A meeting of the Schulich Faculty Council for the 2019-2020 academic year will be held on Friday March 13th 2020 from 11:30-1:00pm in SSB E111.

AGENDA

1. Welcome & Chair’s Remarks (5 mins)

2. Enquiries & Communications
   a) Draft University Academic Plan 2020-2025 3-15

3. Dean’s Remarks (15 mins)

4. PHD/GBC/UBS Initiatives (15 mins)

5. Motion: Approval of Schulich Non-Degree Studies Approval Process (D. Zwick) (10 mins) 16-27

6. Motion: Program Change to Master of Management (MMgt) (D. Zwick) (10 mins) 28-31

7. Discussion: Dean Search Procedures (J. McKellar) (35 mins)
   a) For Information: Schulich Procedures for Decanal Searches (April 2018) 32-35
   b) For Information: York University Procedures for Decanal Searches 36-38

8. Adjournment

CONSENT AGENDA

A consent agenda item is deemed to be approved unless, at any moment before or during the meeting, a member of the Faculty Council of the Schulich School of Business advises the Chair of his or her request to debate it.

1. BBA/iBBA Program Committee
   a) New Courses
      1. OMIS 3020 3.00 Predictive Analysis
      2. OMIS 4010 3.00 Artificial Intelligence Fundamentals for Business 39-51
   b) Curricular Changes
      1. OMIS 3730 3.00 Database Management with Microsoft Access (title and description) 67-77
      2. OMIS 4000 3.00 Models and Applications of Operational Research (title and description) 78-90

2. Master Programs Committee
   a) Program Changes
      1. Master of Accounting (MAcc) (admission requirement) 91-95
      2. Graduate Diploma in Intermediate Accounting (DIAc) (admission requirement) 96-98
b) **Curricular Changes**
   1. Master of Business Administration (MBA): ENTR 6605 3.00 Entrepreneurship and New Firm Creation (*add prerequisite*)

3. **EMBA Program Committee**
   a) **New Courses**
      1. EMBA 6125 2.00 Entrepreneurial Selling
      2. EMBA 6145 2.00 Price Management
      3. EMBA 6495 2.00 The Innovation Opportunity in Frontier Markets
   b) **Curricular Changes**
      1. EMBA 6755 2.00 Leading and Managing Diverse Organizations (*title*)

4. **Minutes of the Last Meeting:** 2020.02.07

**Upcoming Meeting Dates for 2019-2020:**

**Schulich Executive Committee:**

April 3rd, 2020

**Schulich Faculty Council:**

April 17th, 2020
Subject: Draft UAP to Faculty Councils
Date: Monday, March 2, 2020 at 1:33:02 PM Eastern Standard Time
From: Senate Secretaries/Faculty Council Secretaries Info. on behalf of Cheryl Underhill
To: SENATE-S@YORKU.CA

Council Secretaries: The Draft University Academic Plan 2020-2025 has now been posted on APPRC’s UAP Renewal website at - https://secretariat.info.yorku.ca/senate/academic-policy-planning-and-research-committee/university-academic-plan-renewal/

The draft Plan is hereby transmitted to Faculty Councils to facilitate discussions on the document they are able to accommodate between March and early April.

Any efforts you can also lend to disseminate notice of the APPRC Open Forum to discuss the draft UAO is much appreciated. Posted on the APPRC site (link above) is the invitation to the Community Open on Thursday, 5 March 2020 at 9:30am, the form to RSVP for the event, as well the link to the livestream feed for those unable to attend in person.

Many thanks for your assistance with this important Senate initiative. Please be in touch if there any questions about the matter.

Cheryl Underhill
Senior Assistant Secretary of the University
University Secretariat
York University
1050 Kanefi Tower
416 736-2100 Extension 30335
Building a Better Future:
York University Academic Plan 2020-2025

The new University Academic Plan (UAP) 2020-2025 is about coming together to make positive change for our students, our campuses, and our local and global communities.

Where We Are
After a decade of rapid development York has arrived as a fully comprehensive, research-intensive, multi-campus, urban University. We combine groundbreaking scholarship, discovery, and artistic creation with renowned strengths in community engaged and industry partnered research for maximum social and economic impact.

We are a full spectrum University, increasingly recognized for excellence in health, engineering, and sciences, while we continue to lead in liberal arts, creative and performing arts, and professional studies. The comprehensive strengths of our Keele campus are enhanced by our bilingual Glendon campus, our downtown professional learning sites devoted to law and business, and our international campuses in Hyderabad, India and Las Nubes, Costa Rica.

York boasts one of the largest and most diverse undergraduate and graduate student bodies in Canada, almost 18% of whom are now international students. Through the ingenuity of our faculty, we have dramatically grown the opportunities for students to learn experientially through community placements, capstone projects, and research internships, whether at home or abroad, and to access online courses and content. Students are embracing new programs in emerging areas like Global Health, Indigenous Studies, Digital Media, and Management of Artificial Intelligence. Our School of Continuing Studies has quickly become one of North America's largest and most successful, offering cutting-edge and flexible pathways to education for adult learners looking to retool their careers. Our academic mandate and programming express values of Equity, Diversity, and Inclusion ever more clearly.

Through the growth of Innovation York, we have emerged as a thriving regional hub for entrepreneurship and knowledge mobilization. We value our deep connections to local and global partners, who work with us to contribute to the wellbeing of both people and communities.

Where We Are Going
In the short term, we will see a further dynamic expansion of our capacity with the launch of a new campus in Markham centred on technology and entrepreneurship. We will develop an integrated health precinct with partners in Vaughan. We will undertake significant renewal of our research and teaching infrastructure across the entire University, and will elevate our international partnerships and profile.
York has scaled up its health-related teaching, research, and innovation based on a vision of keeping more people healthier, longer. We are well placed over time to establish a medical school that is designed in a manner consistent with this vision, to serve one of Canada's fastest growing and most diverse regions through a community-based care model that integrates physicians into broader health and wellbeing promotion teams.

Focusing on the next five years, this Plan charts a path to positive change in relation to six Priorities that are foundational to York University's mission, vision, and identity. For each Priority the Plan explains the reasons why action is imperative and the key aims that will guide us. Permeating all six Priorities is a theme of coming together as both a precondition and an outcome of fulfilling the Plan. A better future must be rooted in strong relationships – among the members of our own institution, across our multiple campuses, with our closest neighbours and Indigenous communities, and with our burgeoning network of partners near and far.

In the spirit of coming together, the people of YorkU have also expressed a strong desire to bring our unique capacities to bear on some of the most urgent issues facing the planet, from climate change to inequality to truth and reconciliation to forced migration, among others. Over the next five years, we will challenge ourselves as a University to deepen our collective contributions to the United Nations’ Sustainable Development Goals (SDGs). The York University SDG Challenge will transect all of our Priority areas and will be open to all interested members of our community. York is already recognized globally for our excellence in SDG-relevant research, education, innovation, and civic action. The SDG Challenge will further elevate our engagement and project our distinctive ethos as a community of changemakers.

**York University's Planning Ecosystem**

The UAP 2020-2025 marks a new beginning. At the same time, it builds on the transformational work already underway across the institution. This Plan is designed to function as a meta-document that links our existing academic plans and initiatives into a coherent whole. It embeds and affirms the University’s Strategic Research Plan, Indigenous Framework, and a new Internationalization & Global Engagement Strategy, among others. These focused strategies are embraced as vital elements that infuse the UAP as an overarching statement of our direction over the next five years.

The UAP also informs our operational and budget plans. York is known as a leader in Integrated Resource Planning (IRP) to ensure that high-level strategies do not sit on a shelf but are translated into concrete implementation plans. Every faculty and administrative unit has an IRP that lays out the specific actions it is taking to implement the UAP with timelines and regular progress reports, so that human and financial resources are continually aligned to support our stated academic priorities and goals.
York University has an enduring commitment to critical inquiry and the pursuit of knowledge that comes from many perspectives and ways of knowing. As a learning community, we believe in the power of research, scholarship, creativity, education, and dialogue to transform ourselves and the world around us for the better. We share a collective belief in the university as a public trust.

This Plan is designed to uphold the fundamental values of the University, even as we evolve its role and reach to ensure our graduates are equipped for a future that will be defined by dramatic change.

- Climate and environmental change raise urgent questions for virtually every field of endeavour and a need to come up with innovative solutions.
• Global power shifts translate into local tensions and inequities, and give rise to the need for meaningful strategies to enhance economic inclusion and social cohesion.
• People are ever more connected through digital networks and physical mobility, generating complexity as well as immense possibilities to accelerate collaboration and problem solving.
• Technology is both disrupting and enhancing every sphere of life and work, as well as revolutionizing how people learn, think, and create.

York University brings distinctive capabilities to the table to meet these challenges and find the opportunities that lie within them. This UAP positions York clearly as an agent of positive change for our students, for higher education, for society at large, and for the planet. We believe that at this juncture, to make a better future, the world needs more of York University.

Each of the six Priorities focuses on a key dimension of positive change that York University will pursue over the life of the Plan. The Priorities are conceptualized as a wheel to reflect their fluidity and interdependence. Each Priority depends upon the others to fully realize the UAP, just as the people of YorkU depend upon each other to thrive as a whole community.
21st Century Learning: Diversifying Whom, What, and How We Teach

Why: At York University we are determined to equip every student, regardless of background or field of study, with the knowledge, transferable skills, and values to navigate a 21st century world in which change is the only constant.

This Priority speaks to the unparalleled diversity of our student body as a source of pride and a comparative advantage that differentiates York University as an institution. York has become a global magnet for talented people drawn by our academic excellence, cosmopolitan character, and commitment to making a positive difference. The next five years will see:

- continued efforts to make York an attractive destination for more Indigenous students, in line with our Indigenous Framework
- additional growth and diversification of our international student body, reaching our goal of 20-25% of our students being international

This Priority also highlights the value we place on diversity of thought. To prepare our students to live, work, and act meaningfully in the world, we will:

- continually reinvent our programs to address emerging issues and labour market needs that call for new pedagogical approaches and cross-disciplinary thinking
- pursue inclusive excellence by decolonizing curriculum and ensuring our graduates are known for their global mindset, ethical judgment, and superior ability to integrate diverse ideas and worldviews
- build essential 21st century skills into our programs, including digital and information literacies, critical thinking, and the ability to ask good questions, marshal evidence, and communicate effectively in a variety of media

Finally, this Priority speaks to diversifying how we teach in an era of perpetual learning. Rather than acquiring static knowledge, the hallmark of a quality education is now intellectual agility, adaptability, and knowing how to learn in any context. To meet this challenge we will:

- attain our goal of providing every student with an experiential learning opportunity, regardless of program
- offer more microcredentials and flexible delivery options, in person and online, to serve the needs of diverse learners with complex lives at multiple career stages
- create more spaces for active and collaborative learning, so that students gain skills in working with others along with the joy of belonging to a learning community
- encourage students to become lifelong learners with the curiosity, research and creative skills, and habits of mind to continually question and update their own knowledge
- enhance teaching supports for all instructors, including tenure-stream and contract faculty as well as teaching assistants
Mobilizing Knowledge and Creativity

Why: As change accelerates around us, we aim to be more responsive to our communities by generating critical knowledge and works of art, ideas that engage multiple perspectives, and innovations that propel Ontario as a global knowledge-economy leader.

We have laid out an ambitious agenda for the continued growth and application of our research, scholarship, and creative activity in our Strategic Research Plan (SRP) 2018-2023: Towards New Heights. We remain committed to this agenda, including in particular:

- increasing the research participation of faculty and trainees at all levels across the institution
- accelerating growth in the number and diversity of our scholarly and artistic outputs and research funding base
- expanding the influence of our work through broadening and deepening our external partnerships and engagement in the generation and sharing of knowledge and creative works
- maximizing our impact by building on the success of Innovation York to expand student, faculty, and community access to entrepreneurship programming and to increase our innovation activities
- implementing our Open Access Policy (2019)

Based on a thorough scan of activity across the University, the SRP mapped our established research and creative strengths across six intersecting themes, in which we are demonstrating national and international leadership:

<table>
<thead>
<tr>
<th>Advancing Fundamental Inquiry and Critical Knowledge</th>
<th>Analyzing Cultures and Mobilizing Creativity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Healthy Lives, Communities and Environments</td>
<td>Exploring and Interrogating the Frontiers of Science and Technology</td>
</tr>
<tr>
<td>Forging a Just and Sustainable World</td>
<td>Integrating Entrepreneurial Innovation and the Public Good</td>
</tr>
</tbody>
</table>

We expect to continue to grow and excel in these areas, with the help of investments that are already underway in enhanced infrastructure and in supports for our faculty. These include maintaining consistent high quality supports for individual investigators across the institution, as well as more focused investments in large-scale, collaborative research programs that cross disciplines and often borders with an array of partners. York University enters this UAP with an expanded cohort of graduate students and post-doctoral fellows from Canada and around the world, who will both participate in and accelerate this agenda.
The continued growth of our research and creative activities also demands that we support scholarly communities in keeping with the theme of coming together. York’s excellence in inter- and transdisciplinary research is renowned and positions us for leadership in addressing the most complex and pressing issues of the day, such as those highlighted by the UN’s SDGs. During this Plan, we will further cultivate this way of thinking across disciplines by means of our Organized Research Units and beyond, and find ways to infuse it deeply in student learning as well as in our research and creative activities and output.

The SRP 2018-2023 identified five areas where York has a clear opportunity to achieve new levels of research success in ways that bring a distinctively York perspective to addressing compelling challenges of our time:

- Indigenous Futurities
- Public Engagement for a Just and Sustainable World
- Healthy Individuals, Healthy Communities and Global Health
- Integration of Artificial Intelligence into Society
- Digital Cultures

Exciting initiatives are already underway, which include a new Institute for Indigenous Languages and Cultures [confirm name] and an AI Taskforce, which is examining how York can become a distinctive leader in research and teaching that engages critically and humanistically with the development of technologies including artificial intelligence and machine learning.

Over the life of this UAP, we will continue to resource these efforts in particular by implementing our Faculty Complement Renewal Strategy, which calls for continued steady growth, renewal, and diversification of our tenure-stream faculty complement, including the use of cluster hiring to advance strategic priorities. This will also require focused efforts to meet current and future research infrastructure needs, to provide mentorship for an incoming generation of scholars, and to ensure that our faculty's research and creative output are disseminated ever more widely and recognized both internally and externally.

**From Access to Success: Next Gen Student Supports**

*Why:* With many of our students facing life challenges that affect their studies, York will devote additional attention to supporting students of all backgrounds and circumstances to complete their studies successfully and to realize their full potential.
A core value of York University since its inception has been to provide access to all eligible students so that no talent is left behind. We serve large numbers of students who are new Canadians, Black, Indigenous, racialized, from lower income backgrounds, or who are among the first generation in their families to attend university. We are proud that our campuses teem with students of diverse sexualities, abilities, nationalities, religions, political beliefs, and linguistic backgrounds. Indeed, it is this vibrancy and promise that attract many people to come to York or to support our work.

We also recognize that many of our students may have substantial work and family commitments, or face systemic barriers as part of the experience of belonging to a minority in society or at university. As a large institution that has grown quickly, York also recognizes that we must reduce the complexity of navigating our University in order to improve the experience of all students, graduate and undergraduate.

With progress already happening in many areas, we will redouble our efforts over the course of this UAP to achieve positive change for our students in the following areas:

- more seamless, timely, and reliable access to excellent academic and career advising, as well as accessibility and other supports, through a combination of in-person service and digital systems, including our recently launched Student Virtual Advisor
- earlier feedback to students on their academic standing, and the use of data analytics to enable proactive, early interventions with students who are struggling
- more robust resources to assist international students with their distinctive needs
- achievement of our Faculty Complement Renewal Strategy to diversify our faculty to better reflect the makeup of our student body
- increased opportunities to practice relationship-building across differences
- more chances to learn about Indigenous worldviews and the history of Canada vis-à-vis Indigenous peoples
- new systems to track our progress on improving outcomes for all of our students and especially those from underrepresented groups

**Advancing Global Citizenship**

*Why:* York University draws people from around the world who seek to learn from each other and to gain the global fluencies needed to work locally and across borders toward a better future.

More than ever, universities have a responsibility to contribute to positive change through global cooperation and borderless education. York is already well known for its strengths in global languages and internationally engaged research and teaching, with alumni and partners around the world. Our Glendon campus provides a unique environment for cross-linguistic and cross-cultural teaching, research, and dialogue. We have an eco-campus in Las Nubes, Costa Rica and offer global management education at our campus in Hyderabad, India. In addition,
we are embedded in one of Canada's most multicultural and economically vibrant urban regions, where many employers seek highly qualified personnel with a global orientation.

York University has launched an Internationalization and Global Engagement Strategy (2020), which sets the stage for a new phase of development that will bring greater resources and coordination to our efforts in this area and will reinforce our commitment to ethical internationalization. The pan-university consultation informing this Strategy has underlined the importance of promoting values of integrity, reciprocity, reflexivity, inclusivity, and sustainability in our international programs and activities. It sets an agenda for action in four areas:

• global outlook and fluency – informing curricula and global learning, while leveraging our own diversity
• global nature of research – attracting international scholars and supporting international collaborative research
• international students – robust recruitment from a broader sweep of countries, creating a supportive and inclusive environment, and supporting transitions to careers or further study
• global reach and profile – communicating more actively, enhancing global reputation, expanding partnerships, and fostering alumni connectivity

York is committed to supporting this agenda with enhanced resources and activities in each of these areas. We will work with Universities Canada and other partners to ensure that York can fully leverage new public investments such as the federally funded Outbound Student Mobility Program.

Working in Partnership

Why: York University understands that by partnering with other entities and sectors we can maximize positive impact on our students, our campuses, and our broader communities.

York has always embraced the view that its role extends beyond the academy to the communities we serve. We are a longtime leader in community-engaged research, teaching, and civic action. Our interactions with entrepreneurs and industry have grown exponentially in recent years with the launch of Innovation York, YSpace in Markham, and several Faculty-based innovation hubs. Through our Indigenous Framework, we are committed to engaging and supporting Indigenous communities and recognizing the support they provide to York. We know from experience, that by working with other kinds of organizations we gain insight and increase our collective problem-solving capacities, while bringing our students into contact with valuable learning and career opportunities.

Over the course of this Plan, we will continue to build cross-sector and inter-community partnerships that can serve as vital catalysts for positive change. As a university, we will model
new and deeper forms of collaboration with industry, government, and community partners, engaging all of our campuses and orienting students to both career paths and social responsibilities. Signature activities will include the following:

- developing with partners in Vaughan an integrated, interdisciplinary healthcare precinct that will serve the needs of a growing region, while creating synergies for health-related research, teaching, and innovation
- establishing a UN-sponsored CIFAL\(^1\) centre, located at our new Markham campus, to provide cross-sectoral training and development programs that will advance the UN SDGs
- implementing York University’s social procurement policy, one of the first among Canadian academic institutions, as part of our broader commitment to being an anchor institution for the region
- attracting community partners to co-develop our Keele campus Lands for Learning in ways that support both our academic mission and our social and environmental responsibilities
- continuing to work with York’s Indigenous Council to strengthen the Indigenous presence on campus
- connecting our entrepreneurship and innovation activities to the broader innovation ecosystem of Ontario

**Living Well Together**

*Why:* Making positive change requires that all members of our diverse community feel welcomed into a sense of belonging, common purpose, and shared responsibility to support and enrich each other’s work.

Given the scale and breadth of York University, with many people commuting some distance to our campuses and with alumni living and working around the world, we must make a conscious effort to know each other and to build community. Anishnaabe teachings refer to the gift of Mino Bimaaddiziwin or the Good Life. Our students, staff, and faculty have let us know that a stronger sense of connection, inclusion, and wellbeing are among the key changes they are seeking in their daily experience of life at the University. Our alumni are seeking more opportunities to remain engaged with the University. In support of this Priority, we will pursue the following over the course of this Plan:

- renewing our physical environment with inspiring and humane natural and built spaces, including an expanded Art Gallery of York University within a revitalized Harry Arthurs Common

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\(^1\) CIFAL stands for Centre international de formation des autorités et leaders' (in English: International Training Centres for Authorities and Leaders). The CIFAL Global Network aims to strengthen capacities of government officials and civil society leaders to advance sustainable development: [https://unitar.org/about/offices-training-centres-around-world/cifal-global-network](https://unitar.org/about/offices-training-centres-around-world/cifal-global-network).
• purposeful efforts to foster dialogue, respect, and open-mindedness to diverse points of view
• drawing upon our strengths in the creative and performing arts to create social connection and community pride
• continued actions to support reconciliation through our Indigenous Framework, including additional Indigenous spaces and art works
• systematic efforts to embed human rights, equity, diversity, and inclusion training across the University
• enhanced efforts to engage and support our vibrant network of alumni
• committing to a culture of service excellence in which we all are responsible to support each other’s success
• continuing to implement mental health and wellbeing strategies, policies, and collective actions that create supportive and empowering environments for all members of the community

Answering the Call: A University-Wide Challenge to Contribute to the UN Sustainable Development Goals

In addition to the six foundational Priorities above, the members of the York University community have expressed a strong desire to make a difference on some of the most compelling issues of the day. Community members have pointed to a range of complex societal issues to which York is ideally placed to contribute, given our commitment to social responsibility, our extensive network of partnerships, and our excellence in thinking across disciplines. It is striking that most of the issues that surfaced in these conversations are referenced in the United Nations Sustainable Development Goals (SDGs), a framework that calls on member countries to take urgent action in 17 areas that are critical to ensure peace and prosperity for people and the planet.
York University is already recognized as an international leader in SDG-relevant research, teaching, partnerships, and campus practices. By challenging ourselves to deepen this work over the next five years, and to track and report on our contributions, we reaffirm longstanding York values of social justice, equity, sustainability, and excellence in all that we do. This SDG Challenge will galvanize our community in coming together to engage critically with the SDGs, and to take meaningful steps, both small and large, toward a more just and sustainable future.

Beginning in this 75th anniversary year of the United Nations, York’s SDG Challenge will be a pan-University exercise to support and recognize a wide range of grassroots activities that may touch on any of the Priorities in the Plan. These activities may be purely internal or they may engage others from our nearest neighbourhoods to the farthest corners of the world. They may involve fundamental inquiry and artistic creation, or seek immediate changes in skills, policies, aesthetic practices, or behaviours. They may emanate from any academic discipline or administrative unit, or spark new collaborations across different areas of the University. They might even involve some friendly competition for a good cause. By supporting students, faculty, contract instructors, staff, alumni, and volunteers to come together for SDG-related learning and initiatives, we will create leadership opportunities for our people and forge stronger relationships along the way. By telling the story of our SDG-related work, we will build community pride and put a spotlight on the qualities that make York University a truly unique and special place.

By furthering SDG-related work that intersects with the Priorities, this Plan will highlight the distinctive ethos of York as a University committed to making a positive impact on our students, our communities, and the world around us.
To: Faculty Council
From: Alan Middleton, SEEC
Re: Non-Degree Studies Approval Processes – SEEC- Faculty Council Approval

Motion:

That the following process for the approval of Non-Degree Studies at the Schulich School of Business be adopted by the Schulich School of Business:

At the beginning of the Fall term of the academic year the Executive Director of SEEC will provide a report to the Dean indicating the Non-Degree plan process being followed by SEEC. Once approved by the Dean this will be submitted to the Executive Committee for discussion and, on approval, moved to Faculty Council for final approval.

Rationale:

Following the Vice-Provost Academic’s note of October 24th, 2019 and the decision of the York University Senate in June 2019 stipulating the creation of a process to approve non-degree programs at the Schulich School of Business, the attached proposes such a process.

The Schulich Executive Education Centre (SEEC) operates in a highly competitive market for managerial non-degree programs. Due to the nature of the marketplace SEEC confronts very specific challenges, two of which are:

1. The need for the speedy creation of highly customized, high quality programs meeting specific customer specifications and needs;
2. The need for a nimble approach to program development as new topics, technologies and requirements arise in managerial practice for which training is sought and which may not be offered (or offered quickly enough for this market) within the curricular offerings of Schulich degree programs. (see Exhibit #1, Section #1)

Because of these unique challenges we recommend a process that provides academic oversight of the quality of open non-degree programs while allowing SEEC to successfully attract clients and respond adroitly to emerging market opportunities. Excluded from this process are custom
programs, which have specific content development needs and are generally covered by a confidentiality agreement.

The motion asks for approval of the process of non-degree studies development, not approval of the individual programs.

Exhibit #1 indicates the proposed approval process for Non-Degree Programs at the Schulich School of Business.

1. The report presented to Faculty Council will cover:
   i) An analysis of the market environment for management education indicating the highly competitive nature of the market, the need for rapid responsiveness in creating high quality programs and the need to provide learning in topics the market needs but which may not be offered within the current offerings of Schulich or SEEC. (see Exhibit #1 Section #1)
   ii) A summary of SEEC’s program development that includes
       - The nature of SEEC’s non-degree study activity (example shown in Exhibit #1 Section #2)
       - Description of SEEC’s Non-Degree Development Process
         (example shown in Exhibit #1 Section # 3)
   iii) Brief Summary of previous academic year Open and Custom activities
        - Timing coincides with the yearly report of Non-Degree Studies
         September – August for the Vice-Provost Academic (example shown in Exhibit #1 Section #4)
   iv) List of intended new Open Programs for the new fiscal year
       (September – August).
   v) A detailed description of these open programs.
   vi) A detailed description of the qualifications and quality of the instructors teaching in SEEC’s non-degree programs (see Section #5)
   vii) List of current Custom client activity (without details) (Exhibit #1 Section #6)

In Sum:

1. Summary approval provides sound academic oversight while permitting SEEC to compete via rapid Open program development;
2. Custom programs are covered by confidentiality agreements and therefore cannot be included in the process approval.
Exhibit #1

To: Executive Committee of Schulich School of Business Faculty Council

From: Alan Middleton, Executive Director Schulich Executive Education Centre (SEEC)

February 25, 2020

SEEC Non-degree Studies Approval Process

This report outlines the background of the Schulich Executive Education Centre (SEEC) Non-Degree Program design, development and delivery process. It is intended to brief the Executive Committee and Faculty Council on a yearly basis each September/October.

Section #1 - SEEC Non-Degree Market Environment

While there is no good reliable publicly available data of market size, non-degree program management education is estimated to be a $700 million market in Canada.

Suppliers of management education against whom SEEC competes include specialist private sector organizations like the Josh Bersin Academy and Global Knowledge; management consultants like Accenture, Bain, Deloitte, McKinsey; other Business Schools like Ivey, McGill, Rotman, Smith; other University Continuing Education organizations like University of Toronto, Ryerson University; Colleges like George Brown and Seneca; small/medium enterprises set up by individuals with training/development qualifications and experience; Training/HR/Talent Departments within large organizations like the major banks and other financial institutions; and on-line training programs.

To compete in this highly competitive market SEEC must offer

- High quality programs that achieve high client satisfaction;
- That reflect ever changing and contemporary needs;
- That are relevant in differing industry sectors;
- Offered as either/both Open Programs that anyone can attend, or programs customized to an organization and its staff;
- Packaged in convenient formats (length, timing, blended access)
- Priced competitively;
- Certificated;
- With a credibly branded provider.

and that deliver a positive financial and reputational return for SEEC/Schulich School of Business.

This means that to compete successfully SEEC programs must:

- Be able to be designed, developed and offered quickly as market/client demand develops;
- preferably be ahead of market demand;
- Be an effective blend of high-quality content but offered in a manner that is highly engaging and therefore requires highly talented instructors knowledgeable and with application experience;
- And with sufficient flexibility to handle Custom client requirements and constant changes of timing and content

Section #2 – SEEC Non-Degree Activity Design

a) Clients:
SEEC clients are managers and executives in private, public and NGO sector organizations. They are middle/senior managers and executives in these organizations. They are both domestic and international. They are both individuals attending SEEC Open and Custom Programs and Clients in HR and Talent Management or Department Heads who ‘authorize’ attendance at Open Programs or contract SEEC to train their organization’s staff.

b) Purposes of non-degree activities:
To provide a high-quality opportunity for continuous updating of managerial skills in all sectors, thereby enabling higher performance and productivity while promoting ethical and sustainability-oriented activities by managers/executives and their organizations.

b) How are programs designed to achieve the purpose and meet client needs?

1. Open Programs: from a blend of inputs:
   - Research: Market surveys of trends in global management practices; review of academic managerial research; briefings from Schulich faculty, organizations and individuals with expertise in management education.
   - Briefings from organizations domestically and globally for their talent training and development;
• Analysis of competitive offerings globally.
• Then these inputs are transformed into training programs by subject matter expert instructors working with SEEC expert personnel.
• The Training Program design is then finalized and marketed.

We repeat those programs that have achieved both commercial success and positive quality evaluations; and upgrade or replace those not achieving these standards.

ii) Custom Programs

• A ‘Request for Proposal’ and/or briefing from the client: usually an HR, Talent senior executive and/or Department Head;
• Informal or formal ‘needs analysis’ interviews with the client;
• Mixed with research and information as per i) #1 above.
• Iterative process of discussion with the client, leading to final decision on content, length and cost.

Section #3 Summary of SEEC’s Non-Degree Development Process

Where possible (within the restrictions on Custom Programs of client confidentiality), SEEC’s programs meet the guidelines from York University.

