

**ACCT 5124 P**  
**Data Analytics for Professional Accountants**

**Course Outline**  
**Fall 2021**

<b>Instructor:</b>	Devin Fraser, CPA, CA, CFE
<b>Email:</b>	devinfraser@cunet.carleton.ca
<b>Class Time:</b>	Tuesday's 6:00 to 9:00pm (starting November 2)
<b>Class Location:</b>	Nicol Building 4030 and Online (Zoom)
<b>Office Hours:</b>	By appointment as requested.

**Course Calendar Description:**

Data and information analysis with application to professional accounting (0.25 credit).

**Course Learning Objectives:**

See course schedule below for course learning objectives (CPA Canada Technical Competencies) from the CPA Competency Map.

**Course Prerequisites:**

Must be enrolled in the MAcc program.

**Required Textbook:**

Vernon Richardson, Katie Terrell, and Ryan Teeter, **Data Analytics for Accounting**, 1st Edition, McGraw Hill, 2019 (9781260288407)

Link to Purchase or Rent Textbook / E-Book:

<https://www.mheducation.com/highered/product/data-analytics-accounting-richardson-terrell/M9781260375190.html>

<https://www.havenbooks.ca/products/data-analytics-for-accounting>

**McGraw Hill Connect:**

<https://connect.mheducation.com/class/d-fraser-acct-5124---fall-2021>

**Drop Course Policy:**

The deadline for academic withdrawal is the last day of classes (each term).

**Methods of Evaluation:**

Component	Weight	Due Date
In-Class Memos (2)	10%	By the end of class
Case 1 (Group)	15%	Nov 21 @ Midnight
Case 2 (Group)	15%	Dec 5 @ Midnight
Final Exam Part A - Theory Part B - Power BI Part C - Power Query	22.5% 22.5% 15.0%	Dec 18, 2021 9:00am to 12:00pm EST
<b>Total</b>	<b>100%</b>	

**In-Class Memos:**

During certain weeks we will analyze a dataset as a group by creating the appropriate visualizations using the tools introduced in the course. Once this has been completed, you will write a short memo explaining the results of the data visualizations to the stakeholders.

**Group Cases:**

The cases are posted on Brightspace and will be completed in groups. You will place yourself into a group during the Week 1 class. The cases involve the application and integration of major concepts covered in the course in order to solve problems and issues presented in the case scenarios.

**Final Examination:**

The final exam is comprehensive, covering the material of the entire course. The exam will consist of multiple choice and short-answer questions to assess your knowledge of data analytics based on the in-class material, assigned readings, and the textbook as well as a 90 minute case that requires you to demonstrate application knowledge of using Power BI to solve a business problem. Finally, there will be a toolbox based scenario that requires you to demonstrate application knowledge of using Power Query. The final exam in this course will use a remote proctoring service provided by Scheduling and Examination Services. You can find more information at <https://carleton.ca/ses/e-proctoring/>.

**Deferred Final Examination:**

Students unable to write a final examination because of illness or other circumstances beyond their control must contact the instructor and the MAcc office in writing to request a deferred exam. Permission may be granted when the absence is supported by a medical certificate and or appropriate document(s) to support the reason for the deferral.

**Late Assignments:**

To ensure fairness for all students, penalties will be applied to late assignments. There is a 24 hour no-questions-asked grace period after each assignment deadline in-case of emergencies. If you are unable to complete the assignment by the deadline due to something that comes up last minute, you may submit within the 24 hour grace period and no penalty will be applied.

Once the 24 hour grace period has expired, assignments will be accepted for an additional 24 hours at which time a penalty of twenty (20%) will be applied. For example, an assignment that would normally merit a grade of 80% would receive a grade of 80% if submitted within 0 to 24 hours of the deadline or 60% if submitted between 24 and 48 hours of the deadline. Assignments will not be accepted at all after 48 hours and a grade of 0% will be awarded.

**Modality, Preparation, and Participation:**

Delivery of the course will be blended (synchronous and asynchronous). Each week you will find videos on Brightspace (asynchronous portion). These videos range from anywhere between 2 and 25 minutes. Each video covers (at a high-level) a Learning Objective identified in your textbook. The expectation is that you watch these videos & read the relevant textbook chapters before attending class. The live lectures (synchronous portion) will make up the remainder of your class time each week. The live lectures will be held in-person as well as streamed live on Zoom. Each week you can choose to attend class either in-person, or remotely by zoom.

