REPORT TO THE FACULTY OF BUSINESS FROM THE UNDERGRADUATE CURRICULUM AND POLICY COMMITTEE

FOR THE 2020-2021 ACADEMIC CALENDAR

NOVEMBER 2019

Summary of Proposed Changes

FACULTY OF BUSINESS REPORT TO SENATE SUMMARY OF MAJOR CURRICULUM CHANGES FOR 2020-2021 ACADEMIC CALENDAR

NOVEMBER 2019

This report highlights substantive changes being proposed to the Undergraduate curriculum. For a complete review of all changes, please refer to the Faculty of Business Curriculum Report for Changes to the 2020-2021 Undergraduate Calendar, located electronically at: http://ug.degroote.mcmaster.ca/curriculum-report/

New Programs

N/A

Program Closures

N/A

Major Revisions

N/A

FACULTY OF BUSINESS REPORT TO UNDERGRADUATE COUNCIL SUMMARY OF CURRICULUM CHANGES FOR 2020-2021 ACADEMIC CALENDAR

NOVEMBER 2019

This report highlights substantive changes being proposed to the Undergraduate curriculum. For a complete review of all changes, please refer to the Faculty of Business Curriculum Report for Changes to the 2020-2021 Undergraduate Calendar, located electronically at: http://ug.degroote.mcmaster.ca/curriculum-report/

Below is a summary of the proposed changes for approval by the Faculty of Business. Full proposals and course outlines can be found in the appendices beginning on page 9.

REVISIONS TO MCMASTER GENERAL ACADEMIC REGULATIONS

N/A

<u>REVISIONS TO DEGROOTE SCHOOL OF BUSINESS (FACULTY OF BUSINESS) – ACADEMIC</u> <u>REGULATIONS</u>

N/A

NEW COURSES

- Commerce 3DA3 Predictive Analytics
- Commerce 3FK3 Intermediate Corporate Finance
- Commerce 3FL3 Sustainable and Social Finance

REVISIONS TO EXISTING COURSES

- Commerce 3FI3 Market Trading with Options
- Commerce 4MI3 Marketing Analytics
- Commerce 4SD3 Commercial Law
- Commerce 4SH3 Case Analysis and Presentation Skills
- IBH 2AF3 Global Business Experience

REVISIONS TO EXISTING CERTIFICATES

Business Technology Management (BTM)

COURSE DELETION:

• Commerce 4FI3 – Market Trading with Futures and Forwards

LONG VERSION

REVISIONS TO MCMASTER GENERAL ACADEMIC REGULATIONS

N/A

<u>REVISIONS TO DEGROOTE SCHOOL OF BUSINESS (FACULTY OF BUSINESS) – ACADEMIC</u> <u>REGULATIONS</u>

N/A

NEW COURSES

COMMERCE 3DA3 – Predictive Analytics

3 unit(s)

This course is designed to introduce the basics of predictive analytics to undergraduate students. The course takes a computational approach to address the concept of "prediction and forecasting" within business problems. Students will learn about the most commonly used predictive analytics tools and methodologies and get to apply them to a series of problems to gain hands-on experience. In this process, students also learn the basics of predictive data analytics using state of the art analytics computational platforms and tools such as Anaconda and Jupyter Notebook. Upon the completion of the course, students are expected to have gained a basic but broad understanding of predictive data analytics, and are able to use the R programming language to perform a preliminary predictive analysis on a given data set.

Lectures (three hours)

Prerequisite(s): COMMERCE 3QA3; and registration in Level III or above in a Bachelor of Commerce or Engineering and Management program.

Rationale: The rationale behind recommending this course is the growing demand from the industry for candidates with predictive analytics skills. A predictive analytics course involves using a programming language (or a MS Excel advanced add-on) to analyse data in order to derive predictive-based insight about the environment where the sample data was collected. We believe there is a gap in the curriculum for coding-based, data-related courses. At this time, this is the case for most, if not all, business schools. However, with the renewed interest in data analysis, and therefore disciplines like predictive analytics, the importance of filling this gap has become more pronounced. We believe this course will fill the gap and contribute to the success of our graduates in the job market by:

- (a) familarizing students with a common data analytics platform, where they could develop an understanding about what coding is, how it may benefit them, and why companies require this skill.
- (b) providing them with skills and a background knowledge on data analytics. After taking this course, the participant is expected to have a basic but broad understanding on what data analytics (and in particular predictive data analytics) entails, what are different approaches to a predictive analytics problem, and how using a programming language could be used to perform the analysis.
- (c) adding a very important capability to the skillset of our graduates. This is particularly important because graduates of many more technical departments (like Computer Science or Computer Engineering) are now applying to the same positions that have been traditionally a natural domain for our business graduates. Our graduates may be at a disadvantage in that competition especially if the position involves coding and data analytics requirements. This course is expected to enhance their position in the job market by adding the required skill to their skill set, and resume.
- (d) This course will be the first Operations Management Area elective course in the third level. After moving the Operations Management course (20C3) to the second level, there has been an increasing interest from the students to take operations related elective courses in the third level.

(e) providing students with an experiential learning opportunity. Students in the course get to apply the theory to data sets provided to them by the instructor.

COMMERCE 3FK3 - Intermediate Corporate Finance 3 unit(s)

This course will provide an overview of the theory, methods and concerns of Corporate Finance. The course will examine the important issues in corporate finance (capital budgeting, capital structure, dividend policy, interaction of investment and financing decisions) from the perspective of the financial manager. Although lecture-based, the course will also use a number of cases to illustrate the theory. **Prerequisite(s):** COMMERCE 3FA3; and registration in level III or above in any Bachelor of Commerce or Engineering and Management program or the Minor in Finance

Rationale: Currently, Finance students take the required second-year courses (2FA3 and 3FA3), which are introductory in nature (since they are meant for all Commerce students). There is no other course for students interested in Corporate Finance before they take the fourth-year advanced electives (Mergers & Acquisitions, Working Capital Management, Venture Capital, Entrepreneurial Finance, etc). Without sufficient in-depth knowledge of Corporate Finance, they are not properly prepared for these advanced electives. The proposed course will cover Corporate Finance topics in depth, and hopefully address the gap in the students' knowledge.

