

**Commerce 4FJ3
Fixed Income Analysis
Winter 2020 Course Outline**

**Finance and Business Economics Area
DeGroote School of Business
McMaster University**

INSTRUCTOR AND CONTACT INFORMATION

Instructor: **Dr. Sultan M. Awan**
Office: TSH-615
awan@mcmaster.ca

Student TA
TBA

Class Schedule: Thu 8:30 AM ~11:20 AM
Office Hours: After class or by appointment

COURSE ELEMENTS

Credit Value:	3	Team skills:	Yes	IT skills:	Yes	Global:	Yes
Avenue:	Yes	Verbal skills:	Yes	Numeracy:	Yes	Group Work:	Yes
Participation:	Yes	Written skills:	Yes	Innovation:	Yes	Social:	Yes
Evidence-based:	Yes	Experiential:	No	Final Exam:	Yes	Guest speaker(s):	No

COURSE DESCRIPTION

This course provides an advanced treatment of fixed income analysis. Topics include bond analysis, term structure of interest rates, interest rate sensitivity of fixed income securities, managing interest rate risk, mortgage-backed securities, interest-rate swap, credit derivatives, interest-rate futures and interest-rate options.

LEARNING OUTCOMES

Upon successful completion of this course, students will be able to complete the following key tasks:

- Understand the features and characteristics of different types of bond instruments
- Pricing and volatility characteristics of the asset class
- Valuation techniques and considerations

REQUIRED COURSE MATERIALS AND READINGS

Bond Markets, Analysis and Strategies by F. Fabozzi, 9th ed., Prentice Hall.

<https://www.pearson.com/us/higher-education/program/Fabozzi-Bond-Markets-Analysis-and-Strategies-9th-Edition/PGM127378.html>

For course contents such as lecture slides, term assignments, other reference materials, and course related announcements, please visit course webpage on Avenue:

<http://avenue.mcmaster.ca>

Texas Instruments BA II Plus financial calculator is recommended for this course. However, any calculator that performs time value of money functions is acceptable.

OPTIONAL COURSE READINGS

Options, Futures and Other Derivatives by John Hull, 9th edition.

Financial Modeling by Simon Benninga, 2nd edition, The MIT Press.

EVALUATION

Learning in this course results primarily from lectures, in-class discussions, home readings, and from assigned problem sets. Students learning and progress in this course will be evaluated on group and individual basis. Final letter grades in this course will be calculated as follows:

Components and Weights

Assignment # 1	Group Assignment due on Feb. 20 th	15%
Midterm Exam	Numerical and Qualitative Questions (Feb. 27 th)	30%
Assignment # 2	Group Assignment due on April 2 nd	15%
Final Exam	Numerical and Qualitative Questions (Semi-Cumulative)	40%
	Total	100%

Assigned Group Work

Numerical and Qualitative questions will be assigned during this term; one in pre-midterm period (assignment #1) and one in post-midterm period (assignment #2). As some algebra and fundamental statistical concepts are important components of quantitative valuation of fixed incomes securities, it is imperative students practice quantitative problems that require use of such statistical and analytical tools. Therefore, two assigned evaluation activity should provide students an opportunity to practice numerical and qualitative questions with the help of the concepts and methodologies learnt in class. As fairly large number of questions on the midterm and the final will be quantitative in nature, this evaluation exercise

Should help students prepare well for the exams. You may find some problems challenging. Please do your best. Serious attempts to arrive at the correct answer will be rewarded. Students are expected to work in a self-chosen group of maximum of TWO students each. However, a submission from an individual student will also be accepted without any deductions of marks. The assigned work and rest of the submission details will be posted on Avenue.

Midterm and Final Exam

will include multiple-choice questions. The nature and format of the questions on the midterm and final will be similar to ones on slides, examples discussed in class, and the ones found in assigned evaluation activities. The answer key to selected chapter-end questions will be posted on avenue once a topic is discussed in the class. This answer key should provide enough sample questions for practice and should provide enough details to work on similar chapter-end questions. The info on the readings for the midterm and the final is provided at the end of this outlines and will also be posted on avenue before each of the exams. Final will be semi-cumulative and only selected topics will make to the readings list for the final. Such details will also be posted on avenue well before each of the exams. Students will be allowed to bring a single, double-sided 8.5” x 11.5” sheet containing formulas and other handwritten notes in the midterm and the final exams. However, use of PC and any other digital devices will not be allowed during the midterm and final exam. Use of financial calculator is highly recommended.

