**Wyoming Teacher Education Program**

**Physics Education - Option 1 - Single Field**

Total Credits Required: 129

Enter grade earned on the line next to each course taken.

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDST 2450 Human Lifespan Development (C2)</td>
<td></td>
<td>(3)</td>
</tr>
<tr>
<td>GPA (2.5)</td>
<td></td>
<td></td>
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<tr>
<td>sophomore standing</td>
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<tr>
<td>EDST 2000 Becoming a Teacher (6)</td>
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<tr>
<td>ITEC 2360 Teaching with Microcomputers or WY community coll. equiv.</td>
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<td>(3)</td>
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<tr>
<td>GPA of 2.5</td>
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<td></td>
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<tr>
<td>Grade &quot;C&quot; or better in W1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade &quot;C&quot; or better in M1</td>
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<tr>
<td>Current Wyoming Substitute Teaching Permit (effective fall 2002)</td>
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</tbody>
</table>

**UNIVERSITY STUDIES**

I. Freshman Life Seminar (1 or 2 credits)

- F1 – EDST 1000 (2) (recommended)

II. Writing (3 courses, 9 credits)

- W1 - ENGL 1010 or equivalent
- W2 - EDST 3000 (See Professional Education Requirements)
- W3 - EDSE 4255 (See Professional Education Requirements)

III. Mathematics (2-3 courses, 6-9 credits; 2 courses only if student tests out of M1 class)

- M1 - MATH 1400 (3), 1405 (3), or 1450 (5) (Placement by exam)
- M2 - MATH 2200
- M3 - EDST 3500 (See Professional Education Requirements)

IV. Science – S1, S2, S3 (6-8 credits)

- S1 - ENGL 1010 or equivalent
- S2 - ENGL 1010 or equivalent
- S3 - ENGL 1010 or equivalent

V. Cultural Context (4 courses, at least 1 from each area)

- C1 - ENGL 1010 or equivalent
- C2 - ENST 2450 Human Lifespan Development (C2) (See Professional Education Requirements)
- C3 - ENST 2450 Human Lifespan Development (C2) (See Professional Education Requirements)
- C4 - ENST 2450 Human Lifespan Development (C2) (See Professional Education Requirements)

VII. Global Diversity (3) (This course may also fulfill another requirement in the University Studies program or the major.)

- G1 - ENGL 1010 or equivalent

**Professional Education Requirements**

- EDSE 4000 (16 credits in Teaching)
- EDSE 4255 (8 credits) Science Pedagogy (W3) (Offered Fall Semester Only)
- EDSE 4000 (2) Pracicum (Offered Fall Semester Only)
- EDST 3500 (3) Quantitative Reasoning for Educators (M3)
- EDST 3000 (6) Teaching a Decision Maker (W2)
- EDST 2450 Human Lifespan Development (C2)
VIII.
P1 - Physical Activity and Health (1) (Effective Fall 1999)

PHYSICS EDUCATION

OPTION 1 - MAJOR CONTENT 1: 50 HOURS

Major content and other required courses must be completed with grade C or better. Minimum 2.5 content GPA required.

MAJOR AREA - 32 HOURS

REQUIRED PHYSICS COURSES:

- PHYS 1310 (4) College Physics I (S2) (Offered Fall Semester)
- PHYS 1320 (4) College Physics II (M3) (Offered Spring Semester)
- PHYS 2310 (4) Physics III: Waves and Optics (Offered Fall Semester)
- PHYS 2320 (3) Physics IV: Modern Physics
- PHYS 3650 (3) Optics/Electronics Lab I
- PHYS 4210 (3) Classical Mechanics I (Offered Fall Semester)
- PHYS 4310 (3) Quantum Mechanics (Offered Spring Semester)
- PHYS 4410 (3) Electricity & Magnetism I (Offered Fall Semester)
- PHYS 4510 (3) Thermodynamics & Statistical Mechanics (Offered Spring Semester)
- PHYS 4860 (Max 12) Independent Study (Offered based on sufficient demand & resources)

Elective Physics Courses (remaining credits in major to reach 32 hours):

- PHYS 2330 (1) Modern Physics Lab (Offered Spring Semester)
- PHYS 2150 (3) Physical Principles of Contemporary Social Problems (C2, G1) or
  PHYS 4050 (2) Physical Principles of Pollution (Offered based on sufficient demand & resources)
- PHYS 4150 (3) Energy Issues for Educators (C2, G1) or
  PHYS 4160 (2) Energy Issues for Educators (Offered Spring Semester every other year)
- PHYS 4000 (3) Applied Laser Science
- PHYS 2350 (3) Atomic and Molecular Physics (Offered Fall Semester)
- PHYS 4050 (2) Physical Principles of Pollution (Offered based on sufficient demand & resources)
- PHYS 4810 (3) Nuclear Physics (Offered Fall Semester)
- PHYS 4860 (Max 12) Independent Study (Offered based on sufficient demand & resources)

REQUIRED NATURAL SCIENCE COURSE:

- NASC 4790 (2) Topics in Natural Science: Safety, Science & Society

SCIENCE ELECTIVES (16 hours):

At least one course from each area: Biological Sciences, Chemistry, Earth & Space Science, Environmental Science.

REQUIRED NATURAL SCIENCE COURSE:

- PHYS 4600 (Max 12) Independent Study (Offered based on sufficient demand & resources)

PHYSICS EDUCATION

OPTION 1 - MAJOR CONTENT 1: 50 HOURS

PHYS 4000 (3) Applied Laser Science

Completion of 100% of Major Content Courses is strongly recommended prior to Phase IIIA.

- PHYS 4860 (Max 12) Independent Study

MAJOR AREA - 32 HOURS

Physics major and other required courses must be completed with grade C or better.

PHYS 4860 (Max 12) Independent Study (Offered based on sufficient demand & resources)

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