The processes and checklists suggested by York are as follows:

“New activities will be subject to approval processes by Offering Units that take into account the following:

- identification of participants in the approval process
  -Identification of audience;
  -purpose of course;
  -process undertaken in program development;
  -qualifications of program development team;
  -qualifications of instructors;
  -consultation processes to adhere to the principles identified above;
  -program description and structure;
  -criteria and procedures for assessing quality.”;

The following are the SEEC processes that meet these requirements:
Non-Degree Quality Control and Approval Processes at SEEC

Open Programs (2day, 3-day, 5 day and 15-18 day):

1. Programs are developed for SEEC based on four inputs:
   - A review of global trends in management from academic and practitioner literature and direct input from Custom clients HR and Talent Departments;
   - A review of competitive activity: Consultants like BCG, Deloitte, McKinsey; Training organizations like Centre for Creative Leadership, DDI, Global Knowledge; and other business school offerings like Duke, IMD, Harvard, Rotman;
   - Proposals from SEEC faculty and other subject matter experts;
   - Identification of areas of potential demand where SEEC executives reach out for instructors (e.g. A.I., Blockchain). The proposal format is included in Exhibit #2A and requires target audience, content, instructor description etc.)

2. Four times per year SEEC executives meet to review program ideas and proposals and decisions made which ones to pursue.

3. Instructor capabilities are then reviewed for these programs based on:
   - Prior evaluations at SEEC;
   - Teaching evaluations at Schulich School of Business;
   - SEEC client recommendations;
   - Direct experience with instructors at other courses and conferences.

4. Instructors are selected from Schulich, other faculties at York, other Business Schools internationally (other than Rotman and Ivey who have non-compete agreements with their tenured faculty) and practitioners in consulting organizations or sole enterprises.

5. Programs are then run, and a full evaluation conducted:
   - Marketability based on repeating the programs 2 – 3 times (first run does not usually successfully forecast demand): minimum requirement 8 paid participants
   - Quality based on evaluations on course completion and follow up: SEEC standard is for a minimum of 4.5/5.0 for repeat; for 4.1-4.5 we coach and revise; for 4.0 and under we change instructor and/or content.
   - ‘Fit’ within the SEEC roster of offerings to keep the total calendar of programs fresh and to minimize overlap of topics.
   - Every 2 years an instructor evaluation is completed that looks at not only evaluations but the timeliness of the content.

6. Programs that have low demand are discontinued
7. Success here is additionally measured by the number of repeat clients (SEEC Alumni) and awards and surveys like the Financial Times global Executive Education Survey where in 2019 we ranked #40 in the world.

8. Each month the SEEC Executive Director reviews programs and results with the Dean and solicits input.

Custom Programs (programs of various lengths designed specifically for an organization and developed together with that organization. Organizations include Private Sector; Public Sector and Not-for-Profit).

1. SEEC either works with potential clients to identify training need areas or responds to RFPs.
2. We then conduct a ‘needs analysis’ by reviewing input from
   - the assigned Talent/HR executive at the client;
   - the senior executive group of the organization;
   - two or three of the intended participants for training.
3. We (our Custom Program Director and Associate Directors working with the chosen faculty/subject matter experts) then draw up a proposal and discuss with client for approval or in a competitive bid situation await the contract decision.
4. On confirmation of the contract we then work with the organization to review detail including instructors, topics, pricing and timing.
5. We choose instructors based on known capability in their area of expertise on a global basis as outlined in # 4 and #5 in Open programs but who have also taught for SEEC previously in some capacity.
6. The program is then delivered, and a full evaluation conducted based on both participant feedback and client HR/Talent Executive feedback often with Client-specific benchmark-based evaluations.
7. In most clients, with their agreement, a ‘sustainment’ process is followed that seeks to review how the learning has been utilized and the impact of the learning on the organization.
8. Success here is additionally measured by the large number of repeat clients and additionally awards and surveys like the Financial Times global Executive Education Survey where we are consistently ranked in the top 65 in the world.
9. Once again review of Custom clients is included in the monthly report and meetings with the Dean as outlined in Open Programs #7

Both Open and Custom Programs - Quality of Program Design and Delivery

The tests of quality and effectiveness of SEEC training are:
1. The quality of the program design and delivery starts with the expertise of our designers and instructors. As indicated earlier, many SEEC instructors come from within the Schulich School of Business (approximately 20%) and York University and other top Business Schools (approximately 10%) as well as other subject matter experts.

2. Evaluations by participants at the conclusion of every Open and Custom program and in many cases a follow up evaluation;

3. The successful repeat buying of our programs in the marketplace;


5. Commercial viability and success of SEEC programs;

6. Evaluations of our product by various outside bodies e.g. Financial Times Global Executive Education Surveys (2019 a combined ranking of # 42 in the world and awards won (5 in 2018/19);

7. Each year we prepare and submit the York University “Annual Report on Non-Degree Programs”. For the September 2018 – August 2019 period submission was made on September 27th, 2019.

8. One of the criteria for evaluation of the Schulich School of Business in Business School accreditation processes like EQUIS is the chapter on Executive Education. In the last one (2016) Chapter 6 was successfully used to support Schulich’s membership and accreditation.

9. **Section # 2A SEEC Open Development Template**

SEEC Short Open Program Development Template for:

**Course Content:** XXXXXXX

**Speaker Name(s):**xxxxxxxxx

<table>
<thead>
<tr>
<th><strong>Course Title</strong></th>
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<td>2.</td>
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<tr>
<th><strong>Technical Aspects</strong></th>
<th>1. length of program</th>
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<td>2. modality? i.e. classroom, classroom and online, etc.</td>
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<td></td>
<td>3. Pre-work</td>
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<th>4. Assessment tools or books to be used</th>
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<tr>
<td><strong>Subline</strong></td>
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<td>Positioning statement(s)</td>
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<table>
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<tr>
<th><strong>About This Seminar</strong></th>
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<tbody>
<tr>
<td>Provide 2 - 3 short paragraphs, treating the following:</td>
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<tr>
<td>a. Rationale/need for the program.</td>
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<tr>
<td>b. How / in what way the program will address these needs.</td>
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<tr>
<td>c. How the program was developed.</td>
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<tr>
<td>d. The essence or ‘promise’ of the program.</td>
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<tr>
<td>e. How the participant will benefit in general</td>
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<th><strong>What You Will Learn</strong></th>
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<tr>
<td>10-12 short, bullets encapsulating the key learning takeaways</td>
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10.
| **Unique Course Features**  
(e.g. simulation exercises or case studies, extensive group work, special materials of interest, application to real-world operating challenges, development of custom strategic plans, individual coaching and mentoring, etc....) |
|---|
| **Who Should Attend**  
Provide list of job titles and industries you feel are primary and secondary markets, |
| **Program Content**  
(Most important section from the buyer's perspective) – aim for 8 major subject headings with 4 - 5 sub bullets under each heading... please keep the sub-bullets concise |
| **Market Research**  
Who are the major competitors of this program and how you differentiate your program  
–Please list a few key points |
| **Program Promotion**  
1. Keywords you recommend for google search  
2. A list of associations/trade show/conference/organizations you recommend we should approach to co-promote this program |
3. Sectors or industries to target: (e.g. manufacturing / automotive / finance / insurance, etc.)
4. A list of 3-5 actual organizations / companies from the sectors/industries above you know of whose employees you think would benefit

Speaker Bio(s)
Approx. length: 75 words
Please provide job backgrounds, academic qualifications, work and experience in teaching this subject area.

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**Section #4 – SEEC programs 2018/2019**

Open enrollment and Custom program data 2018-2019 academic year (September 2018 – August 2019)
Total participants = 7,175.
Open – Domestic: 125 courses and programs; 2,421 participants (34%)
Custom - Domestic: 104 courses and programs, 3937 participants (55%)
Custom – International: 25 courses and programs, 817 participants (11%)

New Open Courses:
- 3 – see attached worksheet for details

New Custom Domestic Courses:
- 48 – with 2,180 participants - see attached worksheet for details

New Custom Domestic Programs
- 10 – with 324 participants - see attached worksheet for details

New Custom International Courses:
- 22 – with 489 participants - see attached worksheet for details
New Custom International Programs:
- 1 – with 44 participants - see attached worksheet. For details

i. Partners and collaborators in design, delivery, marketing of offerings:
- Various Schulich and York faculty; faculty from other Business Schools internationally; professional management educations organizations and individuals
- The SEEC University Partner network
- Marketing communications carried out by SEEC with assistance of two marketing communications agencies: Mindshape and Unified; as well as Web and Digital suppliers
- Professional accreditation plays a role in some topic areas (e.g. Project Management Institute- PMI; Human Resources Professionals Association-HRP)

Section #5 – New Programs (to come at time of presentation)
- List of Intended New Open Programs for the fiscal year covered in the report.
- Detailed Description of Intended New Programs.
- Detailed Description of Faculty Qualifications (such as CV, teaching experience and evaluations, etc.)

Section #6 – Current Custom clients
To come at time of presentation

Section #7 – Faculty Questions
Schulich School of Business Memorandum

To: Faculty Council, Schulich School of Business  
From: Detlev Zwick, Associate Dean Academic  
Date: January 27, 2020  
Re: Program change to the Master of Management

**Motion:** That Faculty Council approves to offer the Master of Management program at our India campus in Hyderabad, India.

**Rationale:** Schulich proposes to take one of our very successful programs to a new market where demand for high-quality management education is high and supply is low. Schulich has the physical capacity and human resources available at our Hyderabad and Keele campuses to deliver the program and support the additional MMGT cohort. Following the successful MBA India model, the MMGT India program will be delivered by Schulich faculty.

The Master of Management program is a 12-months (3 terms) program. The MMGT India students will complete the first two terms of the program at our Hyderabad campus and the final term at Schulich’s Keele campus in Toronto. After completing the program in Toronto, the students will return to India to start their careers. The program will cater to graduates from top undergraduate programs in India and the larger region.
Major Modifications to Existing Programs
Definitions and Proposal Template

Major Modifications Proposal Guidelines

1. **Program:** Master of Management

2. **Degree Designation:** MMGT

3. **Type of Modification:** We propose to offer the Master of Management program at our India campus in Hyderabad, India.

4. **Effective Date:** Fall 2020

5. **Provide a general description of the proposed changes to the program.**

   We propose to add the Master of Management program to Schulich’s India campus. Currently Schulich’s existing Master of Management (MMGT) program is taught at York’s Keele campus. This proposed version of the MMGT will be taught at Schulich’s Hyderabad campus. There will be no changes to the curriculum, delivery of academic content and of learning outcomes from the existing MMGT program. Thus, the change we are proposing is to add a new physical location (Hyderabad campus) of the existing program offering.

6. **Provide the rationale for the proposed changes.**

   Following the successful MBA India model, the MMGT India program will be delivered by Schulich faculty. The program will cater to graduates from top undergraduate programs in India and the larger region. In simple terms, Schulich proposes to take one of our very successful programs to a new market where demand for high-quality management education is high and supply is low. Schulich has the physical capacity and human resources available at our Hyderabad and Keele campuses to deliver the program and support the additional MMGT cohort.

   The Master of Management program is a 12-months (3 terms) program. The MMGT India students will complete the first two terms of the program at our Hyderabad campus and the final term at Schulich’s Keele campus in Toronto. After completing the program in Toronto, the students will return to India to start their careers.

7. **Comment on the alignment between the program changes with Faculty and/ or University academic plans.**

   The proposed master's program and all of its courses will be offered by the Schulich School of Business at York University. It is part of the graduate expansion plan of the Schulich School and the University.

University Goals

York University’s Strategic Mandate Agreement identifies business as an area of both strength and growth. This new program aims to contribute to this growth at the graduate
level. By providing a net addition to the University’s Masters complement, it will help the University address its goal of enhanced graduate studies, research intensification and reaching the masters-level enrolment target.

Student Demand

The Schulich School’s academic plan calls for the school to be innovative, global and diverse. The Master of Management program adds to this mandate by bringing a very strong and highly successful program to an important international market that lacks an adequate supply of high-quality management training options for local graduates. Based on the All India Survey on Higher Education administered by the Ministry of Human Resource Development, Indian universities graduate 500,000 engineering students per year alone (4-yr degree) as well as several millions in the arts and sciences. Therefore, we believe that demand for the MMGT will be strong and that Schulich’s growing brand recognition and existing physical presence will able us to attract top graduates from India and the wider region.

8. Provide a detailed outline of the changes to the program and the associated learning outcomes, including how the proposed requirements will support the achievement of program learning objectives (i.e., the mapping of the requirements to the program learning outcomes).

There will be no changes to the program and existing learning outcomes. The MMGT India will mirror exactly the program content of the existing program.

9. Summarize the consultation undertaken with relevant academic units, including commentary on the impact of the proposed changes on other programs. Provide individual statements from the relevant program(s) confirming consultation and their support.

Since Schulich already offers the MMGT at our Keele location and no one else is offering a similar program at York no consultation was conducted.

However, if deemed necessary we will consult with other faculties as the proposal moves through the approval process.

10. Are changes to the program’s admission requirements being proposed coincident with the program change(s)? If so, outline the admission changes, and comment on the appropriateness of the revised requirements to the achievement of the program learning outcomes.

No changes to the admissions requirements are proposed.

11. Describe any resource implications and how they are being addressed (e.g., through a reallocation of existing resources). If new/additional resources are required, provide a statement from the relevant Dean(s)/Principal confirming resources will be in place to implement the changes.

Minimal additional resources are required. The Hyderabad campus has the physical capacity to accommodate the additional cohort. The Schulich Hyderabad team is sufficient to provide the administrative support on campus. In addition, the dean has recently appointed a full-time program coordinator for the MMGT at our Keele campus, who will
assist in the administrative support of the Hyderabad cohort. With regard to teaching, Schulich has a deep roster of highly qualified instructors that are able to deliver the courses at Hyderabad. Since the MMGT aligns in many respects with course content taught during the first year of the MBA program, which we also deliver in Hyderabad, instructors already going to Hyderabad to deliver MBA courses will in many cases be able to teach MMGT courses at the same time, thus reducing significantly the need to fly in additional instructors for the MMGT cohort. The existing pool of contract and full-time faculty at the Keele campus is very substantial and fully capable of covering courses that instructors with additional teaching assignments in India can no longer fulfil.

12. **Is the mode of delivery of the program changing? If so, comment on the appropriateness of the revised mode(s) of delivery to the achievement of the program learning outcomes.**

There is no change to the delivery of the program.

13. **Is the assessment of teaching and learning within the program changing? If so, comment on the appropriateness of the revised forms of assessment to the achievement of the program learning outcomes.**

There will be no changes to the teaching and learning within the program. The Hyderabad students will take the exact same courses, taught by Schulich instructors as the Keele students.

14. **Provide a summary of how students currently enrolled in the program will be accommodated.**

N/A

15. **Provide as an appendix a side-by-side comparison of the existing and proposed program requirements as they will appear in the Undergraduate or Graduate Calendar.**

N/A
MOTION REGARDING ESTABLISHING A SEARCH COMMITTEE

Preamble:

At the Faculty Council meeting of February 9 2018, a subcommittee of Schulich Faculty Council comprised of Preet Aulakh, Eileen Fischer, Richard Irving and Dirk Matten was charged with the task of developing a proposal on how the search committee for the new dean of our faculty should be composed, and how the members should be selected. The procedures need to take into account the newly adopted York University Procedures for Decanal Searches (UPDS)\(^1\)

Motion:

That Faculty Council approve the following composition and procedures for selecting members of the search committee for the decanal search for the Schulich School of Business, as proposed by the subcommittee after consultation with faculty, staff, students and alumni.

The Search Committee Composition

1.1. Voting Members
   a) Chair (a presidential appointee, normally the Provost, as per the UPDS).
   b) A presidential appointee (normally, an outside faculty member who is familiar with the Faculty and the UPDS).
   c) Seven (7) full-time faculty members, elected by the Faculty Council (see request to amend UPDS below).
   d) One (1) contract faculty member (see request to amend UPDS below).
   e) Two (2) staff members, one from YUSA the other a CPM (see request to amend UPDS below).
   f) Two (2) student members, as per the UPDS.
   g) One (1) alumni member (see request to amend UPDS below).

1.2. Non-Voting Members
   h) the Secretary (presidential appointee, normally an experienced senior staff member from outside the Faculty), as per the UPDS

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Amendment Requests

Faculty Council requests an amendment from the President to University Procedures for Decanal Searches to allow for a Schulich contract faculty member to be appointed to the committee. The rationale is that contract faculty members play a vital role in the delivery of curriculum, yet too often have little say in matters of vital importance to them, such as the selection of the new dean.

Faculty Council also requests an amendment (one additional staff member) to allow for greater staff representation on this search, given the great diversity of the staff who are so critical to the school’s mission.

Faculty Council further requests an amendment to allow for greater faculty representation (one additional faculty member) given the diversity of the faculty.

Finally, Faculty Council requests an amendment (one alumni representative) to allow for a member of this important constituency of stakeholders to be involved in the search process.

Principles of Membership

a) All members of the Search Committee must be available for meetings between May 2018 and the conclusion of its work.
b) Membership of the Search Committee should reflect the diversity of the School and the School’s commitment to maintaining and enhancing that diversity.

Candidacy Guidelines and Procedures

a) Any member of the Schulich community is eligible to be a candidate for selection in the category corresponding to their respective constituency (i.e., full-time faculty, contract faculty, alumni, staff, student), and will become a candidate by self-nomination.
b) Candidates for committee membership will be invited to self-identify in relation to affirmative action designated groups: women, racial/visible minorities, persons with disabilities, and aboriginal peoples.
c) The Executive Committee of Faculty Council will work proactively to ensure that the totality of candidates for election are reflective of the demographic diversity of the Faculty, as well as of diversity in terms of seniority, areas of experience/expertise.
d) All candidates (full and part time faculty, alumni, staff, and students) will be invited to provide a brief candidate statement of up to 150 words. Candidates will be invited to use their candidate statement to respond to the following question: “What expertise and strengths do you bring to committee?”
e) Candidate statements shall be made available to the voters in a secure, digital format in advance of the balloting.

_Balloting Procedures_

a) The balloting for staff and faculty will be conducted through the Office of the Faculty Council through a secure, anonymous e-Vote. Student organizations will handle the balloting for their constituencies, and the alumni office will handle the balloting for alumni.
b) There shall be a separate ballot for each of the constituencies: full time faculty members, contract faculty, alumni, staff and students.

_Voting Procedures_

a) All members of Faculty Council are eligible to cast votes on the ballot that reflects their constituency. (Since contract faculty are not members of Faculty Council, arrangements will need to be made to facilitate having them vote for the contract faculty member on the search committee, if the proposed amendment is approved). Students’ governing bodies will arrange and administer their own votes.
b) If the number of candidates for a constituency is not greater than the number of available places available on the search committee for that constituency, then the vote shall be considered to be a ratification vote.
c) Each voter may cast the number of votes commensurate with the number of available places available on the search committee for his or her constituency (e.g., faculty members may cast up to 7 votes; and contract faculty may cast one vote (assuming the amended procedures are allowed); staff members may cast one vote in either the YUSA or CPM category depending on which they are a member of; students may cast a vote in either the under-graduate or graduate category, and alumni may cast one vote.
d) The e-Vote data will be made available to the secretary to the Chair of Faculty Council in de-identified format and shall be kept confidential. The data shall be retained until the formal appointment of the Search Committee, after which it shall be discarded. When results are announced, the only information revealed will be the names of those who form the committee; no break down of votes received will be circulated.

_Selection Process_

a) The candidates with the highest number of votes shall be selected, subject to the following selection criteria:

- For the student constituency (2 members): that there be one undergraduate (elected by the Undergraduate Student Association) and one graduate student (elected by the Graduate Student Association)
- For the faculty constituency (7 members, if approved):
that there be no more than two members from any of the traditional functional departments (accounting, economics, finance, marketing, operations management/information systems, organizational studies, policy/strategy)
o that there be at least 2 female faculty members
o there shall be at least two members with extensive senior administrative experience (e.g. who have been or who are currently members of the senior administrative team such as previous Associate Deans, Undergraduate Program Directors, or Graduate Program Directors.)

b) It is a principle of the selection process that a single candidate may fulfill more than one selection criterion.
c) In the case of a tie, the candidate will be selected from the affirmative action designated groups: women, racial/visible minorities, persons with disabilities, and aboriginal peoples.

Incomplete Slate of Nominees

In the event that the procedure described above does not result in a fully-formed slate of nominees for the Search Committee, then the Office of the Faculty Council shall formulate, with input from the Faculty Council membership at large, a proposal for remediating action and bring it forward for approval at Faculty Council at the earliest practicable occasion.

Upon Formulation of Slate of Committee Membership

a) Once the slate of nominees for committee membership has been identified by the Faculty Council using the procedures outlined above, the President shall formally establish the Search Committee as a committee advisory to the President as per the UPDS.
b) The nominees become recognized as members of the Search Committee only once the Search Committee has been formally established by the President.
c) Once formed, the Search Committee will then conduct its duties in accordance with the provisions of the UPDS.

Search Process.

The search process shall, consistent with practices in the recent past at York and elsewhere, be “closed” in the sense that the identities of the candidates will be kept confidential and will be known only by members of the search committee.
Attracting capable Deans is critical to advancing the institutional priorities and mandate of York University. The York Act vests in the President the power to recommend to the Board the appointment of officers of the University (13 (2) d). Under the terms of the current Collective Agreement with YUFA, the importance of collegial participation in the selection of academic administrators and Librarian Administrators is acknowledged in 12.27 (b): Unless otherwise agreed to between the President and the Faculty Council of the Faculty in question, candidates for appointment as Deans or Principals shall be recommended to the President by search committees established by and advisory to the President, a majority of which have been elected by Faculty Council, and a majority of the members of which are full-time faculty members.

In light of feedback from the York community and following a review of current practices at other leading Canadian universities, the Procedures for Decanal Searches are being updated, effective immediately.

University Procedures for Decanal Searches

The Deans/Principal play a crucial role in the academic leadership and governance of the university, as well as in the direction and administration of their Faculties and the promotion of teaching and research in those Faculties. It is therefore essential that a decanal search canvas widely to attract candidates who are best qualified for the position in relation to leadership and administrative capacities and experience and scholarly reputation.

The following general procedures shall govern all searches for Faculty Deans, Principal, and, as applicable, the Dean of Libraries. At the outset of a given search, any further specific or supplemental procedures may be agreed upon between the President and the Faculty Council Executive and presented to Faculty Council for approval.

1. The President initiates a search by communication with Faculty Council normally 14 months before the end of the incumbent Dean’s/Principal’s term, or in the case of an unanticipated vacancy, as soon as possible.
2. Faculty Council normally elects 6 full-time faculty members, one staff and two student members (one undergraduate and one graduate student).
3. Ensuring the best possible outcome will be facilitated by a Search Committee that reflects the breadth and diversity of the Faculty. Each Council should therefore establish procedures reflecting the following principles:
   a. A Search Committee should have some representation from full-time faculty members with familiarity of the job of Dean – that is, with academic administrative experience – typically no fewer than two colleagues who have been or who are currently chairs or directors of departments, or in non-departmentalized
Faculties, members of the senior administrative team such as previous Associate Deans, UPDs, or GPDs.

b. Search Committees should broadly reflect the diversity of academic departments including at least one member from each department if possible, and if not, normally no department should have more than one member on the Search Committee; in non-departmentalized faculties, the Committee should broadly reflect the program areas or fields in the Faculty.

c. Search Committees should also reflect broadly the gender and demographic diversity of the Faculty.

4. Faculties with a significant proportion of contract faculty or who may desire to have an external member such as an alumnus may request adding an additional member to the Search Committee representing contract faculty, alumnus, etc. (to be agreed upon with the President).

5. The President appoints one member drawn from outside the Faculty concerned but who is familiar with the Faculty.

6. The President also names the Chair of the Search Committee, normally the Provost; names a non-voting secretary, normally an experienced senior staff member from outside the Faculty; may retain a Search Consultant to assist the Committee; and formally establishes the Search Committee as a committee advisory to the President, whose mandate is to conduct a search for a new Dean/Principal, in accordance with the agreed-upon procedures, and to recommend to the President, by a specified date, the best-qualified candidate(s) for Dean/Principal.

7. The Search Committee is responsible for preparing the position profile drawing on input from Faculty Council and in consultation with the President.

8. The Search Committee will advertise the position in university publications and, if external nominations are being sought, may advertise in national and international professional publications. The Search Committee may also solicit recommendations for the position.

9. The Search Committee assesses and screens applicants/nominees, and conducts interviews. The names of all the candidates considered at any stage, including the list of those interviewed, shall be kept confidential to the Search Committee and the Consultant. By agreeing to serve on the Committee, all members agree to be bound by these requirements of confidentiality.

10. The Search Committee prepares its recommendations for the President, identifying the candidate or candidates who present the knowledge, skills and capacities to undertake the responsibilities of Dean/Principal. The Committee may, if it wishes, rank order candidates.

11. The President consults with the Executive Committee of the Board of Governors which may act on behalf of the Board in appointing the candidate or may recommend the appointment to the Board, at its next regular meeting.

12. The President announces the name of the new Dean/Principal to the Faculty and the Board of Governors, and subsequently to the wider York community.
Pilot Provision (2017 – 2019) for Open Searches

For Faculties wishing to incorporate an open stage into their search, the following is being provided as a pilot for searches in 2017 - 2018 and 2018 – 2019 to be reviewed before incorporating as a standing option.

Where a Faculty Council indicates a preference for an open search, an open stage may be added to the process after the Search Committee has interviewed its shortlisted candidates confidentially and has identified its top ranked candidates – normally the top two ranked candidates. In order to ensure that York has access to the very best candidates, the Consultant (or if there is no Consultant, the Secretary to the Committee) will ask the top ranked candidates whether they are willing to meet with Faculty Council. That information will be kept in confidence by the Search Consultant (or Secretary).

If both/all the top ranked candidates agree to do so, they will be invited to present to a closed session of Faculty Council. The Search Committee will solicit input from Faculty Council about those candidates and consider this input in their final rankings to be presented to the President. In this event, all members of Faculty Council agree to be bound by the same requirements of confidentiality as the Search Committee. Council members will provide input to the Search Committee but members of Council will be expected to keep the names of the candidates confidential in perpetuity.

If any of the top ranked candidates indicate a requirement for a confidential search, the open stage will not occur for any candidate. The Consultant will report to the Search Committee that at least one candidate requires a confidential search, without disclosing which candidate or candidates have not agreed to meet with Faculty Council. The Search Committee will in any respect consult extensively with Faculty Council about the position profile for the Dean, and provide regular updates throughout the search.

Whether or not the search proceeds to an open stage, the top ranked candidates will also meet with the President, and the Search Committee may elect to hold follow-up interviews with them.
MOTION:

That Faculty Council approve the new course, SB/OMIS 3020 3.0 – Predictive Analysis

RATIONALE:

There is currently a gap in the undergraduate curriculum in that there is a dearth of quantitative courses that support data-driven decision making. After second year, students are not exposed to modern data science and predictive analytics. This is problematic as other universities are offering such courses, the techniques are increasingly being sought out in the industry, and it means that our own students are ill prepared for our three Masters programs (i.e., MSCM, MBAN, MMAI). In order to bridge this gap, we are proposing a course that will provide the basic tools and frameworks to lead informed and strategic decision-making based on a deep understanding of data and empirical modelling. Further, the course will expose students to modern analytic tools (e.g., machine learning) and software (e.g., Python) that are especially popular within industry. The skills learned in this course will better prepare students for other OMIS courses (e.g., OMIS 4000 3.0), a career in data analytics, as well as our own quantitative Masters programs.
1. **Course Number and Credit Value:** OMIS 3020 3.00

2. **Long Course Title:** Predictive Analytics

3. **Short Course Title:** Predictive Analytics

4. **Effective Session:** Fall 2020

5. **Course Description for the Undergraduate Course Registry and Calendar:**
   Predictive analytics is the practice of extracting insight from data by creating models that accurately predict future outcomes. This course presents a wide range of data science techniques that support the art of prediction. This includes the manipulation of large data sets, exploratory data analysis, quantitative modelling, performance evaluation, and the effective communication of business insight.

6. **Pre-requisites and/or Co-requisites:**
   OMIS 2010 3.00 and MGMT 2050 3.00

7. **Rationale:**
   There is currently a gap in the undergraduate curriculum in that there is a dearth of quantitative courses that support data-driven decision making. After second year, students are not exposed to modern data science and predictive analytics. This is problematic as other universities are offering such courses, the techniques are increasingly being sought out in the industry, and it means that our own students are ill prepared for our three Masters programs (i.e., MSCM, MBAN, MMAI). In order to bridge this gap, we are proposing a course that will provide the basic tools and frameworks to lead informed and strategic decision-making based on a deep understanding of data and empirical modelling. Further, the course will expose students to modern analytic tools (e.g., machine learning) and software (e.g., Python) that are especially popular within industry. The skills learned in this course will better prepare students for other OMIS courses (e.g., OMIS 4000 3.0), a career in data analytics, as well as our own quantitative Masters programs.