PLEASE NOTE:

1. Students who do not submit the assignments by the deadline, with approval, will receive an extension of 3 days unless approved by the student experience office based on the supporting documentation submitted.
2. Students who do not write midterm, with approval, will have marks moved to final and will write a cumulative final of 70%.
3. If a student misses a lecture for any reason, it is student’s responsibility to obtain class lecture notes and other relevant material from other classmates.
4. Marks for all pre-final exam evaluation activities will be posted on Avenue.
5. Your letter grade will come through official channels. Hence, marks for the final exam will not be posted on Avenue.
6. You are encouraged to contact course instructor or course TA for any questions on the course material and outlines, evaluation scheme, and the Exams.

Grade Conversion

At the end of the course, your overall percentage grade will be converted to your letter grade in accordance with the following conversion scheme:

LETTER GRADE	PERCENT	LETTER GRADE	PERCENT
A+	90 - 100	C+	67 – 69
A	85 - 89	C	63 - 66
A-	80 - 84	C-	60 - 62
B+	77 - 79	D+	57 - 59
B	73 - 76	D	53 - 56
B-	70 – 72	D-	50 - 52
		F	00 - 49

COMMUNICATION AND FEEDBACK

Students who wish to correspond with instructors or TAs directly via email must send messages that originate from their official McMaster University email account. This protects the confidentiality and sensitivity of information as well as confirms the identity of the student. Emails regarding course issues should NOT be sent to the Area Administrative Assistants. Instructors are required to provide evaluation feedback for at least 10% of the final grade to students prior to Week #9 in the term. Instructors may solicit feedback via an informal course review with students by Week #4 to allow time for modifications in curriculum delivery.

ACADEMIC DISHONESTY

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: “Grade of F assigned for academic dishonesty”), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at:

www.mcmaster.ca/academicintegrity

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one’s own or for which other credit has been obtained.
2. Improper collaboration in group work.
3. Copying or using unauthorized aids in tests and examinations.

REQUESTING RELIEF FOR MISSED ACADEMIC WORK

Students may request relief from a regularly scheduled midterm, test, assignment or other course components. Please refer to the policy and procedure on the DeGroote website at the link below:

<http://ug.degroote.mcmaster.ca/forms-and-resources/missed-course-work-policy/>

STUDENT ACCESSIBILITY SERVICES

Students who require academic accommodation must contact Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. Student Accessibility Services can be contacted by phone 905-525-9140 ext. 28652 or e-mail at:

sas@mcmaster.ca

For further information, consult McMaster University's Policy for Academic Accommodation of Students with Disabilities:

<http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicAccommodation-studentsWithDisabilities.pdf>

ACADEMIC ACCOMMODATION FOR RELIGIOUS, INDIGENOUS OR SPIRITUAL OBSERVANCES (RISO)

Students requiring academic accommodation based on religious, indigenous or spiritual observances should follow the procedures set out in the RISO policy. Students requiring a RISO accommodation should submit their request, including the dates/times needing to be accommodated and the courses which will be impacted, to their Faculty Office normally within 10 days of the beginning of term or to the Registrar's Office prior to their examinations. Students should also contact their instructors as soon as possible to make alternative arrangements for classes, assignments, and tests.

POTENTIAL MODIFICATIONS TO THE COURSE

The instructor reserves the right to modify elements of the course during the term. There may be changes to the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. *It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.*

ACKNOWLEDGEMENT OF THE COURSE POLICIES

Your enrolment in Commerce 4FJ3 will be considered to be an implicit acknowledgement of the course policies outlined above, or of any other that may be announced during lecture and/or on A2L. It is your responsibility to read this course outline, to familiarize yourself with the course policies and to act accordingly.

Lack of awareness of the course policies cannot be invoked at any point during this course for failure to meet them. It is your responsibility to ask for clarification on any policies that you do not understand.

Commerce 4FJ3 Course Contents Winter 2020

Below is a **tentative** course schedule. As we progress in the course, contents of some of the topics listed below may be modified, if required.

Topics	Readings
Introduction to the Valuation of Fixed Income Securities	
Syllabus Review Overview of Fixed Income Securities Introduction to Bond Prices, Measuring Bond Yields and Bond Returns	Lecture notes, Chapters 1, 2, and 3
Bond Price Volatility and Term Structure of Interest Rate	
Price-Yield Relationship and Bond Price Volatility Base and Term Structure of Interest Rate	Chapters 4 and 5
<i>Group Assignment # 1 due on Feb 20th</i> <i>Midterm Recess Feb 17 - Feb 21- NO Class</i>	
<i>Midterm Exam Feb 27th</i>	
Valuation of Fixed Income Securities and Interest Rate Derivatives	
Mortgage-backed Securities	Chapter 10, 11 and 12
Interest-Rate Futures Contracts	Chapter 29
Interest-Rate Options	Chapter 18, 20 and 30
Interest-rate Swaps	Chapter 31
Credit Derivatives	Chapter 32
<i>Group Assignment # 2 due on April 2nd</i>	
<i>Final Exam April 13 - 28 – Scheduled by Registrar Office</i>	