

## **Course 102 – Income Approach to Valuation**

## **Course Description**

The Income Approach to Valuation is designed to provide the students with an understanding and working knowledge of the procedures and techniques required to estimate the market value of vacant or improved properties by the income approach. The material covers real estate finance and investment, capitalization methods and techniques, analysis of income and expenses operating income, selection of capitalization rates, and application of the approach. The Income Approach to Valuation utilizes lectures, classroom discussion, and homework problems to emphasize the main concept and procedures taught in the course.

Chapter 1 provides the student with an understanding and working knowledge of real estate finance and investment along with fundamental appraisal concepts necessary to estimate the market value of vacant and improved property.

Chapter 2 is designed to provide students with an understanding and working knowledge of the sources used by appraisers to obtain income and expense data. The chapter also includes an introduction to leases and rents used to help estimate income. The student is exposed to the levels of income (potential gross income, effective gross income, and net operating income), along with proper and improper expenses to consider when estimating the appropriate net operating income to capitalize in the income approach. Finally, the student is taught to develop an accurate reconstructed operating income statement suitable for property tax appraisal using the income approach.

Chapter 3 provides the student with the fundamentals for developing appropriate capitalization rates. Introduced in this chapter is the development of the property's overall capitalization rate, effective tax rate, and the overall yield rate. The student will also learn the difference in the overall capitalization rate and the overall yield rate.

Chapter 4 is designed to teach the students current capitalization procedures that are appropriate in modern appraisal problems and when it is appropriate to use direct capitalization and yield capitalization. As part of the yield capitalization techniques the student is introduced to compound interest tables and the six functions therein in order to estimate the market value of level and variable income streams with reversions.

Chapter 5 introduces the student to straight-line capitalization procedures that are appropriate in certain applications. The student is taught when it is appropriate to use straight-line capitalization and the land and building residual techniques commonly used therein. This chapter will enable the student to work with residual techniques and provide the student the basics for residual techniques that are used in more advanced capitalization procedures.

## **Objectives**

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

- Recognize the definition of income-producing property.
- Recognize the difference between market value and investment value and know why these differences are significant in deriving value estimates by the income approach.
- Explain how the appraiser's understanding of anticipation, change, and the other basic appraisal principles aids in the analysis of market data necessary in the application of the income approach.
- Understand the relationship between highest and best use and the income capitalization approach to value.
- Recognize the different investor requirements for income-producing properties.
- Recognize the factors that influence the behavior of investors in real estate.
- Identify and explain the various types of financing available to investors in real estate.
- List the sources of financing for purchasing real estate.
- Identify and be able to explain the following components of capitalization rates: discount rate; recapture rate; and effective tax rate.
- Understand the basic concepts of the income approach model and how supply and demand factors interact in specific markets.
- Understand the income capitalization formulas (IRV, which is Income equals Rate times Value and VIF, which is Value equals Income times the Factor) in appraising income-producing properties.

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

- Identify the sources of data the appraiser utilizes in estimating income and expense and explain the importance of the accuracy and relevance of market information.
- Identify and explain the various types of rents associated with income-producing properties.
- Identify and understand leases associated with the rental of income-producing properties.
- Understand and be able to derive rental units of comparison in the application of the income approach to valuation.
- Explain the levels of income, potential gross income (PGI), effective gross income (EGI), net operating income (NOI) and the importance of accurate income and expense analysis.
- Identify the categories of income and expense used in reconstructed operating statements of income-producing properties.
- Develop an accurate reconstructed operating statement for appraisal purposes.

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

- Understand the relationship between property income and property value, as expressed by a capitalization rate.
- Understand the components and the functions of the various types of capitalization rates.
- Recognize the formulas that express the relationship between income and value.
- Understand the uses of the IRV and VIF equations in the valuation of income-producing properties.
- Recognize the definition of overall capitalization rate.
- Recognize the practical methods of developing and overall capitalization rate.
- Demonstrate the need for consistency in deriving and applying rates and factors.
- Develop the overall property yield rate from the band of investment technique and extraction from the yield-change formula.

