UNIVERSITI TEKNOLOGI MARA

ASC712: PORTFOLIO THEORY AND APPLICATION

Course Name (English)	PORTFOLIO THEORY AND APPLICATION APPROVED
Course Code	ASC712
MQF Credit	3
Course Description	The course introduces students to modern portfolio theory and general equilibrium models (capital asset pricing models and arbitrage pricing models). This involves the theory and practice of optimally combining securities into portfolios, and efforts involving simplification of the amount and type of inputs to the portfolio problem as well as simplification of the computational procedure to find sets of desirable portfolios. The course also provides a discussion of equilibrium in the capital markets and shows how portfolio theory can be used to infer what equilibrium returns and prices will be for individual securities. Finally, the course suggests ways that equilibrium theory can be used to manage portfolios more meaningfully.
Transferable Skills	Problem solving and information management skills developed through tests, assignments and project
Teaching Methodologies	Lectures, Discussion
CLO	CLO1 Illustrate the basic principles underlying rational portfolio choices and their meaning with respect to formation of prices in the capital market. CLO2 Analyze the general equilibrium models. CLO3 Evaluate empirically how well each model describes the behaviour of actual capital markets.
Pre-Requisite Courses	No course recommendations

Topics
1. Introduction 1.1) The Economic Theory of Choice 1.2) Types of Financial Securities - marketable securities, stock market indices and bond market indices.
2. Portfolio Analysis 2.1) Mean Variance Portfolio Theory - The characteristics of the opportunity set under risk, delineating efficient portfolios and techniques of calculating the efficient frontier. 2.2) Simplifying Portfolio Selection Processes - The single-index model, multi-index models and grouping techniques and simple techniques for determining the efficient frontier. 2.3) Selecting The Optimum Portfolio - Utility analysis and other portfolio selection models. 2.4) International diversification
3. Models of Equilibrium in the Capital Markets 3.1) The standard Capital Asset Pricing Model (CAPM) 3.2) Nonstandard form of CAPM 3.3) Empirical tests of equilibrium models 3.4) The Arbitrage Pricing Model (APT)
4. Security Analysis and Portfolio theory 4.1) Efficient Markets 4.2) Interest rate theory and the pricing of bonds
5. Evaluating The Investment Process 5.1) Evaluation of Portfolio Performance 5.2) Portfolio Management Summary

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment

Assessment Type	Assessment Description	% of Total Mark	CLO
Assignment	Weekly Assignments	5%	CLO1
Assignment	Weekly Assignments	10%	CLO2
Case Study	Case Studies	15%	CLO3
Final Test	Final test	25%	CLO2
Group Project	Research Paper	20%	CLO3
Test	Midterm	10%	CLO2
Test	Midterm	15%	CLO1

Reading List

Recommended Text

- **Edwin J Elton, Martin J Gruber, Stephen J. Brown and William N Goetzmann 2017, *Modern Portfolio Theory Investment Analysis*, 7 Ed., John Wiley & Sons Inc New York [ISBN: 1119427290]**

Reference Book Resources

- **William Kinlaw,Mark P. Kritzman,David Turkington 2017, *A Practitioner's Guide to Asset Allocation*, 2 Ed., John Wiley & Sons [ISBN: 9781119397809]**
- **Jack Clark Francis,Dongcheol Kim 2018, *Modern Portfolio Theory, + Website*, John Wiley & Sons [ISBN: 111837052]**
- **Raj S. Dhankar 2019, *Risk-return Relationship and Portfolio Management*, 2 Ed., Springer Nature [ISBN: 9788132239505]**
- **William F. Sharpe 2000, *Portfolio Theory and Capital Markets*, McGraw-Hill Companies [ISBN: 9780071353205]**

Article/Paper List

This Course does not have any article/paper resources

Other References

This Course does not have any other resources