

**Finance F723
FIXED INCOME ANALYSIS**

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

INSTRUCTOR AND CONTACT INFORMATION

Dr. R. Luo

Instructor

Office Hours: TBA

TA's Contact Information:
TBA

COURSE OVERVIEW

This course provides an advanced treatment of investments in the field 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. Spreadsheet modeling in the above areas will be introduced. In addition to lectures, the course will also consist of students' presentations and one or two guest speakers' presentations.

PREREQUISITE

Eight 600-level courses including A600, E600, F600 and Q600.

COURSE ELEMENTS

Credit Value: 3	Team skills: Yes	IT skills: Yes	Global: Yes
WebCT: No	Verbal skills: Yes	Numeracy: Yes	Political: Yes
Participation: Yes	Written skills: Yes	Innovation: Yes	Social: Yes

RECOMMENDED READINGS

- Bond Markets, Analysis and Strategies by F. Fabozzi, 9th ed., Prentice Hall.
- Options, Futures, and other Derivatives by John Hull, 9th edition.
- Financial Modeling by Simon Benninga, 2nd edition, The MIT Press.

EVALUATION: COMPONENTS AND WEIGHTS

Class Participation	10%
Two Spreadsheet Assignments	15%
Presentation Project	10%
Test One	30%
Final Exam	35%

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
A+	90 - 100
A	85 - 89
A-	80 - 84
B+	75 - 79
B	70 - 74
B-	60 - 69
F	00 - 59

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

Language for Use in Courses with an On-Line Element

In this course we will be using X*. Students should be aware that when they access the electronic components of this course, private information such as first and last names, user names for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course. The available information is dependent on the technology used. Continuation in this course will be deemed consent to this disclosure.

If you have any questions or concerns about such disclosure, please discuss this with the course instructor.

X* = e-mail, avenue to learn, etc

MISSED ACADEMIC WORK

Missed Mid-Term Examinations / Tests / Class Participation

Where students miss a regularly scheduled mid-term or class participation for legitimate reasons as determined by the Student Experience – Academic (MBA) office, the weight for that test/participation will be distributed across other evaluative components of the course at the discretion of the instructor. Documentation explaining such an absence

must be provided to the Student Experience – Academic (MBA) office within five (5) working days upon returning to school.

To document absences for health related reasons, please provide to Student Experience – Academic (MBA) office the [Petition for Relief for MBA Missed Term Work](#) and the [McMaster University Student Health Certificate](#) which can be found on the DeGroote website at <http://mbastudent.degroote.mcmaster.ca/forms-and-applications/>. Please do not use the online McMaster Student Absence Form as this is for Undergraduate students only. University policy states that a student may submit a maximum of three (3) medical certificates per year after which the student must meet with the Director of the program.

To document absences for reasons other than health related, please provide Student Experience – Academic (MBA) office the [Petition for Relief for MBA Missed Term Work](#) and documentation supporting the reason for the absence.

Students unable to write a mid-term at the posted exam time due to the following reasons: religious; work-related (for part-time students only); representing university at an academic or varsity athletic event; conflicts between two overlapping scheduled mid-term exams; or other extenuating circumstances, have the option of applying for special exam arrangements. Such requests must be made to the Student Experience – Academic (MBA) office at least ten (10) working days before the scheduled exam along with acceptable documentation. Instructors cannot themselves allow students to unofficially write make-up exams/tests. Adjudication of the request must be handled by Student Experience – Academic (MBA).

If a mid-term exam is missed without a valid reason, students will receive a grade of zero (0) for that component.

Missed Final Examinations

A student who misses a final examination without good reason will receive a mark of 0 on the examination.

All applications for deferred and special examination arrangements must be made to the Student Experience – Academic (MBA) office. Failure to meet the stated deadlines may result in the denial of these arrangements. Deferred examination privileges, if granted, must be satisfied during the examination period at the end of the following term. There will be one common sitting for all deferred exams.

Failure to write an approved deferred examination at the pre-scheduled time will result in a failure for that examination, except in the case of exceptional circumstances where documentation has been provided and approved. Upon approval, no credit will be given for the course, and the notation N.C. (no credit) will be placed on the student's transcript. Students receiving no credit for a required course must repeat the course. Optional or elective courses for which no credit is given may be repeated or replaced with another course of equal credit value.