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

- Understand and identify the definition of direct capitalization.
- Identify the mathematical relationships between income and value used in direct capitalization and explain how they are indicated in sales transactions and other market evidence.
- Understand the derivation and application of gross income multiplier in direct capitalization.
- Identify the common symbols used in the income capitalization approach.
- Recognized the procedures used to process income estimates and convert income to value using direct capitalization.
- Understand and identify the definition of yield capitalization.
- Explain the differences between yield capitalization and direct capitalization.
- Identify and understand the definition of an annuity.
- Identify the income stream patterns used in yield capitalization.
- Understand and identify the definition of an annuity.
- Understand and identify the definition of discounted cash flow (DCF) analysis and the components needed for application in yield capitalization.
- Identify the six basic financial functions and the formulas used to compute each financial factor.
- Understand how the compound interest tables can be used for solving common appraisal problems.
- Explain the difference between an effective interest rate and a nominal interest rate.

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

- Understand and be able to select a proper capitalization residual technique in appraising income-producing properties.
- Find value of income-producing properties using the building residual technique.
- Find value of income-producing properties using the land residual technique.
- Analyze the shape and behavior of the income stream.
- Understand the structure of straight-line capitalization.

## **Timetable**

Topic	Time Requirement	Day Covered
Chapter 1		
Introduction & Class Orientation	30 Minutes	Monday AM
Overview & Introduction to Income Capitalization	15 Minutes	Monday AM
Real Estate Investment	15 Minutes	Monday AM
Real Estate Financing	60 Minutes	Monday AM
Primary Rates	30 Minutes	Monday AM
Generic Capitalization Formulas	40 Minutes	Monday AM
Review Questions	20 Minutes	Monday AM

Topic	Time Requirement	Day Covered
Chapter 2		
Sources of Income Data	15 Minutes	Monday AM
Basis of Income	30 Minutes	Monday PM
Considerations When Comparing Rental Properties	20 Minutes	Monday PM
Rental Units of Comparison	60 Minutes	Monday PM
Income and Expense Statement	90 Minutes	Monday PM
Review Questions	25 Minutes	Monday PM
Chapter 3		
Introduction to Relationship of Capitalization Rates & Value Estimate	30 Minutes	Tuesday AM
Overall Capitalization Rate (Ro) or (OAR)	15 Minutes	Tuesday AM
Six Methods of Developing an Overall Capitalization Rate (Ro)	3 ½ Hours	Tuesday AM/Tuesday PM
Effective Tax Rate	15 Minutes	Tuesday PM
Methods of Developing the Effective Tax Rate	55 Minutes	Tuesday PM
Yield Capitalization	75 Minutes	Tuesday PM
Review Questions	20 Minutes	Tuesday PM
Quiz #1	30 Minutes	Tuesday PM
Chapter 4		
Capitalization Methods	30 Minutes	Wednesday AM
Application of Direct Capitalization	200 Minutes	Wednesday AM
Introduction of Yield Capitalization	200 Minutes	Wednesday PM
Review Questions	20 Minutes	Wednesday PM
Chapter 5		
Classic Straight Line Capitalization Method	30 Minutes	Thursday AM
Straight Line Capitalization Assumptions	15 Minutes	Thursday AM
Components of the Land & Building Capitalization Rates	55 Minutes	Thursday AM
Methods of Developing the Land Capitalization Rate & Building Capitalization Rate	60 Minutes	Thursday AM
Land Residual Technique	105 Minutes	Thursday AM/Thursday PM

Topic	Time Requirement	Day Covered
Building Residual Technique	105 Minutes	Thursday PM
Review Questions	20 Minutes	Thursday PM
Quiz #2	60 Minutes	Thursday PM