S.18-116

SFU GRADUATE AND POSTDOCTORAL STUDIES

Simon Fraser University
Maggie Benston Centre 1100
8888 University Drive
Burnaby, BC V5A 1S6

TEL 778.782.3042
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gradstudies@sfu.ca
www.sfu.ca/grad

MEMORANDUM

ATTENTION Senate

DATE October 18, 2018

FROM Jeff Derksen, Chair of Senate Graduate Studies Committee (SGSC)

RE: CSAR Graduate Certificate in Accounting with Digital Analytics

For information:

At its meeting of September 11, 2018, SGSC approved the Cohort Special Arrangements proposal for Graduate Certificate in Accounting with Digital Analytics in the Beedie School of Business. The proposal was received by SCUP at its meeting on October 10, 2018.

The following program proposal and new courses are to be effective Summer 2019.

Beedie School of Business

1) Program proposal: Graduate Certificate in Accounting with Digital Analytics (Cohort Special Arrangements)
2) New calendar entry for Graduate Certificate in Accounting with Digital Analytics
3) New Courses:
   - BUS 830 Foundations of Business Systems and Data
   - BUS 831 Analyzing and Visualizing Accounting Data
   - BUS 832 Data Analytics for Auditing Practice
   - BUS 838 Collaboration, Teaming, and Agile Methods
   - BUS 839 Applied Project

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MEMORANDUM

ATTENTION	Senate Committee on University Priorities (SCUP)	DATE	September 24, 2018
FROM	Jeff Derksen, Chair of Senate Graduate Studies Committee (SGSC)		
RE:	Cohort Special Arrangements proposal for a Graduate Certificate in Accounting with Digital Analytics		

For Information:

At its meeting of September 11, 2018, SGSC approved the Cohort Special Arrangements proposals for a Graduate Certificate in Accounting with Digital Analytics, effective **Summer 2019.**

SFU BEEDIE SCHOOL OF BUSINESS

Segal Graduate School | Office of the Associate Dean, 500 Granville Street, Vancouver, BC V6C 1W6 | TEL 778.782.9255, FAX 778.782.5122 | busadmin@sfu.ca

Memo to SGSC

To: Senate Graduate Studies Committee
From: Andrew Gemino, Associate Dean, Graduate Programs
Re: CSAR New Program Proposals
Date: August 23, 2018 REVISED: September 17, 2018

The following curriculum revisions have been approved by the Beedie School of Business and are forwarded to the Senate Graduate Studies Committee for approval. These curriculum items should be effective for **Summer 2019.**

Please include them on the next SGSC agenda.

- **CSAR new program proposal: Graduate Certificate in Accounting with Digital Analytics**
- **CSAR new program proposal: Master of Science in Accounting with Cognitive Analytics**

Thank you for your attention herein. Should you have any questions or concerns, please do not hesitate to contact me.

Dr. Andrew Gemino
Professor, Management Information Systems
Associate Dean, Graduate Programs, Beedie School of Business

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Additional Rationale Memo

To: Senate Graduate Studies Committee
From: Andrew Gemino, Associate Dean, Graduate Programs
Re: CSAR New Program Proposals
Date: September 17, 2018

The following curriculum revisions have been approved by the Beedie School of Business and are being forwarded to the Senate Graduate Studies Committee for approval. These curriculum items should be effective for **Summer 2019:**

- New program proposal (Cohort Special Arrangement):
  - **Graduate Certificate in Accounting with Digital Analytics**
- New program proposal (Cohort Special Arrangement):
  - **Master of Science in Accounting with Cognitive Analytics**

The credential names differ to reflect the different levels of knowledge associated with the graduate certificate and MSc degree. The graduate certificate program is intended to solidify the foundation for digital analytics, and the MSc builds upon this foundation with applications of predictive analytics and machine learning techniques that are signature to cognitive analytics approaches.

Students will receive either the graduate certificate credential or the MSc credential, depending on their entry pathway. Not all students will proceed from the graduate certificate to the MSc credential. As such, these programs are presented as stand-alone credentials which the naming now reflects.

Thank you for your attention herein. Should you have any questions or concerns, please do not hesitate to contact me.

Dr. Andrew Gemino
Professor, Management Information Systems
Associate Dean, Graduate Programs, Beedie School of Business

SFU SIMON FRASER UNIVERSITY
ENGAGING THE WORLD

Graduate Certificate in Accounting with Digital Analytics

Cohort Special Arrangement Program Proposal

August 2018

Beedie School of Business

Executive Summary

As institutions and their audit committees are increasingly concerned with technology and data analysis, providing instruction in the form of a Certificate in Accounting with Digital Analytics will mobilize the data analysis knowledge expected of professional financial services employees in order for them to advance professionally. By creating educational programs that support the development of data analysis skills, financial service professionals will be prepared to embrace the changes coming to the auditing profession and obtain the skills they need to play a vital role in helping client organizations create value. This will enable auditors to:

- leverage enterprise data to enhance audit quality with more granular analysis
- uncover data patterns and relationships that can improve audit quality
- leverage investments that other institutions are making in technology

The emergence of data analysis is a critical component of audit technique and practice. This provides a clear need to develop and maintain leading analytical capabilities within the financial industry, and an opportunity for SFU to become a leading educational provider for these capabilities through the proposed Graduate Certificate in Accounting with Digital Analytics.

PART A [3 pages maximum]

Proposed credential to be awarded

Graduate Certificate in Accounting with Digital Analytics

Location of program

Primarily online, with some face-to-face sessions (Vancouver: Segal campus, and offsite)

Academic unit(s) offering proposed program

Beedie School of Business

Anticipated program start date

Summer 2019

Anticipated completion time

Two terms

Summary of proposed program

a) Aims, goals and/or objectives of the proposed program

Creating "next generation" accountants through innovative programming. To prepare finance industry employees with the skills for data and analytics and develop the "next generation" accountant, who will be:

- knowledgeable about how the profession has evolved and advanced technologically
- accomplished in best practices in accounting, auditing, tax, and financial reporting
- empowered with data and able to use advanced data and analytic technologies
- prepared to collaborate and innovate with teams of business professionals

The purpose of the proposed certificate is to further develop auditing with data analytics capabilities. With analytical capabilities at the heart of the program, Beedie aims to design practical and interactive courses empowering this next generation of auditors for excellence, embracing change, innovation, and critical thinking. To accomplish this objective, the integration of four skill dimensions is proposed:

i. advanced auditing techniques
ii. data and visualization skills
iii. statistical and analytical capabilities
iv. advanced leadership/teaming skills

b) Anticipated contribution of the proposed program to the mandate and strategic plan of the institution

In 2017, the Beedie School identified its vision as the following statement: "We develop innovative and socially responsible business leaders with a global perspective through education, inspired by research and grounded in practice."

A focus on innovation and collaborative capabilities, with attention on data and analytical skills, educates business professionals by developing these skills and grounding them in everyday business practice. The program is therefore highly aligned with Beedie's mission statement. In turn, Beedie's focus on innovation also aligns with the SFU Innovates overall strategy (http://innovates.vpr.sfu.ca/ourstrategy). The proposed certificate stands on the entrepreneurial education pillar of the SFU Innovates strategy, and challenges financial business professionals to innovate their practice with data and analytic capabilities.

c) Potential areas/sectors of employment for graduates and/or opportunities for further study

As the proposed program is geared towards students with high levels of familiarity with accounting, possibly at the Junior Accountant level, promotion within company and/or industry is a key target area for potential graduates. In addition, Beedie is proposing a

one-year Master of Science in Accounting with Cognitive Analytics, allowing for further study opportunities.

d) Delivery methods

A cohort-based, blended education delivery approach including face-to face-sessions integrated with an online learning management system (LMS). Online programming through CANVAS will provide the core of learning environment, enabling students to immerse themselves in learning on their own schedule while encouraging a collaborative, team-based approach. This collaborative approach is further supported by face-to-face sessions for each cohort. A cohort model is proposed in order for students to apply cumulative skills in the final course, an integrative applied project centered around teaming and applying data analytic skills learned in the first four courses.

e) Related programs in the institution or other British Columbia post-secondary institutions

There are several big data and analytic academic programs in post-secondary institutions within BC, primarily at the Master's level. Most of these programs are focused on developing computing science and technical skills for data scientists. The demand for these skills is high and the need for new programs is clear. The proposed certificate focuses on bringing basic data and analytic skills to accounting professionals. Business professionals in accounting see the value of adding data and analytical skills, but do not intend to become data scientists nor data management professionals. As the proposed certificate program is intended to teach data and analytic skills in a business context. It will not duplicate programs with a more technical, statistical focus.

BCIT – Applied Data Analytics (ADA) Certificate www.bcit.ca/study/programs/5512cert

The BCIT ADA certificate program provides a computer science foundation for data analytics systems. It is designed to educate data analyst. The proposed certificate program does not duplicate the program described in this proposal because the proposed program assumes students are business professionals and the area of study is data and analytical skills within the accounting practice.

Contact information

Ali Dastmalchian, Dean, Beedie School of Business: beedie_ea@sfu.ca 778.782.7664
Andrew Gemino, Associate Dean, Graduate Programs: gemino@sfu.ca 778.782.3653
Maria Szymczak, Executive Director, Graduate Programs: mdelguer@sfu.ca 778.782.5023
Jamal Nazari, Associate Professor, Accounting: jnazari@sfu.ca 778.782.4604

PART B [2 pages maximum]

PROGRAM DETAILS

a) Graduation requirements, target audience

The proposed Graduate Certificate in Accounting with Digital Analytics consists of course requirements and an applied project for a minimum of 15 units. Courses from other SFU graduate business programs, or a special topic course, may be substituted at the discretion of the academic director.

Students must complete all of:
BUS 830 – Foundations of Business Systems and Data (3)
BUS 831 – Analyzing and Visualizing Accounting Data (3)
BUS 832 – Data Analytics for Auditing Practice (3)
BUS 838 – Collaboration, Teaming, and Agile Methods (3)
And a project:
BUS 839 – Applied Project (3)

Students are expected to complete the program requirements within two terms.