8. **Instructors and Faculty Coordinator:**

   **Initial Instructor**
   Isik Bicer, Assistant Professor
Alternative Instructors
Adam Diamant, Assistant Professor

Course Coordinator
Adam Diamant, Assistant Professor

9. Specializations:

Primary Area or Specialization
OMIS

Secondary Areas or Specializations
N/A

10. What will be the structure of the contact hours of this course each week?
There will be 3 contact hours per week.

11. Maximum enrolment
45

12. Expected Student Enrolment:
45

13. Evidence for enrolment expectations:
Enrolment is based on demand for quantitative undergraduate courses. For example, OMIS 4000, another senior undergraduate course offered by the OMIS department that teaches students about prescriptive analytics, has approximately 70-80 students enrolled per year. This even necessitated that an extra section be opened.

14. Human Participants Research
N/A

15. If any special computer facilities, teaching materials, or physical facilities are required, please list them.
N/A

16. Course Outline:
See attached.

17. Library Statement:
N/A
Course Originator:

Adam Diamant

OMIS

Name

Area or Specialization

Supporting Faculty Members:
(The course originator should consult with other interested parties and obtain their approval signatures.)

The undersigned have examined this course proposal and feel it is a worthwhile addition to the curriculum and does not, to our knowledge, significantly duplicate the content of existing course offerings.

David Johnston (OMIS)          Zhepeng Li (OMIS)
Name

Murat Kristal (OMIS)           Julian Scott Yeomans (OMIS)
Name

Henry Kim (OMIS)               Moren Levesque (OMIS)
Name

Divinus Oppong-Tawiah (OMIS)   Markus Biehl (OMIS)
Name

Greg Saxton (ACTG)             Ruodan Shao (ORGS)
Name

Eileen Fischer (MKTG)          Theodore Noseworthy (MKTG)
Name

Mark Kamstra (FINE)
Name

1. Approvals

January 13, 2020
Date
Approvals:

Area or Specialization:
This Area/Specialization has reviewed this course proposal and supports the addition of this course to the BBA and/or iBBA curriculum.

_________________________  January 13, 2020
Signature                    Date

Richard Irving              OMIS
Area Coordinator or Specialization Director Area or Specialization

Program:
The BBA/iBBA Program Committee recommends that this new course be added to the list of the courses specified for the program. Documentation attesting to the faculty member support for the change has been received and archived by the committee chair.

_________________________  February 7, 2020
Signature                    Date

Mike Valente                 BBA/iBBA Program
Program Director             Program
MEMORANDUM

Peter F. Bronfman Business Library

TO: Adam Diamant, Assistant Professor in OMIS, Schulich School of Business
SUBJECT: Library Statement for OMIS 3020 3.00: Predictive Analytics
FROM: Xuemei Li, Business Librarian
DATE: February 26, 2020

Predictive analytics is the practice of extracting insight from data by creating models that accurately predict future outcomes. OMIS 3020 presents a wide range of data science techniques that support the art of prediction. This includes the manipulation of large data sets, exploratory data analysis, quantitative modelling, performance evaluation, and the effective communication of business insight. The Libraries can support this course with a good collection including print and electronic books, print and electronic journals, together with various databases in subject areas relevant to this course.

Keyword searching of the Libraries’ catalogue reveals relevant subject headings such as: Decision making, Big data, Data mining, Business planning – Data processing, Business & Economics/Decision-making & Problem solving, Predictive control – Mathematical models, Artificial intelligence, Machine learning and Python (Computer program language). The print academic book collection is supplemented nicely by a range of different practitioner e-book collections, e.g. Proquest Ebook Central, Springer E-Books and Ebooks at Scholars Portal. Linkedin Learning (Lynda.com) has online courses relevant to this course.

Relevant databases include Proquest Business, Business Source Complete, Web of Science, Scholars Portal, and Engineering Village, and students can use these databases to identify articles on themes taught in this course to supplement assigned course materials. Gartner IntraWeb is very useful for Predictive Analytics topics covered in this course.

Students can also consult the library’s research guides: www.library.yorku.ca/web/bbl/guides for resources of relevance to this course. BRYT (Business Research at York Toolkit) – bryt.library.yorku.ca - is recommended as it offers short videos and step-by-step PDF instructions which guide students through conducting effective research.

Assistance with research and information resources is available from reference staff at library locations on campus. Reference service is provided in-person, by phone, by e-mail, and by virtual chat reference.
OMIS 3020 3.00: Predictive Analytics

Course Outline
Fall 2020

<table>
<thead>
<tr>
<th>SECTION</th>
<th>DAY</th>
<th>TIME</th>
<th>ROOM (SSB)</th>
<th>BEGINNING</th>
<th>INSTRUCTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Wednesdays</td>
<td>2:30pm-5:30pm</td>
<td>---</td>
<td>September 14, 2020</td>
<td>Adam Diamant</td>
</tr>
</tbody>
</table>

Adam Diamant received his PhD in Operations Management from the Rotman School of Management prior to joining Schulich. He has worked in a software startup that provides solutions for big and streaming data, been a software consultant for financial companies involved in high frequency trading, and has done research in atmospheric physics. His current research uses stochastic modeling, optimization techniques, and deep learning to model and optimize complex systems in health care.

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Administrative Assistant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adam Diamant</td>
<td>Paula Gowdie Rose</td>
</tr>
<tr>
<td>Office: S340 SSB</td>
<td>Office: S337N SSB</td>
</tr>
<tr>
<td>Email: <a href="mailto:adiamant@schulich.yorku.ca">adiamant@schulich.yorku.ca</a></td>
<td>Email: <a href="mailto:pgowdierose@schulich.yorku.ca">pgowdierose@schulich.yorku.ca</a></td>
</tr>
<tr>
<td>Office Hours: Thursdays @ 12 pm – 2 pm</td>
<td>Phone: 416-736-5074</td>
</tr>
</tbody>
</table>

Brief Description:
Predictive analytics is the practice of extracting insight from data by creating models that accurately predict future outcomes. This course presents a wide range of data science techniques that support the art of prediction. This includes the manipulation of large data sets, exploratory data analysis, quantitative modelling, performance evaluation, and the effective communication of business insight.

Prerequisites: MGMT 2050 and OMIS 2010

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Course Learning Outcomes.................................................................................................................. 2
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Course Material.................................................................................................................................... 3
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Class-by-Class Syllabus ...................................................................................................................... 5
General Academic Policies: Grading, Academic Honesty, Accommodations and Exams .................. 9
Quick Reference: Summary of Classes, Activities and Deliverables ................................................ 10
Course Learning Outcomes

In modern management, data plays a central role in driving business processes. Predictive analytics is the practice of extracting insight from data by creating models that can accurately predict future outcomes. The ability to intimately understand, clearly communicate, and effectively act upon such findings are highly valued in industry due to the breadth of application areas; these methods have been applied to problems in all functional areas of the business including accounting, marketing, finance, operations, and strategy. As a result, the mathematical and computational techniques that support this type of analysis have now become an essential, if not mandatory, management skill.

The purpose of this course is to provide students with an exposure to, and an appreciation for, the basic data science toolkit. It will also teach fundamental skills associated with the application of these techniques in common software suites such as Python. A wide range of examples and business applications will be discussed. The course will consist of a mix of lectures on the functions that support data management including best practices in data manipulation and visualization, the reporting of summary statistics, the training of predictive models, and the extraction of relevant and actionable insight. The central theme of the course will be to have all topics motivated by circumstances that require data-driven decision-making. Further, a ubiquitous feature in modern management is the central role that data plays in driving core business processes. Thus, students will develop a sense of how to approach complex problems that leverage these large data sets.

The objectives of this course are:

- To introduce you to the main concepts in data-driven decision-making for business applications.
- To facilitate a deeper understanding of data procurement, management, and cleansing.
- To develop a proficiency with statistical and machine learning models for predictive analytics.
- To expose you to current computational libraries that support the field of data science.
- To provide you with opportunities to improve your problem solving and critical thinking skills.

Organization of the Course:

The course is organized into two halves. The first half focuses on the basic tools that a data analyst should possess. Specifically, it introduces students to data management and issues surrounding how to clean, manipulate, and prepare data for analysis. It then discusses techniques that support exploratory analysis in order to summarize the main characteristics of the data set and get insight into what predictive models may be appropriate. Topics such as the computation of summary statistics, data visualization, missing and corrupted data, imputation of missing information, and correlation are covered. The second half of the course focuses on machine learning techniques, i.e., the basic tool set of a data scientist. Regularization as well as least-squares, quantile, and logistic regression are introduced. Modern approaches on how to evaluate the predictive performance of these models (e.g., collinearity, residual analysis, confusion matrices, accuracy, precision, and recall) are also covered. The course then discusses both supervised and unsupervised learning models such as decision trees, support vector machines, ensemble models (e.g., random forests, bagging, boosting), and clustering. The course concludes by introducing the fundamentals of artificial neural networks and deep learning.

Classes will consist of a combination of quantitative theory and practical application. Some sessions will be more conceptually oriented while others will have a greater emphasis on computational modeling. Techniques and concepts will be reinforced by in-class examples, at-home assignments, and exams. Students should read assigned materials to support their understanding of the material. They should be also prepared to actively participate in class discussions. Students are encouraged to work on practice problems both individually and in groups. Students are free to solve other problems from the text or other sources, as well as to try any additional problems posted on Canvas. It is also suggested, especially if you have never before used the Python programming language, that you attend tutorial sessions offered by Schulich Deloitte Cognitive Analytics and Visualization Lab.
Additional Course Support

Email: E-mail the instructor with any questions about the course such as administrative issues, questions regarding the grading of the assignments, midterm exam, final project, or if you have (very) brief questions about the material. Please put OMIS 3020, your full name and brief heading (i.e., description of what the email is about) as the first part of the subject line in all e-mail correspondence. Most emails will be responded to within two business days (48 hours) but if you do not get a response within this time frame, please send another email. For other issues including most concerns with the course material, please come speak with the instructor during office hours or request an appointment at a mutually beneficial time. Please be professional in all your email correspondence. For more information on how to write an effective and professional email, please see the following links: http://writingcenter.unc.edu/handouts/effective-e-mail-communication/

Meetings and Office Hours: Students are invited to attend office hours on a drop-in basis. No prior appointments are required for scheduled office hours. Students can also meet with the instructor outside office hours by requesting an appointment (i.e., send an email to the instructor). If you cannot attend a scheduled appointment, notify the instructor as soon as possible. If you schedule an appointment and do not show up, this may affect your ability to schedule future appointments.

Course Announcements: All course emails and announcements will be posted in Canvas. This correspondence will be sent to the email account you have specified in your Canvas profile. It is your responsibility to ensure that you have access to both sources of information and check each regularly.

Course Material

Text: There are no required texts for the course. However, there are several online resources that are recommended for learning reinforcement and for practice questions.


You will receive a free 6-month license for DataCamp, a website specialized in Data Analytics which will be used for several of your assignments during the course. DataCamp also offers additional videos, extra exercises, and even full courses on related concepts if you are keen in going beyond the class material.

Deliverables at a Glance

Course work includes the following deliverables: ten weekly exercises, two assignments, one exam, and a Hackathon. Marks will not be adjusted until all deliverables have been submitted and graded.

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Quantity</th>
<th>% Weight</th>
<th>Total %</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>DataCamp Exercises</td>
<td>10</td>
<td>1</td>
<td>10</td>
<td>Individual</td>
</tr>
<tr>
<td>Assignment</td>
<td>2</td>
<td>15</td>
<td>30</td>
<td>Individual</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>1</td>
<td>30</td>
<td>30</td>
<td>Individual</td>
</tr>
<tr>
<td>Hackathon (Proposal)</td>
<td>1</td>
<td>10</td>
<td>10</td>
<td>Group</td>
</tr>
<tr>
<td>Hackathon (Event)</td>
<td>1</td>
<td>20</td>
<td>20</td>
<td>Group</td>
</tr>
</tbody>
</table>
**DataCamp Exercises:** Ten (10) online exercises, each worth 1%, will be assigned during the course. They will be completed on DataCamp and will reinforce ideas discussed during class. Exercise will be assigned immediately after the related content is discussed and students will have one week (until the beginning of the next class) to complete the module. Exercises consist of a mix of multiple choice answers and specific Python coding questions; each module is expected to take approximately 1-hour. **Late exercises will not be accepted although they will remain available for self-study.**

**Assignments:** Two (2) take home assignments, each worth 15%, will be assigned during the course. The first case study will require students to apply the material learned from lectures 1-4. The second assignment will require students to apply the material learned from lectures 5-8. All assignments, their due date and time, and detailed submission instructions, will be posted on Canvas. All instructions for the assignments are expected to be followed. Assignments are to be completed individually and submitted online using your Canvas account before the designated due date. **All assignments are due at the date and time specified; the exact date and time will be given in the assignment and on Canvas.** Late work will be penalized 15% per day up to a maximum of three days after which you will receive a mark of zero. Exceptions will only be granted for medical and other serious emergencies with appropriate documentation. Please make every effort to let your instructor know in advance (e.g., more than 24 hours before the assignment is due) if your assignment is going to be late – use email. Supporting documentation will be required as per the Schulich policy on missed tests and assignments.

**Midterm Exam:** During week 7, students will write a 3-hour in-class exam worth 30% of their final mark. The exam covers topics taught during weeks 1-6. Within 24 hours of missing an examination, students must contact the Associate Director, Undergraduate Programs Unit at (416) 736-5060 and must also contact their course instructor. Formal, original documentation regarding the reason for missing the exam must be submitted to the Associate Director, Undergraduate Programs Unit (SSB Room W262) within 48 hours of missing the exam. Students who miss an exam due to illness must have their doctor complete an “Attending Physician’s Statement.” For more details, see: [http://www.registrar.yorku.ca/pdf/attending-physicians-statement.pdf](http://www.registrar.yorku.ca/pdf/attending-physicians-statement.pdf).

**Hackathon:** During the final class, students will work in teams of 3-4 during a 3-hour hackathon event. The hackathon covers all course topics. To prepare for the event, students will receive a problem description with a data dictionary several weeks in advance. With this information, the students should develop a proposal (maximum 3 pages, single-spaced) detailing the relevant issues that must be addressed, how the analysis will be approached, the delegation of responsibilities to each group member, how the (potentially) separate analyses will be combined, what the group wishes to conclude from their work, and any relevant implications (e.g., ethical, social, financial) or limitations of their results. The proposal is worth 10% and is due during week 8; critical feedback will be given. During the hackathon, students will have 3-hours to enact their plan. Specifically, they will receive the data set and will be required to analyze it using the tools discussed in the course. The group should report on any insights they obtain. Only code/text written during the hackathon will be accepted; these deliverables are worth 20%.

**Course Participation:** Although there is no formal participation mark, it is strongly suggested that you attend all sessions and actively participate. This ensures you get the most out of the course. Be a positive influence on the classroom environment. This includes coming prepared to class, practicing active listening during lecture, participating in class discussions with insightful and constructive comments, engaging in classroom activities, and ensuring all interactions with the instructor and your peers are respectful and courteous. Further, all interactions outside the classroom should be conducted in an appropriate manner. This includes, but is not limited to, well-written and polite email correspondences, and thoughtful and considerate office hour discussions (note: attending office hours is not mandatory). It is also highly suggested, especially if you have never used the Python programming language, that you attend the Python tutorial sessions offered by Schulich Deloitte Cognitive Analytics and Visualization Lab.
<table>
<thead>
<tr>
<th>DATE/WEEK</th>
<th>TOPICS/ASSIGNED READINGS/ASSIGNED WORK DUE</th>
</tr>
</thead>
</table>
| **Week #1** | **Introduction to Predictive Analytics**  
   - Introduction to data science and machine learning.  
   - Data collection, management, and preprocessing (e.g., normalization).  
   - The prediction paradigm: Training, testing, and evaluation.  
   - The bias-variance tradeoff (overfitting vs. underfitting). |
| **Week #2** | **Python Programming and Its Representation of Data**  
   - Python review and relevant libraries (numpy, scipy, scikit-learn).  
   - Data analysis in Python with the Pandas library and DataFrames.  
   - Visualizing (matplotlib) and manipulating data in Python. |
| **Week #3** | **Exploratory Data Analysis**  
   - Data cleaning: Dealing with missing and corrupted data.  
   - Data imputation techniques (e.g., deletion, substitution)  
   - Summary statistics and correlations (Pearson, Kendall’s Tau). |
| **Week #4** | **Regression Methods**  
   - Linear (ordinary least-squares) and quantile regression.  
   - Model performance: Collinearity, residual analysis, prediction intervals. |
| **Week #5** | **Regularization Approaches**  
   - Lasso and ridge regression (1-norm and 2-norm regularization).  
   - Best subset selection (0-norm regularization). |
| **Week #6** | **Classification Methods**  
   - Logistic regression and the prediction of binary outcomes.  
   - Model performance: Accuracy, recall, precision, F1-score. |
| **Week #7** | **IN-CLASS MIDTERM EXAM (3-hours)**  
   - Topics Covered: **Weeks 1-6** |
| **Week #8** | **Unsupervised Learning**  
   - Cluster analysis (e.g., centroid, distributional, hierarchical).  
   - Internal and external evaluation of clusters. |
| **Week #9** | **Decision Tree Learning:**  
   - Decision trees, random forests, bagging, and boosting. |
| **Week #10** | **Support Vector Machines:**  
   - Support vector machines (SVMs) and regression (SVRs).  
   - The kernel trick: Inner product transformations. |
| **Week #11** | **Introduction to Deep Learning**  
   - Feed-forward neural networks and activation functions.  
   - Loss functions and training with stochastic gradient descent.  
   - Modern architectures: LSTM, autoencoders, GANs, attention. |
| **Week #12** | **HACKATHON (3-hours)**  
   - Topics Covered: **Weeks 1-12** |
General Academic Policies: Grading, Academic Honesty, and Accommodations

Grades at Schulich are based on a 9-value index system. The top grade is A+ (9) and the minimum passing grade is D (2). To keep final grades comparable across courses, the average course grade within a section of an undergraduate course is normally between 5.5 and 7.0. The Schulich School does not use a percentage scale or prescribe a standard conversion formula from percentages to letter grades. Conversions within a course are at the discretion of the instructor. For more details on the index, grading policy, and grade point average (GPA) requirements, consult your student handbook.

Academic honesty is fundamental to the integrity of university education and degree programs, and applies in every course offered at Schulich. Students should familiarize themselves with York University’s policy on academic honesty, which may be found on the Student Handbook and on the Student Services & International Relations Schulich website:

http://schulich.yorku.ca/current-students/academic-honesty/

Participating honestly in this academic community ensures that the York University degree that you earn will continue to be valued and respected as a true signifier of your individual work and academic achievement. All suspected cases of academic dishonesty will be investigated. If you have any questions as to what is and is not permitted, do not hesitate to contact the course instructor or your academic advisors. Potential offences include, but are not limited to:

In papers and assignments:
- Using someone else’s ideas or words without appropriate acknowledgement (i.e., citations).
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts that are false (i.e., the claim is completely unsubstantiated).
- Obtaining or providing unauthorized assistance on any assignment (this includes collaborating with others on assignments that are supposed to be completed individually).

On test and exams:
- Using or possessing any unauthorized aids (e.g., cell phone, graphing calculators).
- Looking at someone else’s answers at any time during the exam.
- Misrepresenting your identity or having another individual write your exam.
- Submitting an altered exam or assignment for re-grading.

Misrepresentation:
- Falsifying institutional documents, grades or university documentation (e.g., medical notes).

Recording Lectures: Lectures and course materials prepared by the instructor are considered by the University to be an instructor’s intellectual property covered by the Canadian Copyright Act. Students wishing to record a lecture or other course material in any way are required to ask the instructor’s explicit permission, and may not do so unless it is granted (note: students who have been previously granted permission to record lectures as an accommodation for a disability are, of course, excepted). This includes tape recording, filming, photographing PowerPoint slides, Canvas materials, etc. If permission is granted, it is intended for the individual student’s own study purposes and does not include permission to “publish” them in anyway. It is absolutely forbidden for a student to publish an instructor’s notes to a website or sell them in any other form without formal permission.

Accommodations: For accommodations sought due to conflicts, religious reasons, unavoidable absences or disabilities, please refer to the Student Handbook or contact Student Services. For counseling & disability services, contact Student Services or see http://cds.info.yorku.ca/.
## Quick Reference: Summary of Content and Readings

<table>
<thead>
<tr>
<th>General Topics</th>
<th>Lecture Details</th>
<th>DataCamp Modules</th>
<th>Canvas Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Python’s Representation of Data</td>
<td>Feature Engineering, Pandas, DataFrames, Visualization.</td>
<td>Pandas Tutorial: DataFrames</td>
<td>-</td>
</tr>
<tr>
<td>4. Regression Methods</td>
<td>Linear/Quantile Regression, Collinearity, Residual Analysis, Prediction Intervals.</td>
<td>Python Exploratory Data Analysis Tutorial</td>
<td>-</td>
</tr>
<tr>
<td>5. Regularization Approaches</td>
<td>Ridge, Lasso, Elastic Net, Best Subset Selection.</td>
<td>Essentials of Linear Regression in Python</td>
<td>Assignment #1</td>
</tr>
<tr>
<td>6. Classification Methods</td>
<td>Logistic Regression, Confusion Matrix, Accuracy, Recall, Precision, F1 Score.</td>
<td>Understanding Logistic Regression in Python</td>
<td>-</td>
</tr>
</tbody>
</table>

**In-Class Midterm Exam (3 hours)**

| 7. Unsupervised Learning | Clustering, Evaluation. | K-Means in Python | - |
| 10. Introduction to Deep Learning | Feed-Forward Neural Networks, Activation Functions, Training with Stochastic Gradient Descent. | Introduction to Deep Learning in Python | - |

**Hackathon (3 hours)**
To: Faculty Council, Schulich School of Business  
From: Adam Diamant  
Date: January 13, 2020  
Re: SB/OMIS 4010 3.0 - New Course Proposal  

MOTION:  
That Faculty Council approve the new course SB/OMIS 4010 3.0 – Artificial Intelligence Fundamentals for Business  

RATIONALE:  
“Data, data everywhere!” is no longer a slogan on paper. Making use of data for informed decision making is become the new business norm in the foreseeable future. Data capture patterns of businesses ranging across suppliers, employers and customers. Data mining discovers the underlying patterns such as association rules, classification models and clusters of similar objects from historical data based on machine learning and applied AI methods. Practitioners in industry as well as academia that are equipped with such knowledge can approach business problems in a data-driven manner with the goal to uncover actionable business intelligence. This course caters to the interests of learning theoretical concepts and tools of data mining and AI at introductory to medium level. It is expected to serve as a concrete grounding for industrial applications as well as academic pursuit in related fields such as Business Analytics, AI management, Social Media, FinTech, and Marketing.  

The specific learning objectives for the students are:  

1. Understand the generation, management, and processing of data  
2. Explore the potential business values that could be discovered using data  
3. Understand the required process of data mining in business tasks  
4. Facilitate the theoretical understanding of data-driven AI methods and the rationale of their business applications  
5. Develop data mining skills that address various business and managerial tasks  
6. Develop techniques that evaluate, customize and enhance data mining performance  
7. Develop collective skills in using intelligence tools for business knowledge discovery  
8. Understand the implications of big data and future applications of computational data science in businesses
1. **Course Number and Credit Value:**
   SB/OMIS 4010 3.0

2. **Long Course Title:**
   Artificial Intelligence Fundamentals for Business

3. **Short Course Title:**
   AI Fundamentals

4. **Effective Session:**
   Winter 2021

5. **Course Description for the Undergraduate Course Registry and Calendar:**
   This course addresses how to apply machine learning to managerial tasks. Through lectures, labs and hands-on projects in realistic contexts, students will learn how artificial intelligence is used for decision making in realistic contexts. Specifically, students will develop technical skills revolving around business value discovery through data mining, e.g., statistical learning, text mining, recommendation, outlier detection and social network analysis.

6. **Pre-requisites:**
   SB/OMIS 3020 3.0 Predictive Analytics (proposing)

7. **Rationale:**
   “Data, data everywhere!” is no longer a slogan on paper. Making use of data for informed decision making is become the new business norm in the foreseeable future. Data capture patterns of businesses ranging across suppliers, employers and customers. Data mining discovers the underlying patterns such as association rules, classification models and clusters of similar objects from historical data based on machine learning and applied AI methods. Practitioners in industry as well as academia that are equipped with such knowledge can approach business problems in a data-driven manner with the goal to uncover actionable business intelligence. This course caters to the interests of learning theoretical concepts and tools of data mining and AI at introductory to medium level. It is expected to serve as a concrete grounding for industrial applications as well as academic pursuit in related fields such as Business Analytics, AI management, Social Media, FinTech, and Marketing.

   The specific learning objectives for the students are:
   1. Understand the generation, management, and processing of data
   2. Explore the potential business values that could be discovered using data
   3. Understand the required process of data mining in business tasks
4. Facilitate the theoretical understanding of data-driven AI methods and the rationale of their business applications
5. Develop data mining skills that address various business and managerial tasks
6. Develop techniques that evaluate, customize and enhance data mining performance
7. Develop collective skills in using intelligence tools for business knowledge discovery
8. Understand the implications of big data and future applications of computational data science in businesses

8. Instructors and Faculty Coordinator:

Initial Instructor
Zhepeng (Lionel) Li

Alternative Instructors
TBD

Course Coordinator
Zhepeng (Lionel) Li

9. Specializations:

Primary Area or Specialization
OMIS

Secondary Areas or Specializations
TBD

10. What will be the structure of the contact hours of this course each week?
    12 weeks * 3 hours/week = 36 contact hours

11. Maximum enrolment
    45

12. Expected Student Enrolment:
    40

13. Evidence for enrolment expectations:
    (1) OMIS classes such as SB/OMIS 2010 3.0 Intro to OM and SB/3670 3.0 Spreadsheet-based Decision Support have met the demand of multiple sections (>3) every year. The success attributes to the offered toolkit that students can apply in their professional as well as academic development. In the same vein, the proposed class is to serve the need of business data analytics using machine
learning tools. So, students from above mentioned classes can receive further training in data-driven analysis skills.

(2) The MBAN and the MMAI programs have demonstrated the demand of data analytics at graduate level. Currently our undergraduate curriculum is absent of similar subjects that could serve as building blocks for our BBA and iBBA student to advance their education in this stream. Therefore, students who plan for graduate studies in data analytics area would take the proposed class.

(3) OMIS faculty members are receiving numerous requests from students asking about the opportunity of applied machine learning classes where they can be equipped of a cutting edge in modern businesses which is using data for decision making. Based on student feedbacks, I believe the enrolment expectation of 40-50 students could be conservative.

14. Human Participation Research
N/A

15. If any special computer facilities, teaching materials, or physical facilities are required, please list them.
A computer lab with desktop for each student will be preferred for teaching environment. The class enrolment can adapt to the lab capacity.

16. Course Outline:
Please refer to the attached course outline file for details.

17. Library Statement: (attached)
There will be pre-assigned required readings for this course. It is expected that they be read. If any handouts are copyrighted; the cost for these materials will be absorbed by the program. A Course Materials Database (‘CMD’) has been created for this course. Every CMD includes some important general information for Schulich students. The instructor posts rubrics, resources and special instructions on assignments on the CMD. Please get into the habit of checking the CMD on a regular basis. Feel free to e-mail the instructor with questions or concerns throughout the term.

Course Originator:

_Zhepeng (Lionel) Li_  January 9, 2020
Signature  Date

_Zhepeng (Lionel) Li_  OMIS
Name  Area or Specialization
Supporting Faculty Members:
(The course originator should consult with other interested parties and obtain their approval signatures.)

The undersigned have examined this course proposal and feel it is a worthwhile addition to the curriculum and does not, to our knowledge, significantly duplicate the content of existing course offerings.

Scott J. Yeomans OMIS
Markus Biehl OMIS
Moren Levesque OMIS
Murat Kristal OMIS
Henry Kim OMIS
Adam Diamant OMIS
Eileen Fischer MKTG
Greg Saxton ACTG
Mark Kamstra FINE
Ruodan Shao ORGS
Theodore Noseworthy MKTG

Approvals:

Area or Specialization:
This Area/Specialization has reviewed this course proposal and supports the addition of this course to the BBA and/or iBBA curriculum.

Richard Irving 1/13/2020
Signature Date
**Program:**
The BBA/iBBA Program Committee recommends that this new course be added to the list of the courses specified for the program. Documentation attesting to the faculty member support for the change has been received and archived by the committee chair.

_________________________   ______________________
Mike Valente               Feb 7, 2020
Signature                  Date

_________________________
Mike Valente
Name of Program Director
Course Outline
Winter 2021

Class Room: TBD; Class Time: TBD
Lab Room: TBD; Lab Time: TBD

Instructor
Zhepeng (Lionel) Li
Associate Professor in OMIS
S337J Seymour Schulich Building (SSB)
Tel: 416-736-2100 x20251
Email: zli@schulich.yorku.ca
Office hours: TBD

Assistant
Paula Gowdie Rose
S337 Seymour Schulich Building
416-736-5074
pgowdierose@schulich.yorku.ca

Zhepeng (Lionel) Li holds a PhD degree, with a specialization in Management Information Systems, David Eccles School of Business, University of Utah. He is an expert in data mining, machine learning, and computational business analytics. Dr. Li’s studies are published by top-tier academic journals and his research work is supported by reputable funding agencies such as Natural Science and Engineering Research Council of Canada and National Natural Science Foundation of China. Lionel teaches courses in related topics such as data management, data mining, and big data.