COMMERCE 3FL3 – Sustainable and Social Finance

3 unit(s)

Students will discuss how financial markets can play a socially-beneficial role. How public companies play a role in creating a more sustainable world. What role endowments play in the success of the non-profit sector. The role socially-responsible businesses, impact investments and green bonds play in helping to improve social outcomes. A major focus will be learning to evaluate public companies from an Environmental, Social and Governance (ESG) perspective. ESG has become a critical skill set in evaluating investments.

Prerequisite(s): COMMERCE 3FA3; and registration in level III or above in any Bachelor of Commerce or Engineering and Management program or the Minor in Finance

Rationale: Sustainable and Social Finance considerations are now considered to be a core part of the fiduciary duty of an investment manager when valuing and selecting investments. The United Nations Principles for Responsible Investment was formed in 2006 and now has more than 2,500 investment firms as signatories that manage over US\$90 trillion in investment assets. The UN PRI requires that investors "incorporate Environmental, Social and Governance issues into investment analysis and decision-making". In this course, students will learn how to incorporate ESG considerations into investing. No other course at McMaster covers this material.

REVISIONS TO EXISTING COURSES

COMMERCE 3FI3 - Market Trading with Options and Futures

3 unit(s)

This experiential course attempts to develops practical skills in trading financial securities -money market instruments, bonds, equities, indices, ETFs, currencies, commodities and their corresponding options focusing on trading strategies that minimize market exposure through risk measurement. Market microstructure insight provides guidance in implementing the appropriate trading strategies. The course relies on the facilities and resources available in the Gould Trading Floor (GTF). Lectures (three hours)

Prerequisite(s): COMMERCE 3FA3 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. Enrolment is limited.

Rationale: Merging with 4FI3 below.

COMMERCE 4FI3 - Market Trading with Futures and Forwards

3 unit(s)

This course attempts to develop practical skills in trading financial securities -fixed income, equities, futures and options- focusing on trading strategies based on market analysis and risk measurement. Lectures (three hours)

Prerequisite(s): COMMERCE 3FA3 ; and registration in Level III or above of an Honours Commerce or Engineering & Management program; or registration in Level IV of the Commerce program. Enrolment is limited.

Rationale: Merging with 3FI3 above.

COMMERCE 4MI3 - Marketing Analytics

3 unit(s)

Marketing departments are increasingly utilizing data routinely collected by their organizations to improve marketing decision making and more effectively allocate resources. This course will familiarize students with tools necessary for converting raw data into valuable consumer insights. The course offers a handson, practical approach, giving students the opportunity to become familiar with data analysis software. The course will emphasize both inference and prediction and highlight the trade-offs associated with different marketing analytics methods.

Prerequisite(s): Registration in any Honours Bachelor of Commerce, Engineering and Management program; COMMERCE 2MA3 (or IBH 2AA3) and COMMERCE 3MA3 for students registered in any Commerce program; COMMERCE 2MA3 (or IBH 2AA3) for students registered in any Engineering and Management Program.

COMMERCE 3MA3; and registration in level III or above in any Honours Bachelor of Commerce or Engineering and Management program

Rationale: The original prerequisites for Marketing Analytics did not require Engineering students to take the undergraduate Marketing Research course (3MA3). To simplify, we are recommending the requirement be made the same for all students.

COMMERCE 4SH3 - Case Analysis and Presentation Skills

3 unit(s)

Cases allow students to directly apply and integrate theories from various business disciplines to realworld situations/problems. Students will be working in teams and will have the opportunity to present their analysis and recommendations to a panel of judges. Hence, they will also develop their presentation skills, team and time management and communication skills. The first half of the course will provide students with the tools they need to approach case analysis. These tools include problem solving methodologies, communication approaches and team building skills. The final half of the course will allow students to practice applying these tools in case analysis situations in a three hour format. The cases will cover various industries and companies as well as different disciplines. Students will also be able to critique the analysis and presentation skills of their peers.

Students will work in teams to solve cases describing real-world problems. This hands-on course will develop student's skills in terms of presentation, communication, as well as team and time management. NOTE: Students should keep the morning prior to the course free in their schedule for weekly case preparation.

Lectures (three hours)

Prerequisite(s): COMMERCE 3MC3 or IBH 3AB3; or instructor permission

Rationale: Students must be available on most Monday mornings for the duration of the semester in order to complete the required cases for the semester. This is not reflected in the scheduled time posted on Mosaic but should be clarified beyond the instructor sending our periodic e-mails throughout the summer.

IBH 2AF3 - Global Business Experience

3 unit(s)

This course has two main objectives: 1) is to understand the role that business plays in the global economy, especially its role in global poverty as well as global peace by immersing students in an international learning experience. 2) For students to understand the historical, sociological, and economic impact in order to assess economic development projects in a developing country. In this course students will learn how globalization connects the developed and developing worlds; how business and the economy maintain structural inequalities and global wealth disparities; the global economic, social, and environmental impact of Western business decisions; the historical, political, geographical, gendered, and cultural context in which business operates, and the impact of economic development policies. Lectures (3 hours)

Prerequisites: Registration in Level II III of the Integrated Business and Humanities Program **Rationale:** This course was meant to have the prereq of enrolment in Level II but was submitted as requiring Level III enrolment last year.

COMMERCE 4SD3 - Commercial Law

3 unit(s)

This course emphasizes those areas of law which are most relevant to business activity. Particular attention is given to the law relating to contracts and business organizations. Other areas of study include: sources of law, the judicial process, real and personal property, torts, agency, credit and negotiable instruments.

Lectures (three hours)

Prerequisite(s): Registration in Level III or above and in any Honours Bachelor of Commerce or Engineering and Management program or Level IV of the Justice, Political Philosophy, and Law Program or the Minor in Innovation.

Rationale: This is a Commerce elective and students start taking them in Level III. Re-adding Justice, Political Philosophy, and Law Program to the prerequisite as it was removed in error in previous submissions.

REVISIONS TO EXISTING CERTIFICATES

Certificate in Business Technology Management (BTM)

Notes

- 1. The courses comprising the BTM certificate will count as elective courses for students enrolled in an Honours Bachelor of Commerce (B.Com.) program.
- 2. SFWRTECH 3IT3 and SFWRTECH 3PR3 are anti-requisites.

Admission

Enrolment in an Honours Bachelor of Commerce (B.Com.) program is required for admission to the certificate.

