## **The Physics Major**

## **Introductory Physics Sequence (16 credits)**

PHYS 165 (3): Introduction to Programming for the Physical Sciences \*

PHYS 171 (3): Introductory Physics: Mechanics and Thermal Physics

PHYS 272 (3): Fields

PHYS 275 (2): Experimental Physics L Mechanics, Heat, and Fields

PHYS 273 (3): Waves

PHYS 276 (2): Experimental Physics II: Electricity and Magnetism

## Supporting Mathematics/Mathematical Methods Courses (15 credits)

MATH 140 (4): Calculus I

MATH 141 (4): Calculus II MATH 241 (4): Calculus III

PHYS 274 (3): Mathematical Methods for Physics I

## **Upper Level Requirements (37 credits)**

PHYS 371 (3): Modern Physics

PHYS 373 (3): Mathematical Methods for Physics II

PHYS 375 (3): Experimental Physics I II: Electromagnetic Waves, Optics and Modern Physics

PHYS 401 (4): Quantum Physics I PHYS 402 (4): Quantum Physics II

PHYS 404 (3): Introduction to Statistical Thermodynamics

PHYS 405 (3): Advanced Experiments lab

or PHYS 407 (3): Undergraduate Experimental Research

PHYS 410 (4): Classical Mechanics

PHYS 411 (4): Intermediate Electricity and Magnetism

PHYS 4XX (3): Advanced Physics Elective I

PHYS 4XY (3): Advanced Physics Elective II

<sup>\*</sup>For students with experience with computer programming, this can be satisfied by a new advanced-level course, PHYS 474 Computational Physics, which will also count as one of the Advanced Physics Electives.