

Subject Code	AF5353
Subject Title	Security Analysis and Portfolio Management
Credit Value	3
Level	5
Normal Duration	One Semester
Pre-requisite / Co-requisite/ Exclusion	Pre-requisite: Investments (AF5344) Have good knowledge of using basic functions and commands in EXCEL
Role and Purposes	There are two major emphases in this course. The first part of the course focuses on portfolio analysis and the second part of the course focuses on investment management process. This subject helps achieve the MoF Outcomes by enabling students to apply financial theories and concepts to conduct portfolio analysis with real investment problems and solve asset management issues (Outcome 2), and to formulate financial strategies (Outcome 3).
Subject Learning Outcomes	Upon successful completion of this course, students should be able to: <ul style="list-style-type: none"> a. Understand Risk and Return in the financial markets b. Give recommendation of investment plans based on investors' circumstance including policy statement, asset allocation strategy, mutual fund selection, and the portfolio construction c. Apply single-factor and multifactor models to construct real equity portfolios d. Evaluate the performance of equity funds with up-to-date performance measures
Subject Synopsis/ Indicative Syllabus	<p>The Mean-Variance Analysis and Portfolio Optimization in Practice The issues in the use of the mean-variance optimization in practice and possible solutions for them</p> <p>Asset Pricing Models and Factor Models The single-factor model and multi-factor models; the correlation structures of security returns under asset pricing models; and the applications of asset pricing models in equity portfolio construction</p> <p>Investment Management Process Policy statement, asset allocation strategy, portfolio construction and implementation, and international issues</p> <p>Equity Portfolio Management Strategies Asset allocation strategies; active, passive and semi-active portfolio management strategies</p> <p>Portfolio Performance Evaluation and Risk Measure Holding-based portfolio performance measures; and an introduction of downside risk measures and the Value-at-Risk measure</p>

	<p>Alternative Investment and Structured Securities An introduction of alternative investments, hedge fund strategies and pricing structured securities</p> <p>Behavioral Finance (Optional) The impact of heuristic-driven biases on investment decision making including representativeness, overconfidence, anchoring-and-adjustment, and aversion to ambiguity</p>																																																							
<p>Teaching/Learning Methodology</p>	<p>Key concepts and techniques will be introduced through lectures. The course places a lot of emphasis on project work. Students will be required to deliver a project which emphasizes on real-world investment issues. By completing the project, students should have hands-on experience in using the knowledge they have learned in class to solve investment problems in practice. Students are encouraged to share their views and experiences actively with their lectures and classmates.</p>																																																							
<p>Assessment Methods in Alignment with Intended Learning Outcomes</p>	<table border="1" data-bbox="367 743 1380 1339"> <thead> <tr> <th rowspan="2">Specific assessment methods/tasks</th> <th rowspan="2">% weighting</th> <th colspan="6">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th> </tr> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>1. Class Participation</td> <td>5%</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>2. Project & Assignment</td> <td>25%</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>3. Midterm</td> <td>30%</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> <td></td> <td></td> </tr> <tr> <td>4. Final examination</td> <td>40%</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Total</td> <td>100 %</td> <td colspan="6"></td> </tr> </tbody> </table> <p>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p> <p>Note: To pass this subject, students are required to obtain Grade D or above in BOTH the Continuous Assessment and Examination components. In addition, the specific requirements on individual assessment components discussed above could be adjusted based on the pedagogical needs of subject lecturers.</p>		Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						a	b	c	d			1. Class Participation	5%	✓	✓	✓	✓			2. Project & Assignment	25%	✓	✓	✓	✓			3. Midterm	30%	✓	✓	✓				4. Final examination	40%	✓	✓	✓				Total	100 %						
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	project discussion, presentation and written report		
	Total student study effort	114 Hrs.	
Reading List and References	Reference		
	<i>Essentials of Investment</i> , 9th edition, Zvi Bodie, Alex Kane and Alan Marcus (McGraw-Hill/Irwin, 2012)		
	<i>Modern Portfolio Theory and Investment Analysis</i> , 8th edition, Edwin J. Elton, Martin J. Gruber, Stephen J. Brown, and William N. Goetzmann (John Wiley & Sons, 2011)		
	<i>Analysis of Investments and Management of Portfolios</i> , 10th edition, Frank K. Reilly and Keith C. Brown (South-Western, 2012)		
	Other Reference		
	Title	Authors	Why?
	(Other good textbooks)		
	Investment	Zvi Bodie, Alex Kane and Alan Marcus	An advanced version of <i>Essentials of Investment</i>
	Investment Science	David Luenberger	First course in Quantitative Finance (Intermediate Investment)
	Statistical Models and Methods for Financial Market	TL Lai and H. Xing	Best statistical modeling book
	Algorithmic Trading and DMA	Barry Johnson	First course in algorithmic trading and orders splitting
	(Investment in Practice)		
Active Portfolio Management	Richard Grinold and Ronald Kahn	A Quantitative Approach for Providing Superior Returns and Controlling Risk	
The Intelligent Investor	Benjamin Graham	Best book of practice in Value Investing	
A random walk down wall street	Burton G. Malkiel	Individual investors are better off buying and holding onto index funds	
A non-random walk down wall street	Andrew Lo and A. C. MacKinlay	views again the previous book	
Fooled by randomness	Nassim N. Taleb	Lucky or Skill?	
Black Swan	Nassim N. Taleb	All the swans are white?	
Irrational Exuberance	Robert J. Shiller	Internet Bubble 1998-2001, most famous word of Nobel Laureates	
(Investment Banking)			
Monkey Business	John Rolfe and Peter Troob	Entry level iBanker's life	
Barbarians at the Gate	Bryan Burrough and Johb Helyar	M&A classic book (usually higher level)	