Miami Dade College

Course Description

SUR1001C | Construction Survey | 3.00 credits

Practice of surveying as related to the building and construction industry. Includes a combination of classroom instruction and practical field problems with the tape, level and transit. Prerequisite: MAC1114 or MAC1147.

Course Competencies

Competency 1: The student will demonstrate an understanding of the history and context of surveying by:

1. Identifying the historical drivers for surveying.
2. Listing significant events in the development of surveying.
3. Identifying and analyzing current uses and the importance of surveying to society.

Competency 2: The student will demonstrate hands-on skills in the use of essential measuring tools by:

1. Performing field measurement exercises using essential measuring tools.
2. Determining the individual pacing value in the field.
3. Performing a traverse survey using tapes/chains will record field data correctly.

Competency 3: The student will demonstrate the correct use of field notes by:

1. Recording field data in the correct format.
2. Performing field calculations using field notebooks.
3. Demonstrating accuracy and precision in notetaking. Performing data error checks and correctly recording the results.

Competency 4: The student will demonstrate an understanding of the units of measurement used in surveying by:

1. Analyzing and calculating derived information from field data.
2. Manipulating field data to determine areas, lengths, and volumes.
3. Collecting field measurements of angles, bearings, and azimuths.

Competency 5: The student will demonstrate proficiency in performing primary field surveys by:

1. Performing field differential leveling surveys.
2. Performing field exercises to collect grid survey data
3. Calculating material volumes from grid survey data.
4. Performing set surveys.
5. Calculating elevations from field data.
6. Determining elevations by the use of instruments.

Competency 6: The student will demonstrate proficiency in performing construction layouts by:

1. Staking out a basic residential floor plan using standard field survey technique.
2. Identifying information from field stakes

Learning Outcomes:

1. Information Literacy
2. Cultural / Global Perspective
3. Numbers / Data
4. Communication
5. Aesthetic / Creative Activities
6. Critical Thinking