

COMP SCI 1570 (3 credits)

Introduction to C++ Programming

Summer Semester 2022 Syllabus

- 1570 Section 102 (70952) MTWRF 11:30-12:30 Live in CS 222
- 1570 Section 103 (71112) MTWRF 11:30-12:30 Live via Zoom

Join Zoom Meeting

<https://umssystem.zoom.us/j/93650535954?pwd=eVpON1FjcUpWelV2Z1ZlUHpmOURWZz09>

Meeting ID: 936 5053 5954

Passcode: CS1570

SYNCHRONOUS/ASYNCHRONOUS DETAILS: While it is **strongly** encouraged to attend in person or synchronously, this class should be recorded daily and provided for review asynchronously. This can accommodate illness or unavoidable absences, etc.

However, all Exams MUST be taken synchronously with a webcam on during the exam.

Contact the instructor well in advance with any concerns.

Tao Wu wuta@mst.edu

Office Hours: By appointment or join in before/after class

Course Outcomes

This course is meant as a first introduction to C++ programming (but not necessarily programming in general). Emphasis is placed on problem solving methods using good programming practices and algorithm design and development. Topics included syntax/semantics, logical, relational and arithmetic operators, decision branching, loops, functions, file I/O, arrays, output formatting, C-strings, and an introduction to Object-Oriented Programming including the development and use of classes, templates, pointers, and exceptions.

Intended Course Audience/Prerequisites

The intended audience for this course is Computer Science undergraduates who have completed an introductory programming course with a C or better.

Course Materials

Required Text: zyBooks online reference (linked via Canvas)

Optional Text: Absolute C++, Savitch, 4th or later edition

Online Reference Material: (Price) <https://classes.mst.edu/compsci1570/> and (Taylor) https://www.cnsr.dev/index_files/Classes/ProgrammingCpp/Content.html

Canvas: The Canvas “Learning Management System” (LMS) will be used to provide information

including administration of homework and grades. This can be accessed through <http://canvas.mst.edu> and additional help can be sought from the IT Helpdesk (<http://it.mst.edu/help-desk/>)

Grading

- 30% Exams
- 55% Homework/zyBooks Problems
- 15% Final Programming Project

The grades are based on the following scale:

- 90-100 A
- 80-89 B
- 70-79 C
- 60-69 D

The final course grade is a weighted average of individual grades. With consultation and permission of the instructor, an optional comprehensive exam may be taken during finals.

Assignments

Canvas outlines the required material along with references to the Online material being covered. You will be responsible for all areas outlined in the topic list. Activities and Homework will consist of problems representative of the material you can expect on the exams.

Programming assignments will be posted in Canvas with instructions included. There will be approximately weekly programming assignments throughout the semester along with a final project (of larger scope).

Course Requirements/Policies

Learning of the material **is required** and attendance at, and participation in, class show your commitment to learning. If your attendance and grades appear significantly lacking, you will be administratively dropped. Conversely, if you make a strong effort toward attending and participating in class, that may be considered in assignment of final grades. I take academic honesty very seriously so please let your work be your own (unless a team assignment is explicitly indicated) – see also the Campus Policy below.

Late Work

Homework may be submitted for partial credit if it is submitted before that assignment is returned to class, or the solutions are posted to Canvas.

(Copy of Price's Policy Below)

You will most probably learn much you didn't already know. I will expect you to really learn it. I'm am not going to expect you to regurgitate stock answers to stock questions. You will be asked to demonstrate solid understanding of the material, applying your new-found knowledge in many different ways.

Homework assignments will be programming problems designed to hone and test your C++ and problem solving skills. These programs will be your primary contribution towards preparing for the exams. If you fail to submit any one of these, you will hurt yourself/grade twice. Make every effort to submit each one. Late submission will be penalized according to the following schedule:

- First Late: 10% penalty for first 24 hours (1 day)
 - 50% penalty for second 24 hours (2 day)
 - no credit thereafter.
- Second Late: 50% penalty for the first 24 hours (1 day)
 - no credit thereafter.

(Price Policy) Don't Cheat

Don't cheat! Don't even think about it. If you cheat, you will be caught and the penalty is severe. In response to a first offense, I will give you a zero for the assignment and lower your semester grade one letter and notify your adviser and the Provost. Your second offense will get you ejected from the class. I expect you to do your own work. This means that you should not work with another student on your programs; I want to see your work. Do not work with others and turn in duplicates. Do not turn in work that you did not write (this includes material copied from the internet or other sources). Don't try to fool me. You are free to ask questions of others and learn from your friends, but not to copy ideas and/or code. Do not let others copy from you.

Campus Policies

Disability Support Services: <http://dss.mst.edu> Any student inquiring about academic accommodations because of a disability should be contact Disability Support Services so that appropriate and reasonable accommodative services can be determined and recommended. Disability Support Services is located in 204 Norwood Hall. Their phone number is 341-4211 and their email is dss@mst.edu. Instructors may consider including the following statement on their course syllabus as a means of informing students about the services offered:

"If you have a documented disability and anticipate needing accommodations in this course, you are strongly encouraged to meet with me early in the semester. You will need to request that the Disability Services staff send a letter to me verifying your disability and specifying the accommodation you will need before I can arrange your accommodation."

Academic Dishonesty: <http://registrar.mst.edu/academicregs/index.html> Page 30 of the Student Academic Regulations handbook describes the student standard of conduct relative to the System's Collected Rules and Regulations section 200.010, and offers descriptions of academic dishonesty including cheating, plagiarism or sabotage. Additional guidance for faculty, including a description of the process for dealing with issues related to academic dishonesty, is available on-line at <http://ugs.mst.edu> . In particular, you must work alone on all tests, exams, and individual programming assignments.

If you have any questions about the Campus Policies information listed above, please contact the

Office of Undergraduate Studies at 573-341-7276.

Title IX:

Missouri University of Science and Technology is committed to the safety and well-being of all members of its community. US Federal Law Title IX states that no member of the university community shall, on the basis of sex, be excluded from participation in, or be denied benefits of, or be subjected to discrimination under any education program or activity. Furthermore, in accordance with Title IX guidelines from the US Office of Civil Rights, Missouri S&T requires that all faculty and staff members report, to the Missouri S&T Title IX Coordinator, any notice of sexual harassment, abuse, and/or violence (including personal relational abuse, relational/domestic violence, and stalking) disclosed through communication including but not limited to direct conversation, email, social media, classroom papers and homework exercises. To learn more about Title IX resources and reporting options (confidential and non-confidential) available to Missouri S&T students, staff, and faculty, please visit <http://titleix.mst.edu>.