Brief Description
This course addresses how to apply machine learning to managerial tasks. Through lectures, labs and hands-on projects, students will learn how artificial intelligence is used for decision making in realistic business contexts. Specifically, students will develop technical skills revolving around business value discovery through data mining, e.g., statistical learning, text mining, recommendation, outlier detection and social network analysis.

Prerequisites: OMIS 3020 3.0 Predictive Analytics

Contents
Course Learning Outcomes........................................................................................................................................1
Deliverables at a Glance..............................................................................................................................................2
Course Material.......................................................................................................................................................2
Student Preparation for Class and Class Participation: Expectations..............................................................3
Class-by-Class Syllabus........................................................................................................................................4

Course Learning Outcomes
The specific learning objectives for the students are:
1. Understand the generation, management, and processing of data
2. Explore the potential business value that could be discovered using data
3. Understand the required process of data mining in business tasks
4. Facilitate the theoretical understanding of data-driven AI methods and the rationale of their business applications
5. Develop data mining skills that address various business and managerial tasks
6. Develop techniques that evaluate, customize and enhance data mining performance
7. Develop collective skills in using intelligence tools for business knowledge discovery
8. Understand the implications of big data and future applications of computational data science in businesses

**Deliverables at a Glance**

The evaluation of deliverables in this class is comprised of four major components: Participation, Homework, Group Project and Final Exam. Studying the data mining emphasizes on hands-on exercises, so the projects and lab assignments are considered comparable to written exam(s).

<table>
<thead>
<tr>
<th>Assignment/Task</th>
<th>Quantity</th>
<th>% Weight</th>
<th>Total %</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>10</td>
<td>1</td>
<td>10%</td>
<td>Individual</td>
</tr>
<tr>
<td>Assignments (homework and lab)</td>
<td>5</td>
<td>7</td>
<td>35%</td>
<td>Individual</td>
</tr>
<tr>
<td>Group Project</td>
<td>1</td>
<td>25</td>
<td>25%</td>
<td>Group of 2-3</td>
</tr>
<tr>
<td>Final Exam</td>
<td>1</td>
<td>30</td>
<td>30%</td>
<td>Individual</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

For details, please see the weekly schedule of the class.

**Course Material**

**Text:** The recommended reading for this course includes the following books. They are available for purchase from the York University Bookstore (http://bookstore.blog.yorku.ca):

1. "Data Science for Business" by Foster Provost and Tom Fawcett, O'Reilly, 2013
2. "Data Mining: Concepts and Techniques" by Jiawei Han, Micheline Kamber and Jian Pei, Morgan Kauffmann, 3rd Edition 2011

**Course website:** An online learning platform (Canvas) will be created - https://schulich.instructure.com/. It contains information and materials specific to this course, including lecture slides, practice problems, data sets, programs, and information regarding additional readings. Check it frequently! You will also access and submit homework assignments on Canvas. Because of the large volume of information available on Canvas, information will be grouped by topic (lectures, general information, practice materials, homework, etc.).

Access to Canvas requires a Passport York login and password. If you do not have a Passport York account, you can find information on how to obtain one at http://computing.yorku.ca/students/home/passwords-passport-york-access/
To log in to Canvas:
1. go to https://schulich.instructure.com/
2. Locate the login box. Enter your Passport York Username and Password.
3. Once logged in, you will be taken to the My Courses page. In the middle of the screen you will see all of the courses that you are enrolled in that use Canvas. Select the course from the list of courses, and you will be taken to the course site.
4. Please make sure that your profile references your most frequently used email account.

Student Preparation for Class and Class Participation: Expectations

Participating honestly in this academic community ensures that the York University degree that you earn will continue to be valued and respected as a true signifier of your individual work and academic achievement. All suspected cases of academic dishonesty will be investigated. If you have any questions as to what is and is not permitted, do not hesitate to contact the course instructor or your academic advisors. Potential offences include, but are not limited to:

In papers and assignments:
- Using someone else's ideas or words without appropriate acknowledgement (i.e., citations).
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts that are false (i.e., the claim is completely unsubstantiated).
- Obtaining or providing unauthorized assistance on any assignment (this includes collaborating with others on assignments that are supposed to be completed individually).

On test and exams:
- Using or possessing any unauthorized aids (e.g., cell phone, graphing calculators).
- Looking at someone else's answers at any time during the exam.
- Misrepresenting your identity or having another individual write your exam.
- Submitting an altered exam or assignment for re-grading.

Misrepresentation:
- Falsifying institutional documents, grades or university documentation (e.g., medical notes).

Late Assignments: Please note that all assignments are due at the date and time specified. The exact date and time will be given in the assignment and on Canvas. Late work will not be accepted. Exceptions will only be granted for medical and other serious emergencies. Please make every effort to let your instructor know in advance if your assignment is going to be late – use email. Supporting documentation will be required as per the Schulich policy on missed tests and assignments.

Group Work: Up to three students can work on an assignment. Although it is possible to complete the assignments by yourself, we highly recommend 2-3 students per group. Only one assignment should be submitted per group. Assignments will be submitted online via Canvas. Groups can consist of students from other sections of the course. However, the assignment must be submitted at the earliest designated due date amongst all group members or else the submission will not be accepted. Learning to work together in teams is an important aspect of your education and preparation for your future careers. That said, project-based teamwork is often new to students and you are therefore reminded of the following expectations with respect to behavior and contributions to your team project.
When working in a team, Schulich students are expected to:

- Treat other members with courtesy and respect and honor the group ground rules.
- Contribute substantially and proportionally to each assignment.
- Ensure enough familiarity with the entire contents of the assignment so as to be able to sign off on it as original work and meet the assignment timeline as established by the team.

Resolving Group Conflicts: Conflicts are part of the team’s process of learning how to work together effectively and when handled well, can generate creativity and bring multiple perspectives to the solution. Student teams are collectively expected to work through their misunderstandings as soon as they arise (and prior to submission of the final project). In cases where teams are unable to arrive at a solution that works for all members, the team must bring this to the attention of the instructor.

Class-by-Class Syllabus

On the scale of 1 to 10 with 1 being the least and 10 being the most technical and mathematical data mining course, the course is not higher than 4. The course does not require programming, but it needs basic math related to probabilities, sets, logarithms, distance and trigonometry functions.

Lectures will have a significant interactive component. Your attendance is expected. If you have a laptop, it is recommended that you bring it along to all lectures, particularly those where there will be a greater emphasis on computation. Students will earn credit for active participation in course activities.

Readings from the text or supplementary materials will be assigned for each of the topics in the course. These are useful for preparation prior to lecture as well as to reinforce class concepts after each session.

Practice problems are selected exercises for you to work on to gain experience in each of the problem solving areas. They will not be graded. Solutions may be posted on Canvas. You may choose to do as many of these problems as you like, and may work on them individually or in groups. In order to maximize your learning, you should attempt the problem individually before working with others. While the suggested problems are a good reflection of the material covered in the course, they are not necessarily comprehensive, and students are encouraged to work on additional problems beyond those suggested.

Lab sessions by the end of each group of topics will provide students with the opportunity to gain hands-on experience of realistic data-driven projects. The lab sessions will nurture practical skill set and get immediate feedback on your mastery of the theory as well as the implementation. It also allows the instructor to identify and further reinforce any concepts students are struggling with.

Note: If any changes in this schedule become necessary, notifications will be posted on Canvas. When changes need to be announced between classes, an email will be sent to students’ email accounts, notifying them of the change. Check your email and the course website regularly. It is your responsibility to ensure that you are up-to-date.

<table>
<thead>
<tr>
<th>DATE/WEEK</th>
<th>TOPICS/ASSIGNED READINGS/ASSIGNED WORK DUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>From Data, Data Mining to Intelligent Business</td>
</tr>
<tr>
<td></td>
<td>• Know your data</td>
</tr>
<tr>
<td></td>
<td>• Data mining: concepts, patterns, technologies and applications</td>
</tr>
</tbody>
</table>
- Knowledge representation
- Cross-industry standard process for data mining (CRISP-DM)
- Issues with data mining

Reading:
- Textbook 1: Chapter 1-2

**Week 2**  
**Lab #1: Business Data Mining Process**
- Tutorial on business data mining process with Rapid Miner
  - Business Understanding
  - Data Understanding
  - Data Preparation
  - Modeling
  - Evaluation
  - Deployment

Assignment I:
- CRISP data mining

**Week 3**  
**Association Analysis**
- Frequent pattern mining
- Association rules
- Association vs. Correlation
- Sequential patterns and frequent subgraph mining
- Applied association pattern mining in business: customer shopping behavior & market basket analysis

Reading:
- Textbook 2: Chapter 6; Textbook 3: Chapter 4

Assignment II:
- Association Analysis

Deliverables:
- Assignment I

**Week 4**  
**Advanced Classification**
- Statistical Learning
  - Bayes' Theorem: a revisit
  - Naive Bayesian classifier: assumption, training, and inference
  - Bayesian Belief Networks
- Rule-based learning
- Instance-based learning
- Applied classification mining in business: stock price movement predictions

Reading:
- Textbook 2: Chapter 8

**Week 5**  
**Advanced Clustering**
- Partition clustering
- Hierarchical clustering
- Cluster validation
- Applied clustering techniques in business: customer profiling
Reading:
• Textbook 2: Chapter 10
Assignment III:
• Supervised and unsupervised learning
Deliverables:
• Assignment II

**Week 6**

**Anomaly Detection**
• Anomaly: characteristics and application approaches
• Anomaly detection technique
  o Statistical-based method
  o Density-based method
• Information manipulation
• Applied anomaly detection in business: Financial Fraud Detection and Prevention with Data Mining Techniques

Reading:
• Materials are to be posted on Canvas

**Group Project (choose one from the following list):**
• Stock Market: S&P Events & Price Movement
• FinTech: Bank Service on Credit Card Approval
• PropTech: Real Estate Predictions
• Social Advertising: Whom Should We Target?

**Week 7**

**Recommendation**
• Personalization and Recommender Systems
• Recommendation techniques
  o Collaborative filtering
  o Content-based filtering
  o Cold start problem
• Applied recommendation in business: Mobile App recommendation and target advertising

Reading:
• Materials are to be posted on Canvas

**Assignment IV:**
• Anomaly detection and recommendation

**Deliverables:**
• Assignment III

**Week 8**

**Text Mining**
• Representation of unstructured text data
• Natural Language Processing: tagging, language modeling and beyond
• Mining textual data
  o Semantics,
  o Sentimental analysis
  o Topic discovery
• Dialog System, e.g., chatterbots
• Applied text mining in business: Online customer review (WoM) analysis and social media study
Week 9  Lab #2: Recommendation for Advertising in Mobil Apps
- Implement recommendation approaches with Python
Deliverables:
  - Assignment IV

Week 10  Social Network Analysis
- Dynamics of network formation
- Social influences and adoption
- Link prediction
- Applied social network analysis in business: friend recommendation on LinkedIn
Reading:
  - Textbook 3: Chapter 19
Assignment V:
  - Social media analytics

Week 11  Frontier topics: Big Data and Data Mining (*)
- NoSQL
- Big data computing
- Mining Web data
- Privacy-preserving data mining
Reading:
  - Materials are to be posted on Canvas
Deliverables:
  - Assignment V

Week 12  Project Presentation

Deliverables:
  - Group project report

(*) The coverage of the frontier topics is contingent on the circumstances, e.g., classroom equipment, guest speaker and the topic's relevance.
MEMORANDUM

Peter F. Bronfman Business Library

TO: Zhepeng (Lionel) Li, Associate Professor in OMIS, Schulich School of Business

SUBJECT: Library Statement for OMIS XXXX 3.00: Artificial Intelligence Fundamentals for Business

FROM: Xuemei Li, Business Librarian

DATE: January 24, 2020

This course addresses how to apply machine learning to managerial tasks. Through lectures, labs and hands-on projects, students will learn how artificial intelligence is used for decision making in realistic business contexts. Specifically, students will develop technical skills revolving around business value discovery through data mining, e.g., statistical learning, text mining, recommendation, outlier detection and social network analysis. The Libraries can support this course with a good collection including print and electronic books, print and electronic journals, together with various databases in subject areas relevant to this course.

Keyword searching of the Libraries’ catalogue reveals relevant subject headings such as: Anomaly detection, Artificial intelligence, Big data, Business—Data processing, Business intelligence, Database management, Data mining, Data warehousing, Decision-making--Mathematical models, Decision making--Computer programs, DecisionTools, Machine learning, Management—Statistical method, Pattern perception, Science—Data processing, Semantic Web, Sentimental analysis, Social network analysis, and Text mining etc. Relevant print books are located primarily at the Steacie Science and Engineering Library. The print academic book collection is supplemented nicely by a range of different practitioner e-book collections, e.g. Proquest Ebook Central, Springer E-Books and Ebooks at Scholars Portal. Streaming videos are also available on the topic of Artificial Intelligence in Business and Economics through the Films on Demand platform.
Relevant databases include *Factiva, Proquest Business, Business Source Complete, Web of Science, Scholars Portal, and Engineering Village*, and students can use these databases to identify articles on themes taught in this course to supplement assigned course materials. *Gartner IntraWeb and Statista* are very useful for Artificial Intelligence topics covered in this course.

The books listed in this proposal which are not currently in our collections will be ordered and added to our collections before the course is delivered. The instructor is encouraged to use the Libraries’ reserve service to ensure equitable student access to all the required reading books.

Students can also consult the library’s research guides: [www.library.yorku.ca/web/bbl/guides](http://www.library.yorku.ca/web/bbl/guides) for resources of relevance to this course. *BRYT (Business Research at York Toolkit)* – [bryt.library.yorku.ca/](http://bryt.library.yorku.ca/) - is recommended as it offers short videos and step-by-step PDF instructions which guide students through conducting effective research.

Assistance with research and information resources is available from reference staff at library locations on campus. Reference service is provided in-person, by phone, by e-mail, and by virtual chat reference.
To: Faculty Council, Schulich School of Business  
From: Zhepeng Li  
Date: December 4, 2019  
Re: SB/OMIS 3730 3.00 – Course Title and Calendar Description Change

RATIONALE:

The current course title is unnecessarily specific on the teaching tool. Due to technological advancements (e.g., AI and big data era), Microsoft Access is no longer considered relevant to practice. Therefore, it is proposed that “with Microsoft Access” be removed from the course title. In addition, MySQL is now the most adopted tool for database management in almost all business sectors; this allows for the inclusion of modern data management topics such as “big data”. Thus, it is also proposed to update the course description, where I have (1) shortened the length to be within 60 words; and (2) removed the specifications on Microsoft Access. Note that much of the course content remains the same although the database software and some of the more advancement topics (e.g., big data related components) have been updated to reflect the technological paradigm shift that has occurred in the industry.
The following information is required for all course change proposals at the undergraduate and graduate level. To facilitate the review/approval process, please use the headings below (and omit the italicized explanations below each heading).

1. **Program**  
   Undergraduate BBA and IBBA

2. **Course Number and Credit Value**  
   OMIS 3730 3.0

3. **Course Title**  
   a) **Long Course Title**  
      Database Management with Microsoft Access
   b) **Short Course Title**  
      Database Management with Microsoft Access

4. **Existing Pre-requisites/Co-Requisites**  
   N/A

5. **Type of Course Change** (indicate all that apply)

<table>
<thead>
<tr>
<th>Change Type</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>in course number</td>
<td></td>
</tr>
<tr>
<td>in credit value</td>
<td>(provide course outline)</td>
</tr>
<tr>
<td>X in course title</td>
<td>(provide course outline; short course titles may be a maximum of 40 characters, including punctuation and spaces)</td>
</tr>
<tr>
<td>X in course description</td>
<td>(provide course outline; short course descriptions may be a maximum of 60 words, written in present tense)</td>
</tr>
<tr>
<td>in learning objectives/outcomes</td>
<td>(please append the program’s existing learning outcomes as a separate document)</td>
</tr>
<tr>
<td>in integration</td>
<td>(provide statement of approval from other program)</td>
</tr>
<tr>
<td>in cross-listing</td>
<td>(provide statement of approval from other program)</td>
</tr>
<tr>
<td>in pre/co-requisite</td>
<td></td>
</tr>
<tr>
<td>expire course</td>
<td></td>
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<tr>
<td>other</td>
<td>(please specify)</td>
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</tbody>
</table>

6. **Effective Session of Proposed Change(s)**  
   Winter 2021

7. **Academic Rationale**  
The current course title is unnecessarily specific on the teaching tool. Due to technological advancements (e.g., AI and big data era), Microsoft Access is no longer considered relevant to practice. Therefore, it is proposed that "with Microsoft Access" be removed from the course title. In addition, MySQL is now the most adopted tool for database management in almost all business sectors; this allows for the inclusion of modern data management topics such as "big data". Thus, it is also proposed to update the course description, where I have (1) shortened the length to be within 60 words; and (2) removed the specifications on Microsoft Access. Note that much of the course content remains the same although the database software and some of the more advancement topics (e.g., big data related components) have been updated to reflect the technological paradigm shift that has occurred in the industry.

8. **Proposed Course Information**
Please insert approved course information on the left, and proposed course information on the right. Please clearly and visibly indicate how course information has been changed using strikethrough (left column), bold, underlining, colours, etc. (right column).

<table>
<thead>
<tr>
<th>Existing Course Information (Change from)</th>
<th>Proposed Course Information (Change to)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Course Title: Database Management with Microsoft Access</td>
<td>1. Course Title: Database Management</td>
</tr>
<tr>
<td>2. Short Title: Database Management with Microsoft Access</td>
<td>2. Short Title: Database Management</td>
</tr>
<tr>
<td>3. Existing Calendar Description:</td>
<td>3. Proposed Calendar Description:</td>
</tr>
<tr>
<td>Database Management Systems are computer-based systems used by organizations to manage the vast amount of data that accompany daily operations. This course provides an applied introduction to database management systems and their use in the business environment. The course covers the fundamentals of database analysis and design as well as provides a hands-on experience in designing and building databases using Microsoft Access. Specific topics covered include the role of database systems, the relational database model, and entity-relationship diagrams, as well as applied skills such as formulating queries, designing forms, and creating reports in Microsoft Access. At the end of the course students will be able to design and build a fully operational database to support the management of any business operation.</td>
<td></td>
</tr>
<tr>
<td>Course Credit Exclusions: LE/CSE 1550 3.00, LE/EECS 1550 3.00</td>
<td>Database Management covers computerized systems used by organizations to manage the vast amount of data that encode business logic, accompany daily operations and support data analysis. The course provides the fundamentals of database management, analysis and design as well as a hands-on experience using up-to-date tools for data and big data management.</td>
</tr>
<tr>
<td>Course Credit Exclusions: LE/CSE 1550 3.00, LE/EECS 1550 3.00</td>
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</table>

9. Consultation

Originator

Zhepeng (Lionel) Li 12/4/2019

Signature Date
Zhepeng (Lionel) Li

OMIS

Name
Area or Specialization

**Approvals:**

**Area or Specialization**
I have reviewed this change form and I support the proposed changes to the course.

Richard Irving

Signature
12/4/2019
Date

Richard Irving

OMIS

Name
Area or Specialization

**Degree Program**
I have reviewed this change form and I support the proposed changes to the course.

Mike Valente

Feb 7, 2020

Signature
Date

Mike Valente

BBA/iBBA

Name of Program Director
Program

**Program Committee**
This course change has received the approval of the relevant Program Committee.

Mike Valente

Feb 7, 2020

Signature
Date

Mike Valente

BBA/iBBA Program Committee

Name of Committee Chair
Committee
OMIS 3730 3.00: Database Management

Course Outline
Winter 2019

<table>
<thead>
<tr>
<th>SECTION</th>
<th>DAY</th>
<th>TIME</th>
<th>ROOM (SSB)</th>
<th>BEGINNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>Monday</td>
<td>11:30 - 14:30</td>
<td>S335</td>
<td>January 7, 2018</td>
</tr>
</tbody>
</table>

Instructors
Zhepeng (Lionel) Li
S337J SSB
Email: zli@schulich.yorku.ca
Office Hours: TBD

Administrative Assistant: Denise Dunbar-McFarlane, omis@schulich.yorku.ca

Zhepeng (Lionel) Li holds a PhD degree, with a specialization in Information Systems, from the David Eccles School of Business, University of Utah. His research method emphasizes business analytics, data analytics and machine learning. Lionel’s research is supported by NSERC. Lionel has taught courses ranging from analytical to technological topics in business schools, such as Big data management, data mining, business intelligence, and management science.

Contents
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Written Assignments/Projects and Exam[s]: Descriptions .................................................................... 9
General Academic Policies: Grading, Academic Honesty, Accommodations and Exams ..................... 10
Quick Reference: Summary of Content and Readings....................................................................... Error! Bookmark not defined.

Brief Description
Database Management covers computerized systems used by organizations to manage the vast amount of data that encode business logic, accompany daily operations and support data analysis. The course provides the fundamentals of database management, analysis and design as well as a hands-on experience using up-to-date tools for data and big data management.

Course Credit Exclusions: LE/CSE 1550 3.00, LE/EECS 1550 3.00

Course Learning Outcomes

This course has six primary objectives, which will be introduced in class lectures and reinforced through labs, assignments and course textbook reading. Through class lectures, assignments, and labs, participants will gain knowledge of database management and be able to:

- Explain what is conceptual modeling and logical database design.
• Create an entity relationship diagram given a business description.
• Explain how to convert a conceptual model (entity-relationship diagram) into a working relational model.
• Explain the difference between first, second, and third normal form and be able to normalize a database.
• Be able to write SQL statements to build and manage databases (Data Definition Language), as well as manipulate existing data (Data Manipulation Language).
• Explain and use inner queries in SQL statements

Getting Help

**Email:** E-mail the instructor with any queries about the course such as administrative issues, questions regarding the grading of the assignments, midterm or final exam, or if you have brief questions about the material. *Please put OMIS 3730, the section #, your full name and brief heading (i.e., description of what the email is about) as the first part of the subject line in all e-mail correspondence.* We will try to respond within two business days (48 hours) but if you do not get a response within this time frame, please send another email as we probably did not get the original email. For any other issues, please come speak with the instructor during office hours. Please be professional in all your email correspondence. For more information on how to write an effective and professional email, please see the following links: [http://writingcenter.unc.edu/handouts/effective-e-mail-communication/](http://writingcenter.unc.edu/handouts/effective-e-mail-communication/) [http://researchguides.library.yorku.ca/content.php?pid=476543&sid=3902786](http://researchguides.library.yorku.ca/content.php?pid=476543&sid=3902786)

**Meetings and Office Hours:** Students are invited to attend office hours on a drop-in basis. No prior appointments are required for scheduled office hours. Students can also meet with the instructor outside office hours by requesting an appointment (i.e., send an email to the instructor). If you cannot attend a scheduled appointment, notify the instructor as soon as possible. If you schedule an appointment and do not show up, this may affect your ability to schedule future appointments.

**Course Announcements:** All general course emails and announcements from your instructor will be posted and sent in Canvas. This correspondence will be sent to the email account you have specified in your Canvas profile. Note that some section-specific messages may be sent to your email account within the Schulich mail system rather than through Canvas. *It is your responsibility to ensure that you have access to both sources of information and check each regularly.*

**Deliverables at a Glance**

Course work includes participation activities and the following deliverables: 4 assignments, one group project and one final exam. *Marks will not be adjusted until all deliverables have been submitted and the final grade has been compiled.* For each deliverable, the grading will be performed by combining all sections into one and assessing students relative to the entire cohort.

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Quantity</th>
<th>% Weight</th>
<th>Total %</th>
<th>Author</th>
</tr>
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<tbody>
<tr>
<td>Homework Assignments</td>
<td>4</td>
<td>10</td>
<td>40</td>
<td>Individual</td>
</tr>
<tr>
<td>Group Project</td>
<td>1</td>
<td>20</td>
<td>20</td>
<td>Group of 2-3</td>
</tr>
<tr>
<td>Final Exam</td>
<td>1</td>
<td>30</td>
<td>30</td>
<td>Individual</td>
</tr>
<tr>
<td>Class Participation Activities</td>
<td>1</td>
<td>10</td>
<td>10</td>
<td>Individual</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>
Course Material

Text: Required reading for this course includes the following custom book, which is available for purchase from the York University bookstore (http://bookstore.blog.yorku.ca):


Course website: An online learning platform (Canvas) has been created - http://schulich.instructure.com/. It contains information and materials specific to this course, including lecture slides, practice problems and information regarding additional readings. Check it frequently. You will also access and submit homework assignments on Canvas. Because of the large volume of information available on Canvas, information will be grouped by topic (lectures, general information, practice materials, homework, etc.). Access to Canvas requires a Passport York login and password. If you do not have a Passport York account, you can find information on how to obtain one at http://computing.yorku.ca/students/home/passwords-passport-york-access/

Student Preparation for Class and Class Participation: Expectations

Participating honestly in this academic community ensures that the York University degree that you earn will continue to be valued and respected as a true signifier of your individual work and academic achievement. All suspected cases of academic dishonesty will be investigated. If you have any questions as to what is and is not permitted, do not hesitate to contact the course instructor or your academic advisors. Potential offences include, but are not limited to:

In papers and assignments:
- Using someone else's ideas or words without appropriate acknowledgement (i.e., citations).
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts that are false (i.e., the claim is completely unsubstantiated).
- Obtaining or providing unauthorized assistance on any assignment (this includes collaborating with others on assignments that are supposed to be completed individually).

On test and exams:
- Using or possessing any unauthorized aids (e.g., cell phone, graphing calculators).
- Looking at someone else’s answers at any time during the exam.
- Misrepresenting your identity or having another individual write your exam.
- Submitting an altered exam or assignment for re-grading.

Misrepresentation:
- Falsifying institutional documents, grades or university documentation (e.g., medical notes).

Late Assignments: Please note that all assignments are due at the date and time specified. The exact date and time will be given in the assignment and on Canvas. Late work will not be accepted. Exceptions will only be granted for medical and other serious emergencies. Please make every effort to let your instructor know in advance if your assignment is going to be late – use email. Supporting documentation will be required as per the Schulich policy on missed tests and assignments.
**Group Work:** Up to three students can work on the project. Although it is possible to complete the assignments by yourself, we recommend 2 students per group. Only one report per group should be submitted. Assignments may be submitted online via Canvas or in printouts. Learning to work together in teams is an important aspect of your education and preparation for your future careers. That said, project-based teamwork is often new to students and you are therefore reminded of the following expectations with respect to behavior and contributions to your team project.

When working in a team, Schulich students are expected to:

- Treat other members with courtesy and respect and honor the group ground rules.
- Contribute substantially and proportionally to each assignment.
- Ensure enough familiarity with the entire contents of the assignment so as to be able to sign off on it as original work and meet the assignment timeline as established by the team.

**Resolving Group Conflicts:** Conflicts are part of the team’s process of learning how to work together effectively and when handled well, can generate creativity and bring multiple perspectives to the solution. Student teams are collectively expected to work through their misunderstandings as soon as they arise (and prior to submission of the final project). In cases where teams are unable to arrive at a solution that works for all members, the team must bring this to the attention of the instructor.

---

### Class-by-Class Syllabus

**Lectures** will have a significant interactive component. Your attendance is expected. If you have a laptop, it is recommended that you bring it along to all lectures, particularly those where there will be a greater emphasis on computation. Students will earn credit for active participation in course activities.

**Readings** from the text or supplementary materials will be assigned for each of the topics in the course. These are useful for preparation prior to lecture as well as to reinforce class concepts after each session.

**Assignments** are written exercises for you to work on to gain experience in each of the concepts and the problem-solving areas. In order to maximize your learning, you should attempt the problem individually. While the suggested problems are a good reflection of the material covered in the course, they are not necessarily comprehensive, and students are encouraged to work on additional problems beyond those suggested.

**Lab session** is an opportunity to gain hands on experience with data management tools. Tutorials and exercises will be provided. Immediate feedback on your mastery of the material will be made available. It also allows the instructor to identify and further reinforce any concepts students are struggling with.

