

GENERAL SCIENCE (GS)

GS 181 Special Topics: Undergraduate Laboratory Research (1 credit)

This course is an introduction to laboratory research methods for the STEM major. Competency in designing research problems and conducting experimentation is essential in STEM-related advanced studies and careers in research and industry. Students will gain an understanding of the scientific process by defining and researching a scientific problem, developing hypotheses and experimental protocols, analyzing results, and drawing conclusions. Students will present their findings in written and oral presentations. This course is 1 credit.

Prerequisite(s): (GS 182)

GS 182 Introduction to Research Methods (2 credits)

This course is an introduction to research methods for the STEM major. Students will gain an understanding of the scientific process, learn strategies for finding information from online and library resources, develop the ability to read and critically analyze scientific literature, and write a scientific literature review. Students will also identify a scientific problem and be introduced to the process of developing a scientific research proposal related to this problem. This course is 2 credits. Course fee.

GS 183 Special Topics: Introduction to Research Methods (3 credits)

This course is an introduction to research methods for the STEM major. Competency in designing research problems and conducting experimentation is essential in STEM-related advanced studies and careers in research and industry. Students will gain an understanding of the scientific process and develop scientific information literacy and writing skills. In addition, students will define and research a scientific problem, develop and test hypotheses using experimental protocols, analyze results, and draw conclusions. Students will present their findings in written and oral presentations. This course meets for 30 lecture/discussion hours and 45 laboratory hours per semester. Course fee.