

**CMPT 103: Introduction to Computing II**

Sections OP01, Spring 2016

MacEwan University

	<b>Lecture (OP01)</b>
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**Calendar description**

This course continues the overview of computing science concepts that was started in CMPT 101. Topics include representation of compound data using abstraction, programming languages, and modularity; algorithms that use these data structures; and networks with the TCP/IP model and client/server architecture. Students continue with the syntax of a high-level programming language: functions, arrays, and user-defined data types. **Note:** *Credit cannot be obtained for both CMPT 103 and CMPT 114.*

(3 credits; 45:36:0 hours)

**Prerequisites** Minimum grade of C- in CMPT 101 or three credits of intermediate CSE including CSE 2120.<sup>1</sup>

**Co-requisites** None.

**Course objectives**

Please refer to the calendar description and detailed schedule for a description of the topics that are covered in the course. Students will be expected to exhibit a basic understanding of these topics and, where applicable, be able to demonstrate practical application of these same topics.

- illustrate the functioning of the classic data structures (e.g., stacks, queues, binary search trees) described in the course;
- illustrate the operation of algorithms covered in the course using small sets of data;
- write solutions to simple problems;
- describe the importance of modularity and data structuring and use these concepts in the creation of small programs in a high-level language; and
- describe various networking concepts

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<sup>1</sup>The Faculty of Arts and Science strictly adheres to the notion of prerequisites, and University staff conduct prerequisite checks throughout the term. If it is discovered that you do not have the appropriate prerequisite for this course, you will be withdrawn by the Office of the University Registrar. Deciding to remain in the course without the prerequisite may result in a significant financial penalty because you will be responsible for any tuition costs associated with the course up to the date of the withdrawal. Courses transferred to MacEwan University from another post-secondary institution will not be applied to your student record until a transfer credit assessment has been completed. If you believe you have the proper external prerequisite please consult with an advisor in the program office (6-211).

### Textbooks (highly recommended)

- Python: Visual QuickStart Guide (available in the bookstore)
- Think Python (online at <http://www.greenteapress.com/thinkpython>)

### Weekly schedule (OP01)

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 am					
8:30 am					
9:00 am		<b>Lab (01L)</b> 5-216		<b>Lab (01L)</b> 5-216	
9:30 am					
10:00 am					
10:30 am					
11:00 am					
11:30 am					
12:00 pm		<b>Office (Cam)</b> 5-173F		<b>Office (Cam)</b> 5-173F	
12:30 pm					
1:00 pm		<b>Lecture (OP01)</b> 5-329		<b>Lecture (OP01)</b> 5-329	
1:30 pm					
2:00 pm					
2:30 pm					
3:00 pm					
3:30 pm					
4:00 pm					
4:30 pm					
5:00 pm					

### Evaluation

Your final mark will be based on your term work, weighted as follows.

Activity	Weight
Quizzes	10%
Weekly labs	20%
Midterm	20%
Programming assignment	20%
Final exam	30%
<b>Total</b>	<b>100%</b>

## Course mechanics

The labs are intended to draw upon, and in many cases extend, the material presented in class. Most, if not all weekly labs will have exercises that are to be completed and submitted during the lab. In addition, there will be one larger programming assignment that is to be worked on over several labs. It is highly likely that this assignment will require you to devote time outside the lab in order to complete it. It consists of a program that is to be written and a set of accompanying documentation. More details will be provided as the term progresses. The final written (lecture) exam will be closed book and will cover material that has been presented in the lecture and in the lab. Labs and midterms will be returned to students as soon as they are marked. Final examinations cannot be returned.

A word of advice...You must do your own coursework. The exams (term and final) are designed to examine the skills and knowledge you have acquired during the labs and in class. If you do not practice those skills for yourself as the term progresses, you will not be able to learn them at the last minute prior to exams.

## Grading

Official grades will be provided by the Office of the University Registrar through myStudentSystem. A minimum grade of C- is required to receive transfer credit or to satisfy a prerequisite for a higher level course.

MacEwan University adheres to the Alberta Common Grading Scheme, which is a 12 point letter grade system. While instructors may use percentages –such as the following– to aid in their grade development, only the letter grade will appear on transcripts.

Grade	Range	Interpretation	GPA
A+	98-100	Outstanding	4.00
A	90-97	Excellent	4.00
A-	85-89	Excellent	3.70
B+	80-84	Very good	3.33
B	75-79	Very good	3.00
B-	70-74	Very good	2.70
C+	65-69	Average	2.30
C	60-64	Average	2.00
C-	55-59	Average (min. for UT credit)	1.70
D+	50-54	Minimal pass	1.30
D	45-49	Minimal pass	1.00
F	≤44	Failure	0.00
IN	Incomplete	—	—

## Student responsibilities

Students are expected to be aware of their academic responsibilities as outlined in MacEwan University Policy E3101: Student Rights and Responsibilities ([found here](#)).

