



IAAO

INTERNATIONAL ASSOCIATION
of **ASSESSING OFFICERS**

Valuing the World

Course 600 - Principles and Techniques of Cadastral Mapping



Course Description

Principles and Techniques of Cadastral Mapping is intended to be a comprehensive, interactive program to introduce entry-level map maintenance personnel and assessment technicians to the field of cadastral mapping. Students are presented basic mapping principles and techniques and are expected to demonstrate basic skills that will allow them to plot deeded descriptions in both the metes and bounds land description system and the Public Land Survey System.

Principles and Techniques of Cadastral Mapping utilize lectures, classroom discussion, and exercises to emphasize the main concepts and procedures taught in the course. Chapter One provides the students with a background and history of mapping in general and addresses the specifics of creating a county-wide assessment mapping program.

Chapter Two introduces the students to the various tools and techniques used by cadastral mappers to plot deed descriptions that contain bearings, azimuths, curves and field angles.

Chapter Three provides an overview of locational systems including latitude and longitude and state plane coordinates. This chapter discusses mathematical projections used in the creation of a flat map from a curved surface.

Chapter Four discusses the various base maps available to today's assessment mapping personnel. In addition, aerial photograph displacement is discussed and explained. This provides an understanding of how photo distortion can affect the accuracy of assessment maps.

Chapter Five explains the various methods available to describe land, provides examples of each and uses exercises to enhance the learning experience.

Chapter Six covers conveyance records, area determination and parcel identification systems.

Chapter Seven addresses the importance of proper map maintenance, explains the different types of maintenance the assessment map technician must complete and provides exercises to enhance the learning experience.

Chapter Eight provides guidance in determining the requirements for a proper cadastral mapping program and explains the value of creating and managing a parcel-level information system.



Objectives

Upon completion of Chapter 1, you will be able to:

- Through class participation discussions and successful completion of the diagnostic drill, students will demonstrate their comprehension of the background and history of the cadastral mapping process, and how it has developed in the assessor's office.

Upon completion of Chapter 2, you will be able to:

- Through successful completion of exercises, the students will draw and solve problems containing bearings, azimuths, field angles and curve data thereby demonstrating their comprehension of the methods used to describe property.

Upon completion of Chapter 3, you will be able to:

- Through both class participation and discussions and successful completion of the diagnostic drill the class will demonstrate their comprehension of latitude and longitude. Also, through the successful completion of coordinate exercises, the student will draw and find the location of points demonstrating their comprehension of the State Plane Coordinate System.

Upon completion of Chapter 4, you will be able to:

- Through both class participation discussions and successful completion of the diagnostic drill, students will acknowledge their comprehension of terminology and different types of base maps.

Upon completion of Chapter 5, you will be able to:

- Through successful completion of mapping exercises the student will demonstrate their understanding and application of Metes and Bounds, PLSS and Platted Subdivisions.

Upon completion of Chapter 6, you will be able to:

- Through successful completion of quizzes and area calculation exercises the student will demonstrate an understanding of conveyances, acreage determination and parcel identification systems.

Upon completion of Chapter 7, you will be able to:

- Through successful completion of mapping exercises the students will demonstrate their understanding of maintaining a cadastral map.

Upon completion of Chapter 8, you will be able to:

- The students will demonstrate their understanding of mapping program management.

Topic	Time Table	Day Covered
Module 1		
Background and History	120 Minutes	Monday AM
Module 2		
Mapping Tools and Techniques	480 Minutes	Monday AM/PM / Tuesday AM
Module 3		
Locational Systems	180 Minutes	Tuesday PM
Module 4		
Base Maps	120 Minutes	Tuesday PM/Wednesday AM
Module 5		
Legal Descriptions	420 Minutes	Wednesday AM/PM / Thursday AM
Module 6		
Administrative	180 Minutes	Thursday AM
Module 7		
Maintenance	180 Minutes	Thursday PM
Module 8		
Mapping Program Management	60 Minutes	Thursday PM
Review	120 Minutes	Friday AM