Science (SCI)

Courses

SCI 1001. FYE: Science/Pre-Professional. 1 Hour.
A First Year Experience course strongly recommended for all entering freshmen and transfer student with 0-24 credits. Designed to help students succeed in science and other courses, adapt to university life, and become integrated into Dixie State University. Students will refine academic skills, create and foster social networks, learn about university resources, and explore different fields of study, degree options, and career opportunities as well as learning what science is and some of the career paths one can take in science. Multiple listed with all other sections of First Year Experience (all 1001 courses, ENGR 1000). Students may only take one FYE course for credit. FA, SP.

SCI 2600. Lab Safety for Teachers. 1 Hour.
Scientific school laboratory safety certification course required for secondary education majors to receive teaching endorsements in the sciences. Course will include the necessary knowledge required for pre-service teachers to safely teach lab science, including identifying the most common safety issues and providing affordable solutions. Offered upon sufficient student need.

SCI 3570. Foundation of Science Education. 3 Hours.
For students with a major or minor in secondary science education. Thorough investigation of research in science learning and state and national curricular standards. Philosophy of science, history of science, nature of scientific inquiry, and current research in science education are included as applicable to secondary science teaching. Serves as a foundation to pre-service science teachers' professional coursework.

SCI 4130. Science Teaching Methods. 3 Hours.
Required of students pursuing a Biology Secondary Education degree. Designed to assist pre-service teachers plan, teach, and evaluate activities for biology classes. Students will examine objectives, instructional methods, and curriculum for biology in secondary schools. Students will gain experience in developing, adapting, evaluating and using strategies and materials for teaching biology. Special characteristics of the science discipline will be considered. Students will be exposed to a diversity of laboratory and outdoor environmental materials and methods. This course does not fulfill a Biology elective for the Bachelor of Science in Biology degree. Offered based upon sufficient student need. Prerequisite: Admission to the Dixie State University Secondary Education Licensure program.

SCI 4700. Secondary Science Teaching Methods. 3 Hours.
Acquaintance and practice with various teaching and assessment methods in science. Development of science curricula emphasizing the integrated linkages between subjects. Development of science lesson and unit plans. It is recommended that students complete this course immediately prior to student teaching. FA.

SCI 4800R. Independent Research. 1-3 Hours.
Students will devise and perform original, preferably unique research projects in their respective Physical Science fields. The culmination of this project will be a publication-quality paper on their research that uses primary scientific literature pertinent to the student's field and individual projects. Repeatable for a maximum of 6 credits subject to graduation restrictions. Prerequisite: Instructor permission and Senior standing. Offered upon sufficient student need.