# **SVR 110 - FUNDAMENTALS OF SURVEYING**

## **Course Description**

Using a variety of surveying equipment and software, students will learn methods and techniques to observe, analyze and integrate field measurements in surveying applications. This includes the proper care and setup of instruments, units of measurement, horizontal and zenith angles, directions, distances, elevations, interpreting and generating contour lines, map reading, field notes and the presentation of data on a completed map. Students will directly apply this knowledge in field activities. Group 2 course

## **Credit Hours**

5

## **Contact Hours**

8

## **Lecture Hours**

2

## **Lab Hours**

6

## **Required Prerequisites**

MTH 121 or higher, can be taken concurrently

## **General Education Outcomes supported by this course**

Communications - Direct

## **Course Learning Outcomes**

#### Knowledge:

- Demonstrate competency in survey equipment set up and operation.
- Develop procedural manuals for proper equipment use.

## Application:

Collect necessary data for constructing a map.

#### Integration:

· Create a comprehensive topographic maps.

### **Human Dimension:**

· Interact with a team for the completion of a project.

#### Caring - Civic Learning:

· Describe the impacts of surveying projects on society.

#### Learning How to Learn:

 Compile log books for developing proper survey instrument procedures.