

Course Outline

RSM 326 H1 S

Data Analytics with Financial Accounting Information

Winter 2023

Lecture Meets: Thursday 9-11 (L0101) and 11-1 (L0201) in RT 142, Thursdays 3-5 (L0301) in SS1085

Tutorials Meet: Friday 10-11 (Online)

Instructors: Scott Liao (L0101 and L0201), Abdul Khizer (L0301)
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Teaching Assistants: Jitesh Kumar (jitesh.kumar@rotman.utoronto.ca),

Course Scope and Mission

This course introduces the analytical mindset and data analytics skills that accounting professionals need to analyze and evaluate a variety of data in order to create insights for making decisions. In particular, you will learn to ask the right questions, prepare the relevant data, apply the appropriate data analytics methods, and interpret the results to answer the questions. You will also learn to use common data analytics tools, such as Excel, Access (SQL), and Tableau to prepare, analyze, and model financial data. Finally, you will apply the analytical mindset and data analytics skills to address various accounting, finance, and general business problems.

Course Prerequisites

RSM219H1, ECO220Y1/ECO227Y1/(STA220H1, STA255H1)/(STA237H1, STA238H1) / (STA257H1, STA261H1)

Statement on Equity, Diversity and Inclusion

The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

Required Readings

Highly recommended: Introduction to Data Analytics for Accounting, Richardson, Terrell and Teeter, McGraw Hill.

Evaluation and Grades

Grades are a measure of the performance of a student in individual courses. Each student shall be judged on the basis of how well they have command of the course materials.

| Work | % Weight | Due Date |
|--------------------------|-----------------|-----------------|
| Homework | Not graded | Weekly |
| Class Participation | 10% | Weekly |
| Midterm Group Project | 30% | March 9 |
| Final Individual Project | 25% | April 6 |
| Final Exam | 35% | |

Course Format and Expectations

Class Participation

Students are required to prepare thoroughly and make every effort to make contributions to the class discussion. The success of this class will depend on students' participation. Active participation will make the class more enjoyable and interesting. Participation in class is evaluated based on the quantity and quality of comments made during each week's class.

Homework

There will be weekly take-home problems. The problems will be covered by the TA during the tutorial session and are therefore not graded. They serve as a practice and will significantly enhance the learning and preparation for the projects and the final exam. Completion of homework is highly encouraged.

Midterm Group Project

The midterm group project requires students to work in teams of 4-5. Learning to work together in teams is a crucial transferrable skill you will use not only in your coursework, but also in your future careers. Support is available if you encounter common teamwork challenges such as:

- Team members feeling left out of the team.
- Team members not responding in a timely manner to communication.
- Division or quality of work among team members being unequal or unfair.

Consult the [Centre for Professional Skills Teamwork Resources page](#) for tips, strategies, and best practices. You can also [book an appointment with a teamwork mentor](#) through the RC Centre for Professional Skills Writing Centre. Teamwork mentors can help you resolve or mitigate conflict, strategize on planning, or improve team communication.

If you are a student registered with Accessibility Services, and extensions are one of your academic accommodations, consult with your Accessibility Advisor about the teamwork in this course.

Final Individual Project

While the final project will be similar in nature to the midterm project, it will be done individually rather than in groups. Details of the project will be revealed closer to the mid-semester.

Final Exam

Final exam will be in-class, scheduled for during the final exam period (date TBD). It will cover the entire semester and unlike the projects, which are aimed at testing students' ability to perform analyses using data, it will be focused on testing conceptual knowledge and ability to interpret analyses.

Original:

Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (<https://uoft.me/pdt-faq>).

Writing Assignments or Presentations

How well you communicate your ideas, in writing or orally, will be considered in the evaluation of the assignment. In your written assignments, you should aim for clarity, strong organization, concision, professionalism, and correct grammar. Your presentations should reflect strong planning and organization, clarity of speech, and an engaging demeanour. Sources, whether in written or presentation assignments, should always be correctly attributed.

Support is available through the RC Centre for Professional Skills (CPS) for students who would like help or feedback on their writing or speaking (presentations). CPS offers both individual and group appointments with trained writing instructors and presentation coaches who are familiar with the RC program and common types of business assignments. You can also access your college Writing Centres for help with written assignments.

You can [book an appointment with a writing or presentation coach](#) through the RC Centre for Professional Skills Writing Centre. For more information about writing centres, student supports, and study resources, see the [Writing and Presentation Coaching academic support page](#).

Electronic Course Materials

This course will be using the following electronic course materials:

Electronic access to the textbook listed above (highly recommended, but not required), \$99.

The required materials will cost no more than \$65.00. The use of these materials complies with all University of Toronto policies which govern fees for course materials.

