

“W” Number: \_\_\_\_\_  
 Student Name: \_\_\_\_\_  
 Advisor Name: \_\_\_\_\_

Catalog: 2021-2022 University of Wyoming Catalog  
 Program: Secondary Physics Education with Concurrent  
 Major in Physics, B.A.

## Secondary Physics Education with Concurrent Major in Physics, B.A.

Graduates of this program earn a Bachelor’s Degree in Physics Education and a concurrent major in Physics. It prepares students to teach Physics in grades 6-12.

A concurrent major will ensure that graduates are highly qualified teachers and will expand career possibilities.

This program requires a minimum of 120 total hours. All major courses must be passed with a grade of C or better. A minimum GPA of 2.500 in major content courses is required. A minimum of 42 credits must be upper-division.

An initial background check must be completed prior to starting any field or practicum experience. Student fees cover the cost of this initial background check so work with your College of Education advisor for details.

### Professional Education Requirements

| Course Name   | Credits:      | Term Taken | Grade | Gen Ed |
|---|---------------|------------|-------|--------|
| <b>Foundations</b>  |               |            |       |        |
| EDST2450 - Foundations of Development and Learning  | Credits: 3    |            |       |        |
| ITEC2360 - Teaching with Technology   | Credits: 1-3  |            |       |        |
| (3 credits required)  |               |            |       |        |
| <i>Completion of EDST 2450 with a minimum grade of C or better is a prerequisite for the following courses:</i>   |               |            |       |        |
| EDEX2484 - Introduction to Special Education  | Credits: 3    |            |       |        |
| EDST3480 - Diversity & the Politics of Schooling  | Credits: 3    |            |       |        |
| <i>A minimum 2.75 UW cumulative GPA is required for registration in EDST 3100 and EDST 3101.<br/>A copy of your valid Wyoming Substitute Teaching Permit must be on file with the Teacher Preparation and Advising Office no later than the first day of class.</i> |               |            |       |        |
| EDST3100 - Teacher as Practitioner  | Credits: 3    |            |       |        |
| EDST3101 - Practicum 3  | Credits: 2    |            |       |        |
|   |               |            |       |        |
| <b>Assessment</b>   |               |            |       |        |
| EDST3550 - Educational Assessment   | Credits: 2    |            |       |        |
|   |               |            |       |        |
| <b>Methods (Offered Fall Semester Only)</b>   |               |            |       |        |
| EDSE3275 - Subject Matter Specific Methods I: Secondary Science Education   | Credits: 3-6  |            |       |        |
| (3 credits required)  |               |            |       |        |
| EDSE4275 - Subject Matter Specific Methods II: Secondary Science Education  | Credits: 3-6  |            |       |        |
| (4 credits required)  |               |            |       |        |
| <b>Residency (Offered Spring Semester Only)</b>   |               |            |       |        |
| EDSE4500 - Residency in Teaching  | Credits: 1-16 |            |       |        |
| (12 credits required)   |               |            |       |        |
| EDSE4550 - Residency Applications and Synthesis   | Credits: 3    |            |       |        |

### Major Content

#### Physics Core

#### Introductory Courses

| Course Name                       | Credits:   | Term Taken | Grade | Gen Ed |
|-----------------------------------|------------|------------|-------|--------|
| PHYS1210 - Engineering Physics I  | Credits: 4 |            |       |        |
| OR                                |            |            |       |        |
| PHYS1310 - College Physics I      | Credits: 4 |            |       |        |
|                                   |            |            |       |        |
| PHYS1220 - Engineering Physics II | Credits: 4 |            |       |        |