The proposed certificate is geared towards employees already working within the accounting and auditing sector, primarily at the Junior Accountant level. Therefore, financial services employees will be the targeted recruitment group. Due to the blended delivery model, it is predicted that primarily domestic students will be interested. The primarily online delivery model, with limited face-to-face sessions, allows for maximum flexibility for full-time employees to complete the program while remaining employed full-time.

b) Admission requirements

Applicants must satisfy the University admission requirements as stated in Graduate General Regulations 1.3 in the SFU Calendar. An undergraduate degree in business, management, commerce, or other suitable quantitatively oriented programs is required and a minimum of two years of applicable work experience. Candidates holding a professional designation such as a CPA and evidence of strong mathematics competency would also be ideal candidates.

c) Evidence of student interest and labour market demand

The Graduate Management Admissions Council (GMAC) owns and administers the Graduate Management Admission Test® (GMAT®) exam. The GMAT is used by more than 7,000 graduate programs worldwide. Approximately 9 out of 10 new MBA enrollments globally are made using a GMAT score and more than 200,000 candidates take the GMAT exam every year. The information they provide is perhaps the best source for considering student demand. In recent papers, GMAC has noted the significant demand for Masters of Analytics programs.[1] A 2011 report from McKinsey Consulting[2] has suggested that "by 2018, the United States alone could face a shortage of between 140,000 and 190,000 of works with analytical skills". Each of these reports suggests strong general demand for analytics programming. Evidence of the demand within the accounting profession is also significant. The Chartered Professional Accountant (CPA) has recognized the changes data and analytical skills are bringing to the profession.[3]

These articles suggest a significant unmet need for further education in the area of data analytics, and specifically in the area of accounting/audit/tax. The type of jobs that candidates are likely to access after graduation include analytic team leads, lead business analysts, managers of business analytics teams, and promotions to senior levels.

d) Eligibility for scholarships, awards, and financial aid

Not eligible for scholarships, awards, and financial aid at this time. The Certificate in Accounting with Digital Analytics is proposed as a Cohort Special Arrangement program, which is not eligible for awards adjudicated by the Senate Graduate Awards Adjudication Committee.

RESOURCES

a) Enrolment Plan

We expect to run the proposed Certificate in parallel with a proposed MSc in Accounting with Cognitive Analytics. Given current expressions of interest from potential students, we expect to be able to recruit 60-70 Certificate students in the first year (Summer 2019). Our expectations are that 50% of students who enroll in the Certificate will move immediately into the proposed MSc in Accounting with Cognitive Analytics.

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[1] For example, the following GMAC report released Jun 16, 2016 and accessed on Jun 20, 2018: https://www.gmac.com/market-intelligence-and-research/research-insights/curriculum-and-delivery/dataanalytics.aspx The trend has continued as noted in a follow-up article published on July 13, 2017 and accessed on Jun 20, 2018: https://www.gmac.com/market-intelligence-and-research/researchinsights/curriculum-and-delivery/demand-for-analytics-goes-beyond-master-of-data-analytics-programs.aspx

[2] Report accessed June 20, 2018. https://www.mckinsey.com/business-functions/digital-mckinsey/ourinsights/big-data-the-next-frontier-for-innovation

[3] See for instance the following g article accessed June 20, 2018: https://www.cpajournal.com/2017/06/26/big-data-business-analytics-implications-audit-profession

b) Resources required and/or available to implement the program (financial and personnel) including any new faculty appointments

Existing resources will be utilized. Canvas will be the online course delivery tool. Face-to-face sessions are minimal, meaning limited physical resources are needed. Face-to-face sessions will be held at the Segal Graduate School or offsite utilizing corporate space with an industry partner organization, with no requirement for additional lab space, library space, or other on-campus facilities. Students will not utilize in-house Beedie resources such as the Career Management Centre or student engagement opportunities. Administrative resources will come from existing Beedie Graduate Program staff at the Segal Graduate School. Existing faculty will be utilized, with no new hires planned.

c) Faculty member's teaching/supervision

SFU Beedie has exceptional, world class faculty with skills and expertise in data and analytics. Below provides example of credentials and profiles of some of our outstanding faculty in this area.

Accounting

Dr. Michael Favere-Marchesi: Ph.D. (University of Southern California), Master of Accountancy, B.Sc. (Brigham Young University), C.P.A. (California), Certified Internal Auditor profile

Dr. Jamal Nazari: Ph.D. Accounting (U of Calgary), MSc Accounting (U of Tehran), BA Accounting (U of Mashhad), CPA (BC), CMA, CGA (Alberta) profile

Dr. Kim Trottier: Ph.D. Accounting (UBC), MSc Accounting (UBC), BComm (Ottawa University), CPA, CA (Ontario) profile

Information Systems

Dr. Andrew Gemino: Ph.D. (University of British Columbia); M.B.A., M.A., B.A. (Simon Fraser University) profile

Dr. Nilesh Saraf: Ph.D. (University of Southern California), M.B.A. (Indian Institute of Management, Lucknow), B.Eng. (Maharaja Sayajirao U., India) profile

Dr. Peter Tingling: Ph.D. (U. of Western Ontario), M.B.A. (Wilfrid Laurier), CPA, CGA profile

Operations Management

Dr. Payman Jula: Ph.D. (UC Berkeley), M.Sc. (Western Michigan), B.Sc. (Tehran) profile

Dr. Michael Johnson: Ph.D., M.A.Sc., B.Eng, (Windsor) profile

Dr. Srini Krishnamoorthy: PhD (Columbia), PGDB (Indian institute of Management Lucknow), B.Tech. (Indian Institute of Technology, Madras) profile

Marketing

Dr. Bob Krider: Ph.D., M.Sc., B.Sc. (University of British Columbia) profile

Dr. Jason Ho: Ph.D. (University of British Columbia), Master of Philosophy in Marketing (Chinese University of Hong Kong) profile

Dr. Srabana Dasgupta: Ph.D. (University of Southern California), M.A. (Delhi School of Economics), B.A. (Jadavpur University) profile

d) Proposed tuition and other program fees including a justification

Tuition is to be charged on a per credit basis, using the existing Masters of Science in Finance (MSc Fin) tuition of $666.88 per unit plus additional student fees of approximately $200 per term (without a U-Pass, as the proposed program is primarily delivered online) as per the academic calendar. Certificate budget:

Certificate Cohort FINANCIAL SUMMARY Revenue	2019
Tuition Certificate (80 students)	800,400
Total Revenue	800,400
Tuition to Beedie minus VPA share (35.1)	**519,460**
One Time Development Fee	125,000
Total Revenue To Beedie	**644,460**

Total Revenue per student	
Certificate	10,005
Beedie Revenue per student	
Certificate	6,493

Expenses		
Program Salaries		
Academic Salaries:		
Certificate Faculty Salary	177,000	
MSc Faculty Salary	0	
TA	12,000	
Program Assistant Salary & Benefits (shared)	20,000	
Total Program Salaries	209,000	
Operations Cost		
Software Purchase Costs	1,500	Specialized software/simulations may be used
General Office Expenses	200	
Courier/Messenger Expense	500	
Program & Course Development	125,000	
Computing Services Charges	25	
Total Operations	127,225	
TOTAL EXPENSES	336,225	
Revenue - EXPENSES	308,235	

PART C: Appendices

Appendix 1 Calendar entry

Appendix 2 New course forms with course outlines

Appendix 3 Letter of support

Appendix 4 Faculty biographies

Standard Format for Graduate Program Calendar Entries

Accounting with Digital Analytics

Graduate Certificate

Description of Program

As institutions and their audit committees are increasingly concerned with technology and data analysis, providing instruction in the form of a Certificate in Accounting with Digital Analytics delivers the data analysis knowledge expected of professional financial services employees in order for them to advance professionally. Through educational programs that support the development of data analysis skills, financial service professionals will be prepared to embrace the changes coming to the auditing profession and obtain the skills they need to play a vital role in helping client organizations create value.

Admission Requirements

Applicants must satisfy the University admission requirements as stated in Graduate General Regulation 1.3 in the SFU Calendar. An undergraduate degree in business, management, commerce, or other suitable quantitatively oriented programs is required and a minimum of two years of applicable work experience. Candidates holding a professional designation such as a CPA and evidence of strong mathematics competency would also be ideal candidates.

Program Requirements

The Graduate Certificate in Accounting with Digital Analytics consists of course work and an applied project for a minimum of 15 units. Courses from other SFU graduate business programs, or a special topic course, may be substituted at the discretion of the academic director.

Students must complete all of

BUS 830 – Foundations of Business Systems and Data (3)

BUS 831 – Analyzing and Visualizing Accounting Data (3)

BUS 832 – Data Analytics for Auditing Practice (3)

BUS 838 – Collaboration, Teaming, and Agile Methods (3)

And a project

BUS 839 – Applied Project (3)

Program Length

Students are expected to complete the program requirements within two terms.

Academic Requirements within the Graduate General Regulations

All graduate students must satisfy the academic requirements that are specified in the graduate general regulations, as well as the specific requirements for the program in which they are enrolled.

SFU GRADUATE AND POSTDOCTORAL STUDIES

New Graduate Course Proposal

Course Subject (eg. PSYC) BUS	Number (eg. 810) 830	Units (eg. 4) 3

Course title (max. 100 characters)

Foundations of Business Systems and Data

Short title (for enrollment/transcript - max. 30 characters) **Bus Systems & Data**

Course description for SFU Calendar (course descriptions should be brief and should never begin with phrases such as "This course will..." or "The purpose of this course is..." If the grading basis is satisfactory/unsatisfactory include this in the description)

Enterprise information systems, the relational database systems that underlie them, and creating value through competitive analytics. Develop an understanding of database querying and analytical applications to inspect, summarize, and transform data.

Rationale for introduction of this course

New course for the Graduate Certificate in Accounting with Digital Analytics

Term of initial offering (eg. Fall 2019) Summer 2019	Course delivery (eg. 3 hrs/week for 13 weeks) 3 hrs/week for 13 weeks
Frequency of offerings/year Once/year	Estimated enrollment per offering 40-50

Equivalent courses (courses that replicates the content of this course to such an extent that students should not receive credit for both courses)

n/a

Prerequisite and/or Corequisite n/a

Criminal record check required? ☐ Yes if yes is selected, add this as prerequisite

Additional course fees? ☐ Yes ☑ No

Campus where course will be taught ☐ Burnaby ☐ Surrey ☑ Vancouver ☐ Great Northern Way ☑ Off campus

Course Components * ☑ Lecture ☐ Seminar ☐ Lab ☐ Independent ☐ Capstone ☐ _____

Grading Basis ☑ Letter grades ☐ Satisfactory/ Unsatisfactory ☐ In Progress / Complete

Repeat for credit? ☐ Yes ☑ No	Total repeats allowed? 0	Repeat within a term? ☐ Yes ☑ No
Required course? ☑ Yes ☐ No	Final exam required? ☐ Yes ☑ No	Capstone course? ☐ Yes ☑ No

Combined with a undergrad course? ☐ Yes ☑ No If yes, identify which undergraduate course and the additional course requirements for graduate students:

* See important definitions on the curriculum website.

