

COURSE SYLLABUS

CMPT 100: INTRODUCTION TO COMPUTING

Catalogue Description

A survey of major computer science areas, combining a breadth of topics with depth via specific examples within each topic. Topics include: history of computing, computer applications, analysis and design, high level programming, computer software, computer hardware, artificial intelligence, and the social impact of computers.

Prerequisite(s): Mathematics A30 or B30 or C30; or Foundations of Mathematics 30; or Pre-Calculus 30. **Note:** After CMPT 100, students can take any of 105 and 111. Students can receive credit for only one of CMPT 100, CMPT 102, CMPT 120, CMPT 175. Students may not take CMPT 100 for credit after taking CMPT 105. Also, students may not take CMPT 100 for credit concurrent with or following CMPT 115 or CMPT 117. Students wishing to major in computer science are advised to take CMPT 111. In addition, students majoring in computer science may not use CMPT 100 as a course in their major, but may count it as a junior elective as long as CMPT 100 is taken before CMPT 115 or CMPT 117.

Class Time and Location: Lecture: 10:30 am - 11:20 am MWF Arts 134
Tutorials: T01 11:30 am - 12:50 pm Wednesday; T03 11:30 am - 12:50 pm Tuesday; T05 9:00 am - 10:20 am Friday (All in Thorvaldson Building S320)

Website: Moodle

Instructor Information

Instructor Prof. Nadeem Jamali
Contact: Email: jamali@cs.usask.ca
Office Hours: Location: Thorvaldson 281.6,
Hours: TBA

Course Objectives

- Provide an introduction to the science and impact of Computing.

Student Evaluation

Grading Scheme

Assignments 1 through 4	40% (10% each)
Final Project (Assignment 5)	15%
Midterm Exam	15%
Final Exam	30%
Total	100%

Criteria That Must Be Met To Pass

Students should receive a cumulative passing mark to pass the class.

Tentative schedule of midterm and assignment submissions:

- Assignment 1 due 25/9
- Assignment 2 due 9/10
- Assignment 3 due 28/10
- Midterm Exam 3/11
- Assignment 4 due 21/11
- Assignment 5 due 5/12

Note: Midterm and final cumulative marks will be scaled.

Attendance Expectation

- Students will be expected to know all information passed on during lectures and tutorials and through the webpage, Moodle and email. If they miss a lecture or tutorial, they are responsible for acquiring material covered in the session.
- Some topics covered in class may not have corresponding notes associated with them. Students are expected to make their own notes in these cases. Students who miss a class in which such topics are covered are responsible for obtaining notes from other students.

Final Exam Scheduling

The Registrar schedules all final examinations, including deferred and supplemental examinations. Students are advised not to make travel arrangements for the exam period until the official exam schedule has been posted.

Note: All students must be properly registered in order to attend lectures and receive credit for this course.

Textbook Information

Required Text

- None

Recommended Texts

- None

Lecture Schedule

Tentative Schedule:

Week of	Topic
Sept 1	Introduction; Hardware and Software Systems
Sept 8	Hardware and Software Systems; HTML and HCI
Sept 15	HTML and HCI; Networking and the Internet
Sept 22	Networking and the Internet
Sept 29	Programming in Scratch
Oct 6	Problem Solving in Scratch; Advanced Scratch
Oct 13	Computer and Information Security
Oct 20	Software Engineering
Oct 27	New Media
Nov 3	e-Commerce
Nov 17	Artificial Intelligence
Nov 24	Social and Technical Implications of ICT
Dec 1	Conclusion

Additional topics may be added, and some topics – particularly related to the history of Computer Science – may be removed, based on student interest. Topics for possible addition include basics of binary arithmetic, algorithms for searching and sorting, computational complexity and concurrency.

There will be 7 sessions of tutorials, tentatively scheduled for the weeks of Sept 8, Sept 15, Sept 22, Sept 29, Oct 6, Oct 13 and Nov 3

Course Overview

CMPT100 is an introductory Computer Science course designed to provide a broad overview of Computer Science and a foundation for lifelong use of and learning about computers. This course is intended for students majoring in areas other than Computer Science. Students who successfully complete CMPT100 and desire further experience in computing may consider taking CMPT105 and CMPT106 (leading into the Interactive System Design BAsC degree) or CMPT 111 and CMPT115 (leading to the Computer Science BSc degree). You can also follow-up CMPT100 with CMPT275, if you are interested in business applications. Check out <http://www.cs.usask.ca/undergrad/programs/index.php> for more information on these programs.