**Course Schedule:**

<b>Week Date</b>	<b>Topic/Agenda</b>	<b>CPA Canada Technical Competencies</b>	<b>Pre-Class Prep</b>
1 Nov 2	- Introduction to Course Outline - Introduction to Data Analytics Fundamentals	N/A Foundation Building	Chapter 1
2 Nov 9	- Data Visualization - Performance Management Case (Hands On) - In-Class Memo 1	1.4.3; 1.4.4; 1.4.5	Chapter 4
3 Nov 16	- Data Preparation and Cleansing - Financial Statement Analytics - Finance Case (Hands On) - In-Class Memo 2	3.1.1; 3.1.3; 3.2.1; 5.1.3; 5.6.1	Chapters 2 & 8
4 Nov 23	- The Modern Audit & Audit Data Analytics - Advanced Power Query (Hands On)	4.2.1; 4.2.2; 4.3.6; 4.3.8; 4.3.9; 4.3.10	Chapters 5 & 6
5 Nov 30	- Generating Key Performance Indicators - Taxation Case {Auditing GST} (Hands On)	4.3.11; 6.7.1; 2.3.1; 3.2.2	Chapter 7
6 Dec 7	- Final Exam Review - Data Analytics Theory - Power BI - Power Query - MAcc / CFE Tips and Tricks	N/A	N/A

Contribution to Learning Goals of the Program ([MAcc](#)):

Program Learning Goal	Competencies Not Covered	Competencies Introduced (only)	Competencies Taught But Not Assessed	Competencies Taught and Assessed
<b>MA1 Technical Competencies</b>  <i>Graduates will possess the technical abilities expected of professional accountants in all functional areas.</i>				X
<b>MA2 Problem-Solving and Decision-Making</b>  <i>Graduates will be skilled in problem-solving and decision-making.</i>				X
<b>MA3 Enabling Competencies</b>  <i>Graduates will possess the essential skills of a professional accountant including professional and ethical behaviour, communication, self-management, and teamwork and leadership.</i>				X

## ADDITIONAL INFORMATION

### Course Sharing Websites:

Materials created for this course (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s).

### Required Calculator for Examinations:

If you are purchasing a calculator, we recommend any one of the following options: Texas Instruments BA II Plus (including Pro Model), Hewlett Packard HP 12C (including Platinum model), Staples Financial Calculator, Sharp EL-738C & Hewlett Packard HP 10bII

### Group Work:

The Sprott School of Business encourages group assignments in the school for several reasons. They provide you with opportunities to develop and enhance interpersonal, communication, leadership, follower-ship and other group skills. Group assignments are also good for learning integrative skills for putting together a complex task. Your professor may assign one or more group tasks/assignments/projects in this course. Before embarking on a specific problem as a group, it is your responsibility to ensure that the problem is meant to be a group assignment and not an individual one.

### Letter Grades:

In accordance with the Carleton University Undergraduate Calendar (p 34), the letter grades assigned in this course will have the following percentage equivalents:

A+ = 90-100	B+ = 77-79	C+ = 67-69	D+ = 57-59
A = 85-89	B = 73-76	C = 63-66	D = 53-56
A - = 80-84	B - = 70-72	C - = 60-62	D - = 50-52
F = Below 50			

Grades entered by Registrar:

WDN = Withdrawn from the course

DEF = Deferred

### Academic Regulations:

University rules regarding registration, withdrawal, appealing marks, and most anything else you might need to know can be found on the university's website, here:

<http://calendar.carleton.ca/undergrad/regulations/academicregulationsoftheuniversity/>

### Requests for Academic Accommodation:

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

### **Pregnancy**

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website:

<https://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf>

### **Religious Obligations**

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website:

<https://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf>

### **Students with Disabilities**

If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or [pmc@carleton.ca](mailto:pmc@carleton.ca) for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made.

[carleton.ca/pmc](https://carleton.ca/pmc)

### **Survivors of Sexual Violence**

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and its survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: <https://carleton.ca/sexual-violence-support/>

### **Student Activities**

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodations during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist.

<https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>

For more information on academic accommodation, please contact the departmental administrator or visit: [students.carleton.ca/course-outline](https://students.carleton.ca/course-outline)

### **Academic Integrity**

Violations of academic integrity are a serious academic offence. Violations of academic integrity – presenting another’s ideas, arguments, words or images as your own, using unauthorized material, misrepresentation, fabricating or misrepresenting research data, unauthorized co-operation or collaboration or completing work for another student – weaken the quality of the degree and will not be tolerated. Penalties may include; a grade of Failure on the submitted work and/or course; academic probation; a refusal of permission to continue or to register in a specific degree program; suspension from full-time studies; suspension from all studies at Carleton; expulsion from Carleton, amongst others. Students are expected to familiarize themselves with and follow the Carleton University Student Academic Integrity Policy which is available, along with resources for compliance at:

<https://carleton.ca/registrar/academic-integrity/>

### **Centre for Student Academic Support**

The Centre for Student Academic Support (CSAS) is a centralized collection of learning support services designed to help students achieve their goals and improve their learning both inside and outside the classroom. CSAS offers academic assistance with course content, academic writing and skills development. Visit CSAS on the 4th floor of MacOdrum Library or online at: [carleton.ca/csas](http://carleton.ca/csas)

### **Important Information:**

- Students must always retain a hard copy of all work that is submitted.
- All final grades are subject to the Dean’s approval.
- For us to respond to your emails, we need to see your full name, CU ID, and the email must be written from your valid CARLETON address. Therefore, in order to respond to your inquiries, please send all email from your Carleton CMail account. If you do not have or have yet to activate this account, you may wish to do so by visiting <https://carleton.ca/its/get-started/new-grad-students/>