Requirements

27 units total

21 units

- COMMERCE 3KA3 System Analysis and Design
- COMMERCE 3KD3 Database Design Management and Applications
- COMMERCE 3KE3 Management of Enterprise Data Analytics
- COMMERCE 4KF3 Project Management
- COMMERCE 4KG3 Data Mining For Business Analytics
- COMMERCE 4KH3 Strategies for Electronic and Mobile Business
- COMMERCE 4KI3 Business Process Management

6 units

from

- SFWRTECH 3CS3 Computer Security
- SFWRTECH 3IT3 Fundamentals of Networking
- SFWRTECH 3OS3 Operating Systems
- SFWRTECH 3PR3 Procedural and Object Oriented Programming Concepts
- SFWRTECH 3RQ3 Software Requirements and Specification
- SFWRTECH 4SD3 Software Design

Rationale: Redundant note.

COURSE DELETIONS

Commerce 4FI3

APPENDIX – NEW COURSES





RECOMMENDATION FOR CHANGE IN UNDERGRADUATE CURRICULUM FOR 2020-2021 New Course Proposal

DeGroote School of Business McMaster University

- 1. All sections of this form <u>must</u> be completed.
- 2. This form must be completed <u>for all</u> course changes.
- 3. If the committee has any questions regarding this proposal, who should be contacted?

Instructor or Chair Name: **Area Chair: Dr. Elkafi Hassini** Extension: x **27467**

4. A faculty representative will be required to attend the DeGroote Undergraduate Curriculum & Calendar Committee meeting and the DeGroote Faculty of Business meeting at which this recommendation for change in undergraduate curriculum is to be discussed.

Submitted by which area group (select one):

- Strategic Management
- Marketing
- Health Policy and Management
- Accounting and Financial Management Services
- Finance and Business Economics
- Human Resources and Management
- Information Systems
- **X** Operations Management
- Joint Areas (please specify):

Proposed Course Details:

Course Title:	Predictive Analytics
Instructor(s):	Behrouz Bakhtiari
Prerequisites:	Commerce 2QA3, Commerce 3QA3

Course Code: **3DA3** Credit Value: **3units** **Rationale**: Explain briefly the reasons behind the recommendation. If the course is being re-named, give the old and new titles, and old and new course numbers. If the course is to be cancelled, state the rationale.

The rationale behind recommending this course is the growing demand from the industry for candidates with predictive analytics skills.

A predictive analytics course involves using a programming language (or a MS Excel advanced add-on) to analyse data in order to derive predictive-based insight about the environment where the sample data was collected. We believe there is a gap in the curriculum for coding-based, data-related courses. At this time, this is the case for most, if not all, business schools. However, with the renewed interest in data analysis, and therefore disciplines like predictive analytics, the importance of filling this gap has become more pronounced. We believe this course will fill the gap and contribute to the success of our graduates in the job market by:

- (f) familiarizing students with a common data analytics platform, where they could develop an understanding about what coding is, how it may benefit them, and why companies require this skill.
- (g) providing them with skills and a background knowledge on data analytics. After taking this course, the participant is expected to have a basic but broad understanding on what data analytics (and in particular predictive data analytics) entails, what are different approaches to a predictive analytics problem, and how using a programming language could be used to perform the analysis.
- (h) adding a very important capability to the skillset of our graduates. This is particularly important because graduates of many more technical departments (like Computer Science or Computer Engineering) are now applying to the same positions that have been traditionally a natural domain for our business graduates. Our graduates may be at a disadvantage in that competition especially if the position involves coding and data analytics requirements. This course is expected to enhance their position in the job market by adding the required skill to their skill set, and resume.
- (i) This course will be the first Operations Management Area elective course in the third level. After moving the Operations Management course (2OC3) to the second level, there has been an increasing interest from the students to take operations related elective courses in the third level.
- (j) providing students with an experiential learning opportunity. Students in the course get to apply the theory to data sets provided to them by the instructor.

Course Description: Provide a brief description to be included in the Undergraduate Calendar (max. 6 lines).

This course is designed to introduce the basics of predictive analytics to undergraduate students. The course takes a computational approach to address the concept of "prediction and forecasting" within business problems. Students will learn about the most commonly used predictive analytics tools and methodologies and get to apply them to a series of problems to gain hands-on experience. In this process, students also learn the basics of predictive data analytics using state of the art analytics computational platforms and tools such as Anaconda and Jupyter Notebook. Upon the completion of the course, students are expected to have gained a basic but broad understanding of predictive data

analytics, and are able to use the R programming language to perform a preliminary predictive analysis on a given data set.

Statement of purpose (How does the course fit into the Faculty's programme?):

This course is expected to be a third-level elective. It relies upon knowledge gained in data analysis and statistics (through completion of Commerce 2QA3) and the application of data analysis (through completion of Commerce 3QA3). It builds up on the basics statistical data analysis skills and prepare students for more advanced application based courses they can take in year 4.

Expected class size (please provide context if below standard class-size:

The expected and desired class size is 50 students. This is mainly because the course is application-based and students may be required to perform analysis during the lecture.

Method of presentation of course material:

The course is designed as in-class presentation/in-class practice. However, certain computational components may be taught through videos and practices that students could download, watch and practice outside of regular lecture hours. There is also a tutorial, where students perform analysis and gain hands-on experience.

Method of evaluation (exams, essays, assignments, group projects, class participation, etc.):

The proposed method of evaluation is assignments (individual), one exam (individual) and one project (group).

To prevent overlap, is a similar course being offered elsewhere on campus? If so, please attach any relevant correspondence with the other area(s) or department(s)? **X** not offered elsewhere

If the proposed course is to be **cross-listed** in another department/faculty, please attach relevant correspondence with the department/faculty. **X** not cross-listed elsewhere

If this course is intended primarily for students **outside the DeGroote School of Business**, have you the support of the department concerned? **X** not intended for students outside the faculty

A **draft course outline** is attached to this form. \Box Yes it is included.





RECOMMENDATION FOR CHANGE IN UNDERGRADUATE CURRICULUM FOR 2020-2021 New Course Proposal

DeGroote School of Business McMaster University

- 5. All sections of this form <u>must</u> be completed.
- 6. This form must be completed <u>for all</u> course changes.
- 7. If the committee has any questions regarding this proposal, who should be contacted?

