

# Course Outline

<b>Course Code</b>	RSM 326 H1S
<b>Course Name</b>	Data Analytics with Financial Accounting Information
<b>Term, Year</b>	Winter, 2024
<b>Lectures Meet</b>	L0101 R 9-11 / RT
<b>Tutorials Meet</b>	T0101 F 9-10 / UC T0201 F 10-11 / UC
<b>Web page URL</b>	<a href="https://q.utoronto.ca">https://q.utoronto.ca</a>

## Instructor Details

Name	Email	Phone	Office Hours	Virtual Office Link
Clark Shu	<a href="mailto:clarkgz.shu@rotman.utoronto.ca">clarkgz.shu@rotman.utoronto.ca</a>	437-324-2680	Tue 10 am to 12 pm; or by appointment	Zoom ID: 534 726 4663 Passcode: 784658

## Course Scope, Mission 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

*Highly 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	Percentage of grade	Due Date
Homework	Not graded	Weekly
Class Participation	10%	Self-reporting Feb 29 & Apr 4
Midterm Group Project	25%	Mar 1
Final Individual Project	25%	Apr 3
Final Exam	40%	TBD

## 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. Students are expected to maintain a log of their in-class participation (template to be provided by the instructor) and hand in an interim report prior to the midterm, and a final report at the end of the course.

### 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 3-4. 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 [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 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.

## Missed Tests and Assignments

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. Complete the Request for Special Consideration form: <https://uoft.me/RSMConsideration>
2. Provide documentation to support the request, eg. Absence Declaration from [ACORN](#), medical note 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 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.

## 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 [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.

## 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.

[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 procedures outlined in the [Code of Behaviour on Academic Matters](#). 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 [Information Commons Help Desk](#).

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	Thu Jan 11	Using Data Analytics to Ask and Answer Accounting Questions	Chapter 1 Appendices 1A & 1B
2	Thu Jan 18	Introduction to Accounting Data Data Types and How They Are Used	Chapter 2 Chapter 3
3	Thu Jan 25	Preparing Data for Analysis 1 (Relational database, VLOOKUP, & Data Model)	Chapter 4
4	Thu Feb 1	Preparing Data for Analysis 2 (Power Query & SQL)	Appendix 4A
5	Thu Feb 8	Types of Data Analytics Descriptive Analytics	Chapter 5 (pp. 224-235) Chapter 6
6	Thu Feb 15	Review of Basic Statistics Diagnostic Analytics	Chapter 5 (pp. 236-245) Chapter 7
	Thu Feb 22	Reading Week – No Classes	
7	Thu Feb 29	Diagnostic Analytics (continued)	Chapter 7
8	Thu Mar 7	Predictive Analytics	Chapter 8
9	Thu Mar 14	Predictive Analytics (continued)	Chapter 8
10	Thu Mar 21	Prescriptive Analytics	Chapter 9
11	Thu Mar 28	Prescriptive Analytics (continued) Share the Story & Visualization	Chapter 9 Chapter 10
12	Thu Apr 4	Catch up and Selected topics (ML/AI)	TBA
		Final Exam Period (Apr 10 – 30)	

**Please note that the last day you can drop this course without academic penalty is March 11, 2024.**

## 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

- ACORN: <http://www.acorn.utoronto.ca/>
- Email Accessibility Services: [accessibility.services@utoronto.ca](mailto: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>