|  |                 |                   |              |               |
|--|-----------------|-------------------|--------------|---------------|
| OR   |                 |                   |              |               |
| PHYS1320 - College Physics II  | Credits: 4      |                   |              |               |
| <b>Choose 1 Course</b>   |                 |                   |              |               |
| <b>Course Name</b>   | <b>Credits:</b> | <b>Term Taken</b> | <b>Grade</b> | <b>Gen Ed</b> |
| ASTR2310 - General Astronomy I   | Credits: 4      |                   |              |               |
| ASTR2320 - General Astronomy II  | Credits: 4      |                   |              |               |
| PHYS2310 - Physics III: Waves and Optics   | Credits: 4      |                   |              |               |
| PHYS3650 - Advanced Lab in Modern Physics and Electronics  | Credits: 4      |                   |              |               |
| <b>Choose 1 Option</b>   |                 |                   |              |               |
| <b>Option A</b>  |                 |                   |              |               |
| <b>Course Name</b>   | <b>Credits:</b> | <b>Term Taken</b> | <b>Grade</b> | <b>Gen Ed</b> |
| PHYS2320 - Physics IV: Modern Physics  | Credits: 3      |                   |              |               |
| <b>Option B</b>  |                 |                   |              |               |
| <b>Course Name</b>   | <b>Credits:</b> | <b>Term Taken</b> | <b>Grade</b> | <b>Gen Ed</b> |
| ASTR1050 - Survey of Astronomy   | Credits: 4      |                   |              |               |
| AND  |                 |                   |              |               |
| ASTR2320 - General Astronomy II  | Credits: 4      |                   |              |               |
| <b>OR</b>  |                 |                   |              |               |
| ASTR1000 - Descriptive Astronomy   | Credits: 3      |                   |              |               |
| AND  |                 |                   |              |               |
| ASTR2310 - General Astronomy I   | Credits: 4      |                   |              |               |
| <b>Electives</b>   |                 |                   |              |               |
| <ul style="list-style-type: none"> <li>• PHYS Elective, 2000-level or higher, Minimum 2 Credits</li> <li>• PHYS Elective, 3000-level or higher, Minimum 3 Credits</li> </ul> |                 |                   |              |               |
| <b>4000 Level Courses</b>  |                 |                   |              |               |
| <b>Course Name</b>   | <b>Credits:</b> | <b>Term Taken</b> | <b>Grade</b> | <b>Gen Ed</b> |
| PHYS4210 - Classical Mechanics I   | Credits: 3      |                   |              |               |
| PHYS4310 - Quantum Mechanics   | Credits: 3      |                   |              |               |
| OR   |                 |                   |              |               |
| ASTR4610 - Introduction to Astrophysics  | Credits: 3      |                   |              |               |
| PHYS4410 - Electricity and Magnetism I   | Credits: 3      |                   |              |               |
| PHYS4510 - Thermodynamics and Statistical Mechanics  | Credits: 3      |                   |              |               |
| <b>Required Additional Science Courses</b>   |                 |                   |              |               |
| <b>Course Name</b>   | <b>Credits:</b> | <b>Term Taken</b> | <b>Grade</b> | <b>Gen Ed</b> |
| LIFE1010 - General Biology   | Credits: 4      |                   |              |               |
| CHEM1020 - General Chemistry I   | Credits: 4      |                   |              |               |
|  |                 |                   |              |               |
| ASTR1050 - Survey of Astronomy may be substituted for similar type of course   | Credits: 4      |                   |              |               |
|  |                 |                   |              |               |
| COSC1010 - Introduction to Computer Science I  | Credits: 4      |                   |              |               |
| <b>OR</b>  |                 |                   |              |               |
| COSC1030 - Computer Science I  | Credits: 4      |                   |              |               |
| <b>OR</b>  |                 |                   |              |               |
| PHYS3000 - Methods of Physics  | Credits: 4      |                   |              |               |
| <b>Required Mathematics Courses</b>  |                 |                   |              |               |
| <b>Course Name</b>   | <b>Credits:</b> | <b>Term Taken</b> | <b>Grade</b> | <b>Gen Ed</b> |
| MATH2200 - Calculus I  | Credits: 4      |                   |              |               |
| MATH2205 - Calculus II   | Credits: 4      |                   |              |               |
| MATH2210 - Calculus III  | Credits: 4      |                   |              |               |
| MATH2310 - Applied Differential Equations I  | Credits: 3      |                   |              |               |

**Notes:**