

ITM 550 - Advanced e-Business

COURSE OUTLINE FOR 2026-2027

Semester, Section
Classroom, Class Time

Prerequisite(s): [(ITM 100 or ITM 102) and ITM 305, MKT 100] or in the Bus Tech Mgmt 2-Year Public Ontario College Diploma Graduate - Degree Completion Program.

Antirequisite(s): ITM 350

Faculty/Contract Lecturer Information

- Faculty/Contract Lecturer Name:
- Office Location:
- Office Hours:
- Course Website: my.torontomu.ca (for courses using D2L)
- Email Address:

Mode of Course Delivery: In person

Academic Program Advising Contacts

Chair/Director for this Course: Sameh Al Natour

Email Policy

Students are expected to monitor and retrieve messages and information sent through D2L and TMU email on a frequent and consistent basis. In accordance with the Policy on TMU Student E-mail Accounts ([Policy 157](#)), Toronto Metropolitan University (TMU) requires that any electronic communication by students to TMU faculty or staff be sent from their official university email account. Communications sent from other accounts may be disregarded.

Course Description

Building on concepts gained in core ITM business and technology courses, this course will advance theoretical knowledge and applications of electronic commerce (e-Commerce). It integrates technical, social, and business aspects involved in the creation and maintenance of an e-Commerce presence. Business, financial and marketing models that underpin e-Commerce are advanced. Interface, interaction and database design as well as security and analytics measures necessary for building and

maintaining an e-Commerce presence are explained. E-commerce examples illustrating course concepts are discussed and analyzed. All concepts are applied in a hands-on laboratory and project activities.

Course Details

Teaching Methods

The instruction will take place at scheduled hours, following the approach outlined in D2L Brightspace. Laboratory exercises will be submitted as an assignment for that laboratory and be due the following week. There are five laboratory assignments that must be submitted, three mandatory and two that students select from the five other laboratory offerings. However, each of the laboratories will also have a mandatory in-class exercise, which may be a quiz or other exercise. A major project with five separate deliverables will also be used for students to demonstrate competency in the course concepts. Students will work in groups for the project.

There will be a lecture for the first one hour and forty-five minutes of the listed time, followed by a one-hour laboratory as indicated in the schedule. The academic assistant (AA) will be available during lab time for assistance with the lab material and software, questions and discussion.

For direct feedback on projects, work in progress demonstrations, where it is necessary to view videos or websites together, all group members must attend and participate in answering questions from others and providing feedback to other groups/projects. If a group member is absent, no grades will be assigned.

Note: All assessments in this course, regardless of its delivery format, will be held in-person on campus. This applies to in-person, virtual, and online courses, including sections/courses delivered through the Chang School.

Variations within a Course

All sections of a course (Day and CE sections) will follow the same course outline and will use the same course delivery methods, methods of evaluation, and grading schemes. Any deviations will be posted on D2L Brightspace once approved by the course coordinator.

Course Materials

Materials for laboratory (electronic versions of all reading materials are accessible through the TMU library)

1. A license for Shopify is required. See <https://www.shopify.com/ca/free-trial-offer>. You will need at least 3 months. You will be notified by D2L on the best date to activate your free trial. Subscription to Shopify: 3 days free, then 3 months for \$1/month. Please unsubscribe after the course.
2. Sims, L. (2018). Building your online store with WordPress and WooCommerce: Learn to leverage the critical role e-commerce plays in today's competitive marketplace (1st ed.). Berkeley, CA: Apress L. P.
3. Shopify. (2026). Intro to Shopify. <https://help.shopify.com/en/manual/intro-to-shopify>.

Texts & other reading materials (electronic versions of all reading materials are accessible through the TMU library or the public internet.)

