

**SCIENCE EDUCATION
PHYSICS CONCENTRATION
Grade Levels 5-12
REPA 3**

**NOT VALID WITHOUT
OFFICIAL TRANSCRIPT
EVALUATION**

| <u>CONTENT</u> | <u>Semester Hours</u> |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <i>One of the following:</i> | 4 |
| PHYS 17200 Modern Mechanics (4) | |
| PHYS 17200 Modern Mechanics (Honors) (4) | |
| <i>One of the following:</i> | 4 |
| PHYS 27200 Electric and Magnetic Interactions (4) | |
| PHYS 27200 Electric and Magnetic Interactions (Honors) (4) | |
| <i>Each of the following:</i> | |
| PHYS 30600 Mathematical Methods of Physics I | 3 |
| PHYS 30700 Mathematical Methods of Physics II | 3 |
| PHYS 31000 Intermediate Mechanics | 4 |
| PHYS 33000 Intermediate Electricity and Magnetism | 3 |
| PHYS 34000 Modern Physics Laboratory | 1 |
| PHYS 34400 Modern Physics | 4 |
| PHYS 36000 Quantum Mechanics | 3 |
| PHYS 42200 Waves and Oscillations | 3 |
| PHYS 45000 Intermediate Laboratory | 2 |
| <i>One of the following:</i> | 4-5 |
| CHM 11500 General Chemistry (4) | |
| CHM 12300 General Chemistry for Engineers I (4) | |
| CHM 12500 Introduction to Chemistry I (5) | |
| <i>One of the following:</i> | 4-5 |
| CHM 11600 General Chemistry (4) | |
| CHM 12400 General Chemistry for Engineers II (4) | |
| CHM 12600 Introduction to Chemistry II (5) | |
| CHM 13600 General Chemistry Honors (4) (CHM 13600 takes the place of CHM 11500 and 11600, or CHM 12300 and 12400, or CHM 12500 and 12600) | |

Total 42-44

(Physics continued)

| <u>PROFESSIONAL EDUCATION</u> | | | Semester Hours |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------|
| <u>Foundational Courses</u> | | | |
| EDCI | 20500 | Exploring Teaching as a Career | 3 |
| EDCI | 27000 | Introduction to Education Technology and Computing | 3 |
| EDCI | 28500 | Multiculturalism and Education | 3 |
| EDPS | 23500 | Learning and Motivation | 3 |
| EDPS | 26500 | The Inclusive Classroom | 3 |
| EDST | 20010 | Educational Policies and Laws | 1 |
| EDPS | 32700 | Assessment Literacy | 1-2 |
| EDPS | XXXXX | Secondary Classroom Management course* | 1 |
| *If EDPS XXXXX is offered, students should make every attempt to take EDPS 32700 for one (1) credit and EDPS XXXXX for one (1) credit. If EDPS XXXXX is not offered, EDPS 32700 should be taken for two (2) credits. | | | |
| <u>Methods Courses</u> | | | |
| EDCI | 30900 | Reading in Middle and Secondary Schools: Methods and Problems | 3 |
| EDCI | 42400 | The Teaching of Earth/Physical Science in Secondary Schools | 3 |
| EDCI | 42800 | Teaching Science in the Middle and Junior High School | 2 |
| EDCI | 49800 | Supervised Teaching | 10 |
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| Total | | | 36 |