Instructor orChair Name:Trevor ChamberlainExtension:x 23980

8. A faculty representative will be required to attend the DeGroote Undergraduate Curriculum & Calendar Committee meeting and the DeGroote Faculty of Business meeting at which this recommendation for change in undergraduate curriculum is to be discussed.

Submitted by which area group (select one):

- Strategic Management
- Marketing
- Health Policy and Management
- Accounting and Financial Management Services
- **X** Finance and Business Economics
- Human Resources and Management
- Information Systems
- Operations Management
- Joint Areas (please specify):

Proposed Course Details:

Course Title: Intermediate Corporate Finance Instructor(s): Sudipto Sarkar Prerequisites: 2FA3, 3FA3 Course Code: **3FK3** Credit Value: **3** **Rationale**: Explain briefly the reasons behind the recommendation. If the course is being re-named, give the old and new titles, and old and new course numbers. If the course is to be cancelled, state the rationale.

Currently, Finance students take the required second-year courses (2FA3 and 3FA3), which are introductory in nature (since they are meant for all Commerce students). There is no other course for students interested in Corporate Finance before they take the fourth-year advanced electives (Mergers & Acquisitions, Working Capital Management, Venture Capital, Entrepreneurial Finance, etc). Without sufficient in-depth knowledge of Corporate Finance, they are not properly prepared for these advanced electives. The proposed course will cover Corporate Finance topics in depth, and hopefully address the gap in the students' knowledge.

Course Description: Provide a brief description to be included in the Undergraduate Calendar (max. 6 lines).

This course will provide an overview of the theory, methods and concerns of Corporate Finance. We will examine the important issues in corporate finance (capital budgeting, capital structure, dividend policy, interaction of investment and financing decisions) from the perspective of the financial manager. Although lecture-based, the course will also use a number of cases to illustrate the theory.

Statement of purpose (How does the course fit into the Faculty's programme?):

It will fill a gap in knowledge of our Commerce (Finance) students, and prepare them for the specialized courses in their fourth year.

Expected class size (please provide context if below standard class-size: 20?

Method of presentation of course material: Lecture

Method of evaluation (exams, essays, assignments, group projects, class participation, etc.): Test, Exam, Group project.

To prevent overlap, is a similar course being offered elsewhere on campus? If so, please attach any relevant correspondence with the other area(s) or department(s)? **X** not offered elsewhere

If the proposed course is to be **cross-listed** in another department/faculty, please attach relevant correspondence with the department/faculty. **X** not cross-listed elsewhere

If this course is intended primarily for students **outside the DeGroote School of Business**, have you the support of the department concerned? **X** not intended for students outside the faculty

A draft course outline is attached to this form. X Yes it is included.

Proposal for a new course on Corporate Finance

By Sudipto Sarkar

Course name and number: Intermediate Corporate Finance, 3FK3.

<u>Why needed?</u> Currently, Finance students take the required second-year courses (2FA3 and 3FA3), which are introductory in nature (since they are meant for all Commerce students). There is no other course for students interested in Corporate Finance before they take the fourth-year advanced electives (Mergers & Acquisitions, Working Capital Management, Venture Capital, Entrepreneurial Finance, etc). Without sufficient in-depth knowledge of Corporate Finance, they are not properly prepared for these advanced electives. The proposed course will cover Corporate Finance topics in depth, and hopefully address the gap in the students' knowledge.

<u>Textbook</u>: Corporate Finance, by A. Damodaran.

<u>Topics</u>

 Chapters 24-25 (Damodaran): Valuation Chapters 7-10, 12, 15 (Damodaran): The Corporate Investment Decision: Chapters 16-10 (Damodaran): The Financing Decision classes Chapters 16-10 (Damodaran): The Financing Decision 	1.	Chapters 1-6 (Damodaran): Recap of Basics (Objective, values, risk)	2 classes
4. Chapters 16-10 (Damodaran): The Financing Decision2 classes	2.	Chapters 24-25 (Damodaran): Valuation	1 class
	3.	Chapters 7-10, 12, 15 (Damodaran): The Corporate Investment Decision:	2 classes
	4.	Chapters 16-10 (Damodaran): The Financing Decision	2 classes
5. Chapters 21-23 (Damodaran): The Payout Decision 2 classes	5.	Chapters 21-23 (Damodaran): The Payout Decision	2 classes
6. Chapters 13-14 (Damodaran): Working Capital Management2 classes	6.	Chapters 13-14 (Damodaran): Working Capital Management	2 classes
7. Chapter 27 (Damodaran): Real Options in Corporate Finance1 class	7.	Chapter 27 (Damodaran): Real Options in Corporate Finance	1 class
8. Chapter 26 (Damodaran): Acquisitions and LBOs1 class	8.	Chapter 26 (Damodaran): Acquisitions and LBOs	1 class

Total 13 classes





RECOMMENDATION FOR CHANGE IN UNDERGRADUATE CURRICULUM FOR 2020-2021 New Course Proposal

DeGroote School of Business McMaster University

- 9. All sections of this form <u>must</u> be completed.
- 10. This form must be completed <u>for all</u> course changes.
- 11. If the committee has any questions regarding this proposal, who should be contacted?

Instructor or Chair Name: Chair: Trevor Chamberlain Extension: x 23980

12. A faculty representative will be required to attend the DeGroote Undergraduate Curriculum & Calendar Committee meeting and the DeGroote Faculty of Business meeting at which this recommendation for change in undergraduate curriculum is to be discussed.

Submitted by which area group (select one):

- Strategic Management
- Marketing
- Health Policy and Management
- Accounting and Financial Management Services
- Finance and Business Economics
- Human Resources and Management
- Information Systems
- Operations Management
- Joint Areas (please specify):

Proposed Course Details:

Course Title:	Sustainable and Social Finance	Course Code:	3FL3
Instructor(s):	Trevor Chamberlain	Credit Value:	3
Prerequisites:	None		

Rationale: Explain briefly the reasons behind the recommendation. If the course is being re-named, give the old and new titles, and old and new course numbers. If the course is to be cancelled, state the rationale.

Sustainable and Social Finance considerations are now considered to be a core part of the fiduciary duty of an investment manager when valuing and selecting investments. The United Nations Principles for Responsible Investment was formed in 2006 and now has more than 2,500 investment firms as signatories that manage over US\$90 trillion in investment assets. The UN PRI requires that investors "incorporate Environmental, Social and Governance issues into investment analysis and decision-making". In this course, students will learn how to incorporate ESG considerations into investing. No other course at McMaster covers this material.

