

**EDUCATION MAJOR: PHYSICS**  
**ST OLAF COLLEGE EDUCATION DEPARTMENT**  
*(For Students Entering the Teacher Education Program Fall 2022 and After)*

**Physics Teacher Candidates Must:**

1. Meet all Professional Educator Licensing and Standards Board (PELSB) Pedagogy and Content Standards.
2. Pass the Minnesota Teacher Licensure Exam (MTLE) competency exams in their Content Area(s) and in Pedagogy before licensure.
3. Have a major in Physics.

**PROFESSIONAL EDUCATION REQUIREMENTS**

	<b><u>Course Credit</u></b>
___ Education 231: Understanding Substance Abuse	0.00
___ Education 295: Foundation of Education	1.00
___ Education 300: Planning, Instruction, and Assessment	1.00
___ Education 330 Lab	0.00
___ Education 340: Differentiating Instruction	1.00
___ Education 381: Senior Seminar	0.50
___ Education 382: Human Relations Component	0.00
___ Education 389: Student Teaching	3.00

**One** Interim

___ Education 378: Multicultural Education in Hawaii (Offered in even years)( <b>OEP, PAR</b> )	1.00
___ Education 379: Urban Education Practicum and Seminar ( <b>OEP, PAR</b> )	
___ <b>One additional PAR</b> course to meet licensure standards	1.00

**PHYSICS (9-12) CONTENT AREA LICENSURE REQUIREMENTS**

___ Education 364: Teaching of Science 5-12* (Spring)	1.00
___ Education 374: Reading in the Content Area*	0.50
___ Physics 130: Analytical Physics I* (NTS)	1.00
___ Physics 131: Analytical Physics II* (NTS)	1.00
___ Physics 232: Analytical Physics III* (NTS)	1.00
___ Physics 244: Modern Physics/PHYS 245L Modern Physics Laboratory*	1.25
___ Physics 385: Advanced Physics Laboratory*	0.25
___ Physics 386: Advanced Physics Laboratory*	0.25

**One** of the following courses:

___ Physics 374: Classical Mechanics	1.00
___ Physics 375: Maxwell's Equations	
___ Physics 376: Quantum Mechanics	

**ADDITIONAL COURSES FOR THE PHYSICS MAJOR**

___ <b>Two</b> of the following:	2.00
___ Physics 374: Classical Mechanics (if not selected above)	
___ Physics 375: Maxwell's Equations (if not selected above)	
___ Physics 376: Quantum Mechanics or one additional 3XX Physics course	

This document is intended to serve as an advising tool and is subject to change. It is important for students to meet with Education Faculty regularly to verify that they are satisfying all requirements for licensure and with content faculty to ensure that major requirements are being met. All course substitutions must be documented on a Course Substitution Form and approved by the Director of Licensure.

*\* Indicates content courses in which Professional Educator Licensing and Standards Board (PELSB) Standards are embedded.*