ASR 210 - INTERMEDIATE SCIENCE RESEARCH I

Course Description

Students learn research methodology in the natural and social sciences by accessing scientific databases, using online bibliographic search techniques, consulting doctoral-level research scholars, developing hypotheses and performing experiments to test them, and writing research papers and making presentations at scientific symposia. Emphasis is placed on the formulation of hypotheses and initiation of experiments in consultation with mentors. Course may also be taken by students that have completed the ASR high school sequence to continue their research. Group 2 course.

Credit Hours

2

Contact Hours

2

Lecture Hours

2

Required Prerequisites

Completion of one 100-level science course or ASR 121; permission of instructor.

General Education Outcomes supported by this course

Communications - Direct

Course Learning Outcomes

Knowledge:

- Identify and utilize online tools for researching advanced scientific articles.
- Summarize and explain primary scientific research articles.

Application:

- Formulate a research question and hypotheses based on initial, exploratory research.

Integration:

- Differentiate your own research question from previous research.

Human Dimension:

- Critically reflect on feedback offered by others during the process of developing a research project.

Caring - Civic Learning:

- Share your results and enthusiasm of a preliminary research project.
- Develop a research project.

Learning How to Learn:

- Develop a plan to continue your research project.