Course Description: Provide a brief description to be included in the Undergraduate Calendar (max. 6 lines).

Students will discuss how financial markets can play a socially-beneficial role. Can public companies play a role in creating a more sustainable world? What role do endowments play in the success of the non-profit sector? What role can socially-responsible businesses, impact investments and green bonds play in helping to improve social outcomes? A major focus will be learning to evaluate public companies from an Environmental, Social and Governance (ESG) perspective. ESG has become a critical skill set in evaluating investments.

Statement of purpose (How does the course fit into the Faculty's programme?):

As above, ESG analysis has quickly become a required skill-set to value and select investments. ESG is now a core component of the CFA program. Accordingly, students studying Finance need to be familiar with ESG concepts to be able to function in today's market for investment finance job opportunities.

Expected class size (please provide context if below standard class-size:

As a Special Topic course this year, 31 undergraduates and 38 MBA students enrolled. As the content of the course appears to be popular and topical with students as well as a door opener for many investment functions, I suspect that Undergraduate enrolment could increase substantially.

Method of presentation of course material:

In class supported by PowerPoint lectures. Students are provided with many primary readings on the subject, videos, TED Talks. In the course, they examine public companies' corporate social responsibility reports and ESG research published by specialist firms.

Method of evaluation (exams, essays, assignments, group projects, class participation, etc.): Class participation which includes PollAnywhere quizzes to ensure students do the weekly readings (30%), two group projects (40%) and an individual assignment where the student appraises a public company's ESG disclosure and assesses ESG research on the company (30%).

To prevent overlap, is a similar course being offered elsewhere on campus? If so, please attach any relevant correspondence with the other area(s) or department(s)? \square not offered elsewhere

If the proposed course is to be **cross-listed** in another department/faculty, please attach relevant correspondence with the department/faculty. 🔀 not cross-listed elsewhere

If this course is intended primarily for students **outside the DeGroote School of Business**, have you the support of the department concerned? 🔀 not intended for students outside the faculty

A **draft course outline** is attached to this form. \square Yes it is included.

Commerce 3FL3 Sustainable and Social Finance Course Outline

Finance Area DeGroote School of Business McMaster University

Course Objective

Students will discuss how financial markets can play a socially-beneficial role. Can public companies play a role in creating a more sustainable world? What role do endowments play in the success of the non-profit sector? What role can sociallyresponsible businesses, impact investments and green bonds play in helping to improve social outcomes? A major focus will be learning to evaluate public companies from an Environmental, Social and Governance (ESG) perspective. ESG has become a critical skill set in evaluating investments.

Instructor and Contact Information

Section C01 Time: TBA Mike Miller, CFA Instructor millem11@mcmaster.ca Office: TBA Office Hours: After Class

Class Location: TBA

Student TA: TBA

TBA@mcmaster.ca Office Hours: TBA

Course Elements

Credit Value: A2L: Participation:	3 Yes Yes	Leadership: Ethics: Innovation:	Yes Yes Yes	IT skills: Numeracy: Group work:	No No Yes	Global view: Written skills: Oral skills:	Yes Yes Yes
Evidence- based:	Yes	Experiential:	No	Final Exam:	No	Guest speaker(s):	Yes

Course Description

Students will discuss how Financial Markets can play a socially beneficial role. Can public companies play a role in creating a more sustainable world? What role do endowments play in the success of the non-profit sector? What role can socially-responsible businesses, impact investments and green bonds play in helping to improve social outcomes? A major focus will be learning to evaluate public companies from an Environmental, Social and Governance (ESG) perspective. Institutional Investors are now implementing the United Nations Principles for Responsible Investments. Corporations are finding that they have to manage multiple stakeholders beyond shareholders and must do so with increasing transparency around ESG issues. Virtually all public companies now publish a detailed Corporate Social Responsibility report. Students will study and assess how well these reports address key issues surrounding the Environment (Carbon, Water, Fracking), Social Issues (Human Rights, Ethical Supply Chains, Labour Standards, Conflict Zones) and Corporate Governance (Tax Avoidance, Executive Pay, Corruption, Diversity, Harassment). Evaluation will depend heavily on class participation and 3 assignments.

Learning Outcomes

Upon successful completion of this course, students will gain an understanding of:

- > The role that Finance can play in promoting positive social outcomes.
- The importance of Environmental, Social and Governance issues when completing a financial valuation of a company.
- The improving transparency of corporations around their Environmental, Social and Governance impacts on society.
- > How metrics and standards are being developed to better evaluate ESG issues.
- The relationship between improved transparency and enhanced investor engagement in promoting improved ESG outcomes.
- How global goals like the UN's Sustainable Development Goals and Declaration of Human Rights can be furthered through ESG processes.
- New social finance investment vehicles like Green Bonds, B-Corps and Impact Investments.

Course Materials and Readings

Required:

Course Materials Are Available on Avenue To Learn

http://avenue.mcmaster.ca

All readings will be provided on Avenue.

Evaluation

Learning in this course results primarily from in-class lectures and discussion and completion of three group assignments. The assignments will be evaluated on a group basis (groups of 3) where group members will share the same grade. If the majority of the group feels that a

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member does not deserve an equal percentage of the mark assigned, it is the group's responsibility to inform the instructor by email specifying the percentage of the mark in the group member's opinion that should be assigned to each member. There will be no Mid-Term or Final Exam.

Your final grade will be calculated as follows:

Components and Weights

Assignment #1	(Groups of 3)	10%
Assignment #2	(Groups of 3)	30%
Assignment #3	(Individual)	30%
Class Participation		30%
Total		100%

Course Deliverables

Three Group Assignments (70% weight in total)

There will be three assignments that will ask students to apply ESG concepts to actual companies and to current sustainability and social issues. The assignments will involve (#1) researching the endowment assets of a charity or non-profit or the investment approach of a major public pension fund, (#2) researching climate change and assessing the carbon impact of both a public company and an investment portfolio and (#3) evaluating a public company's current Corporate Social Responsibility report and an ESG research report for a public company. Each assignment will ask students to apply the sustainability and social issues discussed in class. For all assignments, a hard copy (stapled) must be submitted in class indicating all student names and student numbers. Brief 10 minute in-class presentations will be required for each of assignments #1 and #2. The assignments will be posted on Avenue.

