

Course Outline

Course Code	RSM326H1	
Course Name	Data Analytics with Financial Accounting Information	
Term, Year	Summer 2025 - F	
Course Meets	LEC0101	
	Tuesdays and Thursdays 1:00 PM - 3:00 PM	
	Please see Quercus page for meeting location	
Web page URL	https://q.utoronto.ca	

Instructor Details

Name	Email	Office Hours
Xingchao Gao	xingchao.gao@rotman.utoronto.ca	Please see
_		Quercus page

Course Description and Learning Outcomes

This course introduces the analytical mindset and data analytics skills that accounting professionals need to analyze and evaluate a variety of data to create insights for making decisions. Specifically, 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)

Course Materials

Required Readings

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

Electronic Course Materials

This course will be using the following electronic tools/applications:

Excel (for **Windows**), MS Access (for **Windows**), and Tableau.

Microsoft Office applications and Tableau are free to all students. Students using Mac computers are required to use the Windows version of Microsoft Office (to allow for full functionality), which may necessitate having a parallel Windows operating system (available for purchase if not already loaded) or be willing to use the Lab/Library computers to complete assignments. More information will be provided in a separate handout. The use of these materials complies with all University of Toronto policies which govern fees for course materials.

Evaluation and Grades

Grades are a measure of the knowledge and skills developed by a student within individual courses. Each student will receive a grade on the basis of how well they have command of the course materials, skills and learning objectives of the course.

Work	% Weight	Due Date
Homework	Not graded	Ongoing
Class Participation	10%	Ongoing
Midterm Individual Assignment	20%	May 25
Final Group Project	30%	June 12
Final Exam	40%	TBD

Course Format and Expectations

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.

Writing Assignments or Presentations

The individual assignment and group project are intended to help you develop your communication skills. How well you communicate your ideas, in writing, 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. Sources should always be correctly attributed. 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. CPS offers both individual and group appointments with trained writing instructors 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.

Team or Group Assignments

The final group project requires students to work in teams of \leq 4. 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 <u>Centre for Professional Skills Teamwork Resources page</u> for tips, strategies, and best practices. You can also <u>book an appointment with a teamwork mentor</u> through the RC Centre for Professional Skills Writing Centre or by emailing <u>rotmancommerce.teamworkhelp@utoronto.ca</u>. 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.

Class Participation

Students are expected to prepare thoroughly and make every effort to attend every class and tutorial. Attendance will be taken in both classes and tutorials. As class participation is a graded component of the course, students will be evaluated on the following:

- Thoughtful responses
- Understanding and analysis of topic
- Idea generation
- Promoting further discussion
- Respectful active listening
- Attentiveness

While attendance is necessary for students to participate in class discussions, attendance on its own will not result in a high participation grade. Students must actively contribute and participate by exhibiting the components listed above. 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.

Additional ways to participate in the class include attending an appointment with an RC Writing Instructor or Peer Teamwork Mentor. Appointments will be included in the evaluation of participation grades. Details on how to book those appointments are included in the following sections.

Rotman Commerce Attendance Policy

Rotman Commerce students are expected to make every effort to attend each class. Infrequently, students may miss term work, e.g., quizzes, assignments, etc., due to unplanned and extenuating circumstances and must follow the Request for Special Consideration process as outlined in their course outlines. However, Rotman Commerce will not approve any Request for Special Consideration for participation marks for missed classes. Any such request will be denied.

Missed Tests and Assignments

Students who miss a term test or assignment for reasons entirely beyond their control (e.g. illness) may request special consideration **within 2 business days** of the missed midterm/test/assignment due date.

In such cases, students must:

- 1. Complete the Request for Special Consideration form: https://uoft.me/RSMConsideration
- 2. Provide documentation to support the request, eg. Absence Declaration from <u>ACORN</u>, Verification of Illness Form etc.

Please note: As of September 2023, students may use the Absence Declaration on ACORN *one time per term* to report an absence and request consideration. Any subsequent absence will require a Verification of Illness form or other similar relevant documentation.

Students who do not submit their requests and documentation within 2 days may receive a grade of 0 (zero) on the missed course deliverable. Missed assignments/homework may be reweighted to other components by the discretion of the instructor.

Final Exams: If you miss the final exam in this course for a legitimate reason (illness, etc) you will need to connect with your College Registrar to file a petition for a deferred exam. This deferred exam will be written at a later date as established by the Faculty of Arts & Science. Instructions can be found here: https://www.artsci.utoronto.ca/current/faculty-registrar/petitions-appeals/preparing-petition

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 10% 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.

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.

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 <a href="mailto:emailto:

Generative AI / ChatGPT

- Students are allowed to make use of technology, including generative artificial intelligence tools, to contribute to their understanding of course materials.
- Students may use artificial intelligence tools, including generative AI, in this course as learning
 aids or to help produce midterm and final assignments, but will not have access to it during
 the final exam. Students are ultimately accountable for the work they submit and poor mark

- resulting from incorrect answers produced by AI is the responsibility of the student i.e., use AI at your own risk.
- Any content produced by an artificial intelligence tool must be cited appropriately. Many organizations that publish standard citation formats are now providing information on citing generative AI (e.g., MLA: https://style.mla.org/citing-generative-ai/).

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.

<u>The University of Toronto's Code of Behaviour on Academic Matters</u> 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 procedures outlined in the <u>Code of Behaviour on Academic Matters</u>. If you have any questions 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 or RC resources such as the RC Centre for Professional Skills, the College Writing Centres or the Academic Success Centre.

Email

At times, the course instructor may decide to communicate important course information by email. As such, all U of T students are 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 the <u>Information Commons Help Desk</u>.

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.

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.



Weekly Schedule

Session	Date	Topic	Readings
1	Tuesday May 6	Using Data Analytics to Ask and Answer Accounting Questions	Chapter 1 Appendices 1A & 1B
2	Thursday May 8	Introduction to Accounting Data Data Types and How They Are Used	Chapter 2 Chapter 3
3	Tuesday May 13	Preparing Data for Analysis 1 (Relational database, VLOOKUP, & Data Model)	Chapter 4
4	Thursday May 15	Preparing Data for Analysis 2 (Power Query & SQL)	Appendix 4A
5	Tuesday May 20	Types of Data Analytics Descriptive Analytics	Chapter 5 Chapter 6
6	Thursday May 22	Diagnostic Analytics	Chapter 7
7	Tuesday May 27	Diagnostic Analytics (continued)	Chapter 7
8	Thursday May 29	Predictive Analytics	Chapter 8
9	Tuesday Jun 3	Predictive Analytics (continued)	Chapter 8
10	Thursday Jun 5	Prescriptive Analytics	Chapter 9
11	Tuesday Jun 10	Share the Story & Visualization Catch up and Selected topics (ML/AI)	Chapter 10
12	Thursday Jun 12	Group project presentation Wrap-up	
		Final Exam Period (June 19-24)	

Please note that the last day you can drop this course without academic penalty is June 2, 2025.



Other Useful Links

- Become a volunteer note taker
- Accessibility Services Note Taking Support
- Credit / No-Credit in RSM courses
- Rotman Commerce Academic Support
- Where to find teaching assistant opportunities

URL links for print

- 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