

## SCIENCE: PHYSICS

*(Required if program completed after August 2013)*

\*2.5 GPA, C or better grade in each course

### SCIENCE CORE 26 cr

BIOL L111 Evolution&Diversity <b>or</b>	3
BIOL L112 Biological Mechanisms	
CHEM C117 Chemistry & Biochemistry I	5
GEOL G103, G104 or G105 Earth Sciences	3
MATH M211 Calculus I	4
MATH M212 Calculus II	4
MATH M311 Calculus III	4
MATH M343 Intro to Differential Equatn's (P:M212)	3

OR Praxis II Middle School Science test 10439 score 137  
(Some courses will be required for the major)

### PHYSICS 25 cr

PHYS P221 Physics I (P: MATH M211)	5
PHYS P222 Physics II (P: P221, C: MATH M212)	5
PHYS P301 Physics III (PHYS P222)	3

### Complete 12 credits from the following:

PHYS P309 Modern Physics Lab (P/C: P301)	2
PHYS P310 Environmental Physics (P: physics II)	3
PHYS P314 Medical Physics (P: P202)	3
PHYS P317 Signals & Information Processing (P:P222)	3
PHYS P321 Techniques in Theoretical Phys(P/C:P301)	3
PHYS P331 Theory of Electricity/Magnetism (P: Physics II and Math M312)	3
PHYS P332 Theory of Elect/Magnetism II (P: P331) <b>or</b> 3	
PHYS P460 Modern Optics (P: P332)(3)	
PHYS P340 Thermodynamics & Statistical Mechanics (P: P222 & MATH M322)	3
PHYS P350 Applied Physics Instrumentation Lab (P: P222)	3
PHYS P360 Physical Optics (P:P331)	3
PHYS P400 Analog & Digital Electronics	3
PHYS P401 Analog Electronics	3
PHYS P410 Computing Apps in Physics	3
PHYS P441 Analytical Mechanics	3
PHYS S405 Readings in Physics (Faculty consent)	1-3
PHYS S406 Research & Internship Projects (Faculty consent)	1-6
PHYS S407 Applied Physics Internship (Faculty consent)	1
PHYS P408 Current Research in Physics (Faculty consent)	1

**Not yet formally approved as license additions for REPA Licensing Rules, the following approved additions for Rules 2002 may form study guidelines for additions by Praxis II testing**

### LIFE SCIENCE BIOLOGY 15 cr

BIOL L111 Introduction to Biology: Evolution & Diversity	3
BIOL L112 Introduction to Biology: Biological Mechanisms	3
BIOL L113 Biology Lab	3
BIOL L211 Molecular Biology (P: L112)	3
BIOL L311 Genetics (P: L211)	3
BIOL L318 Evolution (P: L311)	3

### CHEMISTRY 14cr

<b>Required Courses</b>	
CHEM C341 Organic Chemistry I	3
CHEM C342 Organic Chemistry II	3
CHEM N330 Intermediate Inorganic (P: C117, C342 or R340)	5
CHEM C360 Introduction to Physical Chemistry (P: C117, Math M119, PHYS P201, R: N330)	3

### EARTH-SPACE SCIENCE 16-19 cr

<b>Required courses</b>	
GEOL G103 Earth Science: materials/processes or	3
GEOL G104 Evolution of Earth	3
AST A100 Solar System OR A221 General Astronomy I	3-4
AST A105 Stellar System OR A222 General Astronomy II	3-4
GEOL G225 Earth Materials	4
GEOG G304 Physical Meteorology	3

### MATHEMATICS (has not ever been approved as addition)

Statistics course, MATH M365  
Modern Algebra, MATH T/M403