

## BIOCORE (BCOR)

### Courses

#### **BCOR 1400. Exploring Biology 1. 0 or 4 Credits.**

Exploring biology from cells to organisms. Topics include origins of life, ancestral organisms, uni- and multi- cellular energetics, evolution of respiration and metabolism, and the genetic code. Credit not awarded for both BCOR 1400 and BIOL 1400 or BCOR 1425.

Catamount Core: N2.

#### **BCOR 1425. Accelerated Biology. 0-4 Credits.**

Selected topics from the full year of introductory biology, compressed into one semester. For students with demonstrated mastery of basic biology (e.g., AP credit). Permission required. Credit not awarded for both BCOR 1425 and BCOR 1400 or BIOL 1400. Pre/co-requisite: CHEM 1400, CHEM 1405, or CHEM 1410. Catamount Core: N2.

#### **BCOR 1450. Exploring Biology 2. 0 or 4 Credits.**

An evolutionary perspective to exploring biology. Topics include: patterns of inheritance, Darwinian evolution, evolution of biodiversity, ecology of organisms, human effects on biological systems. Credit not awarded for both BCOR 1450 and BIOL 1450.

Catamount Core: N2.

#### **BCOR 1990. Special Topics. 1-18 Credits.**

See Schedule of Courses for specific titles.

#### **BCOR 2100. Ecology and Evolution. 0 or 4 Credits.**

Ecosystem and community structure, population growth, species interactions and niche dynamics, population and chromosomal genetics, speciation in fossil records, ecology of animal behavior, applied ecology. Prerequisites: BCOR 1400, BIOL 1400, or BIOL 1000; BCOR 1450, BIOL 1450, BIOL 1005, or BCOR 1425; MATH 1212 or MATH 1234. Catamount Core: N2, SU.

#### **BCOR 2300. Genetics. 0 or 3 Credits.**

The basis of inheritance, covering topics from classical genetics to modern molecular studies. Analysis of genetic data emphasized, from prokaryotic, animal, and plant systems. Credit not awarded for both BCOR 2300 and ASCI 2160. Prerequisites: BCOR 1400, BIOL 1400, or BIOL 1000; BCOR 1450, BIOL 1450, BIOL 1005, or BCOR 1425; CHEM 1100, CHEM 1400, CHEM 1405, or CHEM 1410. Catamount Core: N1.

#### **BCOR 2500. Molecular & Cell Biology w/lab. 0 or 4 Credits.**

Explores the fundamental processes of life. Topics include cellular metabolism; structure and function of organelles; cell cycle; signal transduction; biology of cancer. CHEM 2580, BCOR 2300 recommended. Credit not awarded for both BCOR 2500 and BCOR 2505. Prerequisites: BCOR 1400, BIOL 1400, or BIOL 1000; BCOR 1450, BIOL 1450, BIOL 1005, or BCOR 1425; CHEM 1400, CHEM 1405, or CHEM 1410; CHEM 1450, CHEM 1455, or CHEM 1460. Catamount Core: N2.

#### **BCOR 2505. Molecular & Cell Biology. 3 Credits.**

Explores the fundamental processes of life. Topics include cellular metabolism; structure and function of organelles; cell cycle; signal transduction; biology of cancer. CHEM 2580, BCOR 2300 recommended. Credit not awarded for both BCOR 2505 and BCOR 2500. Prerequisites: BCOR 1400, BIOL 1400, or BIOL 1000; BCOR 1450, BIOL 1450, BIOL 1005, or BCOR 1425; CHEM 1400, CHEM 1405, or CHEM 1410; CHEM 1450, CHEM 1455, or CHEM 1460. Catamount Core: N1.

#### **BCOR 2990. Special Topics. 1-18 Credits.**

See Schedule of Courses for specific titles.

#### **BCOR 2995. Undergraduate Research. 1-18 Credits.**

Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

#### **BCOR 3000. Biology in Practice. 1 Credit.**

Introduction to a broad array of biological disciplines through attending seminars in the life sciences. The course will introduce students to hypothesis testing and data analysis and interpretation of results, as well as scientific presentation through attending weekly seminars, reading related scientific literature, and participating in class discussions. Prerequisites: (BCOR 2300, BCOR 2100) or (BCOR 2300, BCOR 2500) or (BCOR 2100, BCOR 2500) or (BCOR 2300, NSCI 2105).

#### **BCOR 3990. Special Topics. 1-18 Credits.**

See Schedule of Courses for specific titles.

#### **BCOR 3991. Internship. 1-18 Credits.**

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

#### **BCOR 3993. Independent Study. 1-18 Credits.**

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

#### **BCOR 3995. Undergraduate Research. 1-18 Credits.**

Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

#### **BCOR 4990. Special Topics. 1-18 Credits.**

See Schedule of Courses for specific titles.

#### **BCOR 4994. Teaching Assistantship. 1-3 Credits.**

Undergraduate student service as a teaching assistant, usually in an introductory-level course in the discipline, for which credit is awarded. Offered at department discretion.