Assignment #1 (10% weight). Groups of 3 will choose a charity or non-profit entity that relies to a significant degree on its endowment. Each group will describe the entity's mission, its impact on society, the role the endowment plays and any information available on how the endowment invests. Alternatively, students may choose a large, public pension fund as these entities are significant participants in the sustainable and social finance sector. Be prepared to present a brief PowerPoint when you submit your assignment.

Assignment #2 (30% weight). Groups of 3 will research the topic of Climate Change, choose a public company and evaluate its carbon strategy and disclosure and then finally look into how to incorporate the impact of climate change into your approach to investing. Be prepared to present a brief PowerPoint when you submit your assignment.

Assignment #3 (30% weight). Due for the final class, each student will individually choose a public company and evaluate its Corporate Social Responsibility reports, assess ESG Research on the company and appraise the company's exposure to and commitment to addressing Environmental, Social and Governance issues. Questions will be given that will help structure

how you evaluate the usefulness of the reports for investors and other stakeholders. No presentation is required for this assignment.

Class Participation (30% weight)

Individual contribution in class will be needed to make this course a dynamic learning experience for all. Environmental and social issues are better understood by hearing diverse viewpoints. Marks will also be assigned for attendance and through brief, simple 5-minute quizzes. No studying will be required for these quizzes beyond reading the article (or watching the video / listing to the podcast) assigned for the week. Attendance and quiz marks will be incorporated into your total Class Participation score.

Commerce 3FL3 – Sustainable and Social Finance Fall 2019 Course Schedule

Class	Lecture	Assignments	Presentation
1	(1) Role of Foundations and Endowments (2) Role of Large Public Pension Funds in Social Finance		
2	(1) The Gates Foundation (2) The Heron Foundation (3) Capitalism for the Long Term by Dominic Barton (4) Unilever's Approach to Sustainable and Social Finance		
3	(1) United Nations SDGs and (2) The UN Principles of Responsible Investment		
4	 (1) the Challenge of Meeting Return Objectives (2) The Spectrum of Social Finance Approaches: From Exclusionary to ESG to SRI Funds to Impact Investing (3) Brief Introduction to Environment, Social, Governance Evaluation for Public Companies 	Due: Assignment 1 (Groups of 3) - Overview Report on a Major North American Endowment or Public Pension Fund (10%)	Assignment 1 Presentation
5	 (1) How Investment Managers Implement ESG in their Investment Process (2) The Importance of Investor Engagement with Corporations and Proxy Voting 		Assignment 2 Presentation
6	(1) The Need for Public Company Boards to Consider Multiple Stakeholders and (2) Examination of Governance Issues		Assignment 2 Presentation
7	Examination of Key Social Issues		
8	Examination of Key Environmental Issues for Public Companies	Due: Assignment 2 (Groups of 3) - Climate Change, Carbon Strategy and Disclosure for a Public Company, and Carbon Impact of an Investment Portfolio (30%)	Assignment 2 Presentatior
9	Examination of Key Environmental Issues for Public Companies (Cont'd)		Assignment 2 Presentation
10	(1) Understanding GRI and SASB standards (2) Evaluating Canadian and U.S. Corporate Social Responsibility Reports		Assignment 2 Presentation
11	How Sustainalytics, MSCI and Bloomberg measure ESG and Identify Key Controversial Issues		
12	Impact Investing, Green Bonds and other examples of Impact Investments		
13	Understanding 'BCorps' and private social enterprises	Due: Assignment 3 (Individual) - Evaluation of a Public Company's Corporate Sustainability Report and ESG Research Report (30%)	

Appendix – Changes To Existing Courses





RECOMMENDATION FOR CHANGE IN UNDERGRADUATE CURRICULUM FOR 2020-2021 Course and Calendar Change Proposal Form

DeGroote School of Business McMaster University

- 13. All sections of this form must be completed.
- 14. This form must be completed for all course changes.
- 15. If the committee has any questions regarding this proposal, who should be contacted?

Instructor's Name: Elkafi Hassini Extension: x 27467

16. A faculty representative will be required to attend the DeGroote Undergraduate Curriculum & Calendar Committee meeting and the DeGroote Faculty of Business meeting at which this recommendation for change in undergraduate curriculum is to be discussed.

Submitted by which area group (select one):

- Strategic Management
- Marketing
- Health Policy and Management
- Accounting and Financial Management Services
- Finance and Business Economics
- Human Resources and Management
- Information Systems
- **x** Operations Management
- Student Experience Office
- Joint Areas (please specify):

Nature of recommendation (check whichever is applicable):

- Course cancellation
- Change in delivery (blended/online/etc)
- Change in prerequisites / corequisites

Faculty of Business – Curriculum Changes for 2020-2021

x Other: Change in course	e levels	
Change in Academic Calenda	r Text	
Change in credit value: from	credits to	credits
x Change in course title		

Current Course Description

Courses Title:	Applied Statistics for Business	Course Code: 2QA3,
Management	Science for Business	3QA3, and
Modelling and	Analytics using Excel	4QC3

Rationale: Explain briefly the reasons behind the recommendation for change.

As per the recommendations of the recent IQAP review we recommend that we move 2QA3 to year 1 and 3QA3 to year 2. This will allow equip our students with analytics knowledge early on in their program so they can apply it in other courses and project work later. In addition, we will redesign the courses to include more contemporary analytics tools, such R programming, to better prepare our students for the job market. This will also free up some time in the third year where we can offer more business analytics elective courses.

Please copy and paste the text as it appears now in the calendar, and then provide a strikethrough edit as proposed. Please visit <u>http://academiccalendars.romcmaster.ca</u> for the most complete version of this calendar.