RESOURCES

If additional resources are required to offer this course, provide information on the source(s) of those additional resources.

Faculty member(s) who will normally teach this course
Andrew Gemino, Nilesh Saraf, Peter Tingling
Additional faculty members, space, and/or specialized equipment required in order to offer this course

CONTACT PERSON

Academic Unit / Program	Name (typically, Graduate Program Chair)	Email
Beedie Graduate Programs	Lesley McKay	buscoord@sfu.ca

ACADEMIC UNIT APPROVAL

A course outline must be included.

Non-departmentalized faculties need not sign

Graduate Program Committee	Signature	Date
Department Chair	Signature	Date

FACULTY APPROVAL

The course form and outline must be sent by FGSC to the chairs of each FGSC (fgsc-list@sfu.ca) to check for an overlap in content

Overlap check done? ☑ YES

This approval indicates that all the necessary course content and overlap concerns have been resolved. The Faculty/Academic Unit commits to providing the necessary resources.

Faculty Graduate Studies Committee	Signature	Date
Andrew Gemino		August 23, 2018

A library review will be conducted. If additional funds are necessary, DGS will contact the academic unit prior to SGSC.

SENATE GRADUATE STUDIES COMMITTEE APPROVAL

Senate Graduate Studies Committee	Signature	Date
Jeff Derksen		SEP 2 4 2018

ADMINISTRATIVE SECTION (for DGS office only)
Library Check: SEP 0 7 2018
Course Attribute:
Course Attribute Value:
Instruction Mode:
Attendance Type:

If different from regular units:
Academic Progress Units:
Financial Aid Progress Units:

SFU **BEEDIE SCHOOL OF BUSINESS**

BUS 830: Foundations of Business Systems and Data

Instructor:
Office Phone:
Email:

Semester: Summer 2019
LMS: canvas.sfu.ca

COURSE DESCRIPTION

Introduces the foundations of business processes and the business value of data in enterprise systems. A focus is placed on business processes and the relational database management systems underlying these processes. Introductions to business process mapping (MS Visio), Structured Querying Language (SQL) and visual querying methods (MS Access) for accounting data are provided. Skills in using spreadsheets (MS Excel) to summarize, transform and clean imported accounting data are developed in addition to introductory skills in attaching to a relational database and developing descriptive summaries of accounting data using visual analytic software (Tableau).

OBJECTIVES

The following are course level goals. It is expected that participants completing the course will demonstrate a proficiency in the following:

- Understanding fundamental technology elements underlying competitive analytics in organizations.
- Identifying business processes that could benefit from process redesign.
- Mapping business processes
- Interacting with relational database management systems that include structured and unstructured accounting data.
- Utilizing SQL to design and interpret basic join queries from a relational database.
- Importing data from SQL queries into spreadsheets (MS Excel) to further summarize, clean and transform accounting data as a basis for analysis.
- Attaching visual analytic applications (Tableau) to relational databases in order to generate descriptive visual summaries of accounting data.

COURSE WORKLOAD EXPECTATIONS

You can expect 8 - 10 hours of work weekly for each course you are registered in. These activities will include participating in online activities, preparing readings and cases, answering practice questions, doing library research and working on group assignments with other students. Courses may be scheduled in a compressed format where classes are held in intensive session, but expectations of consistent preparation and participation remain for the length of the course.

BOOK AND MATERIALS

1. Owen, G. (2016). *Using Microsoft Excel and Access 2016 for Accounting*. Cengage Learning.
2. Parker, D. J. (2013). *Microsoft Visio 2013 Business Process Diagramming and Validation*. Packt Publishing Ltd.
3. Ryan, L. (2018). Visual Data Storytelling with Tableau, Pearson Addison Wesley.

LEARNING AND ASSESSMENT

Evaluation in this course will be based on a combination of group and individual work. As in all courses in the Beedie School of Business, grading norms will be observed. In other words, students with the top marks relative to the class average will receive the top grades.

SFU BEEDIE SCHOOL OF BUSINESS

Individual	Weekly Quizzes	15%
	Individual Querying Assignment	20%
	Individual Visual Analysis Assignment	20%
Group	Group Process Mapping Assignment	20%
	Group In-class Exercise	25%
	Total	100%

Weekly Quizzes Due: Weekly, Sunday at 11:00 pm

A series of weekly multiple-choice quizzes will be provided through Canvas. Questions are drawn randomly from a question pool and provided to students in a timed format. Questions are focused on the material to be presented in the week to come and quizzes serve as a preparation for this material. Students have 30 minutes to answer 10 questions in an open book format. Students will receive feedback on their mark once the quiz closes.

Group Business Process Assignment Due:

Students will work in groups of 3-4 to create a process map for a business process defined in a case. Students will be required to use MS Visio to map the business process. Assignment requirements also include a short analysis of the process along with 2 recommendations for how to improve the overall process. Groups will be assessed on their ability to effectively visualize the business process along with the quality of the process improvement recommendations.

Individual Querying Assignment Due:

Students will work through a series of questions and provide the SQL code for each of the proposed queries. In addition, students will be asked to query data compiled in a relational database and then import this data into MS Excel. Students then use spreadsheet features to clean and transform data as described in the project. Students will be evaluated on the quality of the resulting transformed Excel worksheet.

Individual Visual Analysis Assignment Due:

Students will compile a brief visual analysis of an accounting dataset. The data set will be created from a database query that the students design. Students will use a visual analytic tool (Tableau) to provide a summary of the data in the query. Students will be evaluated on the quality of the visual summary and a short write-up of the analysis.

Group In-class Exercise Due

Students will work in groups of 3-4 in a time-limited, in-class assignment to integrate their learning about processes, querying and visual analysis. Students will be given a business process analysis case and then will be required to develop a business process map, develop queries that provide data about the process and then create a brief analysis of the process with some suggestions for improvement. Groups will be assessed on their ability to effectively visualize the business process, create the necessary queries and provide high-quality process improvement recommendations.

COURSE STRUCTURE

This course will consist of a blended approach with face-to-face and on-line components. Students work individually and as part of a group to complete course requirements.

SFU BEEDIE SCHOOL OF BUSINESS

READING SCHEDULE

Readings are available electronically and can be found on Canvas or from the library. They are labelled accordingly on the course website under the heading "Resources".

Session 1: Competing on Analytics

1. Davenport, T. H. (2006). Competing on analytics. *Harvard Business Review*, *84*(1), 98.
2. Parker, D. J. (2013). *Microsoft Visio 2013 Business Process Diagramming and Validation*. Packt Publishing Ltd., Chapter 1.

Session 2: Business Process Mapping

1. Parker, D. J. (2013). *Microsoft Visio 2013 Business Process Diagramming and Validation*. Packt Publishing Ltd., Chapters 2, 3 and 4.

Session 3: Business Process Mapping and Validation

1. Parker, D. J. (2013). *Microsoft Visio 2013 Business Process Diagramming and Validation*. Packt Publishing Ltd., Chapters 5, 6 and 7.

Session 4: Business Process Improvement

1. Borthick, A. F., Schneider, G. P., & Vance, A. (2011). Using graphical representations of business processes in evaluating internal control. *Issues in Accounting Education*, *27*(1), 123-140.
2. Parker, D. J. (2013). *Microsoft Visio 2013 Business Process Diagramming and Validation*. Packt Publishing Ltd., Chapters 8 and 9.

Session 5: Business Process Improvement Reporting

1. Parker, D. J. (2013). *Microsoft Visio 2013 Business Process Diagramming and Validation*. Packt Publishing Ltd., Chapter 10 and 11.

Session 6: Introduction to SQL in Accounting

1. Rezaee, Z., Sharbatoghlie, A., Elam, R., & McMickle, P. L. (2002). Continuous auditing: Building automated auditing capability. *Auditing: A Journal of Practice & Theory*, *21*(1), 147-163.
2. Owen, G. (2016). *Using Microsoft Excel and Access 2016 for Accounting*. Cengage Learning., Chapter 1 through 5 (for review).

Session 7: Introduction to Database Querying

1. Owen, G. (2016). *Using Microsoft Excel and Access 2016 for Accounting*. Cengage Learning., Chapters 6 and 7.

Session 8: Visual Querying using MS Access

1. Owen, G. (2016). *Using Microsoft Excel and Access 2016 for Accounting*. Cengage Learning., Chapters 8 and 9.

Session 9: Developing Reports

1. Owen, G. (2016). *Using Microsoft Excel and Access 2016 for Accounting*. Cengage Learning. Chapters 10 and 11.

Session 10: Introduction to Data Visualization

1. Ryan, L. (2018). Visual Data Storytelling with Tableau, Pearson Addison Wesley. Chapter 1 and 2.

SFU BEEDIE SCHOOL OF BUSINESS

Session 11: Data Visualization in Accounting

1. Dilla, W., Janvrin, D. J., & Raschke, R. (2010). Interactive data visualization: New directions for accounting information systems research. *Journal of Information Systems*, *24*(2), 1-37.
2. Ryan, L. (2018). Visual Data Storytelling with Tableau, Pearson Addison Wesley. Chapter 3.

Session 12

No readings. In-class exercise.

ACADEMIC HONESTY

Plagiarism is the unacknowledged use of other people's ideas or work. Plagiarism is often unintentional and can be avoided through careful work habits and familiarity with academic conventions. But whether intentional or unintentional, plagiarism is recognized as a serious academic offence. The university's strong stance against plagiarism reflects our shared commitment to intellectual honesty, and the original contributions of each student and faculty member validate and sustain the university as a vital centre of knowledge and research. It is your responsibility, as a student and a member of the academic community, to ensure that you have correctly acknowledged and cited all the resources you have used in writing your work.

