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# **ISCI - INTEGRATED SCIENCE**

#### ISCI 2001 Life and Earth Science (2-2-3)

Prerequisite: Completion of Area A Math and Area D with a "C" or better in each course. This course is designed as an inquiry-based science content overview for Early Childhood Education. Students will develop and demonstrate a basic understanding of fundamental principles of life and earth sciences correlated to nine themes included in the GPS: characteristics of life, biodiversity and heredity, energy flow, interdependence of life, cell structure and function, earth systems, the lithosphere, the hydrosphere, and the biosphere.

# Restriction(s):

Enrollment limited to students in the College of Educ Health Prof or College of Letters Sciences colleges.

### ISCI 2002 Physical Science (2-2-3)

Prerequisite: Students must have completed all area D courses with a grade of "C" or better and have completed their area A math requirement with a grade of "C" or better. An inquiry-based, integrated lecture and lab course for Early-Childhood Education majors in physical science. Topics to be investigated include physical and chemical properties of matter, energy, motion, simple machines, light, optics, electricity, and magnetism. Restriction(s):

Enrollment limited to students major in Early Childhood Education.

## ISCI 2246 Tutoring in Science (2-2-3)

Prerequisite; Permission of the instructor. This course prepares students to work as skilled science tutors in the Math and Science Learning Center. Students will investigate scientific learning and strategies for one-on-one tutoring of undergraduate science students through a combination of lecture and direct observation of learners. Supervised lab hours are required in science tutoring. The laboratory component will allow students will make structured observations in the Math & Science Learning Center or a K-12 tutoring environment each week. If tutoring sessions include work with K-12 students, lab hours may count toward education majors? field experience.

# ISCI 5555G Contemporary Topics in Science (3-0-3)

Prerequisite: ISCI 2001, ISCI 2002 with grades of 'C' or better. This course is designed to engage students in the study of contemporary issues in science through examination of evidence and formulation of scientific argument. Through engagement in the habits of mind of scientific inquiry, students will develop content knowledge and understanding of the interrelationships of pure and applied sciences and technology.

Prerequisite(s): ISCI 2001 with a minimum grade of C and ISCI 2002 with

a minimum grade of C

# Restriction(s):

Freshman, Sophomore, Junior or Senior students may not enroll.

### ISCI 5555U Contemporary Topics in Science (3-0-3)

Prerequisite: ISCI 2001, ISCI 2002 with grades of 'C' or better. This course is designed to engage students in the study of contemporary issues in science through examination of evidence and formulation of scientific argument. Through engagement in the habits of mind of scientific inquiry, students will develop content knowledge and understanding of the interrelationships of pure and applied sciences and technology.

**Prerequisite(s):** ISCI 2001 with a minimum grade of C and ISCI 2002 with a minimum grade of C

#### Restriction(s):

Freshman or Sophomore students may **not** enroll.