II Laboratory CHemistry Elective GEOL 303 Paleontology Field Course 4 8 GEOL 350 and Invertebrate Paleontology GEOL 412 Geomorphology 3 GEOL 421 and Mineralogy Laboratory GEOL 422 Petrology 3 GEOL 421 and Mineralogy Laboratory GEOL 422 Petrology 3 GEOL 423 Petrography 1 GEOL 491 Seminar 1 Geology Electives Electives PHYS 110 Introductory Astronomy 3 PHYS 211 College Physics I Laboratory PHYS 212 College Physics II Laboratory SOIL 217 Introduction to Meteorology & Climatology 3 CSCI 122 Visual BASIC 3	EDUC 488	Applied Student Teaching	3
BIOL 124 Environmental Science 4 & 124L and Environmental Science Laboratory BIOL 150 General Biology I 4 & 150L and General Biology II Laboratory BIOL 151 General Biology II 4 & 151L and General Biology II Laboratory Biological Elective CHEM 121 General Chemistry I 4 & 121L and General Chemistry I Laboratory CHEM 122 General Chemistry II Laboratory CHEM 122 General Chemistry II Laboratory CHEM 122 General Chemistry II Laboratory CHEM 124 and General Chemistry II Laboratory CHEM 125 General Chemistry II Laboratory CHEM 126 Geolusy Field Course 4 GEOL 303 Paleontology Field Course 4 GEOL 350 and Invertebrate Paleontology GEOL 412 Geomorphology 3 GEOL 420 Mineralogy 4 GEOL 421 and Mineralogy Laboratory GEOL 422 Petrology 3 GEOL 423 Petrography 1 GEOL 423 Petrography 1 GEOL 424 Seminar 1 Geology Electives CHYS 110 Introductory Astronomy 3 CHYS 211 College Physics I 4 211L and College Physics I Laboratory CHYS 212 College Physics II Laboratory SOIL 217 Introduction to Meteorology & Climatology 3 CSCI 122 Visual BASIC 3	EDUC 489	Teaching Students of Diverse Backgrounds	3
& 124L and Environmental Science Laboratory BIOL 150 General Biology I 4 & 150L and General Biology II Laboratory BIOL 151 General Biology II 4 & 151L and General Biology II Laboratory Biological Elective CHEM 121 General Chemistry I 4 & 121L and General Chemistry I Laboratory CHEM 122 General Chemistry II Laboratory CHEM 122 General Chemistry II Laboratory CHEM 122 General Chemistry II Laboratory CHEM 124 and General Chemistry II Laboratory CHEM 125 General Chemistry II Laboratory CHEM 126 Geology Field Course 4 & GEOL 303 Paleontology Field Course 4 & GEOL 350 and Invertebrate Paleontology GEOL 412 Geomorphology 3 GEOL 420 Mineralogy 4 & GEOL 421 and Mineralogy Laboratory GEOL 422 Petrology 3 GEOL 423 Petrography 1 GEOL 424 Seminar 1 Geology Electives CHEM 125 Geomorphology 3 GEOL 426 Physics I 1 A 211 College Physics I 1 A 211 College Physics I Laboratory CHEM 126 College Physics II Laboratory CHEM 126 College Physics II Laboratory CHEM 127 Introduction to Meteorology & Climatology 3 CSCI 122 Visual BASIC 3	Teaching Specia	alty Requirements	
& 150L and General Biology I Laboratory BIOL 151 General Biology II 4 & 151L and General Biology II Laboratory Biological Elective CHEM 121 General Chemistry I 4 & 121L and General Chemistry I Laboratory CHEM 122 General Chemistry II Laboratory CHEM 122 General Chemistry II Laboratory CHemistry Elective GEOL 303 Paleontology Field Course & GEOL 350 and Invertebrate Paleontology GEOL 412 Geomorphology GEOL 421 and Mineralogy Laboratory GEOL 422 Petrology GEOL 423 Petrography GEOL 421 Seminar Geology Electives PHYS 110 Introductory Astronomy PHYS 211 College Physics I & 211L and College Physics I Laboratory PHYS 212 College Physics II Laboratory SOIL 217 Introduction to Meteorology & Climatology 3 CSCI 122 Visual BASIC 3 3			4
& 151L and General Biology II Laboratory Biological Elective CHEM 121 General Chemistry I 4 & 121L and General Chemistry II Laboratory CHEM 122 General Chemistry II 4 & 122L and General Chemistry II Laboratory Chemistry Elective GEOL 303 Paleontology Field Course 4 GEOL 350 and Invertebrate Paleontology GEOL 412 Geomorphology GEOL 420 Mineralogy 4 GEOL 421 and Mineralogy Laboratory GEOL 422 Petrology GEOL 423 Petrography GEOL 423 Petrography GEOL 491 Seminar Geology Electives PHYS 110 Introductory Astronomy PHYS 211 College Physics I 4 211L and College Physics I Laboratory PHYS 212 College Physics II 4 8 212L and College Physics II Laboratory SOIL 217 Introduction to Meteorology & Climatology CSCI 122 Visual BASIC 3		67	4
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Electives PHYS 110 Introductory Astronomy 3 PHYS 211 College Physics I 4 & 211L and College Physics I Laboratory PHYS 212 College Physics II 4 & 212L and College Physics II Laboratory SOIL 217 Introduction to Meteorology & Climatology 3 CSCI 122 Visual BASIC 3	GEOL 491	Seminar	1
PHYS 211 College Physics I 4 & 211L and College Physics I Laboratory PHYS 212 College Physics II 4 & 212L and College Physics II Laboratory SOIL 217 Introduction to Meteorology & Climatology 3 CSCI 122 Visual BASIC 3	0,	Electives	6
& 211L and College Physics I Laboratory PHYS 212 College Physics II 4 & 212L and College Physics II Laboratory SOIL 217 Introduction to Meteorology & Climatology 3 CSCI 122 Visual BASIC 3	PHYS 110	Introductory Astronomy	3
& 212L and College Physics II Laboratory SOIL 217 Introduction to Meteorology & Climatology CSCI 122 Visual BASIC 3		9	4
CSCI 122 Visual BASIC 3		9 ,	4
	SOIL 217	Introduction to Meteorology & Climatology	3
Total Credits 139	CSCI 122	Visual BASIC	3
	Total Credits		139

Degree Requirements and Notes

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- Courses taken P/F may not be used to satisfy any requirements.
- GPA of 2.75 or better in the teaching specialty is required for placement in student teaching and exit from the program.
- A grade of 'C' or better is required in all Professional Education Requirement courses.
- A GPA of 2.75 or better in professional education as well as passing the appropriate Praxis II exam are required to exit the program.
- See School of Education (http://www.ndsu.edu/education) for admission requirements.