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- Submitting the same work more than once without prior approval
- Translating a work from one language to another without complete and proper citation.
- Cheating
- Impersonation (having someone else write your exam)
- Submitting false records or information (forged medical notes)
- Stealing or destroying the work of another student
- Unauthorized or inappropriate use of computers, cell phones, calculators and other forms of technology in course work, assignments or examinations
- Falsifying material that is subject to academic evaluation
- Any activity not specifically outlined in this document that is intended to circumvent the standards of academic honesty

You are expected to post comments, and write reports and exams in your own words. Whenever you take an idea or passage from another author, you must acknowledge it by appropriately citing the source. If you are struggling to complete an assignment, please see your instructor or the program office for additional assistance.

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SFU GRADUATE AND POSTDOCTORAL STUDIES

New Graduate Course Proposal

Course Subject (eg. PSYC) BUS	Number (eg. 810) 831	Units (eg. 4) 3

Course title (max. 100 characters)

Analyzing and Visualizing Accounting Data

Short title (for enrollment/transcript - max. 30 characters) **Analyzing & Visualizing Data**

Course description for SFU Calendar (course descriptions should be brief and should never begin with phrases such as "This course will..." or "The purpose of this course is..." If the grading basis is satisfactory/unsatisfactory include this in the description)

An exploration of financial and non-financial data using summary measures, predictive models for decision-making, and graphic visualizations.

Rationale for introduction of this course

New course for the Graduate Certificate in Accounting with Digital Analytics

Term of initial offering (eg. Fall 2019) Summer 2019	Course delivery (eg. 3 hrs/week for 13 weeks) 3 hrs/week for 13 weeks
Frequency of offerings/year Once/year	Estimated enrollment per offering 40-50

Equivalent courses (courses that replicates the content of this course to such an extent that students should not receive credit for both courses)

n/a

Prerequisite and/or Corequisite n/a

Criminal record check required? ☐ Yes if yes is selected, add this as prerequisite

Additional course fees? ☐ Yes ☑ No

Campus where course will be taught ☐ Burnaby ☐ Surrey ☑ Vancouver ☐ Great Northern Way ☑ Off campus

Course Components * ☑ Lecture ☐ Seminar ☐ Lab ☐ Independent ☐ Capstone ☐ _____

Grading Basis ☑ Letter grades ☐ Satisfactory/ Unsatisfactory ☐ In Progress / Complete

Repeat for credit? ☐ Yes ☑ No	Total repeats allowed? 0	Repeat within a term? ☐ Yes ☑ No
Required course? ☑ Yes ☐ No	Final exam required? ☐ Yes ☑ No	Capstone course? ☐ Yes ☑ No

Combined with a undergrad course? ☐ Yes ☑ No If yes, identify which undergraduate course and the additional course requirements for graduate students:

* See important definitions on the curriculum website.

RESOURCES

If additional resources are required to offer this course, provide information on the source(s) of those additional resources.

Faculty member(s) who will normally teach this course
Michael Favere-Marchesi, Jamal Nazari, Kim Trottier
Additional faculty members, space, and/or specialized equipment required in order to offer this course

CONTACT PERSON

Academic Unit / Program	Name (typically, Graduate Program Chair)	Email
Beedie Graduate Programs	Lesley McKay	buscoord@sfu.ca

ACADEMIC UNIT APPROVAL

A course outline must be included.

Non-departmentalized faculties need not sign

Graduate Program Committee	Signature	Date
Department Chair	Signature	Date

FACULTY APPROVAL

The course form and outline must be sent by FGSC to the chairs of each FGSC (fgsc-list@sfu.ca) to check for an overlap in content

Overlap check done? ☑ YES

This approval indicates that all the necessary course content and overlap concerns have been resolved. The Faculty/Academic Unit commits to providing the necessary resources.

Faculty Graduate Studies Committee	Signature	Date
Andrew Gemino		August 23, 2018

A library review will be conducted. If additional funds are necessary, DGS will contact the academic unit prior to SGSC.

SENATE GRADUATE STUDIES COMMITTEE APPROVAL

Senate Graduate Studies Committee	Signature	Date
Jeff Derksen		SEP 24 2018

ADMINISTRATIVE SECTION (for DGS office only)
Library Check: SEP 07 2018
Course Attribute: _____
Course Attribute Value: _____
Instruction Mode: _____
Attendance Type: _____

If different from regular units:
Academic Progress Units: _____
Financial Aid Progress Units: _____

SFU BEEDIE SCHOOL OF BUSINESS

BUS 831: Analyzing and Visualizing Accounting Data

Instructor:
Office Phone:
Email:

Semester: Summer 2019
LMS: canvas.sfu.ca

COURSE DESCRIPTION

Explores accounting data using univariate descriptive statistics, sampling and testing procedures for summary measures. Develops exploratory data analysis techniques and graphic visualizations to display relationships in accounting data that can be communicated to an executive audience. Introduces basics for multivariate predictive models that support accounting decision making. Develops basic multivariate predictive models to explore and validate data relationships and develops skills in communicating these relationships to business professionals.

OBJECTIVES

The following are course level goals. It is expected that participants completing the course will demonstrate a proficiency in the following:

- Apply spreadsheet function (Excel) to create randomized samples and validate procedure.
- Use pivot tables in spreadsheet (Excel) for exploratory data analysis of accounting data.
- Apply visual analytic software (Tableau) to visualize descriptive statistics from accounting data.
- Perform a confirmatory data analysis and identify outliers in an accounting data population.
- Identify appropriate statistical techniques and test statistic(s) for several business hypotheses.
- Understand the value of data mining and using a data analysis method (e.g. CRISP-DM).
- Utilize several multivariate predictive techniques for an accounting related issue.
- Develop and validate a multivariate predictive analytic model for an accounting issue.

COURSE EXPECTATIONS

You can expect 8 - 10 hours of work weekly for each course you are registered in. These activities will include participating in online activities, preparing readings and cases, answering practice questions, doing library research and working on group assignment with other students. Courses may be scheduled in a compressed format where classes are held in intensive session, but expectations of consistent preparation and participation remain for the length of the course.

BOOK AND MATERIALS

1. Appelbaum, D. (2017). Introduction to Data Analysis for Auditors and Accountants. The CPA Journal, 7.
2. Black, Ken and Castillo, Ignacio. (2014). Business Statistics for Contemporary Decision Making, 2nd Canadian Edition. Wiley.
3. Ferrari, Alberto and Russo, Marco, (2017). The Definitive Guide to DAX: Business intelligence with MS Excel, MS SQL Server, and Power BI. Microsoft Press.
4. Ryan, L. (2018). Visual Data Storytelling with Tableau, Pearson Addison Wesley.
5. Selected readings and custom courseware may be provided on Canvas.

LEARNING AND ASSESSMENT

Evaluation in this course will be based on a combination of group and individual work. As in all large courses in the Beedie School of Business, grading norms will be observed. In other words, students with the top marks relative to the class average will receive the top grades.

SFU BEEDIE SCHOOL OF BUSINESS

Individual	Individual Assignment: Sampling Procedure	20%
	Individual Assignment: Descriptive Statistics	30%
Group	Predictive Model Report	30%
	Predictive Model Presentation	20%
	Total	100%

Individual Sampling Procedure Assignment Due:

Students will work on business questions and apply their knowledge of spreadsheets to create randomized samples and validate these procedures. Student will then work toward a confirmatory data analysis with a holdback sample to identify outliers in an accounting data population. Students will be evaluated on the quality of the analysis and depth of analysis on identification of outliers.

Individual Descriptive Statistics Assignment Due:

Students will develop an exploratory data analysis using pivot tables in spreadsheets (Excel) combined with visual analytic (Tableau) techniques to communicate important aspects of accounting data. A concise report will be developed that focuses on the business value of the exploratory analysis. Students will be evaluated on the quality of the combination of exploratory and visual summaries as well as the identification and communication of the business value associated with the exploratory analysis.

Group Predictive Modeling Report Due:

Students will work in groups of 3-4 to create a predictive model from an accounting data set. The report will be written for a business executive audience, so an emphasis on the business impacts of the predictive model is essential. Groups will be assessed on their ability to effectively communicate the business implications of the predictive model along with the quality of the predictive modeling process recommendations.

Group Predictive Modeling Presentation Due:

In the final session, students will make a time restricted, business presentation in groups of 3-4. This presentation should integrate their learning about sampling, exploratory analysis and predictive modeling. The presentation should be formatted for a business executive audience. Groups will be assessed on their ability to effectively visualize and communicate the business issue and on the quality of the recommendations emerging from their analysis.

COURSE STRUCTURE

This course will consist of a blended approach with face-to-face and on-line components. Students work individually and as part of a group to complete course requirements.

READING SCHEDULE

Readings are available electronically and can be found on Canvas or from the library. They are labelled accordingly on the course website under the heading "Resources".

Session 1: Visual Storytelling with Tableau

1. Appelbaum, D. (2017). Introduction to Data Analysis for Auditors and Accountants. The CPA Journal, 7.
2. Ryan, L. (2018). Visual Data Storytelling with Tableau, Pearson Addison Wesley. Chapters 1.

Session 2: Visual Analytics and Choosing the Right Visual Aid

1. Ryan, L. (2018). Visual Data Storytelling with Tableau, Pearson Addison Wesley. Chapters 2 and 3.

Session 3: Intermediate Visual Analytics I

1. Ryan, L. (2018). Visual Data Storytelling with Tableau, Pearson Addison Wesley. Chapters 4, 5 and 6.

Session 4: Intermediate Visual Analytics II

1. Ryan, L. (2018). Visual Data Storytelling with Tableau, Pearson Addison Wesley. Chapters 7, 8 and 9.

Session 5: Analysis with MS Excel I

1. Ferrari, Alberto and Russo, Marco, (2017). The Definitive Guide to DAX: Business intelligence with MS Excel, MS SQL Server, and Power BI. Microsoft Press. Chapter 1 and 2.

Session 6: Analysis with MS Excel II

1. Ferrari, Alberto and Russo, Marco, (2017). The Definitive Guide to DAX: Business intelligence with MS Excel, MS SQL Server, and Power BI. Microsoft Press. Chapter 3 and 4.

