

**Bachelor of Science in Physics with  
8-12 Physics/Mathematics Teacher Certification  
Minor in Mathematics**

Grade range will change to 7-12 after September 1, 2014

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

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_

Expected date of graduation: \_\_\_\_\_

**CORE CURRICULUM**

English Composition	Earned	Need
ENGL 1301 Critical Thinking, Reading, and Writing I		3
ENGL 1302 Critical Thinking, Reading, and Writing II		3
<b>Literature</b> (modern/classical language literature course may substitute)		
ENGL 2309, 2319, 2329, 2303, or other 23XX+ literature		3
<b>US History</b> (Texas History, 3363 or 3364, may substitute for one US History)		
HIST 1311 History of the United States prior to 1865		3
HIST 1312 History of the United States since 1865		3
<b>Political Science</b>		
POLS 2311 Government of the United States		3
POLS 2312 State and Local Government		3
<b>Mathematics</b>		
MATH 1426 Calculus I		4
MATH 2425 Calculus II		4
<b>Social/Cultural Studies</b> (3 hours from approved list)		
		3
<b>Fine Arts</b> (3 hours from approved list)		
		3
<b>Liberal Arts</b> (3 hours, fulfilled by PHIL 2314)		
<b>Natural Science</b> (8 hours, fulfilled by the major)		

**CORE HOURS (35)** 0 35

**OTHER REQUIRED COURSEWORK**

Mathematics	Earned	Need
MATH 2326 Calculus III		3
MATH 3300 Introduction to Proofs		3
MATH 3301 Foundations of Geometry		3
MATH 3319 Differential Equations and Linear Algebra		3
MATH 3321 Abstract Algebra I		3
<b>Chemistry</b>		
CHEM 1441 General Chemistry I		4
CHEM 1442 General Chemistry II		4
<b>Computer Science</b> (CSE 1310+, PHYS 2321, or MATH 3345)		
		3
<b>Elective</b>		
		3

**OTHER REQUIRED HOURS (32)** 0 29

**Computer Proficiency:** Fulfilled by Computer Science requirement

**Oral Communication:** Fulfilled by PHYS 4117

**ACADEMIC CRITERIA**

**College of Science:** A 2.25 GPA is required both at UTA and in major coursework to remain in the major.

**UTeach Arlington:** Entry into EDUC 4333 requires a UTA or cumulative GPA of 2.75 and the following scores on the THEA: Reading 270, Writing 220, Math 230.

**PHYSICS**

	Earned	Need
PHYS 1443 General Technical Physics I		4
PHYS 1444 General Technical Physics II		4
PHYS 2311 Mathematical Methods of Physics		3
PHYS 3313 Introduction to Modern Physics <i>with</i>		3
PHYS 3183 Modern Physics Laboratory		1
PHYS 3321 Intermediate Electricity and Magnetism		3
PHYS 4315 Thermodynamics and Statistical Mechanics		3
PHYS 4319 Advanced Mechanics		3
PHYS 4326 Introduction to Quantum Mechanics		3
PHYS 4117 Individual Learning by Seminar		1
<b>Advanced Physics Electives</b>		
PHYS 33XX+		3
PHYS 33XX+		3

**PHYSICS HOURS (34)** 0 34

**UTEACH ARLINGTON**

	Earned	Need
SCIE 1101 STEP 1: Inquiry Approaches to Teaching		1
SCIE 1102 STEP 2: Inquiry-based Lesson Design		1
EDUC 4331 Knowing and Learning in Math and Science		3
EDUC 4332 Classroom Interactions		3
PHIL 2314 Perspectives on Science and Math		3
PHYS 4391 Research Methods		3
MATH 2330 Functions and Modeling		3

**Academic criteria must be met before entering the final year**

EDUC 4333 Multiple Teaching Practices in Math and Sci.		3
SCIE 4607 Student Teaching <i>with</i>		6
SCIE 4107 Student Teaching Seminar		1

**UTEACH HOURS (24)** 0 27

**TOTAL DEGREE HOURS (125)** 0 125