*Note:* If any changes in this schedule become necessary, notifications will be posted on Canvas. When changes need to be announced between classes, an email will be sent to students’ email accounts, notifying them of the change. Check your email and the course website regularly. It is your responsibility to ensure that you are up-to-date.
<table>
<thead>
<tr>
<th>DATE/WEEK</th>
<th>TOPICS/ASSIGNED READINGS/ASSIGNED WORK DUE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week #1</strong> (Jan 7)</td>
<td>Course Overview &amp; [Introduction to DBMS]</td>
</tr>
<tr>
<td></td>
<td>• Reading: Chapter 1, 2</td>
</tr>
<tr>
<td><strong>Week #2</strong> (Jan 14)</td>
<td>DBMS Development Process &amp; Conceptual Design – ER Model I</td>
</tr>
<tr>
<td></td>
<td>• Reading: Chapter 2</td>
</tr>
<tr>
<td></td>
<td>• Homework Assignment 1</td>
</tr>
<tr>
<td><strong>Week #3</strong> (Jan 21)</td>
<td>Conceptual Design – ER Model II &amp; Review and Exercises</td>
</tr>
<tr>
<td></td>
<td>• Reading: Chapter 3</td>
</tr>
<tr>
<td></td>
<td>Deliverables:</td>
</tr>
<tr>
<td></td>
<td>• <strong>Homework Assignment 1</strong> (due before class)</td>
</tr>
<tr>
<td><strong>Week #4</strong> (Jan 28)</td>
<td>Lab I: Create and Populate Table in MySQL</td>
</tr>
<tr>
<td></td>
<td>• Reading: Chapter 6</td>
</tr>
<tr>
<td></td>
<td>Deliverables:</td>
</tr>
<tr>
<td></td>
<td>• <strong>To be assigned in class</strong></td>
</tr>
<tr>
<td><strong>Week #5</strong> (Feb 4)</td>
<td>Relational Model: Logical DB Design</td>
</tr>
<tr>
<td></td>
<td>• Reading: Chapter 4</td>
</tr>
<tr>
<td></td>
<td>• Homework Assignment 2</td>
</tr>
<tr>
<td><strong>Week #6</strong> (Feb 11)</td>
<td>Lab II: Define Key and Constraints in MySQL</td>
</tr>
<tr>
<td></td>
<td>• Reading: Chapter 6</td>
</tr>
<tr>
<td></td>
<td>Deliverables:</td>
</tr>
<tr>
<td></td>
<td>• <strong>To be assigned in class</strong></td>
</tr>
<tr>
<td></td>
<td>• <strong>Homework Assignment 2</strong> (due before class)</td>
</tr>
<tr>
<td><strong>Week #7</strong> (Feb 25)</td>
<td>Relational Model: Transforming Conceptual Design to Logical Design &amp; Exercises</td>
</tr>
<tr>
<td></td>
<td>• Reading: Chapter 4</td>
</tr>
<tr>
<td></td>
<td>• Homework Assignment 3</td>
</tr>
<tr>
<td><strong>Week #8</strong> (Mar 4)</td>
<td>Relational Model: Normalization &amp; Relational Algebra &amp; Exercises</td>
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<tr>
<td></td>
<td>• Reading: Chapter 4</td>
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<tr>
<td></td>
<td>• Group Project Assignment</td>
</tr>
<tr>
<td></td>
<td>• Homework Assignment 4</td>
</tr>
<tr>
<td></td>
<td>Deliverables:</td>
</tr>
<tr>
<td></td>
<td>• <strong>Homework Assignment 3</strong> (due before class)</td>
</tr>
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</table>

February 18: **Family Day – Campus Closed**
<table>
<thead>
<tr>
<th>DATE/WEEK</th>
<th>TOPICS/ASSIGNED READINGS/ASSIGNED WORK DUE</th>
</tr>
</thead>
</table>
| **Week #9 (Mar 11)** | **Structured Query Language (SQL)**  
|                 | • Readings: Chapter 6, 7                                                     |
|                 | **Deliverables:**  
|                 | • Homework Assignment 4 (due before class)                                    |
|                 | • Working on Group Project                                                     |
| **Week #10 (Mar 18)** | **Lab III: Data Manipulation Language in MySQL**                        |
|                 | **Deliverables:**  
|                 | • To be assigned in class                                                       |
|                 | • Working on Group Project                                                     |
| **Week #11 (Mar 25)** | **Beyond Relational Databases - Data Warehousing and NoSQL Models**          |
|                 | • Readings: Chapter 7, 9                                                       |
|                 | **Deliverables:**  
|                 | • Working on Group Project                                                     |
| **Week #12 (April 1)** | **Lab IV: Application of relational database - MS Access**                    |
|                 | **Deliverables:**  
|                 | • Group Project (due before class)                                             |
|                | **Final Exam**                                                                |


Grades at Schulich are based on a 9-value index system. The top grade is A+ (9) and the minimum passing grade is D (2). To keep final grades comparable across courses, the average course grade within a section of an undergraduate course is normally between 5.5 and 7.0.

The Schulich School does not use a percentage scale or prescribe a standard conversion formula from percentages to letter grades. Conversions within a course are at the discretion of the instructor.

For more details on the index, grading policy, and grade point average (GPA) requirements, consult your student handbook.

Academic honesty is fundamental to the integrity of university education and degree programs, and applies in every course offered at Schulich. Students should familiarize themselves with York University’s policy on academic honesty, which may be found on the Student Handbook and on the Student Services & International Relations Schulich website:

http://schulich.yorku.ca/current-students/academic-honesty/

Accommodations. For accommodations sought due to exam conflicts, religious reasons, unavoidable absences or disabilities, please refer to the Student Handbook or contact Student Services. For counseling & disability services, contact Student Services or see http://cds.info.yorku.ca/.

Exams (Absence from)
Midterm. Students who miss a midterm examination must contact their course instructor within 24 hours and provide the course instructor with documentation substantiating the reason for the absence. A copy of the documentation must also be submitted to Student Services; it will be placed in the student’s file.

Final. Within 24 hours of missing a final examination, students must contact the Associate Director, Undergraduate Programs Unit at (416) 736-5060 and must also contact their course instructor. Formal, original documentation regarding the reason for missing the exam must be submitted to the Associate Director, Undergraduate Programs Unit (SSB Room W262) within 48 hours of missing the final exam. Students who miss a final exam due to illness must have their doctor complete an “Attending Physician’s Statement.” For a copy of this document, visit http://www.registrar.yorku.ca/pdf/attending-physicians-statement.pdf

Recording Lectures. Lectures and course materials prepared by the instructor are considered by the University to be an instructor’s intellectual property covered by the Canadian Copyright Act. Students wishing to record a lecture or other course material in any way are required to ask the instructor’s explicit permission, and may not do so unless it is granted (note: students who have been previously granted permission to record lectures as an accommodation for a disability are, of course, excepted). This includes tape recording, filming, photographing PowerPoint slides, Canvas materials, etc. If permission is granted, it is intended for the individual student’s own study purposes and does not include permission to “publish” them in any way. It is absolutely forbidden for a student to publish an instructor’s notes to a website or sell them in any other form without formal permission.
RATIONAL:

The OMIS area is modernizing some of its course offerings in order to better educate students on the current position of analytics in business. The change in this course’s title and description reflects the modern position that operations research and management science have in the data science profession. A canonical representation of this hierarchy is represented in the following figure:
Course Change Proposal Template

The following information is required for all course change proposals at the undergraduate and graduate level. To facilitate the review/approval process, please use the headings below (and omit the italicized explanations below each heading).

1. **Program**
   
iBBA/BBA

2. **Course Number and Credit Value**
   
OMIS 4000 3.0

3. **Course Title**
   
   a) **Long Course Title**
      
      Models and Applications of Operational Research

   b) **Short Course Title**
      
      Models and Applications of Operational Research

4. **Existing Pre-requisites**
   
SB/OMIS 2010 3.0 and SB/MGMT 2050 3.0

5. **Type of Course Change (indicate all that apply)**

   | in course number | in credit value (provide course outline) | X in course title (provide course outline; short course titles may be a maximum of 40 characters, including punctuation and spaces) | X in course description (provide course outline; short course descriptions may be a maximum of 60 words, written in present tense) | in learning objectives/outcomes (please append the program’s existing learning outcomes as a separate document) | in integration (provide statement of approval from other program) | in cross-listing (provide statement of approval from other program) | in pre/co-requisite | expire course | other (please specify) |

6. **Effective Session of Proposed Change(s)**
   
Fall 2020

7. **Academic Rationale**
   
The OMIS area is modernizing some of its course offerings in order to better educate students on the current position of analytics in business. The change in this course’s title and description reflects the modern position that operations research and management science have in the data science profession. A canonical representation of this hierarchy is represented in the following figure:
8. Proposed Course Information

Please insert approved course information on the left, and proposed course information on the right. Please clearly and visibly indicate how course information has been changed using strikethrough (left column), bold, underlining, colours, etc. (right column).

<table>
<thead>
<tr>
<th>Existing Course Information (Change from)</th>
<th>Proposed Course Information (Change to)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title:</strong> Models and Applications in Operational Research</td>
<td><strong>Title:</strong> Prescriptive Analytics</td>
</tr>
<tr>
<td><strong>Description:</strong> This course surveys selected topics in operational research. It focuses on developing quantitative methods and computer simulations for insight into real-world problems. Emphasis is placed on practical applications rather than mathematical proofs. Students are expected to create mathematical models and solve them using Microsoft Excel and the Python programming language. Application areas include aggregate planning, revenue management, and supply chains.</td>
<td><strong>Description:</strong> This course surveys topics in prescriptive analytics. It focuses on developing quantitative methods and computer simulations to gain insight into real-world problems. Emphasis is placed on practical applications rather than mathematical proofs. Students are expected to create mathematical models and solve them using Excel and by programming in Python. Application areas include supply chain and revenue management, logistics, and healthcare.</td>
</tr>
<tr>
<td>Prerequisites: SB/OMIS 2010 3.0 and SB/MGMT 2050 3.0</td>
<td>Prerequisites: SB/OMIS 2010 3.0 and SB/MGMT 2050 3.0</td>
</tr>
</tbody>
</table>

9. Consultation

This has been discussed with several professors in the OMIS area including the Director of the Master of Business Analytics (MBAN) and Master of Management in Artificial Intelligence (MMAI) programs Murat Krystal, Assistant Professors Divinus Oppong-Tawiah and Isik Bicer, Associate Professor Zhepeng Li, and the Area Coordinator of the OMIS area Richard Irving.

Originator

*Adam Diamant*

**Signature**

**January 9, 2020**

**Date**

**OMIS**
Name: Richard Irving
Area or Specialization: OMIS

Signature: ____________________________  Date: January 13, 2020

I have reviewed this change form and I support the proposed changes to the course.

Degree Program

Name: Mike Valente
Area or Specialization: BBA/iBBA

Signature: ____________________________  Date: Feb 7, 2020

I have reviewed this change form and I support the proposed changes to the course.

Program Committee

This course change has received the approval of the relevant Program Committee.

Name: Mike Valente
Program: BBA/iBBA

Signature: ____________________________  Date: Feb 7, 2020

Name of Committee Chair: Mike Valente
Committee: BBA/iBBA Program Committee
OMIS 4000 3.00: Prescriptive Analytics

Course Outline
Winter 2021

<table>
<thead>
<tr>
<th>SECTION</th>
<th>DAY</th>
<th>TIME</th>
<th>ROOM</th>
<th>BEGINNING</th>
<th>INSTRUCTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Thursdays</td>
<td>2:30pm – 5:30pm</td>
<td>W357</td>
<td>September 14, 2019</td>
<td>Adam Diamant</td>
</tr>
</tbody>
</table>

Adam Diamant received his PhD in Operations Management from the Rotman School of Management prior to joining Schulich. He has worked in a software startup that provides solutions for big and streaming data, been a software consultant for financial companies involved in high frequency trading, and has done research in atmospheric physics and global climate modeling. His current research uses stochastic modeling and optimization techniques to model and optimize complex systems in health care.

Instructor

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Administrative Assistant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adam Diamant</td>
<td>Paula Gowdie Rose</td>
</tr>
<tr>
<td>Office: S340 SSB</td>
<td>Office: S337N SSB,</td>
</tr>
<tr>
<td>Email: <a href="mailto:adiamant@schulich.yorku.ca">adiamant@schulich.yorku.ca</a></td>
<td>Email: <a href="mailto:pgowdierose@schulich.yorku.ca">pgowdierose@schulich.yorku.ca</a></td>
</tr>
<tr>
<td>Office Hours: Thursdays @ 11 am – 1 pm</td>
<td>Phone: 416-736-5074</td>
</tr>
</tbody>
</table>

Brief Description
This course surveys topics in prescriptive analytics. It focuses on developing quantitative methods and computer simulations to gain insight into real-world problems. Emphasis is placed on practical applications rather than mathematical proofs. Students are expected to create mathematical models and solve them using Excel and by programming in Python. Application areas include supply chain and revenue management, logistics, and healthcare.

Prerequisites: SB/OMIS 2010 3.0 and SB/MGMT 2050 3.0.

Contents
Course Learning Outcomes ............................................................................................................. 2
Additional Course Support ................................................................................................................ 3
Course Material and Resources ......................................................................................................... 3
Deliverables at a Glance .................................................................................................................... 4
Class-by-Class Syllabus ..................................................................................................................... 6
General Academic Policies: Grading, Academic Honesty, and Accommodations .............................. 8
Quick Reference: Summary of Content and Readings ....................................................................... 9
Course Learning Outcomes

This course prepares students to make informed decisions in complicated managerial settings, situations with imperfect observations, or environments where the outcomes are uncertain. Focus is placed upon operational processes in business environments. Students will develop quantitative methods to manage organizational limitations and various sources of uncertainty in order to optimize a set of objectives. Students who complete this course will be able to build mathematical models and use computational tools, such as spreadsheets and computer simulations, to support operational decision-making. Most importantly, students will develop the necessary skills to effectively understand when to apply these tools to improve organizational processes and how best to present the results.

The objectives of this course are:

- To expose you to the main concepts of quantitative reasoning in a business environment.
- To develop your proficiency with mathematical models and computational tools for analysis.
- To provide you with opportunities to improve your problem solving and critical thinking skills.
- To learn basic programming skills (Excel, Python) and how to leverage technology for problem solving.
- To gain experience working on real problems and give professional quality presentations.

Organization of the Course:

The course is organized into two modules. In Module A, you will build on your knowledge of mathematical programming and learn how to apply it to situations with multiple types of decision variables, complicated constraints, nonlinear objective functions, multiple objectives, imperfect information, and settings with uncertain outcomes. Topics include mixed-integer linear programming, logical constraints, non-linear programs, goal programming, scenario-based optimization, and two-stage stochastic programs with recourse. Module B teaches students how to obtain deep insights into complex processes by creating a computer simulation of the salient features of a system. Topics include sources of predictable and unpredictable variability, generating randomness, Monte Carlo simulations, and discrete-event simulations. In both modules, Excel and Python will be used for computational solutions. The course covers a range of application areas including financial management, inventory modelling, revenue management, production, transportation, process analysis, scheduling, policy evaluation, and supply chain management.

Classes will consist of a combination of quantitative theory and practical application. Some sessions will be more conceptually oriented, while others will have a greater emphasis on computational modeling. Techniques and concepts will be reinforced by in-class examples and at-home assignments. Students should read assigned materials before as well as after class to support their understanding of the material. They should be prepared to actively participate in class discussions and in-class problem solving exercises. Mastery of the techniques taught in this course requires regular practice. Students are encouraged to work on practice problems both individually and in groups. Additional readings and practice problems are provided on Canvas and can be found in several of the class resources. Students are free to solve other problems from the text or other sources, as well as to try any additional problems posted on Canvas.

Students are expected to have basic knowledge of computers, Microsoft Excel, and the Excel Solver tool. They should be comfortable with basic concepts in mathematical programming and probability theory; knowledge gained through successful completion of OMIS 2010, MGMT 1050, and MGMT 2050. Computations in the course will often require the use of Microsoft Excel and the Python programming language. Solution techniques using Excel and Python will be discussed and illustrated in class. Students will also be expected to use these tools to complete their assignments and potentially, for their final group project. Note that students are not expected to have previous Python programming experience before enrolling in the course. However, they are expected to complete online tutorials that teach them the foundation of Python as part of a course deliverable and to apply this knowledge to their final group project.
**Additional Course Support**

**Email Correspondence:** E-mail the instructor with any questions about the course such as administrative issues, questions regarding the grading of the assignments, midterm exam, final project, or if you have (very) brief questions about the material. **Please put OMIS 4000, your full name and brief heading (i.e., description of what the email is about) as the first part of the subject line in all e-mail correspondence.** Most emails will be responded to within two business days (48 hours) but if you do not get a response within this time frame, please send another email. For other issues including most concerns with the course material, please come speak with the instructor during office hours or request an appointment at a mutually beneficial time. Please be professional in all your email correspondence. For more information on how to write an effective and professional email, please see the following links:  
http://writingcenter.unc.edu/handouts/effective-e-mail-communication/  
http://researchguides.library.yorku.ca/content.php?pid=476543&sid=3902786

**Meetings and Office Hours:** Students are invited to attend office hours on a drop-in basis. No prior appointments are required for scheduled office hours. Students can also meet with the instructor outside office hours by requesting an appointment (i.e., send an email to the instructor). If you cannot attend a scheduled appointment, notify the instructor as soon as possible. If you schedule an appointment and do not show up, this may affect your ability to schedule future appointments.

**Course Announcements:** All course emails and announcements will be posted in Canvas. This correspondence will be sent to the email account you have specified in your Canvas profile. **It is your responsibility to ensure that you have access to both sources of information and check each regularly.**

**Course Material and Resources**

There are no required textbooks for this course. There are several resources that are highly recommended.


Course materials, such as lectures, PowerPoint slides, tests, course notes, outlines, and similar materials, are protected by copyright. As the creator of those materials, the instructor(s) is the exclusive copyright owner. You may take notes and make copies of course materials for your personal use. However, you may not reproduce or distribute the course materials (e.g., uploading the content to a website like CourseHero) without my written permission. Third party copyrighted materials (such as book chapters, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law. Copying this content for distribution may lead to a violation of Copyright law.
Deliverables at a Glance

Course work includes participation activities (the online Python tutorials from DataCamp) and the following deliverables: three assignments, one midterm exam, and one final project. **Note that marks will not be adjusted until all deliverables have been submitted and the final grade has been compiled.**

<table>
<thead>
<tr>
<th>Deliverable</th>
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</tr>
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<td>Midterm Exam</td>
<td>1</td>
<td>30</td>
<td>30</td>
<td>Individual</td>
</tr>
<tr>
<td>Final Group Project</td>
<td>1</td>
<td>29</td>
<td>29</td>
<td>Group</td>
</tr>
<tr>
<td>Online Python Tutorials</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>Individual</td>
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</tbody>
</table>

**Homework Assignments:** Three (3) assignments, each worth 12%, will be assigned during the course. The first assignment will cover material from Module A (Weeks 1-3), the second assignment will cover material from Module A (Weeks 4-6), and the third assignment will cover material from Module B (Lectures 7-10). Assignments, the due date and time, and submission instructions, will be posted on Canvas. All instructions for assignments are expected to be followed. Assignments are to be completed individually and submitted online using Canvas. **Assignments are due at the date/time specified; the exact date and time will be given in the assignment and on Canvas. Late work (even one minute after the deadline) will be penalized 15% per day up to a maximum of three days after which you will receive a mark of zero.** Exceptions will only be granted for medical and other serious emergencies with appropriate documentation. Please make every effort to let the instructor know in advance (e.g., more than 24 hours before the due date) if your assignment is going to be late – use email. Supporting documentation will be required as per the Schulich policy on missed tests and assignments.

**Final Group Project:** Students are expected to apply the skills learned in the course to deliver managerial recommendations in a small consulting project provided by Riipen; a platform that matches the learning objectives of the course to industry partners that require those skills. Up to four students can work on the final project together. By week 2, students must choose who their group members will be. Each group will also elect a group leader and this individual should register the group for the project on Canvas and add their fellow group members. The group leader may liaise with the industry partner several times during the semester depending on the company’s and the group’s preferences. A 10-page written report must be submitted to the instructor (via email) at the end of week 11; copies should also be submitted to the industry partner via email. A 15-minute oral presentation (10-minute pitch and 5-minutes of questions) will be given on the final day of class; representatives from the industry partner may attend. Each group is *advised* to schedule and meet with the instructor once between week 4 and 10 to discuss their progress.

Clear, concise, and correct writing will be considered in the evaluation of the written component of the group project. That is, you may lose points for writing that impedes communication: poor organization, weak paragraph development, excessive wordiness, a hard-to-follow writing style, spelling mistakes and grammatical errors. Full paragraphs and proper sentence structure is expected. A cover page, an executive summary, and intermediate development of your analysis should be included. Quantitative analysis should be provided in an appendix and a detailed bibliography (APA style) must be submitted.

The oral presentation must be coherent, succinct, and must include any aids to facilitate participant understanding. It should include a summary of the problem, a brief discussion of the process by which you came to a solution, what issues are particularly important (and why), and a set of managerial recommendations. Be prepared to rigorously defend your recommendations; you must demonstrate how your quantitative analysis supports the suggestions your group is proposing. Each group member must speak during the presentation and questions should be answered by more than one person.

Learning to work together in teams is an important aspect of your education and preparation for your future careers. You are therefore reminded of the following expectations with respect to behavior and contributions to your team project. When working in a team, Schulich students are expected to:
• Treat other members with courtesy and respect and honor the group ground rules.
• Contribute substantially and proportionally to each component of the project.
• Ensure enough familiarity with the entire contents of the assignment so as to be able to sign off on it as original work and meet the project timeline as established by the team.

Midterm Exam: During week 8, students will write a 3-hour (in-class) worth 30% of their final mark. The exam covers all topics taught during weeks 1-6 inclusive. Quantitative questions can be expected and the exam will consist of several short answer and/or multi-part questions. Within 24 hours of missing a midterm examination, students must contact the Associate Director, Undergraduate Programs Unit at (416) 736-5060 and must also contact their course instructor. Formal, original documentation regarding the reason for missing the exam must be submitted to the Associate Director, Undergraduate Programs Unit (SSB Room W262) within 48 hours of missing the midterm. Students who miss a midterm exam due to illness must have their doctor complete an “Attending Physician's Statement.” For more details, see: http://www.registrar.yorku.ca/pdf/attending-physicians-statement.pdf.

Online Python Tutorials: Students must complete a selection of DataCamp tutorials that provide an introduction on how to code using the Python programming language. This ensures that students have the basic knowledge to understand the scripts used in the course and to complete the second and third assignment. The list of modules are posted below. Students must complete the tutorials by week 5 to earn the 5%. Python will be introduced during lecture in week 4 and students will need the programming skills for the final group project. Therefore, it is strongly suggested that students begin this task early. Students already familiar with Python should speak to the instructor as a customer assignment will be prepared.

• DataCamp Course: Introduction to Python
  o Python Basics
  o Python Lists
  o Functions and Packages
  o Numpy

• DataCamp Course: Intermediate Python for Data Science
  o Dictionaries and Pandas
  o Logic, Control Flow, and Filtering
  o Loops

• DataCamp Course: Supply Chain Analytics in Python
  o Basics of Supply Chain Optimization and PuLP

Course Participation: Although there is no formal participation mark in the course, it is strongly suggested that students attend all sessions and actively participate in lectures. This will ensure that you get the most out of the course. Be a positive influence on the classroom environment. This includes coming prepared to class, practicing active listening during lecture, participating in class discussions with insightful and constructive comments, engaging in classroom activities, and ensuring all interactions with the instructor and your peers are respectful and courteous. Further, all interactions outside the classroom should be conducted in an appropriate manner. This includes, but is not limited to, well-written and polite email correspondences, thoughtful and considerate office hour discussions (note: attending office hours is not mandatory, however, all students will meet with the professor at least once to discuss their final project), professional interaction with your industry partner, and being punctual to all scheduled meetings with the instructor and your group. Third, in the final class, each group will deliver a presentation summarizing their work on the final project. Students who are not presenting are expected to listen to their peers and hand in an assessment form that provides constructive feedback. Notice, as discussed above, professionalism and appropriate course participation does impact your final project grade.
Topics, readings, and other preparations for every class are listed below.

Note: If any changes in this schedule become necessary, information will be communicated through the course Canvas website.

<table>
<thead>
<tr>
<th>DATE/WEEK</th>
<th>TOPICS/ASSIGNED READINGS/ASSIGNED WORK DUE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MODULE A – Advanced Optimization</strong></td>
<td></td>
</tr>
</tbody>
</table>
| **Week #1** | Course Introduction & Review of Mathematical Programming  
• Introduction to OR and decision making under uncertainty.  
• Review of linear programming and MS Excel’s Solver tool.  
• Review of mathematical notation used in optimization. |
| **Week #2** | Advanced Linear Programming  
• Review of pure integer (IP) and pure binary (BIP) programs.  
• General mixed-integer linear programs (MILPs).  
**Deliverables:**  
• Final Project Group Member Selection |
| **Week #3** | Nonlinear Programming  
• Non-linear programming problems (NLPs).  
• Solving NLPs using Microsoft Excel. |
| **Week #4** | Using Python for Optimization  
• Review of the Python programming language.  
• Using Python to formulate optimization models.  
**Deliverables:**  
• Assignment 1 (Individual) |
| **Week #5** | Multicriteria Decision Making and Goal Programming  
• Goal programming (hard vs. soft constraints).  
• Using Python to formulate linear goal programs. |
| **Week #6** | Stochastic Programming and Recourse Decisions  
• Scenario-based optimization with uncertain outcomes.  
• Two-stage stochastic programming with recourse.  
**Deliverables:**  
• Online Python Tutorials (Individual) |
| **NO CLASS – READING WEEK** | |
MODUHLE B – Computer Simulations

Week #7
Introduction to Simulations in Python
- General principles of computer simulations in Python.
- Predictable variability: Using regression to highlight differences.
- Unpredictable variability: Fitting data to a probability distribution.
- True and pseudo-random number generators.

Deliverables:
- Assignment 2 (Individual)

Week #8
IN-CLASS MIDTERM EXAM (3-hours)
Topics Covered: Weeks 1-6

Week #9
Monte Carlo Simulation
- The Monte Carlo (MC) method.
- Python implementation of MC.
- Calculating output statistics.
- Variance reduction techniques.

Week #10
Discrete-Event Simulation Models
- Discrete-Time Simulation: Events occur at discrete intervals.
- The “burn-in” method to collect unbiased performance metrics.

Week #11
Elements of Artificial Intelligence (AI)
- Incorporating optimization models into discrete-event simulations.
- Types of policies: myopic, look-ahead, and policy approximations.
- High-level introduction to stochastic dynamic programming, reinforcement learning, and value function approximations.

Deliverables:
- Final Project Written Report (Group)

Week #12
In-Class Presentations of Final Group Projects
- Oral presentations (Group) and peer assessment (Individual)

Deliverables:
- Assignment 3 (Individual)
General Academic Policies: Grading, Academic Honesty, and Accommodations

Grades at Schulich are based on a 9-value index system. The top grade is A+ (9) and the minimum passing grade is D (2). To keep final grades comparable across courses, the average course grade within a section of an undergraduate course is normally between 5.5 and 7.0.

The Schulich School does not use a percentage scale or prescribe a standard conversion formula from percentages to letter grades. Conversions within a course are at the discretion of the instructor. For more details on the index, grading policy, and grade point average (GPA) requirements, consult your student handbook.

Academic honesty is fundamental to the integrity of university education and degree programs, and applies in every course offered at Schulich. Students should familiarize themselves with York University’s policy on academic honesty, which may be found on the Student Handbook and on the Student Services and International Relations Schulich website: http://schulich.yorku.ca/current-students/academic-honesty/.

Participating honestly in this academic community ensures that the York University degree that you earn will continue to be valued and respected as a true signifier of your individual work and academic achievement. All suspected cases of academic dishonesty will be investigated. If you have any questions as to what is and is not permitted, do not hesitate to contact the course instructor or your academic advisors. Potential offences include, but are not limited to:

In papers and assignments:
- Using someone else’s ideas or words without appropriate acknowledgement (i.e., citations).
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts that are false (i.e., the claim is completely unsubstantiated).
- Obtaining or providing unauthorized assistance on any assignment (this includes collaborating with others on assignments that are supposed to be completed individually).

On test and exams:
- Using or possessing any unauthorized aids (e.g., cell phone, graphing calculators).
- Looking at someone else’s answers at any time during the exam.
- Misrepresenting your identity or having another individual write your exam.
- Submitting an altered exam or assignment for re-grading.

Misrepresentation:
- Falsifying institutional documents, grades or university documentation (e.g., medical notes).

Recording Lectures: Lectures and course materials prepared by the instructor are considered by the University to be an instructor’s intellectual property covered by the Canadian Copyright Act. Students wishing to record a lecture or other course material in any way are required to ask the instructor’s explicit permission, and may not do so unless it is granted (note: students who have been previously granted permission to record lectures as an accommodation for a disability are, of course, excepted). This includes tape recording, filming, photographing PowerPoint slides, Canvas materials, etc. If permission is granted, it is intended for the individual student’s own study purposes and does not include permission to “publish” them in anyway. It is absolutely forbidden for a student to publish an instructor’s notes to a website (e.g., Course Hero) or sell them in any form without formal permission.