1. **ACADEMIC INTEGRITY:** All forms of student dishonesty are considered unacceptable. MacEwan University Policy C1000: Academic Integrity ([found here](#)) promotes honesty, fairness, respect, trust, and responsibility in all academic work. According to the policy, “Academic dishonesty involves participating in acts by which a person fraudulently gains or intentionally attempts to gain an unfair academic advantage thereby compromising the integrity of the academic process”. All incidents of academic dishonesty are reported and recorded by the Academic Integrity Office. The penalties and sanctions for academic dishonesty can include the following: a mark reduction up to zero on a piece of academic work, a grade reduction up to an F in the course, and suspension or expulsion (with transcript notation) from the University. Please see the academic integrity policy for more details. You are responsible for understanding what constitutes academic dishonesty
2. **REGISTRATION STATUS:** You are responsible for your registration status at the University. Program advisors (Rm 6-211) may assist you with the process of registration, including adding or dropping of courses, but it is your responsibility to verify that these changes have been officially completed. This verification can be done at any time using myStudentSystem. You should check your official registration status before the last date to officially withdraw from the course.
3. **WITHDRAWING FROM THE COURSE:** If you stop attending class you must complete a Course Drop Form, have it signed by a Program Advisor (Rm 6-211), and submit it to the Office of the University Registrar by the last day to withdraw as provided in the Academic Schedule in the Academic Calendar. Failure to officially withdraw will result in a grade being assigned based on course work completed. Late withdrawals are only allowed in exceptional circumstances.
4. **ATTENDANCE AND PUNCTUALITY:** Attendance is required for all lectures and labs, and you are expected to arrive on time.
5. **EXAMINATIONS:** Your student photo I.D. is required at exams. It is at the discretion of the instructor whether you will be allowed to write the exam if you arrive over 15 minutes after the exam has begun. You must remain in the exam room for at least 20 minutes from the time it commenced. Only calculators approved for use by the instructor may be used during examinations, which include any laboratory and lecture quizzes. Any devices capable of external communication, such as cell phones, iPods and Bluetooth-enabled devices, cannot be used for exams of any type. Permission to use the washroom during exams is at the discretion of the instructor and may require accompaniment.

6. **MISSED TERM EXAMINATIONS:** If you miss a term examination you must provide the instructor with an explanation within 24 hours or a mark of zero may be given. Notification may be provided through email, voice mail, or direct contact with the instructor. Official documentation as to why the examination was missed will be needed to assess whether your absence will be excused or not. If your absence is excused the weight of this examination will be added to the weight of the final examination in the course. Medical excuses must include the date you were examined, the specific dates for the period of the illness, a clear statement indicating that the severity of the illness prevented you from attending school or work, and the signature of the examining physician (a signature by office staff on behalf of the physician is not acceptable). Medical notes obtained subsequent to the date of the examination are generally not accepted. A mark of zero will be given if the instructor considers the excuse inappropriate or inadequately substantiated.
7. **DEFERRED FINAL EXAMINATIONS:** University policy allows for the deferral of exams for extenuating circumstances, such as illness or catastrophic events. To apply for a deferral, see Program Services (Rm 6-211). Applications must be received by Program Services within two business days of the missed exam. A fee of \$50 per exam, up to a maximum of \$100, will be charged to your account. Note that a vacation, even if paid for and/or documented, is not grounds for an exam deferral. Application forms are available from the Program Services office, and must be submitted with appropriate documentation. Students should advise the instructor prior to the examination if they know beforehand that they will be unable to attend the scheduled examination time. If you have any questions about the process please contact Program Services (780 497 4505 or [ArtsAndScience@macewan.ca](mailto:ArtsAndScience@macewan.ca)). For further information please refer to MacEwan University Policy C2005: Final Assessment (found [here](#)) and Policy C2020: Grading (found [here](#)).
8. **LATE ASSIGNMENTS AND MISSED LABS/QUIZZES:**  
If a lab exercise/assignment is submitted late, then it will receive a grade of zero unless a proper medical document is shown to the instructor. Five minutes after the lab has ended is late! All deadlines will be very strictly adhered to. The lab exercises are to be submitted at the end of the specified lab. Details on submission of exercises will be discussed in the lab. Lab assignments will be due as specified on the assignment description.
9. **CELL PHONES:** All cell phones are to be turned off during class and exam periods (except under exceptional circumstances in which approval has been given by the instructor).
10. **STUDENTS WITH DISABILITIES:** Students with disabilities who may have special requirements in this course are advised to discuss their needs with Services to Students with Disabilities located in the Student Resource Centre. You should advise the course instructor(s) of any special needs that are identified. See Policy E3400 Students with Disabilities (found [here](#)).
11. **STUDENT APPEALS:** The University has a policy regarding Student Appeals (E3103, found [here](#)). You should access this policy to become aware of the deadlines and guidelines that need to be followed if you are appealing a grade or other University assessment.
12. **E-MAIL:** All students are given a `<name>mymacewan.ca` email address. This email address is available to the course instructor who may distribute relevant course information or announcements via email. The Bachelor of Science Program regularly communicates with students via email. Check your `mymacewan.ca` email regularly or forward it to an email address you check regularly. If you use email to communicate with your instructor, you must use your `mymacewan.ca` account. This is to protect your privacy; if a non-`mymacewan.ca` account is used, there is no way for an instructor to verify the identity of the sender.

13. **MISSED CLASSES:** If a class is missed, you are responsible for the missed material and ensuring that you are aware of any announced changes to the schedule.

**Disclaimer:** The information in this Course Outline is subject to change; any changes will be announced to the class or, if applicable, to the lab.