Session 7: Analysis with MS Excel III

1. Ferrari, Alberto and Russo, Marco, (2017). The Definitive Guide to DAX: Business intelligence with MS Excel, MS SQL Server, and Power BI. Microsoft Press. Chapter 5, 6 and 7.

Session 8: Analysis with MS Excel IV

1. Ferrari, Alberto and Russo, Marco, (2017). The Definitive Guide to DAX: Business intelligence with MS Excel, MS SQL Server, and Power BI. Microsoft Press. Chapter 8 and 9.

Session 9: Sampling and Sample Distributions

1. Black, Ken and Castillo, Ignacio. (2014). Business Statistics for Contemporary Decision Making, 2nd Canadian Edition. Wiley. Chapter 7 and 8.

Session 10: Hypothesis Testing I

1. Black, Ken and Castillo, Ignacio. (2014). Business Statistics for Contemporary Decision Making, 2nd Canadian Edition. Wiley. Chapter 8 and 9.

Session 11: Hypothesis Testing II

1. Black, Ken and Castillo, Ignacio. (2014). Business Statistics for Contemporary Decision Making, 2nd Canadian Edition. Wiley. Chapter 10 and 11.

Session 12

No readings. In-class group presentations.

ACADEMIC HONESTY

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SFU GRADUATE AND POSTDOCTORAL STUDIES

New Graduate Course Proposal

Course Subject (eg. PSYC) BUS	Number (eg. 810) 832	Units (eg. 4) 3

Course title (max. 100 characters)

Data Analytics for Auditing Practice

Short title (for enrollment/transcript - max. 30 characters) **Data Analytics for Auditing**

Course description for SFU Calendar (course descriptions should be brief and should never begin with phrases such as "This course will..." or "The purpose of this course is..." If the grading basis is satisfactory/unsatisfactory include this in the description)

The use of information technology across audit processes. Applying analytics to deliver a high-quality audit and improve internal and external reporting quality.

Rationale for introduction of this course

New course for the Graduate Certificate in Accounting with Digital Analytics

Term of initial offering (eg. Fall 2019) Summer 2019	Course delivery (eg. 3 hrs/week for 13 weeks) 3 hrs/week for 13 weeks
Frequency of offerings/year Once/year	Estimated enrollment per offering 40-50

Equivalent courses (courses that replicates the content of this course to such an extent that students should not receive credit for both courses)

n/a

Prerequisite and/or Corequisite n/a

Criminal record check required? ☐ Yes if yes is selected, add this as prerequisite

Additional course fees? ☐ Yes ☑ No

Campus where course will be taught ☐ Burnaby ☐ Surrey ☑ Vancouver ☐ Great Northern Way ☑ Off campus

Course Components * ☑ Lecture ☐ Seminar ☐ Lab ☐ Independent ☐ Capstone ☐ _____

Grading Basis ☑ Letter grades ☐ Satisfactory/ Unsatisfactory ☐ In Progress / Complete

Repeat for credit? ☐ Yes ☑ No	Total repeats allowed? 0	Repeat within a term? ☐ Yes ☑ No
Required course? ☑ Yes ☐ No	Final exam required? ☑ Yes ☐ No	Capstone course? ☐ Yes ☑ No

Combined with a undergrad course? ☐ Yes ☑ No If yes, identify which undergraduate course and the additional course requirements for graduate students:

* See important definitions on the curriculum website.

RESOURCES

If additional resources are required to offer this course, provide information on the source(s) of those additional resources.

Faculty member(s) who will normally teach this course
Andrew Gemino, Nilesh Saraf, Peter Tingling
Additional faculty members, space, and/or specialized equipment required in order to offer this course

CONTACT PERSON

Academic Unit / Program	Name (typically, Graduate Program Chair)	Email
Beedie Graduate Programs	Lesley McKay	buscoord@sfu.ca

ACADEMIC UNIT APPROVAL

A course outline must be included.

Non-departmentalized faculties need not sign

Graduate Program Committee	Signature	Date
Department Chair	Signature	Date

FACULTY APPROVAL

The course form and outline must be sent by FGSC to the chairs of each FGSC (fgsc-list@sfu.ca) to check for an overlap in content

Overlap check done? ☑ YES

This approval indicates that all the necessary course content and overlap concerns have been resolved. The Faculty/Academic Unit commits to providing the necessary resources.

Faculty Graduate Studies Committee	Signature	Date
Andrew Gemino		August 23, 2018

A library review will be conducted. If additional funds are necessary, DGS will contact the academic unit prior to SGSC.

SENATE GRADUATE STUDIES COMMITTEE APPROVAL

Senate Graduate Studies Committee	Signature	Date
Jeff Derksen		SEP 2 4 2018

ADMINISTRATIVE SECTION (for DGS office only)
Library Check: SEP 07 2018
Course Attribute: _____
Course Attribute Value: _____
Instruction Mode: _____
Attendance Type: _____

If different from regular units:
Academic Progress Units: _____
Financial Aid Progress Units: _____

SFU BEEDIE SCHOOL OF BUSINESS

BUS 832: Data Analytics for Auditing Practice

Instructor:
Office Phone:
Email:

Semester: Summer 2019
LMS: canvas.sfu.ca

COURSE DESCRIPTION

Learn to apply information technology across the end-to-end audit and accounting process. Access large quantities of accounting data, and use analysis to dig deeper, and deliver a high-quality audit, that provide clients with valuable insights to make better informed business decisions and improve their internal and external reporting quality.

OBJECTIVES

The following are course level goals. It is expected that participants completing the course will demonstrate a proficiency in the following:

- Recognizing how data analytics can address accounting and business questions
- Understand the process to clean and prepare financial and non-financial data for analysis
- Recognize how completeness, reliability, or validity can affect data quality
- Perform basic data analysis to address business and accounting issues.
- Communicate the results of analysis to relevant stakeholders

COURSE EXPECTATIONS

You can expect 8 - 10 hours of work weekly for each course you are registered in. These activities will include participating in online activities, preparing readings and cases, answering practice questions, doing library research and working on group assignment with other students. Courses may be scheduled in a compressed format where classes are held in intensive session, but expectations of consistent preparation and participation remain for the length of the course.

BOOK AND MATERIALS

1. Richardson V.J., Teeter, R., & Terrell, K. (2018). Data Analytics for Accounting, McGraw-Hill Higher Education.
2. Additional selected readings will be provided on Canvas

LEARNING AND ASSESSMENT

Evaluation in this course will be based on a combination of group and individual work. As in all large courses in the Beedie School of Business, grading norms will be observed. In other words, students with the top marks relative to the class average will receive the top grades.

Individual	Weekly Quizzes	20%
	Final Exam	40%
Group	Group Case 1	20%
	Group Case 2	20%
	Total	100%

SFU BEEDIE SCHOOL OF BUSINESS

Weekly Quizzes Due: Every week, Saturday at Midnight

A series of weekly multiple-choice and short answer quizzes will be provided through Canvas. Students will have about 40 minutes to answer 10 multiple-choice questions and two short answer questions. Students will receive feedback within 48 hours after finishing each quiz.

Final Exam Due:

Final exam will be based on all the materials and concepts covered in the course.

Group Case 1 Due:

Students will work in groups of 3-4 to develop an audit plan from the available financial and non-financial datasets. Students will set up a could folder, review the changes to the working papers, identify audit data requirements, and prepare an audit plan. The audit plan developed by the groups will be assessed based on the procedures outlined in the audit plan. Each of these procedures should be supported by supplemental information and analysis.

Group Case 2 Due:

Students will work in groups of 3-4 on a case of financial statement analytic tool. Students will use XBRLAnalyst to access XBRL data, use XBRLAnalyst to create dynamic common size financial statements, and use SQL to query an XBRL databse. Students will be assessed based on the quality of analysis performed using the XBRLAnalyst.

COURSE STRUCTURE

This course will consist of a blended approach with face-to-face and on-line components. Students work individually and as part of a group to complete course requirements. A mixture of case study discussions, small group exercises, case analysis, and group assignments may be utilized.

READING SCHEDULE

Additional selected readings are available electronically and can be found on Canvas. Solution to select cases and exercises will also be posted to Canvas. Students are expected to read the background materials and related chapters prior to attending each module.

TENTATIVE TIMETABLE

DATE	TOPIC	CHAPTER
Week 1	**Data Analytics in Accounting:** • Explain why data analytics matter to accountants and how it affects auditing, financial accounting, and tax • Describe the data analytics process using the IMPACT cycle • Identify accounting and auditing issues that data analytics can address • Describes the skills needed by accountants to perform data analysis	1
Week 2	**Accounting Data Preparation and Cleaning:** • Understand how data are organized in an accounting information system	2

	• Understand how financial data are stored in a relational database • Explain and apply extraction, transformation, and loading technique	
Week 3	**Accounting Data Preparation and Cleaning:** • Define data analytics approaches in accounting • Explain the profiling approach to accounting data analytics • Describe the data reduction approaches to data analytics used in accounting • Regression approach to accounting data analytics • Classification approach to accounting data analytics • Clustering approach to accounting data analytics	3
Week 4	**Data Visualization and Summaries to Communicate With Stakeholders** • Identify the objective of data visualization • Selecting the best charts to present data • Chart refinement for effective and efficient communication • Identifying the audience, tone and content of the reports	4
Week 5	**The Modern Audit and Continuous Auditing** • Understand modern auditing techniques • Evaluate an audit plan • Understand the nature, extent, and timing of audit tests • Select appropriate audit tasks and approaches • Evaluate audit alarms as part of continuous auditing • Understanding working paper platforms	5
Week 6	**Introduction to Caseware IDEA Analytics tools** • IDEA data analytics • IDEA Sampling techniques • IDEA Statistical methods	Readings on Canvas
Week 7	**Audit Data Analytics** • Understand different types of analysis for auditing and when to use them • Understand basic descriptive audit analyses • Understand more complex statistical analyses, including Benford's law • Understand advanced predictive and prescriptive audit analytics	6
Week 8	**Introduction to KPMG Automated Audit Procedures** Using KPMG Automated Audit Procedures to: • Detection of unusual transaction data • Preparation of analysis data by collecting data from ERP (Enterprise Resource Planning) • Statistical Evaluation of audit risk by using financial and non-financial data	Readings on Canvas

Week 9	**Introduction to Electronic Account Analysis Tool (eAAT)** Using eAAT to: • Detection of unusual transaction data • Preparation of analysis data by collecting data from ERP (Enterprise Resource Planning) • Statistical Evaluation of audit risk by using financial and non-financial data	Readings on Canvas
Week 10	**Generating Key Performance Indicators** • Evaluate management requirements and identify useful KPIs from a list • Evaluate underlying data quality used for KPI • Create dashboard using KPIs	7
Week 11	**Financial Statement Analytics** • Describe how XBRL tags financial reporting data • Understand how different types of ratio analysis can be facilitated by XBRL • Explain how to create and read visualizations of financial statement data • Describe the value of text mining and sentiment analysis of financial reporting	8
Week 12	**FINAL EXAM**	

ACADEMIC HONESTY

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- Submitting false records or information (forged medical notes)
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SFU BEEDIE SCHOOL OF BUSINESS

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SFU GRADUATE AND POSTDOCTORAL STUDIES

New Graduate Course Proposal

Course Subject (eg. PSYC) BUS	Number (eg. 810) 838	Units (eg. 4) 3

Course title (max. 100 characters)

Collaboration, Teaming, and Agile Methods

Short title (for enrollment/transcript - max. 30 characters) **Collaboration & Teaming**

Course description for SFU Calendar (course descriptions should be brief and should never begin with phrases such as "This course will..." or "The purpose of this course is..." If the grading basis is satisfactory/unsatisfactory include this in the description)

Working collaboratively to practice agile project management techniques through team-based learning.