1. Zhou, F., Liang, Z., Zhang, N., & Mou, J. (2026). HOW DOES ARTIFICIAL INTELLIGENCE MAKE THE WORLD A BETTER PLACE? UNPACKING THE EFFECTS OF ARTIFICIAL INTELLIGENCE RECOMMENDATIONS OF SOCIAL GOODS ON ECOMMERCE WEBSITES. Journal of Electronic Commerce Research, 27(2), 142-166.
2. Bilotta, N., & Romano, S. (2019). The rise of tech giants: A game changer in global finance and politics. Bern: Peter Lang.
3. Twin, A. (2026). KPIs: What are Key Performance Indicators? Tyes and Examples. <https://www.investopedia.com/terms/k/kpi.asp>.
4. Wei, Y., Xu, D. J., & Li, K. (2025). Turning the Tide: How AI Review Bot's Reply Helps Low-Follower Influencers in E-Commerce. Journal of Electronic Commerce Research, 26(3), 306-322.
5. Lin, K. (2022). A comparative analysis for emerging e-commerce business owners: Shopify & Amazon. EDP Sciences. <https://doi.org/10.1051/shsconf/202215101033>
6. Chauhan, S. (2020). COVID-19: An inflection point for E-commerce. Express Computer
7. Shopify. (n.d.). What Is e-Commerce? A Comprehensive Guide. from <https://www.shopify.in/encyclopedia/what-is-e-Commerce>
8. Better Lemonade Stand. (2024). What is e-Commerce <https://www.abetterlemonadestand.com/what-is-e-Commerce/>
9. Spivey, M. (2026). E-commerce infrastructure: The ultimate guide to revamp for growth. <https://www.bigcommerce.com/articles/ecommerce-website-development/infrastructure/>
10. Bathgate, J. (2020). Retailcustomerexperience.com - networld media group: Why content is the foundation for a successful e-commerce shopping experience. Singer Island: Newstex. Retrieved from

- <https://www.retailcustomerexperience.com/blogs/why-content-is-the-foundation-for-a-successful-e-commerce-shopping-experience/>
11. Maguire, M. (2023). A Review of Usability Guidelines for E-Commerce Website Design. In M. M. Soares, A. Marcus, & E. Rosenzweig (Eds.), Design, User Experience, and Usability (Vol. 14032, pp. 30–43). Springer. https://doi.org/10.1007/978-3-031-35702-2_3
 12. Sherwin, K., (2020). 5 types of e-Commerce shoppers - video. Retrieved Dec. 30, 2020 from <https://www.nngroup.com/videos/5-types-e-commerce-shoppers/>
 13. Adobe (2026). SEO in 2026: How AI is reshaping the fundamentals of search. <https://business.adobe.com/blog/seo-in-2026-fundamentals>.
 14. Tan, F. T. C., Guo, Z., Cahalane, M., & Cheng, D. (2016). Developing business analytic capabilities for combating e-commerce identity fraud: A study of Trustev's digital verification solution. Information & Management, 53(7), 878-891. <https://doi.org/10.1016/j.im.2016.07.002>
 15. Mohd, N. A., & Zaaba, Z. F. (2019). A review of usability and security evaluation model of e-Commerce website. Procedia Computer Science, 161, 1199-1205.
 16. Zhang, Ronggang, et al. The Whole Process of e-Commerce Security Management System : Design and Implementation, Springer, 2023. ProQuest Ebook Central, <https://www.proquest.com/legacydocview/EBC/7191425?accountid=13631>.
 17. Anggadol, K., (2023). Canada's e-commerce laws: what you need to know. <https://www.lexpert.ca/news/legal-faq/canadas-e-commerce-laws-what-you-need-to-know/379856>.
 18. Boag, P., (2025). The psychology of ethical E-commerce: How to help customers buy (without manipulation). <https://boagworld.com/usability/the-psychology-cro/>
 19. Shopify podcasts: <https://www.shopify.com/podcasts>

Course Learning Outcomes

Learning outcomes describe what students are expected to have learned or achieved; as a result, they usually describe what students will be capable of doing, or what evidence will be provided to substantiate learning.

The students in this course will build on previous knowledge and experiences of business and technological fundamentals and the application of technology, software and infrastructure to the creation and maintenance of an e-Commerce presence online. ITM550 concentrates on the application and development of technology to support eBusiness/E-commerce strategy and initiatives in today's digital economy. The learning objectives for this course are:

1. To develop a comprehensive knowledge of how business, financial, technical and design fundamentals are applied in an E-commerce context;
2. To analyze the infrastructure, security, analytics and user needs of E-commerce;
3. To develop competencies and skills in applying knowledge in a hands-on setting.

Course-level learning outcomes

The course is designed to provide students with:

- Knowledge of the fundamental technology drivers in eBusiness/e-Commerce including network infrastructure, software and user interface design and functionality, database design, content development, and limitations;
- Knowledge of the current status of business and financial models and strategies in an e-Commerce context;
- Knowledge of how basic business functions (such as marketing, sales, manufacturing, distribution and customer service) are implemented in an eBusiness/e-Commerce context;
- Ability to analyze and explain the ethics, social issues, and responsibilities of e-Commerce;
- Ability to analyze the security and analytics requirements of e-Commerce; and
- Knowledge of creating and maintaining an e-Commerce presence.

