CET 251 Elements of Land Surveying 1

Course Description: A course on fundamental concepts and techniques of land boundary surveying. Topics include: records research, state minimum standards, monumentation of corners, and simple plats and legal descriptions. Students must complete field exercises.

Prerequisites(s): CET 110 **Corequisite(s):** None

Lecture Hours: 3	Lab Hours: 2	Credit Hours: 4
Lab Fee: $70	Supplemental Fee: $0	Purpose:
☐ Transfer Assurance Guide Course (TAG)	☐ Transfer Module Course (TM)	
Course Format: Lec/Lab	Grading: A/B/C/D/F/I	
Delivery Method: ☒ Web ☒ Hybrid ☒ Classroom		
Semesters Offered: ☒ Fall □ Spring □ Summer		

Course Primary Text:

Title: Brown's Boundary Control and Legal Principles	Edition: 7th
Author(s): Robillard, Walter G., Donald A. Wilson, Curtis M. Brown	
Publisher: Wiley	
Title: Evidence and Procedures for Boundary Location	Edition: 7th
Author(s): Robillard, Walter G., Donald A. Wilson, Curtis M. Brown	
Publisher: Wiley	
Title: Original Ohio Land Subdivisions Volume III of the Final Report	Edition:
Author(s): Sherman, C.E	
Publisher: State of Ohio Department of Natural Resources, Division of Geological Survey	
Title: Writing Legal Descriptions in Conjunction with Survey Boundary Control	Edition: 4th
Author(s): Wattles, Gourdon H	
Publisher: Wattles Publications	

Supplemental Materials:

Original Ohio Land Subdivisions Volume III of the Final Report Map Supplement
Articles retrieved from internet

Course Outcomes:

1	ABET (B), Introduced: an ability to apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require limited application of principles but extensive practical knowledge.
2	ABET (E), Introduced: an ability to identify, analyze, and solve narrowly defined engineering technology problems.
3	ABET (F), Introduced: an ability to apply written, oral, and graphical communication in both technical and non-technical environments.
4	ABET (G), Reinforced: an understanding of the need for and an ability to engage in self-directed continuing professional development.
5	ABET (H), Reinforced: an understanding of and a commitment to address professional and ethical responsibilities, including a respect for diversity.
6	ABET (I), Reinforced: a commitment to quality, timeliness, and continuous improvement.

Course Topics:

Week 1	Introduction to the Course and NCEES
Week 2	Role of the Surveyor, duties and limitations
Week 3	Types of Surveys; boundary, topographic, ALTA, mortgage inspections, condominium, as-builts, floodplain, FEMA
Week 4	The Surveyor as an Expert Witness, Common Law, Case Law, Statute Law
Week 5	Exam 1
Week 6	Liability of the Surveyor, Initial Client Contact
Week 7	Site Visit, Initial Client Contact Checklist
Week 8	Contracts, Exam 2
Week 9	Registered Land, Legal Descriptions, Deeds, Covenants and Restrictions, Easements and Encumbrances
Week 10	Surveyors Reports, Original Surveys, Deed Preparation, Exam 3
Week 11	USPLSS, Ohio and Indiana
Week 12	Metes and Bounds, Kentucky
Week 13	Boundaries, Easements, Sectionalized Lands, Exam 4
Week 14	Reading Deeds and Preparing a Graphical Abstract
Week 15	Final Project

Methods of Evaluation/Assessment

Classroom Activities 13 @ 30 points each
Quizzes 2 @ 30 points each
Exams 4 @ 100 points each
Final Project 1 @ 150 points each

Course Keeper: Carol L. Morman, PE, PS

Date Completed: September 12, 2013
Updated: September 16, 2016
Updated: March 15, 2019