CS110-001 Programming and Problem Solving
(Winter 2017)

Calendar Description: An introduction to problem-solving techniques, the fundamental concepts of programming, and the software design process. Topics will include: data types, control structures, scope rules, functions, files, and the mechanics of running, testing and debugging. Problems will be drawn from various science disciplines.

> Note: CS majors who have mastered the course material in CS 110 through other means are eligible to write the CS 110 bypass exam.

Prerequisites: Precalculus 30, Calculus 30, or Math 102.

Credit Hours: 3 (3 lecture hours and 2 lab hours per week)

Class Time and Location: Mondays, Wednesdays & Fridays: 1:30 pm - 2:20 pm, CL 126

Final Exam: 7:00 pm - 10:00 pm, Wednesdays, Apr 19, 2017 (Common Exam with CS110-002 & CS110-003)

Textbook: Y. Daniel Liang, *Introduction to Programming with C++,* 3/e, Prentice Hall, 2013.
> Note: A copy of the textbook will be put on the reserved desk in the library.
> Companion Website: http://www.cs.armstrong.edu/liang/cpp3e/

Instructor: Dr. JingTao Yao, Office: CW308.18, Email: jtyao@cs.uregina.ca,
> Office hours: Mondays, Wednesdays and Fridays: 2:30 pm - 3:30 pm or by appointment

Lab Sessions: Enroll in one of following sections: 093-099. These compulsory labs (5% of lab work and 5% of lab test) are held in CL 135.4 and CL 136. Labs start the week of January 16 and the Lab test is scheduled in the week of April 3. Check lab schedule at:
http://www.cs.uregina.ca/Dept/OfficeHours/c135_4.html

Lab Instructors: Alex Clarke, Michael Dickenson, Krissie Kowlaski (3), Olamide Ogunsanwo, Jhonatan Oliveira.

Lab Instructor Office Hours: http://www.cs.uregina.ca/Dept/OfficeHours/c119.html
> Full time lab instructors who answer lab related questions for CS110 including account resetting.

Lab Website: http://www.cs.uregina.ca/Links/class-info/110/index.html

Makers: Faisal Khan, Davinder Singh

Grading System:
1. Assignments (5)   10%
2. Quizzes (5)   15%
3. Midterm Tests   15%
4. Labs   10%
5. Final Examination   50%
6. Instructor Discretion +/-   5%

Tests and Exam: There are no make-up tests and exam. If you cannot sit for midterm tests with approved reasons prior the midterms, the grade will be attached to final. There is no reason for missing the final exam.

Attendance: You are expected to attend all scheduled lectures. If you cannot attend a lecture, it is your responsibility to catch up the contents. Little time is available to assist those who have missed relevant classes. Statistics show that students attend lectures regularly get high grades on exams. That is a fact that you should remember when making your daily decisions.

Chapters may be covered: Chapters 1-7 and part of Chapters 10, 13, 17 and 19.

Important dates:
> January 6, 2017 (First lecture, Wednesday)
> January 16, 2017 (First lab week)
> January 13, 2017 (Assignment 0 due, Friday)
>> January 18, 2017 (The add/drop deadline, No record)
> January 20, 2017 (Quiz 1, Friday)
> January 27, 2017 (Assignment 1 due, Friday)
> February 3, 2017 (Quiz 2, Friday)
> February 10, 2017 (Assignment 2 due, Friday)
> February 17, 2017 (Quiz 3, Friday)
>> February 20-24, 2017 (Winter break, no classes, no labs)
> March 3, 2017 (Assignment 3 due, Friday)
> March 8, 2017 (Midterm Test, Friday)
>> March 15, 2017 (Withdrawing deadline, Grade of W)
> March 17, 2017 (Quiz 4, Friday)
> March 24, 2017 (Assignment 4 due, Friday)
> March 31, 2017 (Quiz 5, Friday)
> April 3, 2017 (Lab test week)
> April 7, 2017 (Assignment 5 due, Friday)
> April 12, 2017 (Last lecture, Monday)
> Apr 19, 2017 (Final Exam, Wednesday)

Assignments:
1. <u>SAVE THE TREES!</u> All assignment questions are available online at UR Courses and you must submit your assignments electronically to UR Courses (https://urcourses.uregina.ca/).
2. You are required to submit two files (the source code and the result) for <u>each programming question</u> in your assignments. All program source code must be named as AnQm.cpp where n is the assignment number and m is the question number. The screenshot of your results should be named as AnQm.jpeg.
3. All assignments are due at 10:00 pm on the due date. Partially completed assignments are acceptable but LATE assignments are NOT accepted. All uploaded files will be automatically submitted after cu-off time. If you are unable to complete an assignment due to health problems, for instance, a medical certificate is required before the assignment will be accepted. This applies to other unusual cases.
4. Marking of program questions are based on Marking Scheme. Please make sure your programs are properly formatted and with necessary comments.

5. If you have any questions or complaints about the marking of your assignment, you should email me your question or complaint <u>within one week</u> from date marks are posted. The assignment will be reassessed by the marking team. Do NOT complaint to me or the markers <u>before</u> all marks are posted.

Important notes:
1. The dates, schedule, requirements etc. are tentative. The online version should be the latest one. Please check for changes.
2. Email communications with the instructor should be sent from URCourses. In addition, you may use your U of R account. Class announcements will be sent to your U of R account. There will be no reply to any free web-based email accounts, hotmail. gmail, or yahoo, for instance, and limited communications to some commercial ISPs (e.g. Access, Sasktel, etc.) or government email accounts.
3. Please read the sections of the 2016-2017 University of Regina Undergraduate Calendar dealing with Academic Regulations, especially those regulations regarding academic integrity and plagiarism. Cheating will not be tolerated. Co-operation on programming assignments is generally encouraged, but it must be <u>limited to verbal discussion of concepts not code or any other written documentation</u> that is submitted for grading. Copying of assignments is plagiarism. Knowingly allowing an assignment to be copied will also be treated as plagiarism. The consequence of plagiarism or any other form of cheating may range from a zero grade, to failure in the class, to expulsion from the university. Please note that the Dean of your faculty will be informed of any such incident, as per university regulations.