Rationale for introduction of this course

New course for the Graduate Certificate in Accounting with Digital Analytics

Term of initial offering (eg. Fall 2019) Summer 2019	Course delivery (eg. 3 hrs/week for 13 weeks) 3 hrs/week for 13 weeks
Frequency of offerings/year Once/year	Estimated enrollment per offering 40-50

Equivalent courses (courses that replicates the content of this course to such an extent that students should not receive credit for both courses)

n/a

Prerequisite and/or Corequisite n/a

Criminal record check required? ☐ Yes if yes is selected, add this as prerequisite

Additional course fees? ☐ Yes ☑ No

Campus where course will be taught ☐ Burnaby ☐ Surrey ☑ Vancouver ☐ Great Northern Way ☑ Off campus

Course Components * ☑ Lecture ☐ Seminar ☐ Lab ☐ Independent ☐ Capstone ☐ _____

Grading Basis ☑ Letter grades ☐ Satisfactory/ Unsatisfactory ☐ In Progress / Complete

Repeat for credit? ☐ Yes ☑ No	Total repeats allowed? 0	Repeat within a term? ☐ Yes ☑ No
Required course? ☑ Yes ☐ No	Final exam required? ☐ Yes ☑ No	Capstone course? ☐ Yes ☑ No

Combined with a undergrad course? ☐ Yes ☑ No If yes, identify which undergraduate course and the additional course requirements for graduate students:

* See important definitions on the curriculum website.

RESOURCES

If additional resources are required to offer this course, provide information on the source(s) of those additional resources.

Faculty member(s) who will normally teach this course
Andrew Gemino, Payman Jula, Michael Johnson
Additional faculty members, space, and/or specialized equipment required in order to offer this course

CONTACT PERSON

Academic Unit / Program	Name (typically, Graduate Program Chair)	Email
Beedie Graduate Programs	Lesley McKay	buscoord@sfu.ca

ACADEMIC UNIT APPROVAL

A course outline must be included.

Non-departmentalized faculties need not sign

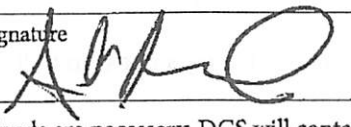
Graduate Program Committee	Signature	Date
Department Chair	Signature	Date

FACULTY APPROVAL

The course form and outline must be sent by FGSC to the chairs of each FGSC (fgsc-list@sfu.ca) to check for an overlap in content

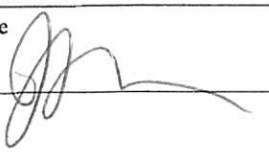
Overlap check done? ☑ YES

This approval indicates that all the necessary course content and overlap concerns have been resolved. The Faculty/Academic Unit commits to providing the necessary resources.

Faculty Graduate Studies Committee	Signature	Date
Andrew Gemino		August 23, 2018

A library review will be conducted. If additional funds are necessary, DGS will contact the academic unit prior to SGSC.

SENATE GRADUATE STUDIES COMMITTEE APPROVAL

Senate Graduate Studies Committee	Signature	Date
Jeff Derksen		SEP 2 4 2018

ADMINISTRATIVE SECTION (for DGS office only)
Library Check: SEP 0 7 2018
Course Attribute: _____
Course Attribute Value: _____
Instruction Mode: _____
Attendance Type: _____

If different from regular units:
Academic Progress Units: _____
Financial Aid Progress Units: _____

SFU BEEDIE SCHOOL OF BUSINESS

BUS 838: Collaboration, Teaming, and Agile Methods

Instructor:
Office Phone:
Email:

Semester: Summer 2019
LMS: canvas.sfu.ca

COURSE DESCRIPTION

Analytic projects in accounting require significant collaboration, project management and teaming skills. No individual alone has all the requisite skills for a complete, complex analysis. Students will work collaboratively practicing agile project management techniques. Learning how to work productively in agile project environments is a critical skill for project success. These skills will be developed throughout the course in team-based assignments.

OBJECTIVES

The following are course level goals. It is expected that participants completing the course will demonstrate proficiency in the following:

- Understanding the elements of creating effective teams and how to support other team members.
- Using aspects of "teaming" in short term project teams.
- Utilizing traditional project management methods to create a project plan.
- Applying agile project management techniques, focusing on Scrum methodology, to deliver a short-term project.

COURSE EXPECTATIONS

You can expect 8 - 10 hours of work weekly for each course you are registered in. These activities will include participating in online activities, preparing readings and cases, answering practice questions, doing library research and working on group assignment with other students. Courses may be scheduled in a compressed format where classes are held in intensive session, but expectations of consistent preparation and participation remain for the length of the course.

BOOK AND MATERIALS

1. Duhigg, C. (2016). What Google learned from its quest to build the perfect team. *The New York Times Magazine*, *26*, 2016.
   reWork,. https://rework.withgoogle.com/print/guides/5721312655835136/
2. Edmondson, A. C. (2012). Teamwork on the fly. *Harvard Business Review*, *90*(4), 72-80.
3. Project Management Institute. (2017). Agile Practice Guide. Project Management Institute. ISBN 9781628253993
4. Selected readings may be provided on Canvas

LEARNING AND ASSESSMENT

Evaluation in this course will be based on a combination of group and individual work. As in all large courses in the Beedie School of Business, grading norms will be observed. In other words, students with the top marks relative to the class average will receive the top grades.

Individual	Weekly Quizzes	15%
	Team Feedback Assignment	20%
	Self-report – Final report	20%

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Group	Project Proposal – Proposal and Presentation	15%
	Final Project Plan and Presentation	30%
	Total	100%

Weekly Quizzes Due: Weekly, Sunday at 11:00 pm

A series of weekly multiple-choice quizzes will be provided through Canvas. Questions are drawn randomly from a question pool and provided to students in a timed format. Questions are focused on the material to be presented in the week to come and quizzes serve as a preparation for this material. Students will have 30 minutes to answer 10 questions in an open book format. Students will receive feedback on their mark once the quiz closes.

Team Feedback Assignment Due:

Students will work in groups on the proposal and project plan. This group work will enable team members to gauge the effectiveness of other groups members. Each team member will commit to a process of providing feedback to other group members and listening to feedback from others. Each student will be evaluated on the quality of the feedback provided to team members by both instructors and team members.

Self-report Final Report Due:

A final self-report will be collected for each team member. This reflexive self-report should consider the experiences and knowledge gained in completing the project proposal and project plan. Students are asked to demonstrate how they have improved their ability to team and participate in project-based work. Students are asked to integrate readings and other experiences and include specific examples whenever possible. Students will be evaluated on the breadth and depth of the reflexive narrative and the quality of the writing provided in the document.

Group Project Proposal and Presentation Due:

Students will work in groups of 3-4 to create a proposal for their final project to be completed in the final Year 1 course BUS 839: Applied Project. Students will make a time restricted, business presentation of this proposal in their groups. The proposal will follow a project management format including introduction, work breakdown structure proposed schedule and budget along with risk analysis. Groups will be assessed on the quality of the proposal and the group 's ability to effectively communicate project details and create a compelling proposal for further development.

Group Project Plan and Presentation Due

The Group Project Plan builds on the Group Project Proposal document. The plan should include all elements of the proposal plus a detailed schedule and work breakdown structure for the final project for BUS 839. In the final sessions, students will make a time restricted, business presentation in groups of 3-4. This presentation should integrate their learning about traditional and agile project management. The presentation should be formatted for a business executive audience. Groups will be assessed on their ability to effectively visualize and communicate the project plan and on the quality of the project plan emerging from their team work.

COURSE STRUCTURE

This course will consist of a blended approach with face-to-face and on-line components. Students work individually and as part of a group to complete course requirements. A mixture of case study discussions, small group exercises, case analysis, and group assignments may be utilized.

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READING SCHEDULE

Readings are available electronically and can be found on Canvas or from the library. They are labelled accordingly on the course website under the heading "Resources".

Session 1: Essentials of Teaming

1. Edmondson, A. C. (2012). Teamwork on the fly. *Harvard Business Review*, *90*(4), 72-80
2. Duhigg, C. (2016). What Google learned from its quest to build the perfect team. *The New York Times Magazine*, *26*, 2016

Session 2: Building Effective Teams

1. Duhigg, C. (2016). What Google learned from its quest to build the perfect team. *The New York Times Magazine*, *26*, 2016.
    - reWork,. https://rework.withgoogle.com/print/guides/5721312655835136/

Session 3: Essentials of Project Management I

1. Project Management Institute. (2017). Agile Practice Guide. Project Management Institute. Chapter 1.

Session 4: Essentials of Project Management II

1. Project Management Institute. (2017). Agile Practice Guide. Project Management Institute. Chapter 2.

Session 5: Essentials of Project Management III

1. Project Management Institute. (2017). Agile Practice Guide. Project Management Institute. Chapter 3.

Session 6: In-class Presentations

No readings. In-class group presentations.

