

## **Integrated Science (SCI)**

### **SCI 100 STEM Fundamentals**

1 Hour

Prerequisites: None

2 hours weekly (1-0)

This course is designed to help STEM-oriented students in their transition to college. Students will learn about the resources and services available at John A. Logan College and other higher education institutions, as well as the expectations and challenges of being a STEM-oriented college student. They will also gain important skills that are required to achieve success in math- and science-based college coursework.

### **SCI 101 Integrated Life & Physical Science I**

IAI – LP900L/901

4 Hours

Prerequisites: None

5 hours weekly (3-2)

Using a combination of lecture and lab, this course integrates various introductory topics as they relate to the life and physical sciences. It is oriented to provide general knowledge on a variety of topics such as general biology and chemistry, cells, energy flow, genetics, evolution, earth's resources, various biotic and abiotic components of ecosystems, as well as resource availability, consumption, pollution, and sustainability, along with how it relates to climate change. The utilization of the scientific process: inquiry, as well as interpretation of data and critical thinking, will be integrated throughout the semester during both lecture and lab.

### **SCI 111 Integrated Life & Physical Science II**

IAI – LP900L/901

3 Hours

Prerequisites: Concurrent enrollment or completion of SCI 101 or consent of instructor

3 hours weekly (3-0)

This is an interdisciplinary physical and life science course that focuses on the study of humankind's relationships with other organisms and the impact on nonliving components of the environment. There are both biological and physical science topics integrated throughout the course, as a continuation from SCI 101 content. Critical thinking and the process of science is intertwined throughout the course too.

### **SCI 210A Integrated Science I**

IAI – LP 900L

3 Hours

Prerequisites: None

4 hours weekly (2-2)

Integrated Science is a lecture-laboratory course designed to provide a wide-ranging background in the life and physical sciences. The primary focus will be on providing the pre-service teacher with the information needed to meet the new science education standards based on content and inquiry methods. Future K-8 teachers will acquire knowledge that can be directly applied to lessons they will teach in the classroom, as well as enhancing their own personal scientific literacy. Science 210A will concentrate on the physical sciences.

## **SCI 210B Integrated Science II**

IAI – LP 901L

4 Hours

Prerequisites: None

5 hours weekly (3-2)

Integrated Science is a lecture-laboratory course designed to provide a wide-ranging background in the life and physical sciences. The primary focus will be on providing the pre-service teacher with the information needed to meet the new science education standards based on content and inquiry methods. Future K-8 teachers will acquire knowledge that can be directly applied to lessons they will teach in the classroom, as well as enhancing their own personal scientific literacy. Science 210B will concentrate on the life sciences.

## **SCI 215 Environmental Biology**

IAI – L1 905

3 Hours

Prerequisites: None

3 hours weekly (3-0)

An introductory course on the study of man's relationship and dependency on the environment and natural resources. Emphasis will be primarily from biological perspectives, including: ecology, biodiversity, evolution, pollution, health and natural resource management. Current environmental issues will be studied to explore their personal and social impact on society.