Accommodations: For accommodations sought due to conflicts, religious reasons, unavoidable absences or disabilities, please refer to the Student Handbook or contact Student Services. For counseling & disability services, contact Student Services or see http://www.yorku.ca/cds.
<table>
<thead>
<tr>
<th>Week and Topics</th>
<th>Readings</th>
<th>Assignments</th>
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</thead>
<tbody>
<tr>
<td><strong>MODULE A – Advanced Optimization</strong></td>
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</tr>
<tr>
<td>1. Course Introduction and Review of Mathematical Programming Problems</td>
<td>Ragsdale, Chapters 2, 3, 5 OMIS 2010 Notes (lectures 1-3)</td>
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</tr>
<tr>
<td>2. Advanced Linear Programming</td>
<td>Ragsdale, Chapters 3, 5, 6</td>
<td>Group Member</td>
</tr>
<tr>
<td>3. Nonlinear Programming Models</td>
<td>Ragsdale, Chapter 8</td>
<td>-</td>
</tr>
<tr>
<td>4. Using Python for Optimization</td>
<td><a href="https://pythonhosted.org/PuLP/">https://pythonhosted.org/PuLP/</a></td>
<td>Assignment #1</td>
</tr>
<tr>
<td>5. Multicriteria Decisions Making and Goal Programming Models</td>
<td>Ragsdale, Chapter 7</td>
<td>-</td>
</tr>
<tr>
<td>6. Stochastic Programming and Recourse</td>
<td>Birge &amp; Louveaux, Chapters 1 Kall, Chapters 2 – 6 Shapiro &amp; Philpott, Chapters 1 - 2.1</td>
<td>Python Tutorials</td>
</tr>
<tr>
<td><strong>No Class Reading Week (February 18)</strong></td>
<td></td>
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</tr>
<tr>
<td>7. Introduction to Simulations in Python</td>
<td>Ragsdale, Chapter 12</td>
<td>Assignment #2</td>
</tr>
<tr>
<td><strong>In-Class Midterm Exam (3 hours)</strong></td>
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<tr>
<td><strong>MODULE B – Computer Simulations</strong></td>
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<tr>
<td>9. Monte Carlo Simulations</td>
<td>Ragsdale, Chapter 12 <a href="https://pythonprogramming.net/monte-carlo-simulator-python/">https://pythonprogramming.net/monte-carlo-simulator-python/</a></td>
<td>-</td>
</tr>
<tr>
<td>11. Elements of Artificial Intelligence</td>
<td>-</td>
<td>Written Report</td>
</tr>
<tr>
<td>12. Presentations of Group Projects</td>
<td>-</td>
<td>Assignment #3</td>
</tr>
</tbody>
</table>
Memorandum

To: Faculty Council
From: Marcia Annisette, Program Director Master of Accounting
Date: January 27th, 2020
Subject: Minor Program Change to Master of Accounting

Motion:
That Faculty Council approve the proposal to change the admissions requirement for the Master of Accounting from "an undergraduate degree from a recognized institution" to read instead "a 4-yr degree from a recognized institution"

Rationale:
The current admission requirement allows flexibility to admit some students with 3-yr degrees into the program. The flexibility was instituted so as not to exclude eligible graduates from European 3-year programs and 3-yr non-science/non-engineering programs from some Commonwealth countries that are recognized to be equivalent to a North American 4-year degree. However, such flexibility has resulted in a deluge of applications and inquiries from candidates who do not meet other program requirements. This has placed considerable load on admissions staff and has lengthened the admissions process. Furthermore, to date not a single applicant from the two eligible groups we aimed not to exclude, has applied to the program. Therefore, from an administrative perspective, the cost of building this flexibility in our admission requirements has not been justified in terms of attracting more eligible candidates from these two groups of potentially eligible students.
Change to Program/Graduate Diploma Academic Requirements
Proposal Template

The following information is required for all proposals involving a change to program/graduate diploma academic requirements, including admission requirements. To facilitate the review/approval process, please use the headings below (and omit the italicized explanations below each heading).

1. Program/Graduate Diploma: Master of Accounting (MACC)

2. Effective Session of Proposed Change(s): Fall 2020

3. Proposed Change(s) and Rationale

a) A description of the proposed change(s) and rationale, including alignment with academic plans.
The program proposes to restrict entry into the MAcc only to holders of a 4-yr undergraduate degree

*Rationale:* The current admission requirement allows flexibility to admit some students with 3-yr degrees into the program. The flexibility was instituted so as not to exclude eligible graduates from European 3-year programs and 3-yr non-science/non-engineering programs from some Commonwealth countries that are recognized to be equivalent to a North American 4-year degree. However, such flexibility has resulted in a deluge of applications and inquiries from candidates who do not meet other program requirements. This has placed considerable load on admissions staff and has lengthened the admissions process. Furthermore, to date not a single applicant from the two eligible groups we aimed not to exclude, has applied to the program. Therefore, from an administrate perspective, the cost of building this flexibility in our admission requirements has not been justified in terms of attracting more eligible candidates from these two groups of potentially eligible students.

b) An outline of the changes to requirements and the associated learning outcomes, including how the proposed requirements will support the achievement of program/graduate diploma learning objectives.
No changes in associated learning outcomes are expected

c) An overview of the consultation undertaken with relevant academic units and an assessment of the impact of the modifications on other programs/graduate diplomas. (*Where and as appropriate, the proposal must include statements from the relevant program/graduate diplomas confirming consultation/support.*)

This change is being done in conjunction with changes in the Graduate Diploma in Intermediate Accounting

d) A summary of any resource implications and how they are being addressed. (*Attention should be paid to whether the proposed changes will be supported by a reallocation of existing resources or if new/additional resources are required. If new/additional resources are required, the proposal must include a statement from the relevant Dean(s)/Principal.*)

There will be no resource implications

e) A summary of how students currently enrolled in the program/graduate diploma will be accommodated.

This change has no impact on students who are currently enrolled in the MAcc
4. Calendar Copy

Using the following two-column format, provide a copy of the relevant program/graduate diploma requirements as they will appear in the graduate Calendar.

<table>
<thead>
<tr>
<th>Existing Program/Graduate Diploma Information (change from)</th>
<th>Proposed Program/Graduate Diploma Information (change to)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MASTER OF ACCOUNTING</strong></td>
<td><strong>MASTER OF ACCOUNTING</strong></td>
</tr>
<tr>
<td>The Graduate Program in Accounting is a professional master’s degree program designed to develop students' academic and intellectual abilities in all fields of professional accountancy.</td>
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</tr>
<tr>
<td>The 12-month, 45-credit program is accredited by the Chartered Professional Accountants of Ontario. Successful graduates will have acquired in-depth knowledge in all of the subdisciplines that constitute the broad field of accounting and will have also deepened their expertise in two chosen areas. They may proceed to write the Common Final Examination immediately following graduation from the program.</td>
<td>The 12-month, 45-credit program is accredited by the Chartered Professional Accountants of Ontario. Successful graduates will have acquired in-depth knowledge in all of the subdisciplines that constitute the broad field of accounting and will have also deepened their expertise in two chosen areas. They may proceed to write the Common Final Examination immediately following graduation from the program.</td>
</tr>
<tr>
<td>The program places heavy emphasis on developing students’ critical thinking abilities and their capacity to operate in decision environments characterized by high degrees of ambiguity through applied case analysis. Cases also help to develop students’ appreciation of multiple viewpoints and perspectives. This program is designed to provide a strong foundation for initial career placement (also through an optional internship in Term 3) and long-term career growth.</td>
<td>The program places heavy emphasis on developing students’ critical thinking abilities and their capacity to operate in decision environments characterized by high degrees of ambiguity through applied case analysis. Cases also help to develop students’ appreciation of multiple viewpoints and perspectives. This program is designed to provide a strong foundation for initial career placement (also through an optional internship in Term 3) and long-term career growth.</td>
</tr>
<tr>
<td>Admission to the Master of Accounting is open to graduates from business programs. Non-business graduates are encouraged to apply for the Graduate Diploma in Intermediate Accounting. Please visit <a href="http://schulich.yorku.ca">http://schulich.yorku.ca</a> for more information.</td>
<td>Admission to the Master of Accounting is open to graduates from business programs. Non-business graduates are encouraged to apply for the Graduate Diploma in Intermediate Accounting. Please visit <a href="http://schulich.yorku.ca">http://schulich.yorku.ca</a> for more information.</td>
</tr>
</tbody>
</table>

**ADMISSION REQUIREMENTS**

- Applicants with a non-Canadian or non-business degree must first complete the Diploma in Intermediate Accounting

Website links:

- [www.yorku.ca/grads/](http://www.yorku.ca/grads/)
- [www.facebook.com/YorkUGradStudies](http://www.facebook.com/YorkUGradStudies)
(DIAc), which is an eight-month graduate diploma to bring internationally educated and non-business students up to speed on accounting principles and tax practices for the MAcc.

- Applicants with CPA accredited business degrees from Canadian institutions, Schulich i/BBA students/graduates with non-accounting specializations, registered CPA students who have completed Core 1 of the PEP and ACCA students/affiliates who have completed Fundamentals may be eligible for admission to Term 1 of the MAcc.

- All applicants should possess an undergraduate degree from a recognized university with a minimum B average in the last two full years (or equivalent) of academic work. Candidates are also required to have completed prerequisite courses at the undergraduate level.

- Schulich i/BBA students/graduates with an accounting specialization, applicants with an accounting specialization from CPA accredited business programs, registered CPA students who have completed Core 2 of the PEP and ACCA members may be eligible for admission to Term 2 of the MAcc.

- All applicants should possess an undergraduate degree from a recognized university with a minimum B average in the last two full years (or equivalent) of academic work. Candidates are also required to have completed prerequisite courses at the undergraduate level. Schulich i/BBA students should also have a minimum B (6.0) average in all CPA courses.

- Post-graduate work experience is
Applicants are required to submit essays, résumé, references, and take the Graduate Management Admission Test (GMAT) or the Graduate Record Examination (GRE) with acceptable scores on all measures thereof. These requirements will be waived if the applicant graduated from Schulich within the last five years.

- Proof of English language proficiency if prior studies were not completed in English: Test of English as a Foreign Language (iBT): 100 with minimum component scores of 23 or International English Language Testing System: 7.0 overall with minimum component scores of 6.5.

DEGREE REQUIREMENTS
Students must successfully complete:
- 45 credits of coursework, consisting of:
  - 33 credits of core courses, and,
  - 12 credits of electives from two out of four options.

All other requirements are identical to those of Schulich's other master’s programs.

DEGREE REQUIREMENTS
Students must successfully complete:
- 45 credits of coursework, consisting of:
  - 33 credits of core courses, and,
  - 12 credits of electives from two out of four options.

All other requirements are identical to those of Schulich's other master’s programs.
Memorandum

To: Faculty Council
From: Marcia Annisette, Program Director Master of Accounting
Date: January 27th, 2020
Subject: Minor Program Change to the Graduate Diploma in Intermediate Accounting

Motion:
That Faculty Council approve the proposal to restrict admissions into the Diploma in Intermediate Accounting to only graduates from 4-yr undergraduate degree programs.

Rationale:
The current admission requirement allows flexibility to admit some students with 3-yr degrees into the program. The flexibility was instituted so as not to exclude eligible graduates from European 3-year programs and 3-yr non-science/non-engineering programs from some Commonwealth countries that are recognized to be equivalent to a North American 4-year degree. However, such flexibility has resulted in a deluge of applications and inquiries from candidates who do not meet other program requirements. This has placed considerable load on admissions staff and has lengthened the admissions process. Furthermore, to date not a single applicant from the two eligible groups we aimed not to exclude, has applied to the program. Therefore, from an administrative perspective, the cost of building this flexibility in our admission requirements has not been justified in terms of attracting more eligible candidates from these two groups of potentially eligible students.
Change to Program/Graduate Diploma Academic Requirements Proposal Template

The following information is required for all proposals involving a change to program/graduate diploma academic requirements, including admission requirements. To facilitate the review/approval process, please use the headings below (and omit the italicized explanations below each heading).

1. Program/Graduate Diploma: Graduate Diploma in Intermediate Accounting (DIAc)

2. Effective Session of Proposed Change(s): Fall 2020

3. Proposed Change(s) and Rationale

   a) A description of the proposed change(s) and rationale, including alignment with academic plans.
   The program proposes to restrict entry into the DIAc only to holders of a 4-yr undergraduate degree.

   Rationale: The current admission requirement allows flexibility to admit some students with 3-yr degrees into the program. The flexibility was instituted so as not to exclude eligible graduates from European 3-year programs and 3-yr non-science/non-engineering programs from some Commonwealth countries that are recognized to be equivalent to a North American 4-year degree. However, such flexibility has resulted in a deluge of applications and inquiries from candidates who do not meet other program requirements. This has placed considerable load on admissions staff and has lengthened the admissions process. Furthermore, to date not a single applicant from the two eligible groups we aimed not to exclude, has applied to the program. Therefore, from an administrate perspective, the cost of building this flexibility in our admission requirements has not been justified in terms of attracting more eligible candidates from these two groups of potentially eligible students.

   b) An outline of the changes to requirements and the associated learning outcomes, including how the proposed requirements will support the achievement of program/graduate diploma learning objectives.
   No changes in associated learning outcomes are expected.

   c) An overview of the consultation undertaken with relevant academic units and an assessment of the impact of the modifications on other programs/graduate diplomas. (Where and as appropriate, the proposal must include statements from the relevant program/graduate diplomas confirming consultation/support.)

   This change is being done in conjunction with changes in the Graduate Diploma in Intermediate Accounting

   d) A summary of any resource implications and how they are being addressed. (Attention should be paid to whether the proposed changes will be supported by a reallocation of existing resources or if new/additional resources are required. If new/additional resources are required, the proposal must include a statement from the relevant Dean(s)/Principal.)

   There will be no resource implications

   e) A summary of how students currently enrolled in the program/graduate diploma will be accommodated.
4. Calendar Copy

*Using the following two-column format, provide a copy of the relevant program/graduate diploma requirements as they will appear in the graduate Calendar.*

<table>
<thead>
<tr>
<th>Existing Program/Graduate Diploma Information (change from)</th>
<th>Proposed Program/Graduate Diploma Information (change to)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRADUATE DIPLOMA IN INTERMEDIATE ACCOUNTING</td>
<td>GRADUATE DIPLOMA IN INTERMEDIATE ACCOUNTING</td>
</tr>
<tr>
<td>The Graduate Diploma in Intermediate Accounting develops students’ academic and intellectual abilities in the core competency areas that constitute the field of accountancy. This includes courses that are fundamental to accounting as well as basic and intermediate courses in accounting. The program is suitable for graduates of non-business programs and graduates of business programs not accredited by the CPA Ontario. The curriculum is academically rigorous and comprises 30 credits over two terms.</td>
<td>The Graduate Diploma in Intermediate Accounting develops students’ academic and intellectual abilities in the core competency areas that constitute the field of accountancy. This includes courses that are fundamental to accounting as well as basic and intermediate courses in accounting. The program is suitable for graduates of 4-yr non-business programs and graduates of 4-yr business programs not accredited by the CPA Ontario. The curriculum is academically rigorous and comprises 30 credits over two terms.</td>
</tr>
<tr>
<td>After completing the program, graduates will have acquired in-depth learning of all of the field’s competency areas and expertise in basic and intermediate accounting, covering the Core 1 and Core 2 of the CPA qualification path. Graduates may proceed to complete their education necessary for professional certification through pursuing Schulich’s Master of Accounting (advanced standing will be provided to successful graduates) or enter the CPA’s professional certification stream.</td>
<td>After completing the program, graduates will have acquired in-depth learning of all of the field’s competency areas and expertise in basic and intermediate accounting, covering the Core 1 and Core 2 of the CPA qualification path. Graduates may proceed to complete their education necessary for professional certification through pursuing Schulich’s Master of Accounting (advanced standing will be provided to successful graduates) or enter the CPA’s professional certification stream.</td>
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</tr>
</tbody>
</table>
Course Change Proposal Template

The following information is required for all course change proposals at the undergraduate and graduate level. To facilitate the review/approval process, please use the headings below (and omit the italicized explanations below each heading).

1. Program
   Schulich MBA Program

2. Course Number and Credit Value
   ENTR 6605 3.00

3. Course Title
   a) Long Course Title
      Entrepreneurship and New Firm Creation
   b) Short Course Title
      Entrepreneurship and New Firm Creation

4. Existing Pre-requisites/Co-Requisites
   All 5000-series Required Foundations of Management Core Courses.

5. Type of Course Change (indicate all that apply)

<table>
<thead>
<tr>
<th>in course number</th>
</tr>
</thead>
<tbody>
<tr>
<td>in credit value</td>
</tr>
<tr>
<td>(provide course outline)</td>
</tr>
<tr>
<td>in course title</td>
</tr>
<tr>
<td>(provide course outline; short course titles may be a maximum of 40 characters, including punctuation and spaces)</td>
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<tr>
<td>in course description</td>
</tr>
<tr>
<td>(provide course outline; short course descriptions may be a maximum of 60 words, written in present tense)</td>
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<tr>
<td>in learning objectives/outcomes</td>
</tr>
<tr>
<td>(please append the program’s existing learning outcomes as a separate document)</td>
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<td>X in pre/co-requisite</td>
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<tr>
<td>expire course</td>
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<td>other</td>
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6. Effective Session of Proposed Change(s)
   Fall 2020

7. Academic Rationale
   Changing the pre/co-requisite to the completion of all 5100-level would enable students in Term 2 to take this course. We have received a number of complaints this year from MBA students coming to start their companies at Schulich, because they have to wait too late in the program to take our ENTR Courses. This change would allow those keen on learning what they need to push forward their startup earlier in the program and come back as happy alums to talk about their journey in the program as well as in the development of their new venture.

8. Proposed Course Information
   Please insert approved course information on the left, and proposed course information on the right. Please clearly and visibly indicate how course information has been changed using strikethrough (left column), bold, underlining, colours, etc. (right column).
### Existing Course Information
(Change from)

<table>
<thead>
<tr>
<th>Entrepreneurship and New Firm Creation</th>
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<tbody>
<tr>
<td>Explores various dimensions of the creation of new ventures, including family enterprises. It is concerned with content and process questions as well as with formulation and implementation issues that relate to conceptualizing, developing and managing successful new ventures. The course examines the nature of entrepreneurs and what they do. It identifies the nature of opportunities and considers how new venture ideas can successfully be screened. The course provides the opportunity to develop a cohesive and affective business plan for a start-up venture.</td>
</tr>
</tbody>
</table>

**Prerequisite: all 5000-series Required Foundations of Management Core Courses.**

**Course Credit Exclusion: SB/ENTR 6600 3.00.**

### Proposed Course Information
(Change to)

<table>
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</tr>
</tbody>
</table>

**Prerequisites: All 5100-series Required Foundations of Management Core Courses.**

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### 9. Consultation

*For changes in integrations and cross-listings, as well as changes to courses that are integrated and/or cross-listed, please provide evidence that appropriate consultation has taken place.*

### Originator

<table>
<thead>
<tr>
<th>Moren Lévesque</th>
<th>15 January 2020</th>
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<td>Name</td>
<td>Area or Specialization</td>
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### Approvals:

### Area or Specialization

I have reviewed this change form and I support the proposed changes to the course.

<table>
<thead>
<tr>
<th>Chris Carder</th>
<th>15 January 2020</th>
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<td>Signature</td>
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</table>
Moren Lévesque 15 January 2020
Signature Date
Moren Lévesque ENTR
Name Area or Specialization

Degree Program
I have reviewed this change form and I support the proposed changes to the course.

Ashwin Joshi January 21, 2020
Signature Date
Ashwin Joshi MBA
Name of Program Director Program

Program Committee
This course change has received the approval of the relevant Program Committee.

Detlev Zwick February 13, 2020
Signature Date
Detlev Zwick MPC-PCC
Name of Committee Chair Committee
New Course Proposal: EMBA 6125: Entrepreneurial Selling: How Revenue-Responsible Leaders Build Amazing Companies

1. **Program:** Kellogg-Schulich Executive MBA

2. **Course Number:** EMBA 6125

3. **Credit Value:** 2.0

4. **Long Course Title:** Entrepreneurial Selling: How Revenue-Responsible Leaders Build Amazing Companies

5. **Short Course Title:** Entrepreneurial Selling

6. **Effective Session:** Winter 2020

7. **Calendar (Short) Course Description:**
   This course is designed to help leaders build amazing companies by adopting and embedding the habits of high-performing entrepreneurs and sales executives. Participants will learn skills of high-performance and practice building a sales culture to help them and their teams activate the habits that are shown to grow revenue.

8. **Expanded Course Description:**
   This course is designed to help Kellogg leaders build amazing companies by adopting and embedding the habits of high-performing entrepreneurs and sales executives. The course reveals the secrets of what ‘great looks like’ by exploring the mindset of mastery, unlocking the knowledge, skills, disciplines of high-performance, and helping you build the habits of magnetic people. Participants will learn and discuss these critical skills and disciplines, and practice modelling the behaviour, designing the work and building a sales culture to help them and their teams activate the habits that are shown to grow revenue: 1. Give & receive feedback (to grow capability), 2. Present yourself (to establish credibility), 3. Pose the right questions (to surface what matters), 4. Listen empathically (to deepen connections), 5. Run high impact meetings (to drive progress), and 6. Tell the right story (to change minds). For each of these six habits participants will learn the science behind their power and the mindset shift required to reach mastery. Then, they will develop the knowledge, skill and discipline of each habit, so that they can both avoid the common traps people fall into and execute the expert moves of the masters. Finally, they will begin to activate the habits themselves, so that they are prepared to change who they are for themselves and others, and the companies that they lead and grow.

9. **Rationale:**
   This course should be of considerable interest to all our students who are “revenue-responsible” leaders, which includes entrepreneurs and sales executives and even those that are not directly aligned with the sales function in their business, since revenue is a mindset, and the engine that drives revenue is fuelled by the habits applied to an entrepreneur’s or executive’s interactions with their customers and their people. To succeed, these leaders therefore need to (a) build and lead a strong sales culture of intentional practice and feedback, (b) ensure that each and every interaction with colleagues and clients leads to powerful, impactful relationships, and (c) design the right context to grow a powerful revenue engine. This is what the course will offer them.
10. Evaluation:
There will be three primary graded assignments, two individual and one team assignment. The individual assignments are class participation (25% of the grade) and a 3-minute presentation (25%). The former is based on active discussion of the readings, lectures, speakers and panelists as well as the completion of assignments. For the team assignment (50%) students enrolled in the Entrepreneurial Selling course will be working in teams that will be formed in advance and have to prepare for a “Story Jam”, which will be explained in detail in class.

11. Integrated Courses:
This course is not integrated.

12. Crosslisted Courses:
This course is not crosslisted.

13. Faculty Resources:
This course will be taught by Andrew Sykes, Adjunct Lecturer of Innovation and Entrepreneurship, and Craig Wortmann, Clinical Professor of Innovation & Entrepreneurship and Executive Director of the Kellogg Sales Institute, at the Kellogg School of Management of Northwestern University. For the past 15 years, Andrew and Craig have been exploring the intersection of what makes great entrepreneurs and great sales people, and unlocking the habits that make them magnetic. They have been very fortunate to work with some of the fastest-growing entrepreneurial companies and their founders, helping them build powerful revenue engines, as well as some of the world’s largest and most successful companies, helping them build sales cultures, sales coaches and magnetic sales people.

14. Physical Resources:
This course will be offered annually during an elective week at the Evanston campus of the Kellogg of Management, which will provide all the necessary physical resources before, during and after the course. These resources can be supplemented with the resources of York University Library, should this prove necessary (see attached).

15. Bibliography and Library Statement:
All required course materials as well as supplementary selling tools, bios and additional optional readings will be made available to participants by the Kellogg School of Management before and during the course through their Canvas Learning Management System, to which our students will be granted the necessary access. Further readings can be accessed remotely via the York University library, which also allows electronic access to relevant readings and toolkits.
Entrepreneurial Selling is a proposed new EMBA course. This course helps students gain the knowledge, skill and discipline necessary to target and acquire customers in order to be successful in selling.

Required Readings
The outline states that students will be provided with all of the course reading materials. The outline mentions two required books for the course: Predictable Revenue: Turn Your Business Into a Sales Machine With The $100 Million Best Practices of Salesforce.com by Aaron Ross & Marylou Tyler and The Sales Acceleration Formula: Using Data, Technology, and Inbound Selling to go from $0 to $100 Million by Mark Roberge. The library has the eBook version of The Sales Acceleration Formula, but does not have a copy of Predictable Revenue.

Additional Resources
While York University Libraries is not required to support this course directly, key online resources available to support this course are summarized below and are available remotely to all registered students. The Peter F. Bronfman Business Library’s Market Research guide (http://researchguides.library.yorku.ca/marketingresearch) is a useful starting point, as it highlights key online resources the library subscribes to such as:

- Relevant Market Research are available through databases such as Passport, Marketline Advantage, IBISWorld, Statista, Mergent Intellect and BMI Research.

- Consumer Expenditure/Buying Patterns Data are available through databases such as SimplyAnalytics and Dapresy.

- Scholarly and trade articles are available through article databases such as ProQuest Business, Business Source Complete (includes Harvard Business Review articles), and Scholars Portal Journals.

- Major international business news articles are available through Factiva. Factiva provides access to over 30,000 news sources, including the Wall Street Journal, the New York Times, and the Washington Post.

Finally, students may want to consult some of the self-paced online learning modules on the Business Research at York Toolkit website (http://bryt.library.yorku.ca/). This website provides students with access to short videos and step-by-step PDF resources that show students how to search library databases more effectively.
Entrepreneurial Selling:
How Revenue-Responsible Leaders Build Amazing Companies

Course Syllabus KIEIX 966
Professors Andrew Sykes & Craig Wortmann

Contact Information
Andrew Sykes (Instructor)
andrew.sykes@kellogg.northwestern.edu / 312.890.3323

Craig Wortmann (Instructor)
craig.wortmann@kellogg.northwestern.edu / 847.922.2209

Julia DeNardo (Teaching Assistant)
julia.denardo@kellogg.northwestern.edu / TBD

Please copy Andrew, Craig and Julia on ALL correspondence and include “KIEIX966” and your full name in your email.

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Day Two – Be Magnetic To Deepen Relationships
Day Three – Keep Your Word To Build Trust
Day Four – Tell Stories To Change Minds
Day Five – Create Your Future
Your Mindset
Course Materials
Performance Evaluation
A Note on Class Contribution
Overview
This course is designed to help Kellogg leaders build amazing companies by adopting and embedding the habits of high-performing entrepreneurs and sales executives.

Entrepreneurs and sales executives are - by definition - “revenue-responsible” leaders. Whether or not you are directly aligned with the sales function in your business, we believe that revenue is a mindset, and the engine that drives revenue is fueled by the habits you apply to your interactions with your customers and your people.

For the past 15 years, Andrew and Craig have been exploring the intersection of what makes great entrepreneurs and great salespeople, and unlocking the habits that make them magnetic. We have been very fortunate to work with some of the fastest-growing entrepreneurial companies and their founders, helping them build powerful revenue engines, as well as some of the world’s largest and most successful companies, helping them build sales cultures, sales coaches and magnetic sales people.

In this course, we reveal the secrets of what ‘great looks like’ by exploring the mindset of mastery, unlocking the knowledge, skills, disciplines of high-performance, and helping you build the habits of magnetic people.

What this course is
This is a course where we learn and discuss these critical skills and disciplines, and practice modeling the behavior, designing the work and building a sales culture to help you and your people activate the habits that are shown to grow revenue. But the course is not abstract, it is concrete. It begins and ends with you and your habits.

We have identified six key habits that revenue-responsible leaders activate in order to:

- Build and lead a strong sales culture of intentional practice and feedback
- Ensure that each and every interaction with colleagues and clients leads to powerful, impactful relationships
- Design the right context to grow a powerful revenue engine

These habits are:

1. Give & Receive Feedback - To grow capability
2. Present Yourself - To establish credibility
3. Pose the Right Questions - To surface what matters
4. Listen Empathically - To deepen connections
5. Run High Impact Meetings - To drive progress
6. Tell the Right Story - To change minds

Like a telephoto lens, we will zoom in and out of these six habits throughout the course, with a distinct focus on how we activate these close-up, hour-by-hour, meeting-by-meeting. For each high-impact habit, we will learn the science behind their power and the mindset shift required to reach mastery. Then, we will develop the knowledge, skill and discipline of each habit, so that you can both avoid the common traps people fall into and execute the expert moves of the masters. Finally, we will begin to activate the habits themselves, so that you are prepared to change who you are for yourself and others, and the companies that you lead and grow.
What this course is not
This course is not a top-down “strategy” or “leadership” course. It is a bottom-up exploration of how magnetic leaders build amazing companies, starting with themselves. They learn and activate the habits of high performance before they expect those around them to do so. Then, they set those habits within a system of intentional practice to design these habits into daily work. You should come to this course ready to examine your own habits and how they impact the culture you are building in your company.

This five-day transformational experience is designed, built and lead by Professors Craig Wortmann and Andrew Sykes from the Kellogg Sales Institute and includes exercises and experiences that will change the way you view your life and the culture, brand and customer experience of your business.

Day One – Getting Good At Getting Great
During our first session together, we will establish the ground rules for what the week will hold, gain your alignment and commitment for how we’ll work together, and set you up for a week you’ll never forget.

We will lay the foundation for our learning experience by looking at the relationships between knowledge, skill, and discipline and how - in combination - these three elements are combined into powerful habits. As we begin to build on this foundation and lay out the superstructure of how habits are built, we will explore how we learn, acquire, and embed habits. In other words, we will explore how to get good at getting great...at anything.

We call this intentional practice. Intentional practice begins with a specific aim, or intention, to get better at something concrete about your performance. That’s what makes it intentional, rather than just repetitive. Repetitive practice “hopes” for improvement through repetition, but lacks the self-awareness, specific goals and reflection on performance that allows for rapid growth towards mastery.

Mastery is having a situational awareness of each and every circumstance in which we find ourselves, and consciously using the right habits at the right time for the right outcome.