Session 7: Introduction to Agile Project Management

1. Project Management Institute. (2017). Agile Practice Guide. Project Management Institute. Chapter 4.
2. Edmondson, A. C. (2012). Teamwork on the fly. *Harvard Business Review*, *90*(4), 72-80

Session 8: Agile Project Management Methods I

1. Project Management Institute. (2017). Agile Practice Guide. Project Management Institute. Chapter 5.

Session 9: Agile Project Management Methods II

1. Project Management Institute. (2017). Agile Practice Guide. Project Management Institute. Chapter 6.

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Session 10: Hybrid Approaches to Project Management

1. Project Management Institute. (2017). Agile Practice Guide. Project Management Institute. Chapter 7.

Session 11: In-class Presentations

No readings. In-class group presentations.

Session 12: In-class Presentation

No readings. In-class group presentations.

ACADEMIC HONESTY

Plagiarism is the unacknowledged use of other people's ideas or work. Plagiarism is often unintentional and can be avoided through careful work habits and familiarity with academic conventions. But whether intentional or unintentional, plagiarism is recognized as a serious academic offence. The university's strong stance against plagiarism reflects our shared commitment to intellectual honesty, and the original contributions of each student and faculty member validate and sustain the university as a vital centre of knowledge and research. It is your responsibility, as a student and a member of the academic community, to ensure that you have correctly acknowledged and cited all the resources you have used in writing your work.

The following examples are representative but not exhaustive of activities constituting academic dishonesty:

- Plagiarism (presenting the work of another person as your own)
- Submitting the same work more than once without prior approval
- Translating a work from one language to another without complete and proper citation.
- Cheating
- Impersonation (having someone else write your exam)
- Submitting false records or information (forged medical notes)
- Stealing or destroying the work of another student
- Unauthorized or inappropriate use of computers, cell phones, calculators and other forms of technology in course work, assignments or examinations
- Falsifying material that is subject to academic evaluation
- Any activity not specifically outlined in this document that is intended to circumvent the standards of academic honesty

You are expected to post comments, and write reports and exams in your own words. Whenever you take an idea or passage from another author, you must acknowledge it by appropriately citing the source. If you are struggling to complete an assignment, please see your instructor or the program office for additional assistance.

Ignorance of these standards will not preclude the imposition of penalties for academic dishonesty.

For more information you will find the full SFU policy on Academic Honesty (from which the above was summarized) at: http://www.sfu.ca/policies/gazette/student.html

SFU GRADUATE AND POSTDOCTORAL STUDIES

New Graduate Course Proposal

Course Subject (eg. PSYC) BUS	Number (eg. 810) 839	Units (eg. 4) 3

Course title (max. 100 characters)

Applied Project

Short title (for enrollment/transcript - max. 30 characters) Applied Project

Course description for SFU Calendar (course descriptions should be brief and should never begin with phrases such as "This course will..." or "The purpose of this course is..." If the grading basis is satisfactory/unsatisfactory include this in the description)

A team-based strategic business analysis and essay supervised by a Simon Fraser University faculty member with support from a senior industry partner. Graded on a satisfactory/unsatisfactory basis.

Rationale for introduction of this course

New course for the Graduate Certificate in Accounting with Digital Analytics

Term of initial offering (eg. Fall 2019)	Course delivery (eg. 3 hrs/week for 13 weeks)
Summer DVB ~~Fall~~ 2019	3 hrs/week for 13 weeks
Frequency of offerings/year Once/year	Estimated enrollment per offering 40-50

Equivalent courses (courses that replicates the content of this course to such an extent that students should not receive credit for both courses)

n/a

Prerequisite and/or Corequisite n/a

Criminal record check required? ☐ Yes if yes is selected, add this as prerequisite | Additional course fees? ☐ Yes ☑ No

Campus where course will be taught ☐ Burnaby ☐ Surrey ☑ Vancouver ☐ Great Northern Way ☑ Off campus

Course Components * ☑ Lecture ☐ Seminar ☐ Lab ☐ Independent ☐ Capstone ☐ _____

Grading Basis ☐ Letter grades ☑ Satisfactory/ Unsatisfactory ☐ In Progress / Complete

Repeat for credit? ☐ Yes ☑ No	Total repeats allowed? 0	Repeat within a term? ☐ Yes ☑ No
Required course? ☑ Yes ☐ No	Final exam required? ☐ Yes ☑ No	Capstone course? ☐ Yes ☑ No

Combined with a undergrad course? ☐ Yes ☑ No If yes, identify which undergraduate course and the additional course requirements for graduate students:

* See important definitions on the curriculum website.

RESOURCES

If additional resources are required to offer this course, provide information on the source(s) of those additional resources.

Faculty member(s) who will normally teach this course
Andrew Gemino, Michael Johnson, Peter Tingling, Jamal Nazari
Additional faculty members, space, and/or specialized equipment required in order to offer this course

CONTACT PERSON

Academic Unit / Program	Name (typically, Graduate Program Chair)	Email
Beedie Graduate Programs	Lesley McKay	buscoord@sfu.ca

ACADEMIC UNIT APPROVAL

A course outline must be included.

Non-departmentalized faculties need not sign

Graduate Program Committee	Signature	Date
Department Chair	Signature	Date

FACULTY APPROVAL

The course form and outline must be sent by FGSC to the chairs of each FGSC (fgsc-list@sfu.ca) to check for an overlap in content

Overlap check done? ☑ YES

This approval indicates that all the necessary course content and overlap concerns have been resolved. The Faculty/Academic Unit commits to providing the necessary resources.

Faculty Graduate Studies Committee	Signature	Date
Andrew Gemino		August 23, 2018

A library review will be conducted. If additional funds are necessary, DGS will contact the academic unit prior to SGSC.

SENATE GRADUATE STUDIES COMMITTEE APPROVAL

Senate Graduate Studies Committee	Signature	Date
Jeff Derksen		SEP 24 2018

ADMINISTRATIVE SECTION (for DGS office only)
Library Check: SEP 07 2018
Course Attribute: _____
Course Attribute Value: _____
Instruction Mode: _____
Attendance Type: _____

If different from regular units:
Academic Progress Units: _____
Financial Aid Progress Units: _____

SFU BEEDIE SCHOOL OF BUSINESS | MASTER OF BUSINESS ADMINISTRATION

BUS 839: Applied Project

Instructor:
Office Phone:
Email:

Semester: Fall 2019
LMS: canvas.sfu.ca

COURSE DESCRIPTION

The applied project is designed for students to undertake a team-based strategic business analysis to further their learning and career goals. Students will undertake a strategic business analysis and write an extended essay jointly supervised by a Simon Fraser University faculty member and an industry partner. A faculty member will negotiate the purpose, content and deliverables of each project with the students and the sponsoring organization. Common topics include a broad strategic analysis, an in-depth analysis of a specific business problem, a business plan, or a detailed functional strategy.

OBJECTIVES

The Applied Project course is an opportunity for students to use their knowledge and ability to create a team-based, high quality analysis to develop strategic value for themselves and a client (typically, the student's organization).

The project provides students with an opportunity to comprehensively integrate the various subjects studied during the certificate program. Collaborative learning is facilitated through a final presentation to the industry partner organization.

BOOK AND MATERIALS

There are no required readings for this course. Resources provided on Canvas:

1. Detailed information and schedule of deadlines
2. Selected readings and information about resources
3. Submission requirements information
4. Examples of various project types

LEARNING AND ASSESSMENT

Each project is assessed on a satisfactory/unsatisfactory basis and will be approved only after it meets a minimum quality threshold determined by the course instructor. Students will be expected to revise their work until that threshold is met. The quality threshold is a function of content, including analytical processes and conclusions, and University standards for written communications.

Individual	Self-reflection	20 %
	Peer review	20 %
	Participation	10 %
Group	Team Presentation	30 %
	Team Report	20 %
	Total	100 %

Group Project Plan

Previously developed in Summer 2019 in BUS 838

Students will work in groups of 3-4 to operationalize the applied project proposal and plan created in BUS 838: Collaboration, Teaming, and Leading Change. A project management format including introduction, work breakdown structure, proposed schedule, and budget along with risk analysis will be

used. The plan should include all elements of the proposal plus a detailed schedule and work breakdown structure for the term.

Group Project Presentation Due:

In the final sessions, students will make a business presentation in groups of 3-4. This presentation should integrate their learning across Certificate courses. The presentation should be formatted for a business executive audience. Groups will be assessed on their ability to effectively visualize and communicate the project plan and on the quality of the project that emerges from their team work.

Team Report Due:

Management requires you to deliver a report to accompany your presentation. In it, you should include detailed charts, projections, figures, and analysis, etc., that would be inappropriate to include in your presentation, but which would be necessary to develop a complete picture of your proposed solution. You should also include a copy of your slide deck with your report.

Self-reflective Essay Due:

An individual paper (5 pages – 1200 words max) reflecting on your learnings throughout the Certificate program. Some considerations are as follows:

- What did you learn from the team-based applied project?
- What did you learn about managing organizations?
- What experiences did you find most interesting/informative? Why?
- Any impact on future career moves?

You are strongly encouraged to do additional research, as well as integrate relevant material from other Certificate courses.

COURSE STRUCTURE

This course will consist of a blended approach with face-to-face and on-line components. Students work individually and as part of a group to complete course requirements.

Session	Date	Topic
1	September	Introductions, Teams and Project Plans, High-level Overview
2	Sept-Nov	Teams work with instructor and industry partner to develop applied project content
3	November	Practice Presentations
4	Late November	Practice Presentations and Adjudication Panel
5	December	Presentations to organization executives

ACADEMIC HONESTY

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- Stealing or destroying the work of another student
- Unauthorized or inappropriate use of computers, cell phones, calculators and other forms of technology in course work, assignments or examinations
- Falsifying material that is subject to academic evaluation
- Any activity not specifically outlined in this document that is intended to circumvent the standards of academic honesty

You are expected to post comments, and write reports and exams in your own words. Whenever you take an idea or passage from another author, you must acknowledge it by appropriately citing the source. If you are struggling to complete an assignment, please see your instructor or the program office for additional assistance.

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ABOUT THE COURSE INSTRUCTOR

Instructors may write their own short biography, or use the existing one on the Beedie staff directory.

