(C)ITM 200 - Fundamentals of Programming

COURSE OUTLINE FOR 2025-2026

Prerequisite(s): C(ITM) 207

Faculty/Contract Lecturer Information

- **Faculty/Contract Lecturer Name:**
- **Office Location:**
- **Office Hours:**
- **Phone:** (416) 979 – 5000, ext.
- **Course Website:** my.torontomu.ca (for courses using D2L)
- **Email Address:** youremail@torontomu.ca

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

This course covers the fundamental principles of object-oriented, event-driven program design and implementation in a business environment. Emphasis will be placed on logic development, program design, modularity, structured programming standards, maintainability, testing and debugging. Specifically the course will include the following programming features: memory variables; object methods and properties; the logic constructs - sequence, branch, case and loops; simple arrays; basic file structures; validation and error handling. The course will be taught in a lecture and lab design where a GUI programming language will be used to reinforce the theoretical concepts taught in class.

Course Details

Teaching Methods

If you are registered in an in-person or a virtual classroom, instruction will take place at scheduled hours, following the approach outlined in D2L Brightspace. If you are registered in a Chang School Distance Education course, please follow the schedule, course outline and learning modules as outlined in D2L Brightspace.

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.

The course will incorporate lecture and laboratory/tutorial sessions designated at the instructor's discretion. The laboratory/tutorial sessions will be dedicated to programming exercises designed to reinforce the learning of the concepts being taught and to develop programming and problem-solving skills.

Course Materials

Textbook and Other Learning Materials:

Title: Python for Everybody
Author(s): Charles R. Severance
Publisher: CreateSpace Independent Publishing Platform
Paperback ISBN-13: 978-1530051120
Price: $14.42
eBook (free): https://www.py4e.com/book

Course Learning Outcomes

The course introduces the fundamental concepts underlying modern computer programming. A systematic approach is used to teach students how to write programs that solve well-specified problems. Emphasis is placed on the mastery of basic programming skills, with a considerable attention to the fundamental building blocks of computer programs, and the associated concepts and principles. The essentials of sequential processing and control flow are taught in a procedural programming context prior to introducing classes, objects and related object-oriented programming concepts. To ensure the development of the necessary competencies, assigned homework includes the development of program solutions to problems of adequate complexity and relevance.

The learning objectives are:
1) Developing comprehensive knowledge about the fundamental principles, concepts and constructs of modern computer programming.
2) Developing competencies for the design, coding and debugging of computer programs.

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

Use of Generative AI (e.g. ChatGPT, Grammarly, Perplexity, DeepL Translator) to develop or assist with any ideas or material submitted for coursework is expressly prohibited in this course. Use of Generative AI in this manner will be considered a breach of Policy 60.

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

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Topics and Course Schedule

Week	Topic	Readings
1	**Introduction to Computer Programming** **Topics**: • Solving Problems using Computers • Algorithms • Computer Programming • Anatomy of a Python Program • Basic Python Programming by Examples **Learning Outcomes:** • Discuss problem solving using computers • Explain what are Algorithms and flow control structures • Write, run and debug simple Python computer programs	Chapter 1
2	**Variables and Calculations** **Topics**: • Variables and Data Types • Arithmetic Operators and Expressions • Strings • Getting User Input and writing output **Learning Outcomes:** • Write programs that read user input, perform calculations using data variables and arithmetic operators and output messages and calculation results.	Chapters 2 &6
3	**Decision** **Topics**: • Boolean Expressions • Simple Decisions • Chained Decisions • Nested Decisions • Decision by Examples **Learning Outcomes**: • Write programs that make use of Boolean expressions, 'if-else' and 'if-elif-else' statements to implement decision flow controls	Chapter 3
4	**Repetition** **Topics**: • While Loop • For Loop • Loop Patterns • Combining Control Structures	Chapter 5

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	Learning Outcomes ● Implement repetition (looping) using the "while" and "for" control structures ● Write programs using nested loops ● Write programs that combines different flow control structures	
5	**Lists** **Topics**: ● List Methods and Operations ● Lists by Examples **Learning Outcomes** ● Write programs that make use of lists and strings for data processing	Chapter 8
6	**Functions** **Topics**: ● Functions ● Argument Passing ● Parameters and Arguments **Learning Outcomes** ● Implement algorithms as self-contained functions ● Structure programs using multiple functions	Chapter 4
7	● **Midterm**	
8	**Files** **Topics**: ● File I/O ● Exception Handling ● File I/O by Examples **Learning Outcomes** ● Write programs that read from and write to text files.	Chapter 7
9	**Dictionaries & Tuples** **Topics**: ● Dictionaries ● Tuples ● Dictionaries and Tuples by Examples **Learning Outcomes** ● Write programs that make use of dictionaries and tuples for data analysis.	Chapters 9 & 10
10	**Objects and Classes – Part I** **Topics**: ● Objects and Classes ● Programming with Objects **Learning Outcomes** ● Write programs that use objects and classes	Chapter 14

11	**Objects and Classes – Part II** **Topics**: ● Class Attributes and Methods ● Composition, Inheritance ● Examples of Advanced Object-Oriented Programming **Learning Outcomes** ● Write programs that make use of advanced object-oriented programming constructs	Chapter 14
12	**Review**	

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
Weekly Homework	Weeks 1-6 and Weeks 8-11	10%	Weeks 9 and 12
● **Midterm Exam**	Week 7	40%	Week 9
Final Exam	TBA	50%	TBD
Final Grade		100%	
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 2025, this is Friday November 14, 2025. For Winter 2026, this is Friday March 27, 2026.			

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University Policies

You are reminded that you are required to adhere to all relevant university policies found in their online course shell in D2L and/or on the Senate website. Please refer to the Course Outline Appendix for more detail.

Important Resources Available at Toronto Metropolitan University

- 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.
- If taking a remote course, familiarize yourself with the tools you will need to use for remote learning. The Remote Learning Guide for students includes guides to completing quizzes or exams in D2L Brightspace, with or without Respondus LockDown Browser and Monitor, using D2L Brightspace, joining online meetings or lectures, and collaborating with the Google Suite.
- FAQs Academic Considerations and Appeals
- Information on Copyright for Faculty and students.
- Information on Academic Integrity for Faculty and students.

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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 disability services office. AAS works directly with incoming and returning students looking for help with their academic accommodations. AAS works with any student who requires academic accommodation regardless of program or course load.

- Learn more about [Academic Accommodation Support.](#)
- Learn [how to register with AAS.](#)
- Learn about [Policy 159: Academic Accommodation of Students with Disabilities](#)

Academic Accommodations (for students with disabilities) and Academic Consideration (for students faced with extenuating circumstances that can include short-term health issues) are governed by two different university policies. Learn more about [Academic Accommodations versus Academic Consideration](#) and how to access each.

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)
- [Keep.meSAFE](#): 24/7 access to confidential support through counsellors via [My SSP app](#) or 1-844-451-9700

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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.

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