**PHYSICS EDUCATION LICENSURE PROGRAM**

**ST OLAF COLLEGE EDUCATION DEPARTMENT**

**Physics Teacher Candidates Must:**

1. Meet all Minnesota Board of Teaching Pedagogy and Content Standards.
2. Pass the NES Basic Skills in Reading, Writing, and Mathematics prior to student teaching (this requirement could be met by reaching ACT+Writing/SAT threshold scores).
3. Pass the MTLE competency exams in their Content Area(s) and in Pedagogy before licensure.
4. Have a major in their content area (except for ESL).

**PROFESSIONAL EDUCATION REQUIREMENTS Course Credit**

\_\_\_\_ Education 231: Drugs and Alcohol 0.00

\_\_\_\_ Education 290: Educational Psychology (***HBS***) 1.00

\_\_\_\_ Education 291: Standards and Technology 0.00

\_\_\_\_ Education 330: Principles of Education (***ORC***) 1.00

\_\_\_\_ Education 372: Counseling and Communication in the Schools 0.50

\_\_\_\_ Education 375: Differentiated Instruction for Exceptional Learners 0.50

\_\_\_\_ Education 381: Senior Seminar 0.50

\_\_\_\_ Education 382: Human Relations Component 0.00

\_\_\_\_ Education 385: Human Issues in Education 0.50

\_\_\_\_ Education 389: Student Teaching 3.00

**One** Interim (***MCD***) 1.00

\_\_\_\_ Education 378: Multicultural Education in Hawaii (Offered in even years)

\_\_\_\_ Education 379: Urban Education Practicum and Seminar

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

\_\_\_\_ Education 364: Teaching of Science 5-12\* (Spring) (***WRI***) 1.00

\_\_\_\_ Education 374: Reading in the Content Area\* 0.50

\_\_\_\_ Physics 130: Analytical Physics I\* 1.00

\_\_\_\_ Physics 131: Analytical Physics II\* 1.00

\_\_\_\_ Physics 232: Analytical Physics III\* 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: 1.00

\_\_\_\_ Physics 374: Classical Mechanics

\_\_\_\_ Physics 375: Maxwell's Equations

\_\_\_\_ Physics 376: Quantum Mechanics

# ADDITIONAL COURSES FOR THE PHYSICS MAJOR

**Two** 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