

COURSE TITLE:

Introduction to Risk Management and Investment Portfolio Construction

PROFESSOR:

Rodrigo Hurtado

COURSE DESCRIPTION

The goal of this course is to provide a comprehensive introduction to the process of investment portfolio construction, with a special emphasis on risk management. The course will provide a starting point for financial advisors looking to deepen their understanding of the portfolio construction process and the pivotal role risk plays in this process.

The course will begin by introducing the concept of risk, exploring its characteristics, and discussing key risk measurements and parameters. The course will cover the different types of risk that are relevant to investments and provide practical insights into how these types of risk can be managed.

A key aspect of the course will be the focus on determining a client's risk profile. Participants will learn how to accurately assess a client's risk tolerance and investment objectives, which are crucial factors in constructing a portfolio that aligns with the client's financial goals and risk tolerance level.

The course will also highlight the importance of diversification in portfolio construction. Participants will understand why a well-diversified portfolio is essential for mitigating risk and achieving long-term investment success. Participants will learn how to allocate assets effectively across various investment categories to create a resilient portfolio.

The course will close with a practical application of the concepts covered by empowering participants to build a portfolio for a fictional client.

PROFESSOR BIO

Rodrigo Hurtado is an adjunct professor of corporate finance and capital markets at IE University. Professor Hurtado received his International MBA from IE Business School and has over 10 years of experience working in financial markets. While at Banco Santander, Professor Hurtado served as Head of Equity and led a highly competitive sales team, budgeting an annual income of \$2 million. At Principal Financial Group, Professor Hurtado coordinated sales and investment teams across regions. Professor Hurtado is passionate about teaching and learning and works diligently to ensure that his students have meaningful learning experiences.

LEARNING OBJECTIVES FOR THE COURSE

LESSON 1 – Introduction to Risk

1. Define the concept of risk and understand the different types of risk
2. Understand how different types of assets have different types of risk

3. Discuss ways to measure different types of risk

Lesson 2 – How to Determine a Client’s Risk Profile

4. Explain the key components of a client’s risk profile, such as risk aversion and risk tolerance
5. Evaluate what investments a client is eligible for in light of their risk profile
6. Determine a client’s risk profile

Lesson 3 – What You Need to Know Before Building a Diversified Portfolio

7. Explain the concept of diversification and the benefits of diversifying investments
8. Analyze the importance of risk as a key element of portfolio construction
9. Compare and contrast the metrics of standard deviation, variation, correlation, and covariance and how to use these metrics in portfolio construction

Lesson 4 – How to Build a Diversified Portfolio: Selecting Assets and Measuring Performance

10. Discuss the concept of security risk vs. portfolio risk when building a diversified portfolio
11. Analyze the concepts of Alpha, Beta, the Sharpe Ratio, and R-squared, why they are important, and connect them with previous concepts and metrics
12. Explain asset allocation and analyze why it is important

Lesson 5 – Putting It All Together: Building a Diversified Portfolio for a Client

13. Apply concepts learned in previous lessons when building a portfolio for a client
14. Prepare relevant proposals and build a well-diversified portfolio for a client

Learning outcomes for this course:

After completing this course, students will be able to do the following:

1. Demonstrate a comprehensive understanding of the concept of risk, including its various types, measurement techniques, and implications for investment decision-making.
2. Analyze and assess clients' risk profiles to construct investment portfolios accounting for factors such as risk tolerance, financial goals, and time horizon.
3. Apply the principles of diversification to construct well-balanced investment portfolios that minimize risk exposure while maximizing potential returns.
4. Evaluate the performance of investment portfolios using key metrics such as alpha, beta, and Sharpe ratio, and understand how to adjust asset allocations as necessary to achieve desired risk-adjusted returns.
5. Synthesize theoretical knowledge and practical skills acquired throughout the course to develop customized investment proposals and effectively communicate investment recommendations to clients.

HOW CAN WE MEASURE THESE OUTCOMES?

Formative and Summative Assessments:

- Formative assessments with immediate, automatically generated feedback at the end of each lesson so that students can assess their understanding of key topics covered in each lesson.
- An automatically graded, final summative assessment that includes analytical and practical questions to apply newly learned skills from the course.