

LIFE SCIENCES (LIFE-SCI)

Courses

LIFE-SCI 201 Careers in Health I Credit: 1

This course will introduce students to various healthcare professions. Guest speakers will cover topics including day-to-day activities on the job, educational requirements, career advancement, and necessary interests and abilities.

LIFE-SCI 202 Careers in Health II Credit: 1

Students will gain an understanding of the role and scope of practice of health professionals, patient privacy, professionalism, professional school applications and a deeper appreciation of what it means to be a patient through facilitated shadowing experiences.

LIFE-SCI 310 Fundamentals of Medicine I Credits: 2

This course introduces students to various aspects of women's health care. In addition, students will consider the cultural diversity of caring for patients with various medical conditions, and will integrate information from the basic sciences, the, and the social sciences as they learn about health care. Recommended preparation: BIOLOGY 202 and BIOLOGY 206.

Prerequisites: Bachelor of Science, Biomedical Sciences Emphasis Student.

LIFE-SCI 320 Fundamentals of Medicine II Credits: 2

This course introduces students to the aging process and various medical conditions in the elderly. Cultural diversity within aging patient populations will be discussed. Students will experience personal growth and reflection. Recommended preparation: LIFE-SCI 310.

Prerequisites: Bachelor of Science, Biomedical Sciences Emphasis Student.

LIFE-SCI 330 Fundamentals of Medicine III Credits: 2

This course introduces students to various aspects of pediatric health care. Students will become familiar with medical symptoms and clinical findings while integrating knowledge in anatomy, physiology, and pathophysiology of infants, children, and adolescents. Recommended preparation: LIFE-SCI 320.

Prerequisites: Bachelor of Science, Biomedical Sciences Emphasis Student.

LIFE-SCI 340 Fundamentals of Medicine IV Credits: 2

This course introduces students to aspects of adult health care, including bioethics, conflict resolution, informed consent, and human subject research. Presentations on various medical symptoms and clinical findings will be provided to integrate anatomy, physiology, and pathophysiology for learning about acute and chronic medical conditions. Recommended preparation: LIFE-SCI 330.

Prerequisites: Bachelor of Science, Biomedical Sciences Emphasis Student.

LIFE-SCI 399 Introduction to Research Credits: 1-3

Introduction to the theory and practice of research in modern biological sciences. Requires minimum of 3-4 hours per week in the laboratory for each credit hour.

Prerequisites: Departmental consent.

LIFE-SCI 497 Directed Studies—Biological Sciences Credits: 3

Individual or small group study of topics in an area of the biological sciences including class room work, presentation, library work, and writing of term papers or other reports.

Prerequisites: CHEM 320 (or CHEM 322R).

LIFE-SCI 497A Directed Studies-Bioinformatics Credits: 1-3

Individual or small group study of topics in the area of bioinformatics including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497B Directed Studies-Genetics Credits: 1-3

Individual or small group study of topics in the area of genetics including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497BB Directed Studies: Behavioral Biology Credits: 1-3

Individual or small group study of topics in the area of behavioral biology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: BIOLOGY 206 and LS-BIOC 441.

LIFE-SCI 497C Directed Studies-Microbiology Credits: 1-3

Individual or small group study of topics in the area of microbiology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497D Directed Studies-Physiology Credits: 1-3

Individual or small group study of topics in the area of physiology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497E Directed Studies - Biochemistry Credits: 1-3

Individual or small group study of topics in the area of biochemistry including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497F Directed Studies - Biophysics Credits: 1-3

Individual or small group study of topics in the area of biophysics including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497G Directed Studies-Cell Biology Credits: 1-3

Individual or small group study of topics in the area of cell biology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497H Directed Studies - Neuroscience Credits: 1-3

Individual or small group study of topics in the area of neuroscience including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497I Directed Studies-Botany Credits: 1-3

Individual or small group study of topics in the area of botany including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497J Directed Studies-Zoology Credits: 1-3

Individual or small group study of topics in the area of zoology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497K Directed Studies - Ecology Credits: 1-3

Individual or small group study of topics in the area of ecology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497L Directed Studies - Biological Sciences Credits: 1-3

Individual or small group study of topics in the area of biological sciences including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497P Directed Studies - Biotechnology Credits: 1-3

Individual or small group study of topics in the area of biotechnology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497WI Directed Studies—Biological Sciences Credits: 3

Individual or small group study of topics in an area of the biological sciences including class room work, presentation, library work, and writing of term papers or other reports.

Prerequisites: CHEM 320 (or CHEM 322R).

LIFE-SCI 499 Undergraduate Research-Biological Sciences Credits: 3

Independent research, including the writing of research reports in the area of biological sciences.

Prerequisites: CHEM 320 (or CHEM 322R).

LIFE-SCI 499A Undergraduate Research-Bioinformatics Credits: 1-3

Independent research, including the writing of research reports in the area of bioinformatics. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499B Undergraduate Research-Genetics Credits: 1-3

Independent research, including the writing of research reports in the area of genetics. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499C Undergraduate Research-Microbiology Credits: 1-3

Independent research, including the writing of research reports in the area of microbiology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499D Undergraduate Research-Physiology Credits: 1-3

Independent research, including the writing of research reports in the area of physiology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499E Undergraduate Research-Biochemistry Credits: 1-3

Independent research, including the writing of research reports in the area of biochemistry. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499F Undergraduate Research- Biophysics Credits: 1-3

Independent research, including the writing of research reports in the area of biophysics. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499G Undergraduate Research-Cell Biology Credits: 1-3

Independent research, including the writing of research reports in the area of cell biology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements. Recommended preparation: BIOLOGY 206 and LS-BIOC 441.

Prerequisites: Departmental consent.

LIFE-SCI 499H Undergraduate Research-Neuroscience Credits: 1-3

Independent research, including writing of research reports in the area of neuroscience. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499I Undergraduate Research-Botany Credits: 1-3

Independent research, including the writing of research reports in the area of botany. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499J Undergraduate Research-Zoology Credits: 1-3

Independent research, including the writing of research reports in the area of zoology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499K Undergraduate Research-Ecology Credits: 1-3

Independent research, including the writing of research reports in the area of ecology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499L Undergraduate Research-Biological Sciences Credits: 1-3

Independent research, including the writing of research reports in the area of biological sciences. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499M Undergraduate Research-Biological Sciences Honors Credits: 1-3

Independent research, including the writing of research reports in the area of biological sciences.

Prerequisites: Departmental consent.

LIFE-SCI 499P Undergraduate Research-Biotechnology Credits: 1-3

Independent research, including the writing of research reports in the area of biotechnology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499WI Undergraduate Research-Biological Sciences Credits: 3

Independent research, including the writing of research reports in the area of biological sciences.

Prerequisites: CHEM 320 (or CHEM 322R).

LIFE-SCI H490WI Honors Senior Seminar Credits: 3

Discussion, writing and specific readings to coordinate with and amplify topics covered in School of Biological Sciences seminars; must include a term paper on a specific topic. Writing Intensive.