## SCIENCE EDUCATION
### PHYSICS CONCENTRATION

**Grade Levels 5-12**  
**REPA 3**

### CONTENT

<table>
<thead>
<tr>
<th>Semester Hours</th>
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</thead>
</table>

**One of the following:**
- PHYS 17200 Modern Mechanics (4)
- PHYS 17200 Modern Mechanics (Honors) (4)

**One of the following:**
- PHYS 27200 Electric and Magnetic Interactions (4)
- PHYS 27200 Electric and Magnetic Interactions (Honors) (4)

**Each of the following:**
- 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

**One of the following:**
- CHM 11500 General Chemistry (4)
- CHM 12300 General Chemistry for Engineers I (4)
- CHM 12500 Introduction to Chemistry I (5)

**One of the following:**
- 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 Content 38-44**

### PROFESSIONAL EDUCATION

**Foundational Courses**
- 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 Classroom Assessment  
  1
- EDPS 43010 Secondary Creating and Managing Learning Environments  
  1

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**NOT VALID WITHOUT OFFICIAL TRANSCRIPT EVALUATION**
(Physics continued)

### Methods Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 30900</td>
<td>Reading in Middle and Secondary Schools: Methods and Problems</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 42400</td>
<td>The Teaching of Earth and Physical Science in the Secondary Schools</td>
<td>3</td>
</tr>
<tr>
<td>EDCI 49800</td>
<td>Supervised Teaching (16 weeks)</td>
<td>10</td>
</tr>
</tbody>
</table>

One of the following: 2-3

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDCI 42800</td>
<td>Teaching Science in the Middle and Junior High School (2)</td>
<td></td>
</tr>
<tr>
<td>EDCI 55800</td>
<td>Integrated Science, Technology, Engineering and Mathematics (STEM) Education</td>
<td></td>
</tr>
</tbody>
</table>

**Total Professional Education 36-37**