

PRE-REQUISITE(S)

No pre-requisite is required

CREDIT HOURS

4

SYNOPSIS

Investment analysis is important to both individuals who manage their own personal investment and investment managers who invest on behalf of their clients or companies. This unit aims to consolidate the investment and portfolio theories to create investment and portfolio decisions. Coverage includes valuation of major investments such as bond, stock, option and futures, and determination of their proportions in a portfolio. Emphasis is placed on the analytical aspects of the valuation and decision-making process to enable students to adapt to the established but often simplified theories and models in the more sophisticated and dynamic financial world.

LEARNING OUTCOMES

- To apply the relevant theories and real-world skills necessary to design, execute, and evaluate investment proposals and choices under volatile environment to increase stakeholder value.
- To examine various investment techniques in a real investment environment by employing data-driven decision making and demonstrate ethical leadership in transparent to promote ethical decision-making process.
- To apply the knowledge gained in this module and develop on it for continuous learning in order to respond to changing trends, social economic and political landscape.

TOPICS

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| Topic 1 | Biases and investment selection <ul style="list-style-type: none">• Investment theories• Investor behaviour – failure to diversify, naïve diversification, excessive trading and individual investors' buying and selling decision |
| Topic 2 | Investments, Concept Environment and Vehicles <ul style="list-style-type: none">• Different types of investments• Investment process and types of investors• Principal types of investment vehicles• Establish investment goals and plans |

Topic 3	<p>Evaluation of Risk and Returns</p> <ul style="list-style-type: none"> • Appraise the sources of investment returns • Examine methods of measuring investment returns • Examine and discriminate the nature of risk and the calculation of risks • Assess the relationship between risk and required return and the benefits of diversification • Set the right tune at the top - design transparent investment analysis and report
Topic 4	<p>Risk and Diversification</p> <ul style="list-style-type: none"> • Distinguish between the concept of risk aversion and risk averse • Calculate standard deviations for both individual securities and portfolios • Assess the impact of security correlation on portfolio risk • Distinguish between the relationship between correlation and portfolio standard deviation • Apply the concept of efficient diversification and modern portfolio theory
Topic 5	<p>Capital Asset Pricing Model (CAPM) and Arbitrage Pricing Theory (APT)</p> <ul style="list-style-type: none"> • Revisit the capital asset pricing model • Examine the assumptions underlying portfolio theory, CML, SML and CAPM • Appraise the rationale for the security market line (SML) • Discuss and evaluate arbitrage pricing theory model
Topic 6	<p>Market Efficiency: Concept and Anomalies – revisit</p> <ul style="list-style-type: none"> • Discuss the traditional forms of market efficiency and understand how the efficient markets hypothesis is tested • Discuss the evidence supporting the weakly efficient hypothesis and the anomalies in the weakly efficient hypothesis • Discuss the tests of the semi-strong and strong form efficient hypothesis • Understand the effects of stock splits and stock dividends • Examine the impact of the financial crisis on current market condition and shareholder value
Topic 7	<p>Fixed Income Securities</p> <ul style="list-style-type: none"> • Describe the fundamentals of interest rates and market forces that affect the movements of interest rates • Discuss the characteristics, quotations and ratings of international issues of corporate bonds • Understand the model used in the bonds valuation • Describe and calculate the various measures yield and discuss the impact of required return and time to maturity on bond values
Topic 8	<p>Security Analysis</p> <ul style="list-style-type: none"> • Describe the macroeconomic factors that affect share prices • Calculate the intrinsic value of a stock based on the methods used • Overview of company analysis and evaluate the company's competitive position

- Analyse financial statements: financial ratios, the Dupont formula, interpreting financial ratios, trend analysis and industry comparisons
- Discuss the potential problems with financial analysis

Topic 9 Derivative Securities – Options

- Describe the characteristics of option contracts and option trading
- Understanding option trading strategies
- Describe the options market, strike prices and expiration dates
- Explain the driving forces that drive options prices in the market place
- Explain the determinants of option values

Topic 10 Futures

- Explain the basics of futures market
- Explain the financial futures, in particular -what is available, how they are used, what they can accomplish
- Describe and illustrate various hedging and speculating strategies using futures contracts
- Explain the relationship between spot prices and future prices
- Evaluate current market conditions based on vast data base and latest evaluation techniques to upgrade investment skills

Topic 11 International Diversification

- Describe the characteristics of the world capital market
- Advantages and disadvantages to an investor holding an international portfolio
- Describe the international market indices, how they are calculated and its applications
- Application of CAPM and APT to an international investment – revisit
- Design and evaluate investment proposals to increase stakeholder value

Topic 12 Managing an Investment Portfolio

- Concept of construction and portfolio management
- Development of investment policy and market expectation
- Concept of asset allocation
- Portfolio monitoring – Active and passive management, rebalancing, performance measure and evaluation
- Impact on investment decision-making process

Topic 13 Evaluation of Portfolio Performance

- Portfolio management -How to achieve superior performance?
- Understanding Treynor portfolio performance measure and Sharpe portfolio performance measure
- Attribution analysis – Concept and how it can be used to differentiate between a manager's market timing and security selection skills

- Topic 14 Business Data Analytics to Improve Business Competitiveness
- Why is business data analytics important?
 - Generation of data as a strategic imperative
 - Optimization and simulation for business decisions
 - Use of linear and nonlinear techniques, time series analysis and other statistical techniques in data analysis
 - Business analyst characteristics
 - Data analyst tasks
- Data analyst skills
- Topic 15 Accounting Analytics
- Use of accounting analytics to explore how financial statement data and non-financial data interact to forecast events, optimize operations and determine
 - Financial accounting ratios analysis – Overview
 - Dupont analysis
 - Spotting earnings management and get more accurate picture of earnings
 - Revenue and expense recognition red flags

ASSESSMENT DETAILS

Continuous Assessment	%
Presentation of Short Synthesis Assignment	30
Metacognitive Discussion on Written Assessment work	20
Final Assessment	%
Open Book Exam	20
Written Assessment Report	20
Closed Book Exam	10

PRESCRIBED TEXT

Main:

Frank K. Reilly, Keith C. Brown and Sanford J. Leeds, Investment Analysis and Portfolio Management, Asia Edition 11th Ed, (2019) Cengage Learning

H.Kent Baker and Creg Filbeck, Investment Risk Management (2015), Oxford University Press

Alex Sidorenko and Elena Demidenko, Guide to Effective Risk Management 3.0 (2017),
www.researchgate.net/publication/323254437

Kara Tan Bhala, Warren Yeh and Raj Bhala, International Investment Management, (2016) Routledge

Thomas R. Robinson, Elaine Henry, Wendy L. Pirie, Michael A. Broihahn and Anthony T. Cope, International Financial Statement Analysis, 3rd Ed. (2015), John Wiley and Sons Australia

Additional References:

Reilly and Brown, Analysis of Investments and Management of Portfolios, Europe, Middle East and Africa Edition, (2015), Cengage Learning EMEA UK

Glen Arnold, Corporate Financial Management, 5th Ed., (2018), Pearson Education Limited

Michael G. Mcmillan, Investment Workbook: Principles of Portfolio and Equity Analysis, (2018), John Wiley and Sons Ltd

Bill Neale and Philip Linsley, Corporate Finance and Investment: Decisions and Strategies, (2015), Pearson Education Limited

Elton and et. al., Modern Portfolio Theory and Investment Analysis, 9Ed. (2014), Wiley

Hearth, D. & Zaima, J.K., Contemporary Investment: Security and Portfolio Analysis, (2004), Thomson