



**COMMERCE 3FD3
Introduction to Finance
Spring 2020 Course Outline**

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

COURSE DESCRIPTION

What is the difference between making a purpose-built spread sheet and financial modeling? Financial modeling is much more flexible and can be easily modified to solve a wide array of problems. This course will examine the tools built into Excel and VBA and their use in financial modeling. A basic knowledge of Excel is assumed with no prior experience with VBA required.

INSTRUCTOR AND CLASS INFORMATION

Tuesdays/Thursdays from 2:30 PM to 5:30 PM
All times referenced in this document are Eastern.

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Instructor
Tel: 905-525-9140 Ext 20559
Office Hours: Before or after class, or by appointment

COURSE ELEMENTS

Credit Value: 3	Leadership: Yes	IT skills: Yes	Global view: Yes
Avenue: Yes	Ethics: No	Numeracy: Yes	Written skills: Yes
Participation: Yes	Innovation: Yes	Group Work: Yes	Oral skills: Yes

COURSE PREREQUISITES AND COMPLEMENTS

COMMERCE 2FA3 or IBH 2BB3; and registration in level III or above in any Honours Bachelor of Commerce or Engineering and Management program; or Level IV of the Commerce program, or the Minor in Finance.

COURSE DESCRIPTION

This course introduces the basics of financial modelling. It is offered as an upper-year course because of the 2FA3 prerequisite. This setup requires an understanding of finance and a basic knowledge of Excel. We will build on this knowledge to develop a more complete understanding of what makes for a good financial model, and how to go about building.

LEARNING OUTCOMES

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

- Design and layout a financial model.
- Decide on which variables are independent and how to vary them.
- Become familiar with Excel and VBA, enough to be viewed as the "resident expert" in many situations.

REQUIRED COURSE MATERIALS AND READINGS

Course content and class communication available on Avenue:

- <http://avenue.mcmaster.ca>

OPTIONAL COURSE MATERIALS AND READINGS

Benninga; Financial Modeling; *Fourth (4th) Edition*; The MIT Press, 2014:

- ISBN: 978-0262027281
- Finance-focused modelling text, also useful in other finance courses

Walkenbach; Excel 2016 Bible; *First (1st) Edition*; Wiley, 2015:

- ISBN: 978-1119067511
- Traditional-style manual for Excel, without any particular finance focus
- Helpful in gaining understanding of broader Excel usage

EVALUATION

Individual learning in this course results from model building, problem solving, and lab work. Team learning focus of this course is on two assignments and an applied group project centred on a financial model.

The final grade will be calculated as follows:

Components and Weights

Course Engagement	Participation in online activities (individual)	5%
Mini Tests	Written online during class hours (individual)	3 x 15%
Spreadsheet Assignments	Due online during the term (group)	2 x 10%
Group Project	Due online at the end of the term (group)	30%
Total		100%

Course Engagement

Course Engagement marks are based on the level of student engagement in the online content items and activities contained in the course. Each item or activity is tracked online (on the course website) to keep a record of its completion by the student. Student attendance in, or subsequent viewing of, online lectures is also recorded.

A list of the content items and activities requiring student completion is provided on the course website to view at the beginning of the term. Refer to the ***Course Engagement*** section of the course for more details on the evaluation aspects of this component.

Mini Tests

Three (3) mini tests – ***open-book, open-notes*** tests – will be written during the scheduled class hours in the term. Refer to the course schedule for specific dates and times.

A student ***missing a Mini Test*** is required to contact the ‘Student Experience – Academic Office’ and obtain an official approval of relief if he or she wishes to avoid getting a zero (0) grade for the test. If ‘Student Experience – Academic Office’ adjudicates that relief be provided without the requirement of an alternate test, the student’s grade for the missed test will be calculated based on the scheme outlined in the ***Missed Tests*** document available online.

Spreadsheet Assignments

There are two (2) *Spreadsheet Assignments* in the course – completed in groups, submitted online, and focused on the concepts introduced in the course. Refer to the course schedule for specific dates and times.

Students will form groups for this component. Each student group will also complete the **Group Project** as described elsewhere in this document. *The group members will be assigned individual grades relative to the group grade based on the peer assessments completed towards the end of the course.*

Group Project

Students will form groups for this component. Each student group will also complete the *Spreadsheet Assignments* as described elsewhere in this document. *The group members will be assigned individual grades relative to the group grade based on the peer assessments completed towards the end of the course.*

The **Group Project** is **due at the end of the term**. The project will entail building and documenting a real-life financial model using the concepts covered in the course.

ONLINE COURSE COMPONENTS

In this course we will be using Avenue to Learn (A2L). 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 it with the instructor.

ACADEMIC INTEGRITY

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* 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/misled-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 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.

ACKNOWLEDGEMENT OF COURSE POLICIES

Your enrolment in this course 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.

RESEARCH DATA

Any research data obtained by a student from publicly available sources for the purposes of completing term work (including data used in assignments, projects, and tests) are the joint property of the student, the instructor, and the university. All parties are free to use the research data subject to the original copyright of such data. Students hereby agree not to use in their term work any proprietary data or data subject to copyright protection without the prior written approvals of the instructor and the owner of any such copyright.

POTENTIAL MODIFICATIONS 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.

COURSE SCHEDULE

CL.	DATE	CONTENT	EXCEL TOPIC
1	Tue, May 5	Introduction Intro to Financial Modelling	-
2	Thu, May 7	Financial Statement Modelling I Forecasting financial statements using spreadsheets	<ul style="list-style-type: none"> • Various Excel functions / tools
3	Tue, May 12	Financial Statement Modelling II Integrating financial statement worksheets, completing valuations	<ul style="list-style-type: none"> • Various Excel functions / tools
4	Thu, May 14	Mini Test 1 (Written Online at 3.00 PM Eastern time)	
5	Tue, May 19	Portfolio Modelling Investment portfolios, betas, variances, performance measurement	<ul style="list-style-type: none"> • Datables, arrays, pivot tables • Matrix operations
6	Thu, May 21	Forecasting and Optimization Macro forecasting, optimization techniques, predictive analytics	<ul style="list-style-type: none"> • Solver, Analysis Toolkit, Regression, Scenario analysis
-	Mon, May 25	Spreadsheet Assignment 1 (Due Online by 11.00 AM Eastern Time)	
7	Tue, May 26	Working with External Data Integration with online data sources and databases	<ul style="list-style-type: none"> • PowerQuery, Advanced Lookups, Aggregation Tools
8	Thu, May 28	Mini Test 2 (Written Online at 3.00 PM Eastern time)	
9	Tue, Jun 2	VBA / Programming I Intro to VBA / programming	<ul style="list-style-type: none"> • VBA, macros, custom functions
10	Thu, Jun 4	VBA / Programming II Working with custom functions	<ul style="list-style-type: none"> • VBA, advanced loops
-	Mon, Jun 8	Spreadsheet Assignment 2 (Due Online by 11.00 AM Eastern Time)	

CL.	DATE	CONTENT	EXCEL TOPIC
11	Tue, Jun 9	VBA / Programming III Additional programming	<ul style="list-style-type: none"> User interfaces, additional VBA programming
12	Thu, Jun 11	Mini Test 3 (Written Online at 3.00 PM Eastern time)	
-	Sat, Jun 13	Project Proposal (Due Online by 11.00 AM Eastern Time)	
13	Tue, Jun 16	VBA / Programming IV Other programming languages and big data tools	<ul style="list-style-type: none"> (TBA)
14	Thu, Jun 18	<i>Review + Project Questions</i>	-
-	Mon, Jun 22	Group Project (Due Online by 11.00 AM Eastern Time)	