

HLSC - INTEGRATED LIFE SCIENCES

HLSC100 Students in the University: Integrated Life Sciences (1 Credit)

In a small classroom setting, Integrated Life Sciences students learn about academic resources on and off campus.

Restriction: Must be in the Honors College Integrated Life Sciences program.

Credit Only Granted for: EDCP1080, HLSC100, HONR100, or UNIV100H.

HLSC207 Principles of Biology III Organismal Biology (3 Credits)

The diversity, structure and function of organisms as understood from the perspective of their common physicochemical principles and unique evolutionary histories.

Prerequisite: (BSCI160 and BSCI161; or BSCI106); and (BSCI170 and BSCI171; or BSCI105). Or students who have taken courses with comparable content may contact the department.

Restriction: Must be in the Honors College Integrated Life Sciences program.

Credit Only Granted for: BSCI207, BSCI279D, or HLSC207.

HLSC217 The British Masters of Science (3 Credits)

The British Masters of Science will look at the British Scientists who have been at the forefront of some of history's greatest advances and have shaped science as we know it today. This London study abroad program will explore these scientific masters in the city where they made their great contributions, visiting the places where they lived and worked to experience the historic foundations of science.

Restriction: Must be in the Integrated Life Sciences Honors Program.

HLSC322 Principles of Genetics and Genomics (4 Credits)

Principles and mechanisms of heredity and gene expression, with a focus on the application of genomics to contemporary medicine, biotechnology, and societal issues.

Prerequisite: HLSC207.

Restriction: Must be in a major in UGST-HCOL-Integrated Life Sciences Program.

Credit Only Granted for: HLSC322 or BSCI222.

HLSC374 Mathematical Modeling in Biology (4 Credits)

Students will learn empowering mathematical techniques through the understanding of biological models. Models are chosen from a variety of biological disciplines. Mathematical skills that will be developed along the way include: solving non-linear difference equations, eigenvector analysis, and the implementation of these algorithms as computer models.

Prerequisite: MATH131, MATH136, or MATH141. Cross-listed with BSCI374.

Credit Only Granted for: BSCI374, BSCI474, or HLSC374.

Additional Information: The HLSC374 version of this course is restricted to students in the Honors College Integrated Life Sciences program.

HLSC377 Research and Application in Life Sciences (3 Credits)

A skills based course covering current research in the life sciences emphasizing novel approaches to complex real-world problems having a biological basis.

Prerequisite: HLSC207 and HLSC322.

Restriction: Must be in the Integrated Life Sciences honors program.