

**SURV 58 Course Outline as of Summer 2025****CATALOG INFORMATION**

Dept and Nbr: SURV 58 Title: BOUNDARY DETERMINATION

Full Title: Evidence and Procedures for Boundary Determination

Last Reviewed: 12/13/2021

Units	Course Hours per Week		Nbr of Weeks		Course Hours Total	
Maximum	4.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	4.00	Lab Scheduled	3.00	6	Lab Scheduled	52.50
		Contact DHR	0		Contact DHR	0
		Contact Total	6.00		Contact Total	105.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 210.00

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly: CEST 59A

**Catalog Description:**

In this course students will explore the historical development, current concepts, records research, field methods, and evidence and procedures used in boundary determination. This course is intended for those in the fields of civil engineering, land surveying, real estate, and title insurance. Field trips required.

**Prerequisites/Corequisites:**

Course Completion of APTE 191, CEST 51, and SURV 60

**Recommended Preparation:****Limits on Enrollment:****Schedule of Classes Information:**

Description: In this course students will explore the historical development, current concepts, records research, field methods, and evidence and procedures used in boundary determination. This course is intended for those in the fields of civil engineering, land surveying, real estate, and title insurance. Field trips required. (Grade Only)

Prerequisites/Corequisites: Course Completion of APTE 191, CEST 51, and SURV 60

Recommended:

Limits on Enrollment:

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:

<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
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<b>CSU Transfer:</b>	Transferable	Effective:	Fall 1981	Inactive:
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<b>UC Transfer:</b>		Effective:		Inactive:
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**CID:**

**Certificate/Major Applicable:**

Both Certificate and Major Applicable

## **COURSE CONTENT**

**Student Learning Outcomes:**

At the conclusion of this course, the student should be able to:

1. List and define the differences between public lands and private lands boundaries
2. List and analyze types of evidence
3. Prepare and interpret legal descriptions of land boundaries
4. Describe and determine the differences between property rights, property ownership and property boundaries
5. Perform basic records research and reconnaissance for boundary surveys
6. Perform basic field methods in support of boundary surveys

**Objectives:**

At the conclusion of this course, the student should be able to:

1. Summarize the historical development of current land law in California and the United States
2. Identify the concepts and types of evidence used in boundary determination
3. List the types of ownership and evaluate the effects of transfers of property
4. Interpret and prepare various types of legal descriptions
5. Analyze the effects of unwritten title in property surveys
6. Describe the responsibilities of the professional surveyor, court, attorney, title company, engineer, local agencies, and landowners in boundary determination
7. Research and obtain hard copy and electronic land surveying related records from public agencies
8. Perform various boundary surveying field methods

**Topics and Scope:**

Lecture

- I. History and Overview of Property Surveying and Boundary Systems
  - A. Babylonian and Egyptian systems

- B. Native American lands
- C. French system
- D. Spanish and Mexican land grants
- E. Other systems: Texas, colonial eastern seaboard states
- F. Public Domain
- G. Lands held in trust by the State of California
- H. Lands held privately and Common Law
- II. Ownership of Real Property
  - A. Acquisition and transfer of real property
    - 1. Simultaneous and sequential conveyances
    - 2. Unwritten conveyances
    - 3. Eminent domain
  - B. Interests in Real Property
    - 1. Individual vs. shared
    - 2. Controlling interest
    - 3. Lenders and title
  - C. Supplemental laws
    - 1. Homesteads
    - 2. Statute of frauds
    - 3. Statute of limitations
    - 4. Power of attorney
  - D. Real property encumbrances
    - 1. Liens
    - 2. Trust deeds
    - 3. Land contracts
    - 4. Recording
    - 5. Judgments
    - 6. Title insurance
- III. Priority of Controlling Calls
  - A. Types of controlling calls
  - B. Order of priority
- IV. Evidence Used for Locating Land
  - A. Types of evidence
  - B. Preserving and recording evidence
  - C. Evidence and technology
  - D. Calculations and measurements as evidence
- V. Requirements for Written Title Boundaries
  - A. Legal
  - B. Financial
- VI. Writing Legal Descriptions
  - A. Types of legal descriptions
  - B. Parts of a legal description
  - C. Considerations when drafting descriptions
- VII. The Surveying Profession
  - A. The surveyor in court
  - B. The surveyor in business
  - C. Professional liability
  - D. Professional stature

## Laboratory

- I. Boundary Survey Planning and Implementation
  - A. Client intent and survey needs

- B. Records assembly and review
- C. Geographic Information System (GIS) data acquisition
- D. Hard copy maps versus digital maps
- E. Adjoiner notification, legal access
- F. Equipment familiarization, preparation, and use
- II. General Boundary Research at County Offices
  - A. Introduction to Sonoma County Surveyor's Office
  - B. Introduction to Sonoma County Clerk-Recorder's Offices
  - C. Introduction to adjoining county offices
- III. Boundary Survey Field Reconnaissance
  - A. Records assembly and review
  - B. GIS data acquisition
  - C. Hard copy maps versus digital maps
  - D. Adjoiner notification, legal access
  - E. Field evidence identification
  - F. Equipment familiarization, preparation, and use
- IV. Boundary Survey Field Methods
  - A. Boundary creation versus retracement
  - B. Measurement equipment
  - C. Locating equipment
  - D. Evidence assessment
  - E. Field notes and data collection
- V. Boundary Review and Resolution
  - A. Review data
  - B. Interpret data
  - C. Resolve, opine on boundary location
- VI. Boundary Mapping and Submittal
  - A. Review data
  - B. Interpret data
  - C. Create maps and plats in Computer-Aided Design and Drafting (CADD)
  - D. Mock map submittal for review and recording

**Assignment:**

Lecture

1. Textbook reading (1-2 chapters per week)
2. Homework sets (8-14)
3. Quizzes (7-14)
4. Exams (2-4)
5. Final exam

Lab

1. Exercises and performance evaluations (weekly)
2. Written lab reports, field reports, plats and legal descriptions (3-6)

**Methods of Evaluation/Basis of Grade:**

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Legal descriptions and homework sets	Writing 15 - 25%
<b>Problem Solving:</b> Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.	
Written reports and homework sets	Problem solving 20 - 30%
<b>Skill Demonstrations:</b> All skill-based and physical demonstrations used for assessment purposes including skill performance exams.	
Field laboratory exercises	Skill Demonstrations 10 - 20%
<b>Exams:</b> All forms of formal testing, other than skill performance exams.	
Quizzes, exams, and final exam	Exams 30 - 40%
<b>Other:</b> Includes any assessment tools that do not logically fit into the above categories.	
Class participation	Other Category 10 - 15%

**Representative Textbooks and Materials:**

Evidence and Procedures for Boundary Control. 7th ed. Robillard, Walter and Wilson, Donald. Wiley. 2013 (classic)

Forensic Procedures for Boundary and Title Investigation. Wilson, Donald. Wiley. 2008 (classic)

Instructor prepared materials