During our careers, we tend to do the same things over and over again, never reaching mastery. We call this “experience.” In the world of work, experience is often considered a substitute for intentional practice. In reality, experience is a VERY slow and ineffective way to strive for mastery. When the challenges are great, give us someone who has practiced intentionally for one year over someone who has thirty years of experience. In professional sports, dance or music, top-performers spend an increasing amount of time practicing for every hour they perform. Why should it be any different for top-performing entrepreneurs, sales executives and business professionals?

Give & Receive Feedback
In this first session together, we will dig into intentional practice and focus on the key ingredient for rapid progress towards mastery - Habit #1: Giving and Receiving Feedback. You’ll learn a powerful tool to improve your performance in any domain by at least a factor of ten in a single year. You will practice several expert moves of the best managers and coaches, and become a confident, and valued provider of feedback... the fuel that powers confidence and competence in your team.

You’ll deepen your understanding of the gifts of feedback, by uncovering the common traps of delayed, non-specific, ungrounded feedback, and “kind” feedback, and the GIFTS approach to changing the quality of feedback given and received.
Present Yourself
People are quick to judge others based on first impressions. Customers will try to “put you in a box” when they first meet you so, unfair or not, you have a choice. You can allow them to choose your box, or you can decide on your own box, or wrapping, for the gift that you are to them and to the world. Present yourself is about creating fantastic and memorable first impressions by being deliberate about the “wrapping” you choose.

Customers “see us coming” when we approach them for the first time in person or even over the phone. Their instincts kick in and their brains are hard at work trying to pick up signals, label our attributes, and judge whether we are likeable, trust-worthy or worth knowing.

We will work on your personal origin story in our exploration of Habit #2: Present Yourself. Another habit we repeat over and over again is introducing ourselves. Too often, leaders just ‘show up’ in key moments and introduce themselves in a way that is flat and ineffective. We will develop the habit of Presenting Yourself in a way that goes beyond showing up to truly standing out and breaking through in a way that quickly establishes your credibility and connects you more deeply to the people you are leading and the customers you are guiding.

Day Two – Be Magnetic To Deepen Relationships
Pose the Right Questions
The right questions unlock new pathways for action that customers may not have seen before, and they’ll feel powerfully compelled to take those actions. In so doing, they’ll achieve previously unimagined results for themselves, their business and their customers. The problem is, most questions are asked “in the moment” without any preparation and, as a result, lack clear intentions and precise framing, which limits their effectiveness.

In Habit #3: Pose the Right Questions, we will look at the different types of questions, and a formula for when and how to use each kind. We will examine how best to frame questions to not only get the answers you need, but to prime your customers and colleagues to take new actions.

Listen Empathically
Posing the right questions loses its power if we don’t possess the listening skills to back them up. We love great listeners and describe them as people we admire, like, trust and feel attracted to. So, how do great listeners listen differently from average or poor listeners? They listen empathically, with their whole body.

Active listening involves listening intently to what someone is saying, which is a good start. Listening empathically goes beyond active listening, by not only hearing what someone says (and being able to recreate it), but by paying attention to what’s not being said. Empathic listening dives deeper to unearth how people are behaving, to how they’re speaking to what they seem to be feeling.

When you pay attention, you detect the emotions that underlie (and that often contrast against) what someone says. By paying attention, you feel what others feel (thanks to your mirror neurons), see things from another’s perspective, and begin to understand what really matters to them and why.
If you attend to those unspoken needs, rather than simply the verbally expressed wants, you build deeper and lasting relationships with others, and they’ll be irresistibly captivated by your presence. Because you, perhaps alone, will see them for who they really are.

Listening is not a passive act. Instead, listening is a DOING action that gives your customers the space into which they can speak their preferred future. Through Habit #4: Listen Empathically, you “hold space” for others by remaining silent until the time is right, which helps them clarify their thoughts and dig deeper to unearth new truths.

Day Three – Keep Your Word To Build Trust
Run High Impact Meetings
Many people spend more than half of their lives at work in meetings -- more time than we spend with our families! Yet, the majority of people complain that many meetings are useless, undirected, last too long, are inconclusive, or, quite simply, unnecessary. Part of the reason for this is that meetings are approached without clarity on what a meeting actually is and what it is not.

Meetings are not “doing” the work, they are a “break in” doing our work. They’re a pause in the action when people come together to discuss the work that has been done, the work that is to come, and how that work will be done. As such, meetings are a structure or “box” inside which conversations happen, which is why meetings where people multitask and attempt to do work are so frustrating.

Meetings should always have a clear purpose or goal for the meeting, which is something other than “filling the hour we allocated for this discussion.” The way we frame the purpose will either leave people feeling like a meeting is a task to be done (and preferably avoided) or as an exciting opportunity to produce a result.

For every purpose, there should be a matching benefit, which is what participants get out of the meeting WHEN the purpose is achieved. Never again should someone wonder why they’re in your meeting or what they’re expecting to gain. And, if they’re not interested in that benefit, they should be free to exclude themselves from the meeting or suggest a different purpose and benefit. Life’s too short for pointless, low impact meetings.

Meetings are designed to be the box in which specific conversation types take place. As such, we may design meetings to have Reconnaissance, Pathway or Milestones Conversations. With Habit #5: Run High-Impact Meetings we will explore the reasons why it is best practice to limit meetings to “contain” a single type of conversation so that they’re shorter, more focused and thus more effective. In this module we’ll explore some of the expert moves for setting up and designing high-impact meetings.

One more time for the record...you spend more of your life in meetings than you do with your family. After today, you will never run a meeting the same way again.

Day Four – Tell Stories To Change Minds
Tell the Right Story
Stories change minds where facts and figures only harden pre-existing opinions. They build empathy, help people to make sense of the world and provide the context and emotion that people need to make decisions and get into action. In short, stories have always had the power to move the world.
In developing Habit #6: Tell the Right Story, we will explore why and how stories have such power, and how to amplify that power by infusing stories with the right kind of structure. Structure turns language into stories, just like it turns noise into music, and the best stories have a musical, melodious quality to them. They flow, they follow a narrative arc, and they have ups, downs, twists and turns like a fun roller coaster ride. And, just like a ride, every change in mood, tempo, speed, volume or emotion is carefully designed to maximize the experience, ensuring that listeners get to the end of the ride safely.

We will examine the neuroscience of stories, how they change our brains and rewire our emotions. And we will consider some of the adornments to stories, including callbacks and takeaways, gleaming objects and rules of three, that ensure that our stories stick and the message they carry takes seed in the minds of our audiences.

Finally, we will work together to create your Story Matrix with a ‘starter set’ of stories that will ensure that you always have the right story at the right time for the right reasons.

Day Five – Create Your Future
During our week together, we will work on many skills and disciplines. But knowing how to do something - and actually doing it - are two very different things. In our final session, we will work on the hardest and most important question in business and human endeavor...how do we create the habits we are committed to practicing, and quit the ones that don’t serve us? Changing habits is one of the hardest things for humans to do. Our usual approach is filled with common sense assumptions that are simply not matched by research into how humans think, feel, act and develop habits.

In this final session, we will explode myths about habits, share the golden rules for success and understand the vital role of “context design” in preparing for your success. We’ll explore the idea that “our habits are encoded in the contexts of our lives” and understand the Four Contexts: Spaces, Systems, Social and the Context of the Self. We will examine how to “code” your life contexts and the business contexts that surround all employees, to make developing the right habits the easy default instead of the difficult choice.

As a final bonus, you’ll learn the formula for creating habits that’s based on 15 years of research and several thousand peer-reviewed journal-published papers, books and other academic investigations. This formula for creating habits and the Four Powers that drive the formula, will help you understand why change initiatives at companies seem so hard and slow and prone to failure. It will help you to diagnose where your efforts at culture change are dying and give you a tool to direct your attention to where it matters most. The benefit? You’ll be able to design the future of the world of work at your company, in a way that makes being a part of a high-performance culture the standard for employees, and that turns your brand and customer experience from a logo and marketing promise into a tangible and delightful experience for your customers.

Your Mindset
Our course is designed to help you develop and activate the most powerful personal and business habits and turn those habits on the work of building amazing companies. More than a little of our work together will push you out of your comfort zone, and challenge you to adopt new habits, as well as unlearn old habits that do not serve you. We would like for you to view this as a very important journey.
Our course is not for visitors. It is designed for those who want to work hard, practice hard, receive constructive feedback that will challenge, and stretch to own new capabilities. All of this happens in a one-week sprint, so grab your running shoes.

Course Materials
Our course Canvas site contains all of the materials you will need to execute this course, including supplementary selling tools, bios and additional optional readings.

Performance Evaluation
Because this is a shortened version of this Entrepreneurial Selling course, there will be three primary graded assignments, two individual and one team assignment. Students enrolled in our Entrepreneurial Selling course will be working in teams that will be formed in advance. A note on working in teams: Since you will be working in teams, each student will be expected to read and sign a ‘team contract’ before joining the course.

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<tr>
<th>Individual Assignments</th>
<th>Team assignment</th>
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<tr>
<td>Class participation</td>
<td>Team assignment</td>
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<tr>
<td>Your 3-minute presentation</td>
<td>Story Jam</td>
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<td>25%</td>
<td>50%</td>
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A Note on Class Contribution
All class sessions will thrive based on your active discussion of the readings, lectures, speakers and panelists as well as your completion of assignments that will both further your habit activation and allow you to participate in class more fully.

Please prepare for every class session with an eye to how the assignment and material will help you improve and refine your existing and future habits.

If you are a person who is not one to raise her or his hand in class, then you have another opportunity to shine. Send Andrew and Craig an email of some “activation” examples…situations where you or someone you know demonstrated the use of one of the habits we’ve developed in this course in real life. Type up the short story and send it to us!
New Course Proposal: EMBA 6145: Price Management

1. **Program:** Kellogg-Schulich Executive MBA

2. **Course Number:** EMBA 6145

3. **Credit Value:** 2.0

4. **Long Course Title:** Price Management

5. **Short Course Title:** Price Management

6. **Effective Session:** Spring 2020

7. **Calendar (Short) Course Description:**
   This course provides students with advanced knowledge in price management, focusing on managerial and entrepreneurial practice. They will be familiarized with the price management process and its four phases: strategy, analysis, decision-making and implementation phase based on relevant theories and current examples.

8. **Expanded Course Description:**
   Students participating in this course will gain advanced knowledge in price management, with a high emphasis on managerial and entrepreneurial practice. Theories and managing practices are supported by current examples that are embedded in the lecture and by guest speakers. Another focus lies on the focus of engaging the student’s critical thinking and problem-solving skills. Participants have to deal with the challenges of price management in the course of a case study and give group presentations of their solutions. Within the scope of price management, participants will get familiarized with the price management process and its four steps strategy phase, analysis phase, decision making phase and implementation phase.

9. **Rationale:**
   From their Marketing course(s) students will be familiar with the so-called 4P: Product, Price, Place & Promotion. Pricing is the only one of the 4Ps generating turnover/revenue. Moreover, price is the strongest profit driver! It has direct impact on profits, direct impact on sales volume and indirect influence on fixed costs. All students in positions with sales, revenue and/or profit responsibilities should therefore be interested in learning more about pricing.

10. **Evaluation:**
    Assessment for this course is based group presentations of solutions to an assigned case study (30%) and an individual take-home exam where students have to answer two out of four case questions covering major issues of price management (70%). Details on deadlines, formats, and requirements will be discussed in class.

11. **Integrated Courses:**
    This course is not integrated.

12. **Crosslisted Courses:**
    This course is not crosslisted.

13. **Faculty Resources:**
This course will be taught by Dr. Martin Fassnacht, Professor and Holder of the Otto Beisheim Endowed Chair of Marketing and Commerce, Academic Director of the WHU MBA program, Speaker of the Marketing and Sales Group and Scientific Director of the Center for Market-oriented Corporate Management (CMM) at WHU – Otto Beisheim School of Management in Düsseldorf. Furthermore, he is the Chairman of the Advisory Board of Henkel Center for Consumer Goods (HCCG) and Strategic Advisor for Consumer Goods Manufacturers and Retailers. His research focuses on the fields of Price Management, Brand Management, as well as Retail Marketing and Omnichannel Business. Both his research and the courses have a strong practical relevance due to the close cooperation with renowned companies such as Henkel, L’Oreal, BMW, Douglas, Adidas, Facebook, dfv Mediengruppe and Vorwerk. Three years in a row (2017-19), the Frankfurter Allgemeine Zeitung listed Professor Dr. Martin Fassnacht in its Economist Ranking among the 100 most influential economists in Germany.

14. Physical Resources:
This course will be offered annually during a global elective week of the Kellogg WHU EMBA program at the Otto Beisheim School of Management in Vallendar, Germany, which will provide all the necessary physical resources before, during and after the course. These resources can be supplemented with the resources of York University Library, should this prove necessary (see attached).

15. Bibliography and Library Statement:
Students will be given the textbook Price Management: Strategy, Analysis, Decision, Implementation by H. Simon and M. Fassnacht (New York, 2019). All other required cases and readings will be made available to participants by the Kellogg WHU program before and during the course either in hard copy or through their Learning Management System, to which our students will be granted access. Further readings can be accessed remotely via the York University library, which also allows electronic access to relevant readings and toolkits.
Price Management is a proposed new EMBA course. This course helps students develop advanced price management knowledge and skills.

Required Readings
The outline states that *Price Management: Strategy, Analysis, Decision, Implementation* by Simon and Fassnacht (2019) will be used as the course textbook. The library does not own a print or digital version of this book; however, since this is an EMBA course, the students will be provided with all of the course reading materials.

Additional Resources
While York University Libraries is not required to support this course directly, the library subscribes to key online resources that students may wish to consult when the complete their take-home case-based exam. These resources are available remotely to all registered students.

The Peter F. Bronfman Business Library’s Market Research guide (http://researchguides.library.yorku.ca/marketingresearch) is a useful starting point, as it highlights key online resources the library subscribes to such as:

- **Market research reports** are available through databases such as Passport, Marketline Advantage, IBISWorld, Statista, Mergent Intellect and BMI Research.

- **Consumer expenditure and buying patterns data** are available through databases such as Passport (international coverage), SimplyAnalytics (Canadian coverage) and Dapresy (Canadian coverage).

- **Business scholarly and trade / industry articles** are available through article databases such as ProQuest Business, Business Source Complete (includes Harvard Business Review articles), and Scholars Portal Journals.

- **Major national and international business news articles** are available through Factiva. Factiva provides access to over 30,000 news sources, including the *Wall Street Journal, the Globe and Mail, the New York Times, and the Washington Post*.

Finally, students may want to consult some of the self-paced online learning modules on the Business Research at York Toolkit website (http://bryt.library.yorku.ca/). This website provides students with access to short videos and step-by-step PDF resources that show students how to search the library’s business databases more effectively.
Price Management

by
Professor Martin Fassnacht

EMBA 2020 (May 14th – 19th), European Elective

I. Course Instructor:

Prof. Dr. Martin Fassnacht
The Otto Beisheim Endowed Chair of Marketing and Commerce
WHU – Otto Beisheim School of Management
Erkrather Str. 224a, 40233 Düsseldorf
Phone: +49-211-44709-441
E-Mail: martin.fassnacht@whu.edu

II. Learning objective:

Pricing is the (only) one of the 4Ps generating turnover. Moreover, price is the strongest profit driver! It has direct impact on profits, direct impact on sales volume and indirect influence on fixed costs. Within the scope of price management, participants will get familiarized with the price management process and its four steps strategy phase, analysis phase, decision making phase and implementation phase.

Students participating in this course will gain advanced knowledge in price management, with a high emphasis on managerial and entrepreneurial practice. Theories and managing practices are supported by current examples that are embedded in the lecture and by guest speakers. Another focus lies on the focus of engaging the student’s critical thinking and problem solving skills. Participants have to deal with the challenges of price management in the course of a case study and give group presentations of their solutions.

III. Course content:

1. Lectures by Prof. Fassnacht

The lecture is organized into 27 Key Insights (see below) on Price Management. These insights are grouped around following structure:

<table>
<thead>
<tr>
<th>Price Management</th>
<th>Foundations of Price Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Perspective: The Price Management Process</td>
<td></td>
</tr>
<tr>
<td>Strategy</td>
<td>Analysis</td>
</tr>
<tr>
<td>Industry Specific Deep Dive</td>
<td></td>
</tr>
<tr>
<td>Innovations in Price Management</td>
<td></td>
</tr>
</tbody>
</table>
2. Guest Lectures
In addition to Prof. Fassnacht, several guest speakers will be giving lectures.

3. Take-home exam (grading to be clarified)
At the end of the course you will be given four case questions covering major issues of Price Management. You will be assigned to prepare an essay on how you would approach two of these four case questions. Details on deadlines, formats, and requirements will be discussed in class.

IV. Readings:

V. 30 Key Insights on Price Management:

1. Price is a strong profit driver and an important strategic weapon for organizations.
2. Pricing is a significant strategic tool and an important part of the Marketing Mix.
3. The price decision can be considered a part of the comprehensive price management process.
4. Don’t miss the digital revolution to stay competitive.
5. Start your pricing strategy with clear objectives.
6. Make sure you have the right price-value-fit.
7. Make sure you have the right price positioning strategy by defining a coherent price-value-fit.
8. Choose your price positioning wisely as it sets the framework for subsequent price decisions.
9. Market, customer, or competitive dynamics can require repositioning in terms of price.
10. Systematically collect and analyze company, customer and competitive information.
11. Estimate Price-response Functions to support your strategic pricing decisions.
12. Price elasticities must be taken into consideration when applying price changes.
13. Apply robust research methods to generate valid insights on customer price responses.
14. The psychology of price contributes to a more comprehensive understanding of price effects.
15. Acknowledge psychological and behavioral consumer outcomes when managing prices.
16. The optimization of one-dimensional prices is based on a single product and one time period.
17. Use price differentiation to skim customers’ willingness to pay.
18. Bundling and unbundling create additional value and allow for profit improvements.
19. Use yield management to maximize capacity utilization and optimize revenue.
20. Be aware of the influence of current price decisions on future price and profit realization.
21. Have a framework for tactical price decisions vis-à-vis the competition.
22. Price Management is a top level task which can be reinforced by dedicated Price Managers.
23. Reasonably communicate prices in line with your overall price strategy.
24. Systematically monitor the actual effects of your pricing operations.
25. Industry specific features have to be taken into account during the price management process.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>Changing consumer habits affect all phases of the price management process.</td>
</tr>
<tr>
<td>27</td>
<td>Make use of new technologies to create superior value-to-customer and charge adequate prices.</td>
</tr>
</tbody>
</table>
New Course Proposal: EMBA 6495: The Innovation Opportunity in Frontier Markets

1. Program: Kellogg-Schulich Executive MBA

2. Course Number: EMBA 6495

3. Credit Value: 2.0

4. Long Course Title: The Innovation Opportunity in Frontier Markets

5. Short Course Title: The Innovation Opportunity in Frontier Markets

6. Effective Session: Winter 2020

7. Calendar (Short) Course Description:
   This course offers a conceptual framework for analyzing emerging markets from multiple perspectives and aims to equip future business leaders with the ability to make sense of the challenges and make the most of the opportunities presented in emerging markets and the developing world more generally in order to enable these leaders to succeed in a globalized world.

8. Expanded Course Description:
   This course offers a conceptual framework for analyzing emerging markets from multiple perspectives in order to prepare business leaders to address the challenges of succeeding in a globalized world. It aims to equip such future leaders with the ability to make sense of the challenges and make the most of the opportunities presented in emerging markets and the developing world more generally. The course will also address ways in which Israeli innovations may provide an opportunity to addressing emerging market frameworks. Upon completion of the course, participants will be able to 1. Understand the challenges specific to doing business in emerging markets; 2. Set out the different possible structures of market entry in an emerging market; 3. Identify common characteristics of emerging markets (information asymmetries, missing markets, institutional voids) as well as use a toolkit to identify key differences among emerging markets; 4. Apply key frameworks used for assessing business opportunities in emerging markets; 5. Understand key Israeli success stories and approaches to emerging markets.

9. Rationale:
   Any business leader seeking to engage in business of a global nature will likely come into contact with emerging markets over the course of his or her career. This course therefore provides frameworks and skills that should appeal to many of our students. It will also show them how to take innovations from one particular market, in this case Israel, and apply them to other emerging markets.

10. Evaluation:
    Assessment for this course is based on three individual and one team-based component. Each student will be assigned a topic and can then select a reading within that topic on which to submit a pre-course assessment of 1-2 pages (15% of the total), class participation accounts for another 5%. Each group will be given a country to follow closely throughout the course and, on the final day, to present the opportunity for entering their allocated country (50%). These presentations will serve as the background for another individual assignment, which consists in providing one written question to each team based on the tools and frameworks covered in class (30%).

11. Integrated Courses:
This course is not integrated.

12. Crosslisted Courses:
This course is not crosslisted.

13. Faculty Resources:
This course will be taught by Tally Zingher, an attorney and technology consultant. A Fulbright scholar, she holds an A.B. in economics and Middle Eastern studies from Harvard College, an M.P.A. in development economics from the Harvard Kennedy School and a J.D. from Harvard Law School. She practiced corporate law in the New York office of Cleary Gottlieb Steen & Hamilton, including a secondment with Istithmar, the sovereign wealth fund of Dubai, and started her career as a technology investment banker for Broadview International (now part of Jefferies LLC). Subsequently, Zingher was Managing Director at Blue Laurel and the co-founding managing director of the MENA Investment Network, before co-founding Dawsat, a weight loss and wellness solution company based on the traditional Middle Eastern diet, where she is currently the CEO.

14. Physical Resources:
This course will be offered annually during a global elective week of the Kellogg Recanati EMBA program at the campus of the Coller School of Management of Tel Aviv University, which will provide all the necessary physical resources before, during and after the course. These resources can be supplemented with the resources of York University Library, should this prove necessary (see attached).

15. Bibliography and Library Statement:
All required cases and readings will be made available to participants by the Kellogg Recanati program before and during the course either in hard copy or through their Learning Management System, to which our students will be granted access. Further readings can be accessed remotely via the York University library, which also allows electronic access to relevant readings and toolkits.
The Innovation Opportunity in Frontier Markets is a proposed new EMBA course. This course focuses on teaching students how to make sense of the challenges of doing business in emerging markets.

Required Readings
The course outline states that out of environmental considerations, there will be no printed course pack and all readings will be available via Moodle.

Additional Resources
While York University Libraries is not required to support this course directly, key online resources available to support this course are summarized below and are available remotely to all registered students. The Peter F. Bronfman Business Library’s Country & International Business Information guide (http://researchguides.library.yorku.ca/countryinternationalbusiness) is a useful starting point, as it highlights online resources the library subscribes to such as:

- **Relevant country reports** are available through BMI Research, Passport, Statista, Markeline Advantage, Country Profiles via Mergent Online and Doing Business Data (World Bank).

- **Scholarly and trade articles** are available through ProQuest Business, Business Source Complete (includes Harvard Business Review articles), and Scholars Portal Journals.

- **Major international business news articles** are available through Factiva. Factiva provides access to over 30,000 news sources, including the Wall Street Journal, the New York Times, and the Washington Post.

Finally, students may want to consult some of the self-paced online learning modules on the Business Research at York Toolkit website (http://bryt.library.yorku.ca/). This website provides students with access to short videos and step-by-step PDF resources that show students how to search library databases more effectively.
KR GLOBAL ELECTIVE SYLLABUS

FEBRUARY 2020

THE INNOVATION OPPORTUNITY IN FRONTIER MARKETS
THE INNOVATION OPPORTUNITY IN FRONTIER MARKETS

Tally Zingher
Email: Tallyz@post.tau.ac.il or tally@post.harvard.edu
Teaching Assistant (TA): Hilly Hirt
Email: hilly.hirt@gmail.com
Office Hours: By appointment

COURSE DESCRIPTION AND OBJECTIVES

This course offers a conceptual framework for analyzing emerging markets from multiple perspectives in order to prepare business leaders to address the challenges of succeeding in a globalized world. Any business leader seeking to engage in business of a global nature will likely come into contact with emerging markets over the course of his or her career. This course aims to equip such future leaders with the ability to make sense of the challenges and make the most of the opportunities presented in emerging markets and the developing world more generally. The course will also address ways in which Israeli innovations may provide an opportunity to addressing emerging market frameworks.

Upon completion of the course, the student will be able to:
1. Understand the challenges specific to doing business in emerging markets.
2. Set out the different possible structures of market entry in an emerging market.
3. Identify common characteristics of emerging markets (information asymmetries, missing markets, institutional voids) as well as use a toolkit to identify key differences among emerging markets.
4. Apply key frameworks used for assessing business opportunities in emerging markets.
5. Understand key Israeli success stories and approaches to emerging markets.

EVALUATION OF STUDENT AND COMPOSITION OF GRADE

<table>
<thead>
<tr>
<th>Contribution to Grade % points</th>
<th>Assignment</th>
<th>Group Size/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>15%</td>
<td>Pre-course Assessment</td>
<td>Individual, 1-2 pages, prior to the first day of the course, according to your selected case. See details on next page.</td>
</tr>
<tr>
<td>50%</td>
<td>Case Presentation</td>
<td>Group, March 3. See details on next page.</td>
</tr>
<tr>
<td>30%</td>
<td>Final Board of Directors Question List Submission</td>
<td>Individual, to be completed by March 9 Midnight, see details on next page.</td>
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<tr>
<td>5%</td>
<td>Class participation</td>
<td>Individual</td>
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</table>
**COURSE ASSIGNMENTS**

All assignments need to be sent directly to hilly.hirt@gmail.com with cc to tallyz@post.tau.ac.il and meiravbe@tauex.tau.ac.il

The course is taught using the Socratic method – we will have discussions which are based on readings and issues raised in those readings. To make for a rich discussion while maintaining a moderate level of pre-course preparation, each study group will be given a country to follow. Further, each student will be assigned a topic, and can then select a reading within that topic on which to submit a pre-course assessment.

Before the first day of class, each group will be given with a country to follow closely throughout the course. Groups are expected to explore the issues raised in the readings and class discussion from the perspective of allocated country and, on the final day of class, to present the opportunity for entering their allocated country.

Out of environmental considerations, we will not have a printed course pack for this course. All readings will be made available via the courses' Moodle site.

At the end of this process each student should have a topic to cover in their individual pre-course assessment and a country to follow with their group.

**Class Preparation and participation**

Students are expected to familiarize themselves with the assigned readings for each class (regardless of whether or not they submitted an assessment on that reading) and come to class prepared to discuss them.

The following Table lists the countries and topics (with the associated readings, for which each student should select one reading).

<table>
<thead>
<tr>
<th>Countries (Study groups are allocated a country)</th>
<th>Topics (students are allocated a topic, and should select one of the readings in the allocated topic for a pre-course assessment).</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Nigeria</td>
<td><strong>Topic 1: Macroeconomic approach</strong></td>
</tr>
<tr>
<td>o Rwanda</td>
<td>o The Economic Lives of the Poor</td>
</tr>
<tr>
<td>o Ghana</td>
<td>o China ‘The New Normal’</td>
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<tr>
<td>o China</td>
<td>o Markets, Market Failures, and Development</td>
</tr>
<tr>
<td>o India</td>
<td><strong>Topic 2: Competitiveness and Market Entry</strong></td>
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<tr>
<td>o Indonesia</td>
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<tr>
<td>o Thailand</td>
<td></td>
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<tr>
<td>o Vietnam</td>
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<tr>
<td>o Poland</td>
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<tr>
<td>o Russia</td>
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</table>
Before the course commences, each student will submit a 1-to-2 page "Assessment" on a reading they selected from the list above for their allocated topic. The Assessment should describe two issues raised in the reading and assess the issues as they pertain to the students' allocated country. The Assessment should demonstrate that the student has read the material and should provide an analysis of the relevant country in light of the students' understanding of the reading.

The structure of the assessment should comprise five sections, with emphasis placed on thoughtful analysis, not simply a review of the facts/data:

1. Introduction: In [Name of Reading] 2 issues were addressed: 1) [name of 1st issue you view as relevant to discuss] and 2) [name of 2nd issue you feel relevant to discuss]

2. Discussion of 1st issue with analysis on its relevance to the example (or country) discussed in the reading.

3. Discussion of 1st issue with respect to your groups' allocated country.
4. Discussion of 2nd issue with analysis on its relevance to the example (or country) discussed in the reading.

5. Discussion of 2nd issue with respect to your groups' allocated country.

The Assessment should be submitted via email by 10:30am on February 26.

**Case Presentation**

Each study group will make an up-to 8 minutes and up-to 4-slides presentation before an imaginary meeting of a board of directors discussing the outlook for doing business by the group's company in the group's foreign country. Groups will be given several options of company profiles, among which they will choose the company profile they will represent. Full details and explanations on the presentations will be provided during the course. Group case presentations will take place on March 3 during class.

**Final Board of Directors Question-list Submission**

On the last day of class, groups will be presenting their market entry strategy and outlook for their assigned country and company. The entire class will function as a Board of Directors. Each Student needs to think of a single question to ask the presenting group, to help guide the Board decision and better understand the market opportunity and challenges, using the tools and frameworks covered in class. The complete set of individual questions to each case presentation (14 questions, one question per case presentation) must be submitted by March 9, Midnight, to hilly.hirt@gmail.com with cc to tallyz@post.tau.ac.il and meiravbe@tauex.tau.ac.il. Example questions would be provided by the Professor.

