BASIC SURVEYING
CE 263
FALL 2015

INSTRUCTOR: William F. Eichfeld, OFFICE: ENGR B, Room 30
453-7838 (Office) OFFICE HOURS: 1:00 - 2:50 p.m. MTWF
457-5242 (Home-Before 9:00 p.m.)
eichfeld@ engr.siu.edu

Laboratory Instructor: Kyle Frick Salman Sulaiman
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Important Facts:

ISBN 9780470496619

OBJECTIVES: This is a beginning course in surveying designed to introduce students to the principles and equipment of surveying and the profession of surveying.

CATALOG Description: An introductory course designed to introduce the principles, theory, and equipment of surveying. Development of survey field practices on the earth’s surface and subsurface and related computations. Prerequisite: MATH 111.

GRADING: Exam 1 20 % 90 % - 100 % = A
Exam 2 20 % 80 % - 89 % = B
Homework 10 % 70 % - 79 % = C
Laboratory 25 % 60 % - 69 % = D
Final Exam 25 % 0 % - 59 % = F

LABORATORY: Laboratory Attendance is Required!

LATE WORK: Late work will not be accepted.
1. Work each problem completely, show all work neatly.
2. Homework is due at the beginning of the period.

SCHEDULE, Week of:
8/24 Introduction, Organization, & Surveying Measurements & Errors
Chapters 1, 2, & 24
8/31 Distance Measurement & Survey Units and Conversions
Chapters 3 & 4
9/07 (Labor Day – No class on Monday) Surveying Equipment (Transit, Theodolite, Total Stations), Chapter 5
9/14 Angles (Measurement) and Types
Chapters 9, 10, & 11
9/21 Direction (Azimuth & Bearing) and Meridians
Chapters 9, 10, & 11
9/28  Traversing (Closed & Radial) and Traverse Computations  
     Chapters 11 & 12

10/05  EXAM 1, Traverse Computations and Rectangular  
     Coordinates, Chapters 11 & 12

10/12  (Fall Break – no class on Monday) Traverse Adjustments and Area

10/19  Elevations: Levels & Leveling  
     Chapters 6, 7, & 8

10/26  Profile Leveling and Cross Sections  
     Chapters 6, 7, & 8

11/02  Coordinate Geometry (Inverse and Intersection)  
     Chapter 13

11/09  Coordinate Systems, Datums, Chapter 13 (Veteran’s Day on Wednesday-no class)

11/16  Topographic Mapping (Methods & Types) and  
     Contours, Chapter 14

11/23  EXAM 2, (Thanksgiving – no class on Wednesday or Thursday)

11/30  Public Land System, Chapter 21

12/07  Horizontal Curves, Vertical Curves, Chapters 22 & 23

12/14  Final Exam Week

FINAL EXAM
     Friday, December 18, 2015
     8:00 a.m. – 10:00 a.m.
BASIC SURVEYING-LABORATORY
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Laboratory 1 – Point Location

Laboratory 2 – Pacing

Laboratory 3 – Taping

Laboratory 4 – Horizontal Angles

Laboratory 5 – Total Station

Laboratory 6 – Differential Leveling

Laboratory 7 – Traverse Computations

Laboratory 8 – Inaccessible Point Elevation