University of St Andrews

SCHOOL OF MANAGEMENT **2023-24**

MN5612 – PORTFOLIO MANAGEMENT & INVESTMENT

MODULE TYPE/SEMESTER: Core (20 credits), Semester 2

MODULE CO-ORDINATOR: Dr Dimitris Chronopoulos

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AIM:
The aim of the course is to become familiar with the theory and empirical evidence related to portfolio management and investment analysis. Topics will include fundamentals of security valuation, choice theory, the functioning of capital markets and optimal portfolio construction. Emphasis will be on applied applications to theoretical concepts. Students will produce assessed work that has real market application for institutional investors, investment managers and investment consultants.

METHOD OF TEACHING & LEARNING:
Beginning Week 1
TEACHING: 10 Weeks, 2 hours per week
TUTORIALS: 10 Weeks, 1 hour per week (*students are required to submit their answers 1 hour prior to the beginning of each tutorial*)
Beginning Week 2
Office Hours: TBA

LEARNING OUTCOMES:
Knowledge & Understanding / Intellectual Skills
Students learn to analyze and audit an environment using publicly available information. They learn to sort and assess the validity and importance of information.

Module Specific / Practical Skills; Transferable / Key Skills
Knowledge of financial markets, market institutions, the trading environment and mechanisms, and the various investment securities available in the markets.
Knowledge of how to analyze company business fundamentals and their implication on stock market valuations.

INDICATIVE TOPIC OUTLINE:
Knowledge of portfolio theory, investment policy and asset allocation techniques.
Content and Structure:
1. Introduction
2. Utility theory & mean-variance analysis
3. Indifference curves, return and risk
4. The portfolio frontier
5. The single index model
6. CAPM
7. Fixed income securities

ASSESSMENT:
The structure of the course will consist of regular lectures and tutorials.

- **Coursework 1**
  Online quiz. Week 8 (40%) (*students are not allowed to return to previous questions in online quizzes*).
- **Coursework 2**
  Project. Week 9 (20%)
- **Coursework 3**
  Online quiz. Week 11 (40%) (*students are not allowed to return to previous questions in online quizzes*).

READING LIST:
Textbook: The main textbook for this module is currently available in the library on short and long loan basis.

- Zvi Bodie, Alex Kane, and Alan J. Marcus, *Investments,* (11th Ed.), McGraw-Hill, Irwin, 2018. ***(primary module textbook)***
- Copeland T.E., J.F. Weston and K. Shastri, *Financial Theory and Corporate Policy* (4th Ed.), Harlow, Essex Pearson, 2014.

Supplement Textbooks:

- Sharpe, W., Alexander, G. and Bailey, J. (1999) *Investments*, Prentice Hall, 1999.
- Elton, J.E., Gruber, J.M., Brown, J.S., and Goetmann, N.W. (2007) *Modern Portfolio Theory and Investment Analysis*, (6th Ed.), Wiley.
- Reilly F. and K. Brown (2006) *Investment Analysis and Portfolio Management*, (8th Ed.), Thomson South-Western.
- Hoy et.al., *Mathematics for Economics*, 2nd Ed., MIT Press, 2001.
- Huang, C.F. and R.H. Litzenberger*, Foundations for Financial Economics*, North-Holland, 1988. (Advanced Textbook)

Optional Reading:

- B. Malkiel. A random walk down wall street. WW Norton & Co, 2000.
- P. Bernstein. Capital Ideas. Free Press, 1992.

- R. Haugen. The new finance: The case against efficient markets. (2nd Ed.), Prentice Hall, 1999.
- B. Warwick. Searching for Alpha. Wiley, 2000.
- N. Taleb. Fooled by randomness: The hidden role of chance in markets and life. Texere, 2001.

Reading list: Journal articles are each available in library-subscribed databases.

- Fama, E.F., (1972). "Components of Investment Performance," *Journal of Finance*, **27**: 551-567.
- Fama, E.F., and French, K.R. (1992). "The Cross Section of Expected Stock Returns". *Journal of Finance* **47**: 427-465.
- Fama, E.F., and French, K.R. (1993). "Common Risk Factors in the Returns on Stocks and Bonds". *Journal of Finance* **47**: 427-465.
- Fama, E.F., and French, K.R. (2004). "The CAPM: Theory and Evidence". *Journal of Economic Perspectives* **18**: 25-46.
- Fama, E.F., and French, K.R. (1996). "The CAPM is Wanted Dead or Alive". *Journal of Finance* **51**: 1947-1958.
- Fama, E.F., and French, K.R. (1996). "Multifactor Explanations of Asset Pricing Anomalies". *Journal of Finance* **51**: 55-84.
- Fama, E.F., and French, K.R. (1994). "Size and Book-to-Market Factors in Earnings and Returns". *Journal of Finance* **50**: 131-155.
- Markowitz, H., (1952). "Portfolio Selection,". *Journal of Finance*, (March) 77-91.
- Merton, R.C., (1972). "An Analytic Derivation of the Efficient Portfolio Frontier". *Journal of Financial and Quantitative Analysis* **7**: 1851-1872.
- Merton, R., (1973). "An Intertemporal Capital Asset Pricing Model," *Econometrica*, **41**: 867-887.
- Sharpe, W., (1964). "Capital Asset Prices: A Theory of Market Equilibrium Under Conditions of Risk," *Journal of Finance*, **19**: 425-442.

Organisation of courses may be subject to change without notice.