

<b>Subject Code</b>	AF5323
<b>Subject Title</b>	Fixed Income Securities
<b>Credit Value</b>	3
<b>Level</b>	5
<b>Normal Duration</b>	One Semester
<b>Pre-requisite / Co-requisite/ Exclusion</b>	Pre-requisite: Investments (AF5344)
<b>Role and Purposes</b>	This course is concerned with fixed income securities and interest rate risk management. It will introduce tools used to explore the theoretical and empirical aspects of fixed income securities and their derivatives. It contributes to the achievement of the MoF programme outcomes by enabling students to understand and explain real life issues related to fixed income securities (Outcome 2), and apply relevant concepts and tools to solve problems on fixed income investment (Outcome 2).
<b>Subject Learning Outcomes</b>	Upon completion of the subject, students will be able to: <ul style="list-style-type: none"> <li>a. Understand and explain the issues in pricing, hedging, and arbitrage in the fixed income securities markets.</li> <li>b. Evaluate various types of fixed income products and analyze their potential risk and return.</li> <li>c. Apply theories and concepts learned and appreciate fixed income investment decisions.</li> <li>d. Understand and explain the recent developments and issues of the fixed income markets.</li> </ul>
<b>Subject Synopsis/ Indicative Syllabus</b>	<p><b>The Basic Products</b> Bond price arithmetic. Treasury bills, notes, bonds and strips. Organization of government bond markets. Spot rates, par rates and forward rates. Constructing zero curves.</p> <p><b>Risk Management</b> Measures of price sensitivity. Simple hedging strategies using fixed income derivatives. Eurodollar futures. Bond futures. Interest rate swaps.</p> <p><b>Pricing Interest Rate Claims</b> Theories of the term structure. Arbitrage free pricing.</p> <p><b>Corporate Securities and Credit Risk</b> Corporate bonds and credit risk. Credit derivatives.</p> <p><b>Mortgages and Their Derivatives</b> Mortgages and mortgage backed securities. Prepayment risk. <u>Securitization</u></p>

and credit crisis.

**Bonds with Embedded Options**

Basic pricing principles. Static spread and option-adjusted spread. Negative convexity. Effective duration and convexity.

**Teaching/Learning Methodology**

Lectures and seminars will be conducted on the topics of the syllabus. Lecture time will be used flexibly for discussing key concepts and their applications with students and carrying out other learning activities with them. Such activities include group discussions and student presentations of their work (to develop students' critical thinking, analytical skills, teamwork, and communication skills). To maximize benefits, students are encouraged to share their views and experiences actively with their lecturer and classmates.

**Assessment Methods in Alignment with Intended Learning Outcomes**

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
		a	b	c	d		
1. Mid-term Test	15%	✓	✓				
2. Individual Essay	15%		✓	✓	✓		
3. Group Presentation	15%		✓	✓	✓		
4. Participation	5%	✓	✓	✓	✓		
5. Final Examination	50%	✓	✓	✓	✓		
Total	100 %						

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Mid-term Test – It is a closed-book test to cover the intended subject learning outcomes.

Individual Essay – Students have to do a case study or write on a topic about fixed income securities or markets so as to test their abilities to apply concepts taught.

Group Presentation – Students are required to work on a group basis and present an analysis of a current issue about fixed income securities or markets. They have to demonstrate their understanding of concepts taught and their abilities to explain the recent development of the markets.

Participation – Students have to actively discuss questions presented to them in classes to show their understanding of concepts taught and their abilities to apply relevant tools to analyze fixed income securities products.

Final Exam – It is a 3-hour closed-book exam with compulsory problem-solving

	<p>type and essay type questions to test students' understanding of and abilities to apply all concepts taught.</p> <p><b>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.</b></p>	
<b>Student Study Effort Expected</b>	Class contact:	
	▪ Lectures / Seminars	39 Hrs.
	Other student study effort:	
	▪ Preparing for classes and reviewing course materials.	39 Hrs.
	▪ Writing individual essay	10 Hrs.
	▪ Preparing for group presentation	10 Hrs.
	▪ Preparing for mid-term test and final exam	20 Hrs.
	Total student study effort	118 Hrs.
<b>Reading List and References</b>	<p><u>Textbook</u> Fabozzi, F., <i>Bond Markets, Analysis, and Strategies</i>, 8<sup>th</sup> edition, Pearson, 2013.</p> <p><u>References</u> Ceva, K.J. (2014) "Opportunities in Emerging Market Debt" <i>CFA Institute Conference Proceedings Quarterly</i>, Fourth Quarter, 1-10. Vandersteel, T. (2014) "Assessing Value Across Emerging Debt Markets" <i>CFA Institute Conference Proceedings Quarterly</i>, Fourth Quarter, 62-71. Levine, R., <i>How to Make Money with Junk Bonds</i>, 2012, McGraw Hill. Supplementary readings from academic/professional journals and websites.</p>	