

Subject Description Form

Subject Code	AMA4300
Subject Title	Seminars in Investment Science and Finance Analytics
Credit Value	3
Level	4
Pre-requisite / Co-requisite/ Exclusion	Nil
Objectives	<p>This subject is designed to equip students with the latest knowledge and practical techniques in the investment and finance industry. The course includes experience sharing sessions with industry professionals, covering topics such as professional ethics, workplace skills, and future career development. By the end of the course, students will be well-prepared for their future careers in related disciplines, with a solid understanding of the industry and the skills needed to succeed in it.</p>
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ul style="list-style-type: none"> (a) apply mathematical knowledge in the investment and finance industry (b) understand the work and responsibility of different areas in the industry (c) identify the current trend and future development of the industry (d) acquire practical techniques and communication skills in workplace (e) develop lifelong learning skills to adapt to future challenges (f) develop a sense of professional ethics and a positive work attitude
Subject Synopsis/ Indicative Syllabus	<p>A wide range of topics related to investment science and finance analytics will be covered. They can be divided into several categories. Some example seminar topics include:</p> <p><i>Knowledge in finance and mathematics</i></p> <ul style="list-style-type: none"> - financial derivatives - hedge funds and private equity - portfolio optimization - bond pricing and yield curves - risk management and credit analysis - algorithmic and high frequency trading

	<p><i>Profession perspective in the financial industry</i></p> <ul style="list-style-type: none">- financial market and practices in Hong Kong- global development in finance- development of fintech- professional ethnics and conducts in finance industry- legal and policy issues related to finance industry <p><i>Workplace techniques and professional ethnics:</i></p> <ul style="list-style-type: none">- visual communication skills for presenting data- information technology and computer literacy in workplace- communication skills and professional writing in finance industry																																														
Teaching/Learning Methodology	The teaching in this course is conducted through seminars delivered by speakers from the investment and finance industry who have a strong background in mathematics and relevant work experiences. The seminar topics are regularly updated to reflect the current trends in the industry, and the speakers for each seminar may vary.																																														
Assessment Methods in Alignment with Intended Learning Outcomes	<table><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>e</th><th>f</th></tr><tr><td>1. Assignments</td><td>30 %</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td><td></td></tr><tr><td>2. Quizzes</td><td>20%</td><td>✓</td><td>✓</td><td>✓</td><td></td><td></td><td></td></tr><tr><td>3. Essays / Project</td><td>50%</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></table> <p>Since this subject is composed of various seminars, the assessment method will be assessed through. The speaker of each seminar will decide the most suitable form of assessment under these three categories:</p> <p><i>Assignments</i></p> <p>Students are given tasks or problems that requires them to apply the knowledge learned from the seminar and demonstrate problem solving skills.</p> <p><i>Quizzes</i></p> <p>Quizzes include short questions that test students’ understanding on the seminar content. These quizzes can be conducted either online or in-class.</p>	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						a	b	c	d	e	f	1. Assignments	30 %	✓	✓	✓	✓	✓		2. Quizzes	20%	✓	✓	✓				3. Essays / Project	50%	✓	✓	✓	✓	✓	✓	Total	100 %						
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	<p><i>Essays / Project</i></p> <p>Students are required to write reflective paper(s) about their understanding of the seminar or assigned reading materials. They may also be asked to conduct some literature reviews or research of a designated topic and successfully complete a project.</p>	
Student Study Effort Expected	Class contact:	
	▪ Seminar	39 Hrs.
	Other student study effort:	
	▪ Assigned readings	30 Hrs.
	▪ Self-study and other related work	40 Hrs.
	Total student study effort	109 Hrs.
Reading List and References	<p><u>Reference books:</u></p> <p>Hull, <i>Options, futures, and other derivatives</i>, 11th Edition, Pearson, 2022</p> <p>Cartea, Jaimungal & Penalva, <i>Algorithmic and High-Frequency Trading</i>, Cambridge, 2015</p> <p>Brealey, Myers & Allen, <i>Principles of Corporate Finance</i>, 14th Edition, McGraw Hill, 2023</p> <p>San-Jose, Retolaza & van Liedekerke, <i>Handbook on Ethics in Finance</i>, Springer, 2021</p> <p><u>Journals and periodicals:</u></p> <p>Journal of Finance</p> <p>Journal of Financial and Quantitative Analysis</p> <p>Financial Analysts Journal</p>	