COMMERCE 2QA3 - Applied Statistics for Business COMMERCE 1DA3 – Business Data Analytics COMMERCE 3QA3 - Management Science for Business COMMERCE 2DA3 – Decision Making with Analytics COMMERCE 4QC3 – Modelling and Analytics using Excel COMMERCE 4DA3 -- Modelling and Analytics using Excel

(Please see next page for further information on content realignment and scheduling for the new courses)

Operations Management Area Proposal for Commerce Courses realignment

The OM Area members propose to make the following changes in the required commerce courses:

- Move COM 2QA3 (Applied Statistics for Business) to Term 2 of first year and call it COM 1DA3 (Business Data Analytics).
 - Offering 1AD3 in year 1 will serve as an introduction to business analytics early on in the program and will provide students both with statistical and programming foundations that are necessary for advanced analytics courses in subsequent years.
 - The course will cover both statistics and programming topics and assumes that students had no prior data management courses in their high school education.
 - The course will adapt a blended learning system where basic statistics concepts will be provided online.
 - A weekly tutorial will be offered to conduct programming drills.
- COM 3QA3 (Management Science for Business) be changed to 2DA3 (Decision Making with Analytics).
 - The course will keep its emphasis on building students analytical skills and ability to frame problems. The course will cover decision models as they relate to problems in operations, marketing, accounting and finance and their interfaces.
 - The course will also use Excel and add-ins for formulating and analyzing business decision models.
 - The course will incorporate R programming to build on students programming skills from year 1.
 - CPA competency map lists topics such as linear programming, probabilistic models and scenario/simulation analysis. These topics are covered in this course.

With the above changes, we propose the following schedule for these OM Area courses: Winter Year 1: COM 1DA3 Fall Year 2: COM 2OC3 Winter Year 2: COM 2DA3 Year 3: COM 3DA3 (new elective course on predictive modelling) Year 4: COM 4DA3

Data Analytics Courses Mapping to INFORMS Job Task Analysis (CAP training)

		Courses							
		F	Appl	Applications					
Task	1DA3 2DA3 3DA3 4DA3 4KG3 3K						4MI3		
Business Problem Framing		Х	Х	Х	Х		Х		
Analytics Problem Framing	Х	Х	Х	Х	Х		х		
Data	Х		Х		Х	X	Х		
Methodology Selection	Х	Х	Х	Х	Х		Х		
Model Building	Х	Х	Х	Х			Х		
Deployment	Х				Х	X			

Model Life Cycle Management					Х	Х	
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Foundation courses:

COM1DA3 Business Data Analytics COM 2DA3 Decision Making with Analytics COM 3DA3 Predictive Modelling COM 4DA3 Modelling and Analytics with Excel

COM 4KG3: Data Mining for Business Analytics

Application Courses:

COM 3KE3: Management of Enterprise Data Analytics

COM 4MI3: Marketing Analytics

Tools/Techniques to Courses Mapping (use with Learning Portfolio on Avenue to Learn?)

	Courses							
	Foundations						Applications	
Techniques	1DA3	2DA3	3DA3	4DA3	4KG3	3KE3	4MI3	
Visualization	Х	Х	Х				Х	
Text/sentiment analytics					Х			
Machine learning/AI								
Optimization		Х		Х				
Data mining					Х			
Prediction	X	Х	Х		Х		Х	
Tools								
Excel	Х	Х		Х				
SAS								
SPSS								
SAP Hana								
Knime								
Tableau								
Hadoop/Spark								
R	Х	Х	Х	Х			Х	
Matlab								
SQL					Х			
Application								
Health			Х	Х	Х			
Manufacturing				Х	Х			
Marketing				Х	Х		Х	
Education				Х				

Admission

With the move of 1DA3 to year 1, the expectation is that data management will not be a requirement for admission.

Background Preparation

Blended Learning Material:

Faculty of Business – Curriculum Changes for 2020-2021

R Programming for Dummies: <u>http://www.dummies.com/store/product/R-For-Dummies.productCd-1119962846.html</u> Open Intro Statistics: <u>https://www.openintro.org/stat</u> (R and data sets)

Professional Designations

CAP SAP





RECOMMENDATION FOR CHANGE IN UNDERGRADUATE CURRICULUM FOR 2020-2021 Course and Calendar Change Proposal Form

DeGroote School of Business McMaster University

- 17. All sections of this form must be completed.
- 18. This form must be completed for all course changes.
- 19. If the committee has any questions regarding this proposal, who should be contacted?

Instructor's Name:	John Siam
Extension:	x 27028

20. A faculty representative will be required to attend the DeGroote Undergraduate Curriculum & Calendar Committee meeting and the DeGroote Faculty of Business meeting at which this recommendation for change in undergraduate curriculum is to be discussed.

Submitted by which area group (select one):

- Strategic Management
- Marketing
- Health Policy and Management
- Accounting and Financial Management Services
- Finance and Business Economics
- Human Resources and Management
- Information Systems
- Operations Management
- Student Experience Office
- Joint Areas (please specify):

Nature of recommendation (check whichever is applicable):

- Course cancellation
- Change in delivery (blended/online/etc)
- Change in prerequisites / corequisites
- Change in course title
- Change in credit value: from credits to credits
- Change in Academic Calendar Text
- Other: Combine 3FI3 with 4FI3 into one course 3FI3

Faculty of Business – Curriculum Changes for 2020-2021

Current Course Description

Course Title: Market Trading with Options and Futures Course Code:4FI3

This experiential course, students are introduced to theoretical and empirical issues of different financial instruments, their valuation methodology, and their institutional uses in risk management. Market microstructure knowledge provides students guidance in implementing their trading strategies. Students are able to trade money market instruments, bonds, equities, indices, ETFs, currencies, commodities and their corresponding futures and forwards; focusing on trading strategies that minimize market exposure through risk measurement.

Rationale: Explain briefly the reasons behind the recommendation for change.

Due to the popularity of the Options course (3FI3) vs the Futures course (4FI3); we would like to combine the two courses into one course and offer the course in both fall and winter semesters. We done a similar move in 2018 with the MBA course (F722).

Please copy and paste the text as it appears now in the calendar, and then provide a strikethrough edit as proposed. Please visit <u>http://academiccalendars.romcmaster.ca</u> for the most complete version of this calendar.

COMMERCE 3FI3 - Market Trading with Options and Futures 3 unit(s)

This experiential course develops practical skills in trading financial securities –equities, bonds, futures, options ...etc.- focusing on trading strategies that minimize market exposure through risk measurement. This course attempts to develop practical skills in trading financial securities -fixed income, equities, futures and options- focusing on trading strategies based on market analysis and risk measurement.

Lectures (three hours)

Prerequisite(s): COMMERCE 3FA3; and registration in Level III or above of an Honours Commerce or Engineering & Management program; or registration in Level IV of the Commerce program. Enrolment is limited.