Weekly Schedule

| Session | Date** | Topic | Readings |
|---------|--------|---|--------------------------------------|
| 1 | Jan 12 | Using Data Analytics to Ask and Answer Accounting Questions | Chapter 1 Appendices 1A & 1B |
| 2 | Jan 19 | Introduction to Accounting Data Data Types and How They Are Used | Chapter 2 Chapter 3 |
| 3 | Jan 26 | Preparing Data for Analysis 1 (Relational database, VLOOKUP, & Data Model) | Chapter 4 |
| 4 | Feb 2 | Preparing Data for Analysis 2 (Power Query & SQL) | Appendix 4A |
| 5 | Feb 9 | Types of Data Analytics Descriptive Analytics | Chapter 5 (pp. 224-235) Chapter 6 |
| 6 | Feb 16 | Review of Basic Statistics Diagnostic Analytics | Chapter 5 (pp. 236-245) Chapter 7 |
| | | Reading Week – No classes | |
| 7 | Mar 2 | Diagnostic Analytics (continued) | Chapter 7 |
| 8 | Mar 9 | Predictive Analytics | Chapter 8 |
| 9 | Mar 16 | Predictive Analytics (continued) | Chapter 8 |
| 10 | Mar 23 | Prescriptive Analytics | Chapter 9 |
| 11 | Mar 30 | Prescriptive Analytics (continued) Share the Story & Visualization | Chapter 9 Chapter 10 |
| 12 | Apr 6 | Catch up and Selected topics (may be asynchronous) | TBA |
| | | Final Exam Period | |

* The schedule is subject to change.

** Please attend the section that you are officially registered in.

Please note that the last day you can drop this course without academic penalty is March 19, 2020.

Policies and Procedures

Missed Tests and Assignments (including mid-term and final-term assessments)

Students who miss a test or assignment for reasons entirely beyond their control (e.g. illness) may request special consideration.

In such cases, students must:

1. Notify the instructor AND the Rotman Commerce Program Office **on the date** of the missed course deliverable, e.g. missed test, final assessments, assignment or class (in the case of participation marks).

2. Complete a [Request for Special Consideration Form](#) and submit it along with your Absence Declaration on [ACORN](#) (please read the instructions on how to use the Absence Declaration in ACORN) within **2 business days** of the originally scheduled course deliverable. Please email your documents to rotmancommerce.info@utoronto.ca

Students who do not provide this information will be given a grade of 0 (zero) for the missed course deliverable.

Missed assignments/homework may be reweighted to other components by the discretion of the instructor.

Late Assignments

All assignments are due on the date and at the time specified in Quercus. Late submissions will normally be penalized by 20% if the assignment is not received on the specified date, at the specified time. A further penalty of 5% will be applied to each subsequent day.

Students who, for reasons beyond their control, are unable to submit an assignment by its deadline must obtain approval from the instructor for an extension. Supporting documentation will be required as per the policy on missed tests and assignments.

Commitment to Accessibility

The University is committed to inclusivity and accessibility, and strives to provide support for, and facilitate the accommodation of, individuals with disabilities so that all may share the same level of access to opportunities and activities offered at the University.

If you require accommodations for a temporary or ongoing disability or health concern, or have any accessibility concerns about the course, the classroom or course materials, please [email Accessibility Services](#) or [visit the Accessibility Services website for more information](#) as soon as possible. Obtaining your accommodation letter may take up to several weeks, so get in touch with them as soon as possible. If you have general questions or concerns about the accessibility of this course, you are encouraged to reach out to your instructor, course coordinator, or Accessibility Services.

Academic Integrity

Academic Integrity is a fundamental value essential to the pursuit of learning and scholarship at the University of Toronto. Participating honestly, respectfully, responsibly and fairly in this academic community ensures that the U of T degree that you earn will continue to be valued and respected as a true signifier of a student's individual work and academic achievement. As a result, the University treats cases of academic misconduct very seriously.

[The University of Toronto's Code of Behaviour on Academic Matters](#) outlines the behaviours that constitute academic misconduct, the process for addressing academic offences and the penalties that may be imposed. You are expected to be familiar with the contents of this document. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement.
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.

- Obtaining or providing unauthorized assistance on any assignment (this includes collaborating with others on assignments that are supposed to be completed individually).

On test and exams:

- Using or possessing any unauthorized aid, including a cell phone.
- Looking at someone else's answers
- Misrepresenting your identity.
- Submitting an altered test for re-grading.

Misrepresentation:

- Falsifying institutional documents or grades.
- Falsifying or altering any documentation required by the University, including (but not limited to) medical notes.

