Miami Dade College

SUR1001C CONSTRUCTION SURVEY

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Course Description: 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 MAC 1147. (2 hr. lecture 2 hr. lab)
Prerequisite: MAC1114 , MAC1147

Course Competency	Learning Outcomes
Competency 1: The student will will demonstrate an understanding of the history and context of surveying by:	4. Information Literacy 5. Cultural / Global Perspective
1. 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 basic measuring tools by:	2. Numbers / Data
1. 1. Performing field measurement exercises using basic measuring tools. 2. Determining the individual pacing value in the field. 3. Performing a traverse survey using tapes/chains and will correctly record field data.	
Competency 3: The student will demonstrate the correct use of field notes by:	1. Communication
1. 1. Recording field data in the correct format. 2. Performing field calculations using field notebooks. 3. Demonstrating accuracy and precision in note taking. 4. Performing data error checks and correctly recording the results.	
Competency 4: The student will demonstrate understanding of the units of measurement used in surveying by:	2. Numbers / Data
1. 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 basic field surveys by:	9. Aesthetic / Creative Activities
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 offset 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:	3. Critical thinking
1. Staking out a basic residential floor plan using standard field survey techniques 2. Identifying information from field stakes	