There are a number of other first year courses that can be taken by students who want an alternative to CMPT100: CMPT105, for students interested in the Interactive System Design BAsC; CMPT 111, for students wishing to take the Computer Science BSc programs; CMPT 113, for Engineering students interested in computing using VBA in EXCEL; CMPT 116, for Engineering students considering a double degree option with Computer Science; CMPT120, for students interested in digital document processing; and CMPT 175, a course similar to CMPT100 for Business students. If you take CMPT100, you cannot also get credit for CMPT120 or CMPT175.

Policies

Late Assignments

- Assignments must be turned in at the times and dates and locations they are due, unless you have received permission in advance for an extension.

Missed Assignments

Students should submit early versions of their assignments frequently to avoid the possibility of missing a deadline. Students will receive a zero for assignments missed without prior permission from the instructor.

If there is a compelling reason why seeking prior permission is not possible, the student should contact the instructor at the earliest opportunity for consideration of alternative arrangements. The instructor will judge whether the reason is compelling.

Missed Examinations

1. "Students who have missed an exam or assignment must contact their instructor as soon as possible. Arrangements to make up the exam may be arranged with the instructor. Missed exams throughout the year are left up to the discretion of the instructor if a student may make up the exam or write at a different time. If a student knows prior to the exam that she/he will not be able to attend, they should let the instructor know before the exam."
2. "Final exams - a student who is absent from a final examination through no fault of his or her own, for medical or other valid reasons, may apply to the College of Arts and Science Dean's office. The application must be made within three days of the missed examination along with supporting documentary evidence. Deferred exams are written during the February mid-term break for Term 1 courses and in early June for Term 2 and full year courses."

(2007/08. <http://www.arts.usask.ca/students/transition/tips.php>)

Incomplete Course Work and Final Grades

When a student has not completed the required course work, which includes any assignment or examination including the final examination, by the time of submission of the final grades, they may be granted an extension to permit completion of an assignment, or granted a deferred examination in the case of absence from a final examination. Extensions for the completion of assignments must be approved by the Department Head, or Dean in non-departmentalized Colleges, and may exceed thirty days only in unusual circumstances. The student must apply to the instructor for such an extension and furnish satisfactory reasons for the deficiency. Deferred final examinations are granted as per College policy.

In the interim, the instructor will submit a computed percentile grade for the course which factors in the incomplete course work as a zero, along with a grade comment of INF (Incomplete Failure) if a failing grade. In the case where the instructor has indicated in the course outline that failure to complete the required course work will result in failure in the course, and the student has a computed passing percentile grade, a final grade of 49% will be submitted along with a grade comment of INF (Incomplete Failure).

If an extension is granted and the required assignment is submitted within the allotted time, or if a deferred examination is granted and written in the case of absence from the final examination, the instructor will submit a revised computed final percentage grade. The grade change will replace the previous grade and any grade comment of INF (Incomplete Failure) will be removed.

For provisions governing examinations and grading, students are referred to the University Council Regulations on Examinations subsection of the Calendar.

(2011 University of Saskatchewan Calendar/Academic Courses Policy)

Academic Honesty

The University of Saskatchewan is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Student Conduct & Appeals subsection of the University Secretary Website and avoid any behaviour that could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.

All students should read and be familiar with the Regulations on Academic Student Misconduct, <http://www.usask.ca/secretariat/student-conduct-appeals/StudentAcademicMisconduct.pdf>, as well as the Standard of Student Conduct in Non-Academic Matters and Procedures for Resolution of Complaints and Appeals,

<http://www.usask.ca/secretariat/student-conduct-appeals/StudentNon-AcademicMisconduct.pdf>.

Academic honesty is also defined and described in the Department of Computer Science Statement on Academic Honesty:

<http://www.cs.usask.ca/undergrad/honesty.php>.

For more information on what academic integrity means for students see the Student Conduct & Appeals subsection of the University Secretary Website at:

<http://www.usask.ca/secretariat/student-conduct-appeals/forms/IntegrityDefined.pdf>

Examinations with Disability Services for Students (DSS)

Students who have disabilities (learning, medical, physical, or mental health) are strongly encouraged to register with Disability Services for Students (DSS) if they have not already done so. Students who suspect they may have disabilities should contact DSS for advice and referrals. In order to access DSS programs and supports, students must follow DSS policy and procedures. For more information, check <http://www.students.usask.ca/disability/>, or contact DSS at 966-7273 or dss@usask.ca.

Students registered with DSS may request alternative arrangements for mid-term and final examinations. Students must arrange such accommodations through DSS by the stated deadlines. Instructors shall provide the examinations for students who are being accommodated by the deadlines established by DSS.