**PLANNED AGENDA:**

**Class Intro – February 26, 14:30-15:00**

**Day 1 – February 26, 15:00-18:30**

Introduction to emerging markets and introduction to the concept of “institutions”. What are emerging markets? How do we categorize emerging markets and why? To what extent is investing in emerging markets a strategy of diversification vs. a dil“worse”ification.

**Topic 1: Macroeconomic approach.** What is development policy and why does it matter for businesses. What has China’s strategy been with respect to development and opening up to world trade?
Day 2 – February 27, 15:30 to 18:45

Examination of alternative market entry strategies and frameworks, given the realities of different emerging markets.

**Topic 2: Competitiveness and Market Entry**

- “Silver Lake and Private Equity in Brazil: Carnaval or Calamity?” Harvard Business School Case 712-004 (exploring the growth of a private equity firm into Latin America).

**Topic 3: Institutional Voids and The Opportunities They Create**

- “Metro Cash & Carry” Harvard Business School Case 707-505 (analyzing the expansion of a multinational company into India, Russia and China). Case study on the role of institutions in analyzing German company’s entrance into India.

Day 3 – March 1, 15:30pm – 18:45

**Topic 4: Competitiveness strategy and diversification.** How should countries be choosing their industrial policy? What is the effect of natural resources on these choices? Choices of product space and strategic exports.


**Topic 5: The Fortune at the Base of the Pyramid and companies that succeed (and fail) in reaching for it; microfinance a BoP strategy for finance.**

- "Danimal in South Africa: Management Innovation at the Bottom of the Pyramid" Ivey Publishing Case (910M99).
- **Optional:** Duflo, Esther, Abhijit V. Banerjee et. al, “The Miracle of Microfinance? Evidence from a randomized evaluation”. Available [here](#).
Day 4 – March 2, 9:00 – 12:30

**Topic 6: Sovereign debt, state capitalism, corruption and crises. How do they effect business strategy and economic development outcomes.**

- “Dubai: Debt, Development, and Crisis” (A) Harvard Business School Case A 710-069 (on Dubai’s Debt Crisis).

**Topic 7: Corruption**: Unpacking the effects of corruption - No study of emerging markets would be complete without a basic review of corruption, the various ways of measuring it, and its impact.

Day 5 – March 3, 14:30pm – 17:45pm

**Final Case Presentations & Wrap Up**
Course Change Proposal – Leading and Managing Diverse Organizations

The following information is required for all course change proposals at the undergraduate and graduate level. To facilitate the review/approval process, please use the headings below (and omit the italicized explanations below each heading).

1. **Program**
   - *Kellogg-Schulich Executive MBA Program*

2. **Course Number and Credit Value**
   - *EMBA 6755 2.00*

3. **Course Title**
   a) **Long Course Title**
      - Leading and Managing Diverse Organizations
   b) **Short Course Title**
      - Leading and Managing Diverse Orgs

4. **Existing Pre-requisites/Co-Requisites**

5. **Type of Course Change (indicate all that apply)**

<table>
<thead>
<tr>
<th>in course number</th>
<th>in credit value (provide course outline)</th>
</tr>
</thead>
<tbody>
<tr>
<td>in course title (provide course outline; short course titles may be a maximum of 40 characters, including punctuation and spaces)</td>
<td></td>
</tr>
<tr>
<td>in course description (provide course outline; short course descriptions may be a maximum of 60 words, written in present tense)</td>
<td></td>
</tr>
<tr>
<td>in learning objectives/outcomes (please append the program’s existing learning outcomes as a separate document)</td>
<td></td>
</tr>
<tr>
<td>in integration (provide statement of approval from other program)</td>
<td></td>
</tr>
<tr>
<td>in cross-listing (provide statement of approval from other program)</td>
<td></td>
</tr>
<tr>
<td>in pre/co-requisite</td>
<td>expire course</td>
</tr>
<tr>
<td>other (please specify)</td>
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</tr>
</tbody>
</table>

6. **Effective Session of Proposed Change(s)**
   - *Spring 2020*

7. **Academic Rationale**
   While the course itself has not been changed, the revised title better reflects the actual course content and its focus on both leadership and inclusion as well as diversity.

8. **Proposed Course Information**

<table>
<thead>
<tr>
<th>Existing Course Information (Change from)</th>
<th>Proposed Course Information (Change to)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title: Leading and Managing Diverse Organizations</td>
<td>New Title: Beyond Diversity: The Fundamentals of Inclusive Leadership</td>
</tr>
</tbody>
</table>

V. November 2016
9. Consultation

N/A

Originator

Signature Date

Nicholas Pearce
Name Area or Specialization

Approvals:

Area or Specialization
I have reviewed this change form and I support the proposed changes to the course.

Signature Date

Matthias Kipping Kellogg-Schulich Executive MBA
Name Area or Specialization

Degree Program
I have reviewed this change form and I support the proposed changes to the course.

Signature Date

Matthias Kipping
Name of Program Director
Kellogg-Schulich Executive MBA Program

Program Committee
This course change has received the approval of the relevant Program Committee.
Required Attachments

☐ For changes in the number of credits, course title or course description, please attach the Schulich course outline (which must conform to program norms; see the Program Assistant for details).

☐ For cross-listed / integrated courses, please include a signed statement of agreement from the director of the other graduate course / other degree program.

Send to
Send an electronic copy of all forms and attachments, and forward emails of support from other faculty members, to the appropriate program committee secretary.
BeyonD DiversiTy: 
the fundaments of Inclusive Leadership
MORSX 462
SYLLABUS

Professor Nicholas A. Pearce, Ph.D.
@NAPPHD

April 2020
EMBA miami week
MORSX 462: BEYOND DIVERSITY: THE FUNDAMENTALS OF INCLUSIVE LEADERSHIP
EMBA Miami Week – April 2020

PROFESSOR:
Nicholas A. Pearce, Ph.D. (@NAPPHD)
+1 (847) 467-3468
n-pearce@kellogg.northwestern.edu
Office hours: TBA

TEACHING ASSISTANT:
Kyle Dobson, MORS Doctoral Candidate, E-MAIL: kyle.dobson@kellogg.northwestern.edu

COURSE OVERVIEW
Modern leaders find themselves at a critical moment in human history in which our workplaces, marketplaces, and communities are rapidly becoming ever more diverse - on multiple dimensions. Though this reality is often met with fear, anxiety, and confusion, the fact remains that diversity is here to stay. Knowing why and how to harness the power of human difference to facilitate human flourishing is a critical competency for leaders. This five-week course introduces students to the challenges and opportunities of diversity and provides evidence-based insights and practical strategies for how to accelerate full inclusion & belonging as a pathway to sustainability and competitive advantage. By engaging students in intense discussion-based and experiential learning, this survey course equips students with fundamental insights and tools for successfully building and leading organizations that are diverse, equitable, inclusive, and just.

COURSE FORMAT & ATTENDANCE POLICY
In each session, we will focus on a different dimension of the cross-cultural competence and organizational intelligence needed to lead & manage diverse organizations in the multicultural marketplace, starting with your personal diversity journey as an individual, scaling up to the level of teams, organizations, markets, and society. This course is built on the philosophy that we learn from one another – consequently, there will be a strong emphasis on actively engaging in self-reflection, discussing assigned readings and real-world scenarios, sharing experiences, and participating in experiential learning exercises.

Discussions regarding sociocultural diversity often address topics that can engender a degree of controversy and disagreement, and challenge group members to stretch beyond their comfort zones. This is normal and should be expected within the context of our course. Your learning and that of your classmates will be enhanced by your willingness to honestly share your perspectives & experiences as you also actively listen to those of others. I respect – and expect everyone else to respect – the diversity of viewpoints that you will have to share on these topics. In the end, the success of the class depends on your willingness to thoughtfully, respectfully, and actively engage in these difficult conversations.
Because this course relies so extensively on the consistent active engagement of the entire class, it is absolutely essential that you attend all five class sessions. There is a strict no-miss attendance policy for all sections of MORSX 462 – missing 20% of the course (one session) is unacceptable. If you miss one class, the highest grade you can earn in the course is a C; if you miss two classes, you will fail the course.* Moreover, this course does not offer a pass/fail option, as there is no way to get the true value out of the course unless you fully invest yourself in it – both inside and outside of the classroom.

*Exceptions may be made in truly extreme circumstances, such as a major unexpected health challenge, but only if (1) it is clear that you simply had no other choice than to miss class and (2) you provide clear documentation of the extreme circumstances. In fairness to all, the standard for making an exception is very high.

COURSE MATERIALS

All assigned articles can be found in the study.net course pack or our Canvas course page. For Session Five, you will be assigned a book entitled *The Purpose Path: A Guide to Pursuing Your Authentic Life’s Work.*

You should come to each class prepared to summarize key points from the readings and to actively contribute to the conversations and experiential exercises. As you complete each reading, ask yourself:

- What is the basic argument in the article? What are the key concepts/principles?
- So what? How does this matter for me as an individual? For my team/organization? For society?
- What are the implications for the kinds of challenges I might face as a leader?

Please note that no audio or visual recordings (including photos or copies) can be made of the class or course materials (including slides) without the permission of the professor. All exercises and their solutions are confidential. Copyrighted materials cannot be circulated, (micro) blogged about, posted, or shared in any form. If you are unsure as to the application of this guidance, please ask me.

EVALUATION

Your performance in this course will be based upon the following four components:

**COURSE CONTRIBUTION (15%)** – Each class will begin promptly at the start time – your on-time attendance, full preparedness, and complete engagement are both expected and appreciated by your classmates and your professor. In each session, you should be prepared to discuss the readings and/or case(s), share your ideas, and thoughtfully interpret & engage the insights and issues presented by others. Your on-time attendance to all class sessions and the consistency & quality of your contributions are vital to everyone’s learning experience and will factor in to the evaluation of your performance in this class.

Your contribution to class discussions will be evaluated more by the *quality* of your comments than their *quantity*. Quality discussion comments possess one or more of the following attributes:

- Offer a relevant perspective with clear reasoning & careful analysis.
- Apply the theory and concepts offered in the readings and lectures correctly.
- Advance the discussion forward by building on previous contributions with original insights and/or **powerful, provocative questions** – do not merely restate points already made by others.
DIVERSITY REFLECTION ESSAYS (30%) – An important objective of this class is to bridge the gap between theory and practice. Translating insight into action is not always easy, but is essential for effective leadership. In order to facilitate this, you will be asked to complete three “Diversity Reflection Essays.” These individually-authored essays will be of 1-2 pages in length (12-pt. font size, double-spacing, and 1” margins) and will ask you to reflect on the readings and in-class discussion of the previous class by sharing your key takeaways, “aha” moments, as well as your thoughts on how you can apply these lessons to your own practice of leadership. These short essays will be graded on a check-plus, check, check-minus basis. Outstanding essays will go beyond a simple restatement of the in-class highlights/summary of readings to demonstrate a nuanced synthesis of the ideas and a thoughtful explanation of how they can/will be applied to your life and leadership. An additional benefit of these assignments is that they will help you to reflect upon, internalize, and deepen your understanding of key course concepts and how to apply them as you prepare for your final course deliverables.

Each of the three essays will be due via Canvas at the beginning of the following classes:
- Diversity Reflection Essay #1 (based on Session 1): Session 2
- Diversity Reflection Essay #2 (based on Session 2): Session 3
- Diversity Reflection Essay #3 (based on Session 3): Session 4

CROSS-CULTURAL COMPETENCE GROWTH PLAN (25%) – This course is predicated on the belief that you can grow in your cross-cultural competence. Throughout the course, I would like you to record growth goals in relationship to the content areas we discuss in class and those covered in your Intercultural Development Inventory (IDI) report. This assignment is comprised of a two-page essay capturing your key takeaways and lessons learned from the class along with a 1-2 page to-do list of actions that you can and will take to make yourself a more culturally-competent collaborator and leader. I would like you to prepare and submit that essay and “to-do” list – your “Cross-Cultural Competence Growth Plan,” prioritized and dated. This means that you should have identified not only what you will do, but also when and how you will do it. This exercise is mostly for you, but it will also help me see how you are converting the course content into a real action plan for your own growth as a leader.

Your Growth Plan is due via Canvas no later than 11:59pm Central Time on Friday, May 1.

DIVERSITY & INCLUSION CAPSTONE PROJECT (30%) – This final project will provide an opportunity for you to collaborate with a small team of your classmates to deeply investigate the challenges and opportunities related to diversity & inclusion within an industry or sector of your choice (e.g. education, tech, finance, mining, government, philanthropy, arts & entertainment, etc.). Note: Each team must select a different industry/sector, so you will want to have your project plan approved as soon as possible.

Each member of your team will be required to interview at least one senior executive within your chosen industry/sector regarding his/her perspectives regarding the current state of diversity & inclusion in their field, salient opportunities and challenges and opportunities faced by their industry/sector, and any personal, team-level, organization-level, or industry/sector-level strategies that they are currently executing or would recommend in order to resolve those challenges and seize those opportunities.

Following these interviews, using concepts learned in the course, your group will write an analysis of the state of diversity & inclusion in your chosen industry/sector. In your analysis, be sure to include background research on the historical underpinnings of the current state of diversity & inclusion in your chosen industry/sector and your recommendations for strategies and tactics that leaders in your chosen industry/sector should enact (whether individually or collectively) to advance the work of diversity, inclusion, and equity and ultimately, ensure the sustainability of their field.
In your analysis, you might consider addressing some of the following questions (where applicable):

- What are the greatest opportunities for organizations in this industry/sector to take advantage of the benefits of diversity and inclusion?
- How might some of the demographic shifts on the horizon impact this industry/sector? How might these shifts inform/influence workplace and marketplace diversity & inclusion strategy?
- What are common challenges that organizations in this industry/sector have doing business with communities of color? With the LGBT community? Other stigmatized communities?
- What are leaders doing at the organizational or industry/sector-level to address these challenges? What diversity-related opportunities are leaders most eager to take advantage of?
- What is the status of women in the industry/sector?
- How are diversity and inclusion being measured by organizations in the industry? Are there any organizations/consortia that measure and report these data at the industry/sector level?
- What accountability measures are in place for diversity & inclusion goals and strategies at the organizational and/or industry/sector level?
- What should leaders and organizations (both B2B & B2C) do with the insights generated by your team’s analysis? How can they implement some of these ideas within their teams & organizations, as well as with their partners and customers/clients?
- What more should be done to advance diversity & inclusion in this industry/sector?

This final project is an important exercise to further solidify the lessons learned from the course and lay an important foundation for you beyond the course. Your final paper should be approximately 10 pages in length and is due by 11:59pm Central Time on Friday, May 22. Extension requests will not be granted except in extreme circumstances. As a part of this course capstone project, you will also be asked to evaluate the performance of each of your group's members (including yourself). You will find the evaluation form later in this syllabus.

CONSIDERATIONS FOR OUR CLASS COMMUNITY

The Kellogg Honor Code and Kellogg Code of Etiquette both fully apply to this course and represent our shared set of community expectations and values to promote the optimal learning environment for everyone in our School (see http://www.kellogg.northwestern.edu/stu-aff/policies/honorcode.htm and http://www.kellogg.northwestern.edu/stu-aff/policies/etiquette.htm). Academic dishonesty on any submitted work will be reported to the Dean's Office and will result in a failing grade.

Moreover, your fellow classmates and I expect you to:

- Arrive to all class sessions on-time and well-prepared.
- Engage actively and thoughtfully in all class discussions and exercises.
- Not sabotage your colleagues' learning experience by discussing your prior knowledge of any cases/exercises with other students, showing confidential role information to others before/during exercises, and/or not fully engaging in exercises.
- **Not communicate with others (outside of your section) regarding your experience with course cases/exercises** - this would constitute a Kellogg Honor Code violation.
- Not borrow/share notes, handouts, cases, or exams from/with people outside of this class.
- Not use recording devices, cameras, computers, tablets, etc. without permission during class.
- **Not use course handouts, exercises, cases, discussion questions, presentation slides, or any other materials used in this class for purposes other than this class without the express written consent of the professor.**
Objectives:

- Understand the complex interplay between social identity and self-presentation for leaders
- Learn the historical evolution of the rationale for diversity & inclusion in the USA & globally
- Discuss course objectives, philosophy, format, and evaluation criteria
- Develop individual & collective learning goals for the course

Read:

- *Fear of Being Different Stifles Talent* (Yoshino & Smith, 2014)
- BONUS READING: *Dear White Boss* (Caver & Livers, 2002)
- BONUS READING: *The Pressure to Cover* (Yoshino, 2006)
- BONUS READING: *Disentangling the Meanings of Diversity and Inclusion* (Roberson, 2004)
Who Are They?: Navigating Cross-Cultural Interactions
Friday, April 17 • 2:00PM
Class 2

DUE: (1) Diversity Reflection Essay #1 & (2) Intercultural Development Inventory (IDI)

Objectives:
• Learn frameworks for comparing & contrasting cultures and diagnosing cultural differences
• Learn how to work more effectively with people from different cultures
• Gain insight into how cross-cultural (in)competence impacts global business

Read:
• Building Better Global Managers (Rifkin, 2006)
• Navigating the Cultural Minefield (Meyer, 2014)
• The Intercultural Development Inventory (Hammer, 2009)
• BONUS READING: Lost in Translation (Trompenaars & Woolliams, 2011)
Who Is Us?: The Science of Implicit Bias & Mindful Inclusion
Sunday, April 19 • 2:00PM
Class 3

DUE: (1) Diversity Reflection Essay #2 & (2) Complete the Implicit Association Test (IAT)

Objectives:
• Discuss the impact of bias on individuals, teams, and organizations
• Understand the impact of diversity & inclusion in organizations on workplace environment and individual & team performance
• Learn strategies for practicing mindful inclusion in teams and organizations

Read:
• Buried Prejudice (Carpenter, 2008)
• Rethinking Political Correctness (Ely, Meyerson & Davidson, 2006)
• The Measuring Sticks of Racial Bias (Mullainathan, 2015)
• BONUS READING: Women Rising: The Unseen Barriers (Ibarra, Ely & Kolb, 2013)
• BONUS READING: The Teddy-Bear Effect (Livingston & Pearce, 2009)
• BONUS READING: Microinequities: When Small Slights Lead to Huge Problems in the Workplace (Hinton, 2003)

– DENOTES READING AVAILABLE ON CANVAS
Diversity & Inclusion as Organizational Strategy
Monday, April 20 • 2:00PM
Class 4

DUE: Diversity Reflection Essay #3

Objectives:
- Learn about the strategic approaches that organizations use to foster workforce diversity & leverage difference as a source of sustainable competitive advantage
- Understand the impact of diversity & inclusion in organizations on firm strategy, organizational performance, and market leadership

Read:
- Diversity as Strategy (Thomas, 2004)
- Making Differences Matter (Thomas & Ely, 1996)
- BONUS READING: From Affirmative Action to Affirming Diversity (Thomas, 1990)
- BONUS READING: Why Make Diversity So Hard to Achieve? (Rice, 2012)
- BONUS READING: Hacking Tech’s Diversity Problem (Williams, 2014)

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Where Do We Go From Here?
Tuesday, April 21 • 8:30AM
Class 5

DUE ON MAY 1: Cross-Cultural Competence Growth Plan
DUE ON MAY 22: Diversity & Inclusion Capstone Project

Objectives:
- Learn about the impact and future of D&I in organizations from current executives
- Synthesize key learnings from the course & plan action steps for continuing development
- Discuss concrete steps you can take to advance the work of diversity & inclusion in teams, organizations, and society

Read:
- *Letter from Birmingham Jail* (King, 1963)
- *Great Leaders Who Make the Mix Work* (Groysberg & Connolly, 2013)
- *Voices from the Front Lines* (Minguet et al., 2014)
- *Leadership in Your Midst* (Hewlett et al., 2005)
- BONUS READING: *Executive Women and the Myth of Having It All* (Hewlett, 2002)

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About Dr. Nicholas Pearce

A scholar, speaker, entrepreneur, and pastor, Dr. Nicholas Pearce is an award-winning professor of management and organizations at the Northwestern University Kellogg School of Management, the founder and chief executive officer of The Vocati Group, a boutique global executive advisory consultancy, and assistant pastor of Chicago’s historic, 12,000-member Apostolic Church of God. He is the author of *The Purpose Path: A Guide to Pursuing Your Authentic Life’s Work* (St. Martin’s Press).

An internationally recognized thought leader on values-driven leadership and organizational transformation, Dr. Pearce is a trusted adviser, executive coach, and sought-after speaker for corporations, social impact organizations, communities of faith, and governments on six continents. His speaking and consulting clients include AbbVie, Accelerate Institute, Archdiocese of Chicago, Boston Scientific, BP, The Capital Group, Chicago Public Schools, Chicago Urban League, The Episcopal Church, Exelon, Facebook, FMC, Google, Health Care Service Corporation, Hearst, Hyatt, JLL, JPMorgan Chase, KIPP, McDonald’s, Morningstar, NASA, Nike, Novartis, Ronald McDonald House Charities, Surge Institute, Teach for America, U.S. Department of State, U.S. Olympic Committee, USG, Wheaton College, Whirlpool, and YPO. His thought leadership has been featured in global media including *The Atlantic, Bloomberg Businessweek, Chicago Tribune, CNBC, CNN, Crain's Chicago Business, Discovery Channel, Fast Company, Forbes, Fortune, Harvard Business Review, Huffingto...* [rest of the list cut off]

Celebrated for his leadership and scholarship, Dr. Pearce has been a Leadership Greater Chicago Fellow since 2015 and has also been named Kellogg’s MSMS Professor of the Year, a Galbraith Scholar by Harvard University’s Kennedy School of Government, a Public Voices Fellow by The OpEd Project, and one of Chicago’s 40 Game Changers (under 40) by WVON/Ariel Investments. He has also been honored by the Congressional Black Caucus Foundation, Mustard Seed Foundation, National Black MBA Association, and Union League Club of Chicago, among other notable institutions.

Committed to community impact, Dr. Pearce serves as a trustee of the Chicago Children’s Museum, the Field Foundation, Fuller Theological Seminary, McCormick Theological Seminary, and the Seminary Co-Op Bookstores. Previously, Pearce served as a board member of Access Community Health Network, the Chicago Community Trust African American Legacy Fund, and the Harvey Fellows Advisory Board.

Dr. Pearce holds M.S. and Ph.D. degrees from the Kellogg School of Management at Northwestern University and the S.B. in Chemical Engineering & Management from Massachusetts Institute of Technology, with a concentration in Religious Studies earned in conjunction with Harvard Divinity School. Before coming to Kellogg, Pearce worked in Deloitte Consulting’s human capital practice.

A Chicago native, Dr. Pearce resides in his hometown with his wife, Tammy, son, Nolan, and dog, Baxter.
TEAM EVALUATION

Please use this form to evaluate all of the members of your team, including yourself, based on your Diversity & Inclusion Capstone Project and any other group work done together throughout this course.

Evaluate each person on (1) the quality of his/her contribution(s), (2) their dependability/reliability, and (3) the extent to which they demonstrated leadership/initiative using the comparative scale below.

Please submit this group evaluation via Canvas no later than the due date of your final project.

Do not forget to include yourself!

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<tr>
<th>SCORE</th>
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<td>-1</td>
<td>Efforts were clearly not up to par with the other team members</td>
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<td>-0.5</td>
<td>Efforts were somewhat less substantial than most of the other team members</td>
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A meeting of the Schulich Faculty Council for the 2019-2020 academic year was held on Friday February 7th at 11:30am in SSB E111.

In Attendance:

Chair: J. McKellar
Secretary: E. Rush

Voting Members of Faculty Council Present:

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<td>FINE</td>
<td>M. Kamstra, Y. Larkin, Y. Tian</td>
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<td>S. Quail (Library)</td>
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<td>Student Council Reps</td>
<td>N. Nayar (GBC), M. Peav (UBS), A. Peng (UBS), H. Fadlallah (PhD)</td>
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Voting Members of Faculty Council Absent/Regrets:

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Leaves and Sabbaticals:

| D. Cumming | M. Giesler | Y. Pan | V. Trivedi |
| B. Gainer  | L. Ng      | S. Qu  | L. Wright  |

Non-Voting Members of Faculty Council Present

| M. Bhutani       | M. Lefranc  | S. Siddik |
| A. Banerjee (guest) | S. Ly      | N. Sutherland |
| C. Carder        | D. Mak     | S. Tenn   |
| M. Cernea        | A. Mustapha| A. Welsh  |
| T. Fantin        | C. Niederwanger | D. Woticky |
| A. Gravel        | C. Partland| F. Zandi  |
| K. Gray          | K. Rogers (guest) | C. Zhuang |
| L. Hillcoat      | L. Serras  |          |

Non-Voting Members of Faculty Council Absent:

| D. Barret       | C. Ford     | R. Leonidas | R. Leonidas | A. Shaw |
| S. Black        | F. Gorbet   | P. Lyman    | P. Lyman    | S. Sigel |
| E. Caprioni     | C. Hantho   | R. Lynn     | M. Orlan (regrets) | C. Sicoli |
| G. Chen         | A. Harris   | J. Mackay   | B. Pasquali | H. Sinker |
| M. Cohen        | R. Hines    | A. Makooie  | M. Perlis   | J. Thompson |
| D. Conklin      | B. Horowitz | K. Mapa     | E. Peters   | P. Tsaparis |
| M. Cowan        | S. Hussain  | R. Mayer    | J. Pinto    | E. Wang |
| T. D'Agostino   | T. Javed    | A. Middleton| P. Pivato  | B. White |
| P. Deonandan    | J. Jeyakumaran | T. Mcqueen | S. Pulver  | J. Wilkins |
| P. Dillon       | L. Kharlip  | J. Morgan   | R. Ross     | J. Wleugel |
| M. Freedman     | G. Klar     | R. Leonidas | B. Schofield| J. Wu |
| E. Farrell      | P. Laycock  | P. Lyman    | W. Schroeder| D. Yundt |

1. **Welcome & Chair's Remarks**

   The Chair welcomed Council members to the meeting and reviewed the agenda.

2. **Update on Dean Search**

   President & Vice-Chancellor Rhonda Lenton and Provost & Vice-President Academic Lisa Philipps were in attendance to provide the following update on the search process:
   
   - Due to unexpected circumstances with a top candidate, the search has not yielded a new dean.
• The search will be extended again. The following changes will be made moving forward:
  o A new search committee will be formed. Members of the current committee may run for re-election.
  o A new search firm will be contracted.
  o Candidates will be asked up front whether they will accept if offered the job;
  o The same position profile will be used, with minor adjustments as needed.

A number of potential changes to the existing Schulich dean search procedures were suggested throughout the subsequent discussion, to be considered for approval by Faculty Council at a later date in consultation with the President and Provost:

• Make the search non-confidential, if the candidates agree;
• Ensure greater flexibility for considering newly emerging candidates, possibly through the use of rolling deadlines;
• Include the President as a member of the search committee.

Other more general comments from Council members included the need for greater depth in the candidate pool, a desire for faculty members to be able to reach out directly to candidates rather than only through the search consultant, a plan to ensure the insight gained by the existing committee members is not lost when the new committee is formed, and the need for a more innovative approach that allows for consideration of applicants who may not be part of the usual pool of candidates.

The President is currently in the process of putting in place the interim strategy and will send out an update early next week.

Once the Schulich dean search procedures have been revised and approved by the Council in the coming weeks, the election of the search committee membership will begin.

3. Adjournment

K. Tasa moved for adjournment. Seconded by M. Biehl. The meeting adjourned.

Consent Agenda

The following items were approved by consent:

1. BBA/iBBA Program Committee
   a) Course Changes:
      1. IBUS 4200 3.00 Integrative International Business Seminar (pre/co-requisite & description)
      2. MKTG 3150 3.00 Business Case Analysis and Presentation Skills Development (rubric)

2. Master Programs Committee
a) Real Estate & Infrastructure
   1. Master of Real Estate & Infrastructure (MREI) Program Change *(core and elective course requirements, decrease in total credits)*
   2. New Course Proposals:
      i. PROP 6400 3.00 Infrastructure Investment and Finance
      ii. PROP 6500 3.00 Infrastructure Delivery and Finance
   3. Course Changes:
      i. PROP 6300 3.00 Partnership Models for Infrastructure Delivery *(title, restriction)*
      ii. PROP 6600 3.00 Real Estate Portfolio Management *(restriction)*
      iii. PROP 6650 3.00 Commercial Real Estate Asset Management *(title, description, restriction)*
      iv. PROP 6350 3.00 Investing in Infrastructure *(restriction)*
      v. PROP 6750 3.00 Finance for Large Infrastructure *(retirement)*

b) Master of Business Analytics (MBAN)
   1. Program Change *(replacement of MBAN 6300 with MBAN 6200)*
   2. New Course Proposal: MBAN 6200 3.00 Realizing Value from AI & Analytics
   3. Course Change: MBAN 6300 3.00 Case Analysis and Presentation Skills *(retirement)*

3. EMBA Program Committee
   a) Course Changes:
      1. EMBA 6260 2.00 Global Corporate Restructuring *(credit value)*
      2. EMBA 6560 2.00 Strategies for Growth *(credit value)*

4. Minutes of the Last Meeting: 2019.11.08