Requests for a second deferral or rescheduling of a deferred examination will not be considered.

Any student who is unable to write a final examination because of illness is required to submit the [Application for Deferred MBA Final Examination](#) and a statement from a

doctor certifying illness on the date of the examination. The [Application for Deferred MBA Final Examination](#) and the [McMaster University Student Health Certificate](#) can be found on the DeGroote website at <http://mbastudent.degroote.mcmaster.ca/forms-and-applications/>. Please do not use the online McMaster Student Absence Form as this is for Undergraduate students only. Students who write examinations while ill will not be given special consideration after the fact.

In such cases, the request for a deferred examination privilege must be made in writing to the Student Experience – Academic (MBA) office within five business days of the missed examination.

Special examination arrangements may be made for students unable to write at the posted exam time due to compelling reasons (for example religious, or for part-time students only, work-related reasons):

- Students who have religious obligations which make it impossible to write examinations at the times posted are required to produce a letter from their religious leader stating that they are unable to be present owing to a religious obligation.
- Part-time students who have business commitments which make it impossible to write examinations at the times posted are required to produce a letter on company letterhead from the student's immediate supervisor stating that they are unable to be present owing to a specific job commitment.

In such cases, applications must be made in writing to the Student Experience – Academic (MBA) office at least ten business days before the scheduled examination date and acceptable documentation must be supplied.

If a student is representing the University at an academic or athletic event and is available at an overlapping scheduled time of the test/examination, the student may write the test/examination at an approved location with an approved invigilator, as determined by the Student Experience – Academic (MBA) office.

In such cases, the request for a deferred examination privilege must be made in writing to the Student Experience – Academic (MBA) office within ten business days of the end of the examination period.

Note: A fee of \$50 will be charged for a deferred exam written on campus and a fee of \$100 for deferred exams written elsewhere. In cases where the student's standing is in doubt, the Graduate Admissions and Study Committee may require that the student with one or more deferred examination privileges refrain from re-registering until the examination(s) have been cleared.

STUDENT ACCESSIBILITY SERVICES

Student Accessibility Services (SAS) offers various support services for students with disabilities. Students are required to inform SAS of accommodation needs for course work at the outset of term. Students must forward a copy of such SAS accommodation

to the instructor normally, within the first three (3) weeks of classes by setting up an appointment with the instructor. If a student with a disability chooses NOT to take advantage of an SAS accommodation and chooses to sit for a regular exam, a petition for relief may not be filed after the examination is complete. The SAS website is:

<http://sas.mcmaster.ca>

POTENTIAL MODIFICATION TO THE COURSE

The instructor and university reserve the right to modify elements of the course during the term. The university may change 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 COURSE POLICIES

Your registration and continuous participation (e.g. on A2L, in the classroom, etc.) to the various learning activities of MBA F723 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.

COURSE TOPICS

TOPICS AND READINGS
Basic Bond Analysis (Readings: Fabozzi: Chapters 1, 2, 3 and 5) <ul style="list-style-type: none">• Bond Prices, Bond Yields and Bond Returns• Discount Factor, Spot rate, Forward Rate and Term Structure of Interest Rates Spreadsheet Assignment 1 (5%)
Interest Rate Risk Management (Readings: Fabozzi: Chapters 4; Benninga: Chapter 21) <ul style="list-style-type: none">• Interest Rate Sensitivity of Fixed Income Securities• Managing Interest Rate Risk Spreadsheet Assignment 2 (10%)
Pricing Fixed Income Derivatives (Readings: Fabozzi) Term Structure Models (Readings: Hull)
Selected Fixed Income Securities <ul style="list-style-type: none">• Mortgage-backed Securities (Readings: Fabozzi: Chapter 10, 11 and 12)• Interest-rate Swaps (Readings: Fabozzi: Chapter 31)• Credit Derivatives (Readings: Hull: Chapter 25, Fabozzi: chapter 32)• Forward Contract (readings: Fabozzi)• Interest-Rate Futures Contracts (Readings: Fabozzi: Chapter 29)• Interest-Rate Options (Readings: Fabozzi: Chapter 18, 20 and 30)