

# SCIENCE EDUCATION (SCIE)

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## **SCIE 551 TEACHING SCIENCE IN EARLY CHILDHOOD (2)**

Course is designed to familiarize the student with appropriate methods and materials in science for the young child. Emphasis will be on interdisciplinary approach. Prerequisite: ECED 341 (may be taken concurrently).

## **SCIE 580 TEACHING SCIENCE IN THE SECONDARY SCHOOLS (3)**

Selection of appropriate content, method and evaluation techniques, analysis of textbooks and resource materials for teaching science in the middle and high schools. Must be taken the semester prior to student teaching. Prerequisite: SCED 341 or ELED 363.

## **SCIE 650 ENGINEERING IN INTEGRATED STEM EDUCATION (3)**

Students investigate the engineering design process, engineering habits of mind, and engineering fields, and consider how teachers teach and students learn about engineering and to engineer in the context of integrated STEM (Science, Technology, Engineering & Mathematics) education in grades PreK-12.

## **SCIE 652 EARTH-SPACE & PHYSICAL SCIENCE IN INTEGRATED STEM EDUCATION (3)**

Students explore physical and Earth-space science concepts, scientific practices, and ways in which teachers teach and students learn about these concepts and practices in the context of integrated STEM (Science, Technology, Engineering & Mathematics) education in grades PreK-12.

## **SCIE 670 SPECIAL TOPICS IN SCIENCE EDUCATION (1-4)**

Selected topic in science education. Prerequisite: Varies with topic.

## **SCIE 685 PRACTICUM IN INTEGRATED STEM EDUCATION (3)**

Practices and trends in organizing, teaching, and improving programs in PreK-12 integrated STEM education.