Academic Integrity

Academic integrity is integral to your learning, the credibility of your degree or certification, and the integrity of the university as a whole. [Senate Policy 60: Academic Integrity](#) defines academic misconduct, provides a non-exhaustive list of examples of behaviours that may be considered as academic misconduct, and explains how academic misconduct concerns are evaluated and decided. The entirety of the policy applies in this course. As well, please note that submitting work created in whole or in part by artificial intelligence tools unless expressly permitted by the faculty/contract lecturer, is considered a violation of Policy 60.

Generative AI Course Policy and Plagiarism Detection

Generative AI Course Policy

The use of Generative AI (e.g., ChatGPT, Quillbot, Grammarly, Google Translate) can be used to help with the writing process as grammar and spelling checkers as well as to generate images and video materials for a student's e-commerce website. They cannot be used to generate original material, such as an introduction or conclusion. If these applications are used, they must be cited within the assignment or report accordingly.

If you misrepresent source material (as AI often does), that will be considered a breach of Policy 60. If your citations are not genuine (AI often makes up references), that will be considered a breach of Policy 60. Students are required to write a complete declarative statement describing how AI tools were used and the extent of its contribution to the final submission. Copy and pasted material without proper citations will be considered a breach of Policy 60: Academic Integrity.

Turnitin or another originality detection software

Turnitin is a plagiarism prevention and detection service to which TMU subscribes. It is a tool to assist faculty/contract lecturers in determining the similarity between students' work and the work of other students who have submitted papers to the site (at any university), internet sources, and a wide range of books, journals and other publications. While it does not contain all possible sources, it gives faculty/contract lecturers some assurance that students' work is their own. No decisions are made by the service; it generates an "originality report," which faculty/contract lecturers must evaluate to judge if something is plagiarized.

Students agree by taking this course that their written work will be subject to submission for textual similarity review to Turnitin. We strongly recommend that faculty/contract lecturers can opt to have student's papers included in TMU's institutional repository rather than the default Turnitin repository. Use of the Turnitin service is subject to the terms-of-use agreement posted on the Turnitin website. Students who do not want their work submitted to this plagiarism detection service must, by the end of the second week of class, consult with their faculty/contract lecturer to make alternate arrangements. Students who choose not to have their papers screened for textual similarity review by turnitin may be required to submit additional work with their research essay. For example:

- an annotated bibliography of each source used in your paper; and/or
- the first few pages of each cited source used in your paper

Even when a faculty/contract lecturer has not indicated that a plagiarism detection service will be used, or when a student has opted out of the plagiarism detection service, if the faculty/contract lecturer has reason to suspect that an individual piece of work has been plagiarized, the faculty/contract lecturer is permitted to submit that work in a non-identifying way to Turnitin.

Copyright

The course materials provided to you are copyrighted, and may not be shared without my express written permission. Do not share these materials (e.g. course outline, lecture slides, assignment instructions) with others and do not post them on the internet during the course, or at any time after. If you do so, Policy 60 will apply.

Academic Integrity Resources

To learn more about Policy 60 and how to avoid academic misconduct, please review and take advantage of these resources:

- Policy 60: Academic Integrity: www.torontomu.ca/senate/policies/academic-integrity-policy-60/
- Academic Integrity Office website: www.torontomu.ca/academicintegrity
- “Academic Integrity in Space” game: <https://games.de.torontomu.ca/aio/#/>
- “Academic Integrity in Cyberspace!” game: <https://www.torontomu.ca/aic/#/>
- Student Life and Learning Support: www.torontomu.ca/student-life-and-learning/learning-support

If you are a student registered with Academic Accommodation Support (AAS):

Please inform your faculty/contract lecturer if you have test accommodation needs that include the use of assistive technology (including text-to-speech, dictation, or literacy software). Some software may require additional configurations by the faculty/contract lecturer, so it is important you inform them in advance and leverage the sample quiz to ensure the tools are compatible with the Brightspace Quiz in LockDown Browser.

However, not all Assistive Technology tools approved by AAS work well with Respondus' software; if your experience of the sample quiz does not function as expected, please notify your faculty/contract lecturer and/or Accommodation Facilitator.

Topics and Course Schedule

Week	Lecture Topic	Readings	Hands-on/Labs	Hand-in & Due dates
1	Introduction to e-Business and e-Commerce	Readings 6, 7 & 8	In-class exercise: e-Commerce: Amazon, Alibaba, and Kijiji	
2	E-commerce business and revenue models	Reading 2 (Ch. 2) & 5	Lab 1 Case analysis (required) In-lab quiz	
3	E-Commerce infrastructure, hardware, databases	Reading 9	Lab 2 SQL database design and relational diagrams for e-Commerce In-lab quiz	Lab 1
4	E-Commerce software design and tools	Reading 10	Proposal advising	Project proposal Lab 2
5	E-Commerce content and media	Reading 11	Lab 3 Builder tools In-lab quiz	
Study week				
6	Designing e-Commerce and m-Commerce interfaces	Reading 12	Lab 4 Using metrics for evaluating e-commerce interfaces In-lab quiz	Lab 3
7	E-commerce marketing, advertising, and consumer behaviour	Readings 1 & 4	Lab 5 SEM, SEO, and AEO techniques (required) In-lab quiz	Lab 4
8	Work In Progress presentations and Peer evaluation class			Video due before class. Work in progress report and peer evaluations