RECOMMENDATION FOR CHANGE IN UNDERGRADUATE CURRICULUM FOR 2020-2021 Course and Calendar Change Proposal Form

DeGroote School of Business McMaster University

- 21. All sections of this form must be completed.
- 22. This form must be completed for all course changes.
- 23. If the committee has any questions regarding this proposal, who should be contacted?

Instructor's Name:	Dr. William J. Allender
Extension:	x 24756

24. A faculty representative will be required to attend the DeGroote Undergraduate Curriculum & Calendar Committee meeting and the DeGroote Faculty of Business meeting at which this recommendation for change in undergraduate curriculum is to be discussed.

Submitted by which area group (select one):

- Strategic Management
- Marketing
- Health Policy and Management
- Accounting and Financial Management Services
- Finance and Business Economics
- Human Resources and Management
- Information Systems
- Operations Management
- Student Experience Office
- Joint Areas (please specify):

Nature of recommendation (check whichever is applicable):

- Course cancellation
- Change in delivery (blended/online/etc)
- Change in prerequisites / corequisites
- Change in course title
- Change in credit value: from credits to credits
- Change in Academic Calendar Text
- Other:

Current Course Description

Course Title: Marketing Analytics

Course Code: 4MI3

Rationale: Explain briefly the reasons behind the recommendation for change.

The original prerequisites for Marketing Analytics did not require Engineering students to take the undergraduate Marketing Research course (3MA3). To simplify, we are recommending the requirement be made the same for all students.

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COMMERCE 4MI3 - Marketing Analytics

3 unit(s)

Marketing departments are increasingly utilizing data routinely collected by their organizations to improve marketing decision making and more effectively allocate resources. This course will familiarize students with tools necessary for converting raw data into valuable consumer insights. The course offers a hands-on, practical approach, giving students the opportunity to become familiar with data analysis software. The course will emphasize both inference and prediction and highlight the trade-offs associated with different marketing analytics methods.

Prerequisite(s): Registration in any Honours Bachelor of Commerce, Engineering and Management program; COMMERCE 2MA3 (or IBH 2AA3) and COMMERCE 3MA3 for students registered in any Commerce program; COMMERCE 2MA3 (or IBH 2AA3) for students registered in any Engineering and Management.





RECOMMENDATION FOR CHANGE IN UNDERGRADUATE CURRICULUM FOR 2020-2021 Course and Calendar Change Proposal Form

DeGroote School of Business McMaster University

- 25. All sections of this form must be completed.
- 26. This form must be completed for all course changes.
- 27. If the committee has any questions regarding this proposal, who should be contacted?

Instructor's Name:	François Neville
Extension:	x 21463

28. A faculty representative will be required to attend the DeGroote Undergraduate Curriculum & Calendar Committee meeting and the DeGroote Faculty of Business meeting at which this recommendation for change in undergraduate curriculum is to be discussed.

Submitted by which area group (select one):

- Strategic Management
- Marketing
- Health Policy and Management
- Accounting and Financial Management Services
- Finance and Business Economics
- Human Resources and Management
- Information Systems
- Operations Management
- Student Experience Office
- Joint Areas (please specify):

Nature of recommendation (check whichever is applicable):

- Course cancellation
- Change in delivery (blended/online/etc)
- Change in prerequisites / corequisites
- Change in course title

Faculty of Business – Curriculum Changes for 2020-2021

	Change in credit value: from		credits to		credits
\boxtimes	Change in Academic Calendar Text				
	Other:				

Current Course Description

Course Title: Case Analysis & Presentation Skills Course Code: 4SH3

Rationale: Explain briefly the reasons behind the recommendation for change.

Students must be available on most Monday mornings for the duration of the semester in order to complete the required cases for the semester. This is not reflected in the scheduled time posted on Mosaic but should be clarified beyond the instructor sending our periodic e-mails throughout the summer.

Please copy and paste the text as it appears now in the calendar, and then provide a strikethrough edit as proposed. Please visit <u>http://academiccalendars.romcmaster.ca</u> for the most complete version of this calendar.

Cases allow students to directly apply and integrate theories from various business disciplines to real-world situations/problems. Students will be working in teams and will have the opportunity to present their analysis and recommendations to a panel of judges. Hence, they will also develop their presentation skills, team and time management and communication skills. The first half of the course will provide students with the tools they need to approach case analysis. These tools include problem solving methodologies, communication approaches and team building skills. The final half of the course will allow students to practice applying these tools in live case analysis situations. The cases will cover various industries and companies as well as different disciplines. Students will also be able to critique the analysis and presentation skills of their peers.

NOTE: To complete course requirements (i.e., the cases that are assigned throughout the semester), students must be available during the mornings on which the course is scheduled. It is recommended that students keep their morning free until the case analysis schedule has been finalized by the instructor.





RECOMMENDATION FOR CHANGE IN UNDERGRADUATE CURRICULUM FOR 2020-2021 Course and Calendar Change Proposal Form

DeGroote School of Business McMaster University

- 29. All sections of this form must be completed.
- 30. This form must be completed for all course changes.
- 31. If the committee has any questions regarding this proposal, who should be contacted?

Instructor's Name:	Greg Rombough
Extension:	x 27213

32. A faculty representative will be required to attend the DeGroote Undergraduate Curriculum & Calendar Committee meeting and the DeGroote Faculty of Business meeting at which this recommendation for change in undergraduate curriculum is to be discussed.

Submitted by which area group (select one):

- Strategic Management
- Marketing
- Health Policy and Management
- Accounting and Financial Management Services
- Finance and Business Economics
- Human Resources and Management
- Information Systems
- Operations Management
- Student Experience Office
- Joint Areas (please specify):

Nature of recommendation (check whichever is applicable):

- Course cancellation
- Change in delivery (blended/online/etc)
- Change in prerequisites / corequisites
- Change in course title
- Change in credit value: from credits to credits
- Change in Academic Calendar Text
- Other:

Current Course Description

Course Title: Multiple courses and Minors.

Course Code:

Rationale: Explain briefly the reasons behind the recommendation for change.

We need to take 2QA3 out of our minors and course-lists since this course is going away.

Please copy and paste the text as it appears now in the calendar, and then provide a strikethrough edit as proposed. Please visit <u>http://academiccalendars.romcmaster.ca</u> for the most complete version of this calendar.