All suspected cases of academic dishonesty will be investigated by the following procedures outlined in the *Code of Behaviour on Academic Matters*. If you have any question about what is or is not permitted in the course, please do not hesitate to contact the course instructor. If you have any questions about appropriate research and citation methods, you are expected to seek out additional information from the instructor or other U of T resources such as College Writing Centres or the Academic Success Centre.

Tutorial and TA Office Hours

TA would be conducting a Tutorial every Friday from 10:00 AM to 11:00 PM. These tutorials would be held online and are not mandatory to attend but will be helpful if students need any extra help. Tutorials would be recorded for students. Tutorials would run from Jan 20th till the end of the term.

Moreover, TA would also be available for office hours which may be booked online any day through an appointment.

Zoom Details for Tutorial

Meeting URL: <https://utoronto.zoom.us/j/86243971604>
Meeting ID: 862 4397 1604
Passcode: 772823

Email

At times, the course instructor may decide to communicate important course information by email. As such, all U of T students is required to have a valid UTmail+ email address. You are responsible for ensuring that your UTmail+ email address is set up and properly entered on ACORN. For more information visit help.ic.utoronto.ca/category/3/utmail.html.

Forwarding your utoronto.ca email to a Gmail or other type of email account is not advisable. In some cases, messages from utoronto.ca addresses sent to Gmail accounts are filtered as junk mail, which means that important messages from your course instructor may end up in your spam or junk mail folder.

Quercus and the Course Page

The online course page for this course is accessed through Quercus. To access the course page, go to q.utoronto.ca and log in using your UTORid and password. Once you have logged in, you will be at the Quercus Dashboard. On this page you will see all of the courses you are presently enrolled in. If you don't see the course listed here but you are properly registered for the course in ACORN, wait 48 hours.

Recording Lectures

Lectures and course materials prepared by the instructor are considered by the University to be an instructor's intellectual property covered by the Canadian Copyright Act. Students wishing to record a lecture or other course material in any way are required to ask the instructor's explicit permission, and may not do so unless permission is granted. Students who have been previously granted permission to record lectures as an accommodation for a disability are excepted. This includes tape recording, filming, photographing PowerPoint slides, Quercus materials, etc.

If permission for recording is granted by the instructor (or via Accessibility Services), it is intended for the individual student's own study purposes and does not include permission to "publish" them in any way. It is forbidden for a student to publish an instructor's notes to a website or sell them in any other form without formal permission.

FIPPA Language

Notice of video recording and sharing (Download permissible; re-use prohibited)

This course, including your participation, will be recorded on video and will be available to students in the course for viewing remotely and after each session.

Course videos and materials belong to your instructor, the University, and/or other source depending on the specific facts of each situation, and are protected by copyright. In this course, you are permitted to download session videos and materials for your own academic use, but you should not copy, share, or use them for any other purpose without the explicit permission of the instructor.

For questions about recording and use of videos in which you appear please contact your instructor.

Other Useful Links

- [Become a volunteer note taker](#)
- [Accessibility Services Note Taking Support](#)
- [Credit / No-Credit in RSM courses](#)
- [Rotman Commerce Academic Support](#)

URL links for print

- Request for Special Consideration Form: <https://rotmancommerce.utoronto.ca/current-students/forms-requests-and-appeals/forms/>
- ACORN: <http://www.acorn.utoronto.ca/>
- Email Accessibility Services: accessibility.services@utoronto.ca
- Accessibility Services website: <http://studentlife.utoronto.ca/as>
- University's Plagiarism Detection Tool FAQ: <https://uoft.me/pdt-faq>
- The University of Toronto's Code of Behaviour on Academic Matters: <http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>
- Information Commons Help Desk: <http://help.ic.utoronto.ca/category/3/utmail.html>

- Become a volunteer note taker: <https://studentlife.utoronto.ca/program/volunteer-note-taking/>
- Accessibility Services Note Taking Support: <https://studentlife.utoronto.ca/service/note-taking-support/>
- Credit / No-Credit in RSM courses: <https://rotmancommerce.utoronto.ca/current-students/degree-requirements/credit-no-credit-option/>
- Rotman Commerce Academic Support: <https://rotmancommerce.utoronto.ca/current-students/academic-support/>
- Book an appointment with a writing or presentation coach: <http://uoft.me/writingcentres>
- Writing and Presentation Coaching academic support page: <https://rotmancommerce.utoronto.ca/current-students/academic-support/writing-and-presentation-coaching/>
- Centre for Professional Skills Teamwork Resources page: <https://rotmancommerce.utoronto.ca/teamwork-resources>
- Book an appointment with a Teamwork Mentor: <http://uoft.me/writingcentres>