Honors-Science (HONR-SC)

COURSES

HONR-SC 1313. LIBERAL ARTS HONORS MATHEMATICS. 3 Hours.
Topics include the development of the real number system, different orders of infinity, the idea of convergence and how this led to the development of calculus, the concept of a mathematical proof, the conceptual foundations of topology, networks, knot theory, and modern applications of mathematics to the sciences. Crosslisted with MATH 1313.

HONR-SC 1426. HONORS CALCULUS I. 4 Hours.
A more rigorous introduction to calculus than that provided by MATH 1426. Assignments include essay questions and problems that involve research on the development, meaning, and history of concepts emphasized in the course. Students are challenged to master more difficult material in a broader disciplinary context. Credit will be given for MATH 1426 OR HONR 1426 but not both.

HONR-SC 1443. HONORS GENERAL TECHNICAL PHYSICS. 4 Hours.
This course emphasized the methodology of physics, and is closely integrated with calculus. It introduces modern ideas and theories into introductory physics (as opposed to the traditional PHYS 1443, which covers physics before 1900). The Honors course stresses problem-solving skills over the learning of algorithms. Credit will be given for PHYS 1443 or HONR-SC 1443 but not both.

HONR-SC 1444. HONORS GENERAL TECHNICAL PHYSICS II. 4 Hours.
This course emphasized the methodology of physics, and is closely integrated with calculus. It introduces modern ideas and theories into introductory physics (as opposed to the traditional PHYS 1444, which covers physics before 1900). The Honors course stresses problem-solving skills over the learning of algorithms. Credit will be given for PHYS 1444 or HONR 1444 but not both.

HONR-SC 1451. HONORS CELL & MOLECULAR BIOLOGY. 4 Hours.
This course is designed for students who seek a challenge beyond that of the traditional introductory BIOL 1441. Advanced concepts are presented and their applications in contemporary society are explored. This is a rigorous lecture course supplemented with a variety of research-related reading and writing assignments. Credit will be given for BIOL 1441 or HONR 1451 but not both.

HONR-SC 1452. HONORS STRUCTURE AND FUNCTION OF ORGANISMS. 4 Hours.
This course is designed for students who seek a challenge beyond that of the traditional introductory BIOL 1442. Advanced concepts are presented and their applications in contemporary society are explored. This is a rigorous lecture course supplemented with a variety of research-related reading and writing assignments. Credit will be given for BIOL 1442 or HONR 1452 but not both.

HONR-SC 1461. HONORS GENERAL CHEMISTRY I. 4 Hours.
This course is designed for students who seek a challenge beyond that of the traditional introductory CHEM 1441. Many key concepts will not be explained in traditional lecture fashion. Rather, they will be probed by the class while working collaborative exercises. Students will also complete a collaborative digital video project. Credit will be given for CHEM 1441 or HONR 1461 but not both.

HONR-SC 1462. HONORS GENERAL CHEMISTRY II. 4 Hours.
This course is designed for students who seek a challenge beyond that of the traditional introductory CHEM 1442. Many key concepts will not be explained in traditional lecture fashion. Rather, they will be probed by the class while working collaborative exercises. Students will also complete a collaborative digital video project. Credit will be given for CHEM 1442 or HONOR 1462 but not both.

HONR-SC 2303. HONORS SPECIAL TOPICS. 3 Hours.
Topics, format, and prerequisites to be determined by faculty offering the courses. May be repeated for credit as topics change.

HONR-SC 2407. HONORS SPECIAL TOPICS WITH LAB. 4 Hours.
Topics, format, and prerequisites to be determined by faculty offering the courses. May be repeated for credit as topics change. Completion of lab required. Prerequisite: Membership in the Honors College; other requirements as determined by faculty teaching the course.

HONR-SC 2425. HONORS CALCULUS II. 4 Hours.
A more rigorous introduction to calculus than that provided by MATH 2425. Assignments include essay questions and problems that involve research on the development, meaning, and history of concepts emphasized in the course. Students are challenged to master more difficult material in a broader disciplinary context. Credit will be given for MATH 2425 or HONR 2425 but not both.

HONR-SC 3304. SPECIAL TOPICS. 3 Hours.
Topics, format, and prerequisites to be determined by faculty offering the courses. May be repeated for credit as topics change.

HONR-SC 3305. HONORS SCIENTIFIC AND TECHNICAL WRITING. 3 Hours.
A more intensive section of BIOL 3305, offering additional reading, writing, and presentation assignments based on classic and influential literature in the biological sciences and greater attention to detail in communicating scientific and technical information efficiently and accurately for specialist audiences. Credit will be given for BIOL 3305 or HONR 3305 but not both.

HONR-SC 3407. HONORS SPECIAL TOPICS WITH LAB. 4 Hours.
Topics, format, and prerequisites to be determined by faculty offering the courses. May be repeated for credit as topics change. Completion of lab required. Prerequisite: Membership in the Honors College; other requirements as determined by faculty teaching the course.

HONR-SC 4103. ADVANCED SPECIAL TOPICS. 1 Hour.
Advanced special topics in Honors. May be repeated for credit as topics change.

HONR-SC 4303. ADVANCED SPECIAL TOPICS. 3 Hours.
Advanced special topics in Honors. May be repeated for credit as topics change.

HONR-SC 4403. HONORS SPECIAL TOPICS. 4 Hours.
Topics, format, and prerequisites to be determined by faculty offering the courses. May be repeated for credit as topics change.

HONR-SC 4407. HONORS SPECIAL TOPICS WITH LAB. 4 Hours.
Topics, format, and prerequisites to be determined by faculty offering the courses. May be repeated for credit as topics change. Completion of lab required. Prerequisite: Membership in the Honors College; other requirements as determined by faculty teaching the course.