August 29, 2018

Dr. Andrew Gemino
Associate Dean, Graduate Programs
Beedie School of Business
500 Granville Street
Vancouver, BC
Canada, V6C W6

Dear Dr. Gemino,

Re: New Program Proposal for Certificate and Masters of Science Program focused on data & analytics and technology skills

This letter communicates KPMG's support for the creation of both a Certificate and a Masters of Science Program to provide technology and data and analytics (D&A) education for KPMG employees (program name to be determined). The proposed graduate-level education programs would fill an existing skills gap for KPMG employees.

Institutions and their audit committees are increasingly concerned with the impacts of technology and D&A on the audit. KPMG is mobilizing to provide the D&A knowledge its people need to bring innovation to the audit to advance audit quality. In developing educational programs to support the development of D&A skills, KPMG will be preparing its professionals to embrace the changes facing the profession and develop the skills they need to play a vital role in helping client organizations create value.

Developing internal D&A programs to more widely educate KPMG professionals will require significant resources. Given the rapid pace of industry change, and the short supply of D&A expertise world-wide, KPMG Canada could reduce its timeframe and resource use while maintaining high quality outcomes by utilizing an academic partner to deliver professional D&A programming within KPMG.

In forming an educational partnership with SFU Beedie, we are excited to work with an institution that has demonstrated strength in D&A programming, a successful history of innovative programming, as well as experience in working with corporations to provide custom and online programming.

We look forward to news about the program being implemented and to providing this opportunity to our people. If you have any questions, please contact the undersigned.

Yours sincerely,

Kristen Carscallen
Canadian Managing Partner, Audit

Andrew Gemino

Biography

Dr. Andrew Gemino is an award-winning teacher who has twice received the Canada Trust Distinguished Teacher award from the Beedie School of Business and also received two teaching awards during his years at the University of British Columbia. Andrew's academic research focuses on information technology project management, business systems analysis and the design of technology-mediated collaborative environments that includes examining how corporate teams can best collaborate using technologies such as instant messaging. Andrew holds a National Sciences and Research Council of Canada (NSERC) grant to study the effective communication of information system requirements. He is also the co-founder of a software company that develops commercial software for professional sports teams in the NHL and NBA, as well as automated employee scheduling for sports and entertainment companies. Andrew also provides his expertise to the Surgeon Information System Working Group for the Provincial Surgical Oncology Council which is affiliated with the BC Cancer Agency. An accomplished bass and piano player, Andrew played for many years in a local rock and roll band, a gig he says was "more than fun".

https://beedie.sfu.ca/profiles/AndrewGemino

Nilesh Saraf

Biography

Professor Saraf is currently on sabbatical at the Department of Business Economics, Erasmus University, Rotterdam, Netherlands

Professor Saraf focuses his research on the diffusion of enterprise information technology and its role in creating business value. He also conducts research on open source software development, strategic behavior of IT product and service vendors and on the emergence of technology standards.

Professor Saraf's research has appeared in top journals namely, MIS Quarterly and Information Systems Research. His research has won competitive awards including the Emerald Management Reviews Citations of Excellence Awards for 2011 & 2014, and the runner-up award for the Best Doctoral Dissertation competition (ACM-SIGMIS) in 2004. He

has also won competitive external grants from the Social Sciences and Humanities Research Council of Canada. His current academic service roles include the following:

- Associate Editor for Management Information Systems Quarterly (2018-) (click)
- Editorial board of IEEE Transactions on Engineering Management
- Academic Director, Business Technology Management (BTM) Certificate Program

Professor Saraf completed his Ph.D. in Business Administration from the Marshall School of Business, University of Southern California, Los Angeles. He has an undergraduate degree in Electronics Engineering from M.S. University, India, and an MBA from the Indian Institute of Management. He is married and has two children.

https://beedie.sfu.ca/profiles/nileshsaraf

Peter Tingling

Biography

Peter joined the Beedie School of Business at SFU from the Richard Ivey School of Business at the University of Western Ontario where his thesis examined organizational decision-making. Peter has had a long association with higher education and has taught at several business schools. Prior to academia, Peter had more than two decades of industrial experience working in a number of senior line and staff positions as well as consulting to a diverse range of Fortune 500, government, and start-up organizations across North America.

The University, says Peter, meets several of his life goals, allows him to make a greater contribution to society and offers new challenges. "Many industry practitioners are preoccupied with 'what' rather than the more useful 'why' and how' of theory," he says. "These are my interests."

Peter has always considered himself a 'closet academic' with a curious passion for eclectic reading. Some of his favourite authors include Daniel Kahneman (Thinking Fast and Slow), James Gleick (Genius: The biography of Richard Feynman), Peter Bernstein (Against the Gods: The Remarkable Story of Risk), David Halberstam (The Coldest Winter), Margaret MacMillan (Paris 1919, Six Months that Changed the World) and Neil Postman (*Amusing Ourselves to Death: Public Discourse in the Age of Show Business).*

Peter is a member of the Senate Commitee on University Priorities (SCUP), the Senate Commitee on University Honours (SCUH), the Electoral Standing Commitee (ESC), Calendar Committee (CC (Chair)) and the Senate Commitee on Agenda and Rules (SCAR). He serves as Vice-Chair of the Senate and as Associate Dean Undergraduate Programs he serves on a

number of Beedie committees.

Outside of the University, Peter is the president and CEO of Octothorpe Software Corporation, a decision sciences company.

https://beedie.sfu.ca/profiles/PeterTingling

Michael Favere-Marchesi

Biography

After several years in public and private accounting practice, Dr. Michael Favere-Marchesi started an academic career to fulfill his love for research and teaching. Today, as an associate professor of accounting and auditing, his public accounting and industry experiences enhance his lectures in auditing and managerial accounting. Prior to joining the Beedie School of Business, Dr. Favere-Marchesi taught at the Monterey Institute of International Studies in California, the National Institute of Development Administration (NIDA) in Thailand, and the University of Southern California. His research interests include audit judgment and decision-making, audit quality, fraud and international accounting. Dr. Favere-Marchesi earned his undergraduate and graduate degrees in the U.S. and spent several years in Thailand as director of NIDA'S Global MBA program in Bangkok. He speaks French, Spanish and conversational Thai. He served for several years as Chair of the international activities committee for SFU Business. This position included arranging a quality portfolio of university exchange arrangements between SFU Business and leading business schools around the world. Dr. Favere-Marchesi is currently a member of the University Senate and serves on the Senate's Committee on International Activities and the Senate's Committee on Disciplinary Appeal. Externally, Dr. Favere-Marchesi serves as the President-Elect of the Canadian Academic Accounting Association, and served as a member of the Board of Examiners of the American Institute of Certified Public Accountants and the Chair of its International Uniform CPA Qualification Examination Committee. Dr. Favere-Marchesi is currently a reviewer for *Auditing, Behavioral Research in Accounting, Accounting Perspectives*, and various accounting conferences.

https://beedie.sfu.ca/profiles/MichaelFavere-Marchesi

Jamal A. Nazari

Biography

Dr. Jamal Nazari came to Vancouver from Alberta. He completed his Ph.D. in accounting at the University of Calgary. He has taught various financial and management accounting courses at the undergraduate and graduate levels at Simon Fraser University, Mount Royal University, University of Calgary, and Sharif University. Jamal holds the designations of Chartered Professional Accountant, Certified General Accountant, and Certified Management Accountant. He has facilitated courses and programs for CMA and CPA Canada. He is currently serving on the Sustainability Advisory Board of the CPA Canada. His past industry experience includes holding the position of CFO for an investing and a trading company in the automotive industry. Jamal's research interests include corporate social responsibility, sustainability reporting, and intellectual capital. He has presented his research at many recognized conferences. His published work appears in outlets such as Journal of Business Ethics, Journal of Management Accounting Research, Journal of Cleaner Production, Journal of Intellectual Capital, and Methodological Issues in Accounting Research.

https://beedie.sfu.ca/profiles/JamalA.Nazari

Kim Trottier

Biography

Profesor Trottier is an Associate Professor of Accounting at the Beedie School of Business. She holds a Masters degree and PhD in Accounting and Economics from the *University of British Columbia*, and a BCom from *l'Université d'Ottawa*. Her PhD covers archival research as well as mathematical modeling and econometrics. Her research spans several areas of the literature such as valuation models, event study methodology, experiments, behavioural studies, classification classification models, and topical issues in the banking and pharmaceutical industry. Her current focus is on forensics, analytics, big data, and machine learning. Dr. Trottier's teaching experience ranges from theoretical to applied, across all levels of education from undergraduate to PhD students and Executive MBAs. With years spent in professional practice as a Chartered Accountant, Dr. Trottier brings real-world experience to her teaching and research, applying insight from her work as a financial analyst, consultant, manager, corporate controller, and external auditor in corporations ranging in size from $500 million to $270 billion in assets. She holds board positions at the *Canadian Academic Accounting Associationand* and at *460 MIC.*

https://beedie.sfu.ca/profiles/KimTrottier

Payman Jula

Biography

Payman Jula is an Associate Professor at Beedie School of Business, SFU, where he teaches courses related to operations management, and decision making under uncertainty. Payman has a PhD in Industrial Engineering and Operations Research from University of California at Berkeley. His research interests are in transportation and logistics, and applications of operations management in the manufacturing and service (particularly healthcare delivery) industries. Payman has studied the economics of Asia - North America supply chains. He has worked with many international high tech companies such as Samsung Semiconductor, Cypress Semiconductor, Micron Technology, and IMFlash Technologies on issues related to cycle time reduction, production planning, scheduling, and supply chain management.

Payman enjoys Vancouver ski hills in winter and soccer fields in summer.

https://beedie.sfu.ca/profiles/paymanjula

Michael Johnson

Biography

Michael Johnson is a Lecturer at the Beedie School of Business at Simon Fraser University. He is passionate about teaching statistics, quantitative methods and operations management courses and is the recipient of the 2011 Canada Trust Excellence in Teaching Award. Michael spent 10 years teaching in the Operations Management program at BCIT prior to joining the Beedie School of Business. Prior to carrying out his PhD, Michael worked for several years as an engineer improving productivity and operational work flows in high-tech, automotive and process related industries. He has also worked as a consultant on a number of industry and research related projects related to operations research and management science.

https://beedie.sfu.ca/profiles/MichaelJohnson