9	E-Commerce Search Engine Marketing (SEM) and analytics	Reading 13 and 3	Lab 6 e-Commerce analytics tools (required) Lab quiz	Lab 5 and Self-study
10	E-Commerce security	Readings 15 & 16 (ch. 2)	Lab 7 e-Commerce security tools and analysis Lab quiz	Lab 6
11	Ethical, social and political issues in e-Commerce	Readings 17, 18	Project advising	Lab 8
12	Final project demonstrations and Peer evaluation class			Video due before class and peer evaluations Final report and website due in week 13 (TBA)

Evaluation

The grade for this course is composed of the mark received for each of the following components:

Evaluation Component	Due Date	Percentage of Final Grade	Anticipated Return Date
5 Lab Assignments (Individual submission) 3 of the 7 labs (marked in bold in the topics schedule) are required for submission by each student. Of the remaining 4 labs, each student will select another 2 for submission and grading for a total of 5 lab submissions per student. Each lab will include an in-class component, submitted during the lab, and an out-of-class component due the following week. Lab submissions require in- and out-of-class components to be considered complete.	Required Lab 1: Week 3 Lab 5: Week 9 Lab 6: Week 10 Optional (choose 2) Lab 2: Week 4 Lab 3: Week 6 Lab 4: Week 7 Lab 7: Week 11	5 5 5 5 per lab submission. Total possible of 10	Week 4 Week 10 Week 11 1 week after lab due date
Assignment (Individual submission) - Self-study - WIP peer evaluation - Final peer evaluation	Week 9 Week 8 Week 12	30 5 5	Week 11 Week 9 Week 14
Project (group submission) - Project Proposal (group, 8%) - Work In Progress report + video (group, 5%) - Final project report + Demo video (22%)	Week 4 Week 8, video due before class Video due week 12 before class; report due in week 13 (date (TBA)	8 5 22	Week 6 Week 9 Week 16
Final Grade		100%	

Project instructions will be released after the previous deliverable is submitted, and students are required to read the instructions.

In addition, in order to pass this course, students must pass the final project.

Note: Students must achieve a course grade of at least 50% to pass this course.

At least 20% of the grade based on individual work will be returned to students prior to the last date to drop a course in good academic standing. For Fall 2026 this must be before Friday, November 20, 2026 and for Winter 2027 before Friday, April 2, 2027.

Citation Format for Essays and Term Papers

All essay assignments, term papers and other written works must adhere to APA citation format, 7th edition. Technical errors (spelling, punctuation, proofing, grammar, format, and citations) and/or inappropriate levels of language or composition will result in marks being deducted. For writing and language support see: <https://www.torontomu.ca/student-life-and-learning/learning-support/writing-support/>

Late Assignments

Assignments must be handed in by the deadline (11:59 pm on the day it is due), otherwise, the submission will be deemed late and a penalty of 10% per day late will be applied. Assignments more than two (2) calendar days late will not be accepted and a grade of zero (0) will be assigned.

Exemption or deferral of an assignment may be permitted for medical or compassionate reasons. Ideally, students will notify their instructor or the GA by email prior to the due date, or within 3 days of the due date if feasible. Students must submit appropriate documentation according to University policy. For religious observance, a request must be submitted to your instructor within the first two weeks of the course.

Students will be asked to sign in for each class. Academic consideration for assignment deferral will be dependent on class attendance and participation.

University Policies

Students must be reminded that they are required to adhere to all relevant university policies found in their online course shell in D2L and/or on [the Senate website](#).

Important Resources Available at Toronto Metropolitan University

- **Addressing Academic Concerns:** Students are expected to address any questions or concerns through open and timely communication with the course faculty/contract lecturer, as soon as they arise. If a concern cannot be resolved through this initial communication or if additional support is required, students are encouraged to reach out to their program advisor or the chair/director of the teaching department for further guidance. These individuals can help provide clarity, facilitate next steps, and ensure that matters are reviewed in a fair and appropriate manner.
- [The University Libraries](#) provide research [workshops](#) and individual consultation appointments. There is a drop-in Research Help desk on the second floor of the library, and students can use the [Library's virtual research help service](#) to speak with a librarian, or [book an appointment](#) to meet in person or online.
- [Student Life and Learning Support](#) offers group-based and individual help with writing, math, study skills, and transition support, as well as [resources and checklists to support students as online learners](#).
- You can submit an [Academic Consideration Request](#) when an extenuating circumstance has occurred that has significantly impacted your ability to fulfill an academic requirement. You may always visit the [Senate website](#) and select the blue radio button on the top right hand side entitled: Academic Consideration Request (ACR) to submit this request.

