

Name: \_\_\_\_\_

**NORTH DAKOTA STATE UNIVERSITY**  
College of Human Development & Education  
**Physics Education**

Fall 2012

ID: \_\_\_\_\_

General Education Requirements - 40 Credits Required					Teaching Specialty Requirements - 69 Credits Required					
					A GPA of 2.75 or better in the teaching specialty is required for placement in student teaching and exit from the program.					
Course	Number	Course Title	Credits	Grade	Course	Number	Course Title	Credits	Grade	HP
First Year Experience (F)			1 Sem Credit		CHEM	122 OR 151	General Chemistry II OR Principles of Chemistry II	3		
HD&E	189 <sup>1</sup>	Skills for Academic Success	1		CHEM	122L OR 161	General Chemistry II Lab OR Principles of Chemistry II Lab	1		
Communication (C)			12 Sem Credits		CHEM	300/400	Elective Course	4		
*ENGL	110	College Composition I	3		GEOL	105	Physical Geology	3		
*ENGL	120	College Composition II	3		GEOL	105L	Physical Geology Lab	1		
COMM	110	Fund of Public Speaking	3		GEOL	106	The Earth Through Time	3		
ENGL	324	Writing in the Sciences	3		GEOL	106L	The Earth Through Time Lab	1		
Quantitative Reasoning (R)			3 Sem Credits		MATH	166	Calculus II	4		
MATH	165	Calculus I	4		MATH	265	Calculus III	4		
Science & Technology (S)			10 Sem Credits		MATH	266	Intro/Differential Equations (A coreq of MATH 128, 129 or 429 is required)	3		
CSCI	114 OR 116	Microcomputer Packages OR Business Use of Computers	3 OR 4		PHYS	110	Introductory Astronomy	3		
BIOL	124	Environmental Science	3		PHYS	215	Research for Undergraduates	1		
BIOL	124L	Environmental Science Lab	1		PHYS	251	University Physics I	4		
CHEM	121 OR 150	General Chemistry I OR Principles of Chemistry I	3		PHYS	251L	University Physics I Lab	1		
Humanities & Fine Arts (A)			6 Sem Credits		PHYS	251R	University Physics I Recitation	1		
			3		PHYS	252	University Physics II	4		
			3		PHYS	252L	University Physics II Lab	1		
Social & Behavioral Sciences (B)			6 Sem Credits		PHYS	252R	University Physics II Recitation	1		
			3		PHYS	300+	Elective Course	3		
			3		PHYS	350	Modern Physics	3		
Wellness (W)			2 Sem Credits		PHYS	360	Modern Physics II	3		
			2		PHYS	361 OR 370	Electromagnetic Theory OR Electromag Theory (MSUM)	3 OR 4		
Cultural Diversity (D)					PHYS	411/411L	Optics for Scientists & Engineers/Lab	3/1		
Global Perspectives (G)					PHYS	455 OR 330(MSUM)	Classical Mechanics OR Intermediate Mechanics	3 OR 4		
GEOL	105	Physical Geology			PHYS	462	Heat and Thermodynamics	3		
<b>Department Requirements - 4 Credits Required</b>					PHYS	485	Quantum Mechanics I	3		
CHEM	121L OR 160	General Chemistry I Lab OR Principles of Chemistry I Lab	1		PHYS	491	Seminar	1		
STAT	330	Introductory Statistics	3		<b>Professional Education Requirements - 31 Credits Required</b>					
Other department requirements are listed in the Science & Technology and Quantitative Reasoning categories of Gen Ed.					A grade of C or better is required in all Professional Education Requirement courses.					
<sup>1</sup> Students transferring in 24 or more credits do not need to take HD&E 189.  *See School of Education admission requirements.  All courses listed on this curriculum guide are required for the major.					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.					
					EDUC	321	Introduction to Teaching	3		
					EDUC	322	Educational Psychology	3		
					EDUC	451	Instruc Plan, Methods & Assess	3		
					EDUC	481	Classrm Prac/Meth of Teach I - Science	3		
					EDUC	485	Student Teaching Seminar	1		
					EDUC	486	Classrm Mgt for Diverse Learners	3		
					EDUC	487	Student Teaching	9		
					EDUC	488	Applied Student Teaching	3		
					EDUC	489	Native Am. & Multicult Instr Prac	3		
<b>Total Credits Required for Graduation:</b>									<b>145</b>	