

# PHYSICS TEACHING OPTION

SED 413	INQUIRY IN SCIENCE AND SCIENCE EDUCATION (secondary section)	3
Total Credits		48

This option is offered within the following major(s):

- Education - College of Education (<http://catalog.oregonstate.edu/college-departments/education/education-ba-bs-hba-hbs/>)

This option is for students wanting to earn a bachelor's degree in Education and qualify for an Oregon Teaching License to teach physics at the high school level (grades 9–12).

For more information, contact the College of Education Student Services Advisor, 104 Furman Hall, 541-737-4661.

## Option Code: 69

Students must meet all standards in this option by completing the required courses prior to beginning the Professional Level. Note: Most of these courses will also meet requirements in a student's first degree.

Additional option requirements:

- A cumulative 3.0 GPA is preferred for all required courses. Grades below C- are not accepted.
- All required courses must be letter graded (A–F); courses graded on Pass/No Credits (P/N) or Satisfactory/Unsatisfactory (S/U) basis are not accepted.

Code	Title	Credits
<b>Standard 1. Physics Sequence</b>		
PH 211 & PH 221	*GENERAL PHYSICS WITH CALCULUS and RECITATION FOR PHYSICS 211	5
PH 212 & PH 222	*GENERAL PHYSICS WITH CALCULUS and RECITATION FOR PHYSICS 212	5
PH 213 & PH 223	*GENERAL PHYSICS WITH CALCULUS and RECITATION FOR PHYSICS 213	5
<b>Standard 2. Chemistry Sequence</b>		
CH 231 & CH 261	GENERAL CHEMISTRY and *LABORATORY FOR CHEMISTRY 231	5
CH 232 & CH 262	GENERAL CHEMISTRY and *LABORATORY FOR CHEMISTRY 232	5
CH 233 & CH 263	GENERAL CHEMISTRY and *LABORATORY FOR CHEMISTRY 233	5
<b>Standard 3. Paradigms in Physics</b>		
Select at least 12 credits from the following:		12
PH 422	PARADIGMS IN PHYSICS: STATIC FIELDS	
PH 423	PARADIGMS IN PHYSICS: ENERGY AND ENTROPY	
PH 424	PARADIGMS IN PHYSICS: OSCILLATIONS AND WAVES	
PH 425	PARADIGMS IN PHYSICS: QUANTUM FUNDAMENTALS	
PH 426	PARADIGMS IN PHYSICS: CENTRAL FORCES	
PH 427	PARADIGMS IN PHYSICS: PERIODIC SYSTEMS	
<b>Standard 4. Modern Physics Electives</b>		
Select at least 3 credits from the following:		3
PH 315	PHYSICS OF CONTEMPORARY CHALLENGES	
PH 335	TECHNIQUES OF THEORETICAL MECHANICS	
PH 411	ELECTRONICS	
PH 415	COMPUTER INTERFACING AND INSTRUMENTATION	
PH 465	COMPUTATIONAL PHYSICS	
PH 481	PHYSICAL OPTICS	
PH 482/ECE 482	OPTICAL ELECTRONIC SYSTEMS	
PH 483/ECE 483	GUIDED WAVE OPTICS	
<b>Standard 5. Science Education</b>		