For Extenuating Circumstances, [Policy 167: Academic Consideration](#) allows for a once per semester ACR request without supporting documentation if the absence is less than 3 days in duration and is not for a final exam/final assessment. Absences more than 3 days in duration and those that involve a final exam/final assessment, always require documentation. Students must notify their faculty/contract lecturer once a request for academic consideration is submitted. See Senate [Policy 167: Academic Consideration](#).

Longer absences are not addressed through Policy 167 and should be discussed with your Chair/Director/Program to be advised on next steps.

- [FAQs Academic Considerations and Appeals](#)

- Information on Copyright:
 - [Copyright FAQs for Faculty/Contract Lecturers](#)
 - [Copyright FAQs for Students](#)
- Information on Academic Integrity:
 - [Academic Integrity for Faculty/Contract Lecturers](#)
 - [Academic Integrity for Students](#)

Accessibility

- At Toronto Metropolitan University, we are committed to ensuring that all courses are accessible to everyone and to removing barriers that may prevent some individuals from enrolling in courses.
- All technologies and tools used in this course are accessible.
- Students who discover an accessibility barrier with any of the course materials or technologies should contact their faculty/contract lecturer.
- As outlined in [Policy 159: Academic Accommodation of Students with Disabilities](#), students are required to proactively consult with AAS, the faculty/contract lecturer, Department or Faculty, as soon as feasible, including prior to enrolling in a course or program, on any concerns they may have about their ability to meet the essential academic requirements of a course/program.

Academic Accommodation Support

[Academic Accommodation Support](#) (AAS) is the university's accessibility services office, supporting students with disabilities. AAS works with students, faculty, and staff to create inclusive learning environments, reduce barriers, and promote accessibility across the university.

If you have (or suspect you may have) a disability, AAS can provide consultation, guide you through registration, develop accommodation plans where appropriate, and connect you with supports and services. For information about eligibility, documentation requirements, registration, deadlines, and available services, visit [AAS](#).

Academic Accommodations (for students with disabilities) and Academic Consideration (for short-term extenuating circumstances) are governed by **different university policies**. [Learn more about each process](#) and how to access support. Students registered with AAS may request academic consideration (related or unrelated to their disability) if they experience extenuating circumstances that impact their ability to meet their shorter term academic obligations. This includes short term physical or mental

health issues that are sudden/acute (e.g, the flu), unexpected illness or injury, hospitalization or treatment, and significant aggravation of a pre-existing condition. Please see [Policy 167: Academic Consideration](#) for more information and details.

Please note that there is no accommodation for missing/rescheduling or reweighting of tests - this is considered an alternate arrangement. Any student who misses a test/exam will be directed to submit an ACR to explore if possible alternate arrangements under [Policy 167: Academic Consideration](#) can apply .

Wellbeing Support

At Toronto Metropolitan University, we recognize that things can come up throughout the term that may interfere with a student's ability to succeed in their coursework. These circumstances are outside of one's control and can have a serious impact on physical and mental well-being. Seeking help can be a challenge, especially in those times of crisis.

If you are experiencing a mental health crisis, please call 911 and go to the nearest hospital emergency room. You can also access these outside resources at anytime:

- **Distress Line:** 24/7 line for if you are in crisis, feeling suicidal or in need of emotional support (phone: 416-408-4357)
- [Good2Talk](#): 24/7-hour line for postsecondary students (phone: 1-866-925-5454)
- [GuardMe Student Support Program \(GMSSP\)](#): 24/7 access to confidential support through counsellors via the [Student Support app](#) or 1-844-451-9700

If non-crisis support is needed, you can access these campus resources:

- [Centre for Student Development and Counselling](#): 416-979-5195 or email csdc@torontomu.ca
- [Consent Comes First – Office of Sexual Violence Support and Education](#): 416-919-5000 ext 3596 or email osvse@torontomu.ca
- [Medical Centre](#): call (416) 979-5070 to book an appointment

We encourage all Toronto Metropolitan University community members to access available resources to ensure support is reachable. You can find more resources available through the [Toronto Metropolitan University's Wellbeing Central](#) website.