

# UPPER DIVISION UNIVERSITY SCHOLARS REQUIREMENTS

COLLEGE OF SCIENCES AND  
HEALTH PROFESSIONS

PHYSICS DEPARTMENT

Major field requirements for a B.S. Honors in Physics

Math and Computer Science (19 credits):

- CIS 151
- CIS 260 Programming (4 credits)
- MTH 181 Calculus I (4 credits)
- MTH 182 Calculus II (4 credits)
- MTH 281 Multivariable Calculus (4 credits)

Physics Courses (50 credits)

- PHY 243H University Physics I (5 credits)
- PHY 244H University Physics II (5 credits)
- PHY 320 Introduction to Computational Physics
- PHY 325 Introduction to Theoretical Physics
- PHY 330 Introduction to Modern Physics
- PHY 340 Mechanics and Vibrations I
- PHY 341 Mechanics and Vibrations II
- PHY 350 Electricity and Magnetism I
- PHY 351 Electricity and Magnetism II
- PHY 360 Electronics
- PHY 441 Quantum Physics I
- PHY 450 Optics and Electromagnetic Waves
- PHY 455 Optics Labs
- PHY 474 Thermal Physics (CAP) (4 credits)
- PHY 475 Statistical Physics

Honors Contract Courses (10 credits)

- PHY 395 Seminar
- PHY 441 Quantum Physics II
- PHY 493 Advanced Topics (variable credit, take as 2 + 2, minimum of 4 credits required)

Courses without credits listed are now three credits.

PHY 493 Research requires a written and oral presentation at the completion of the project

In order to graduate with the B.S. Honors in Physics, students must have a cumulative grade point average, upon graduation, of 3.20 or higher in PHY and MTH courses. A student who does not achieve this, but meets all the requirements for the B.S. degree in Physics, will receive that degree instead.

Approved by Honors Council: April 2, 2014