CSCI 112: Programming with C

Fall 2020

Meeting Times

- Lecture/New Material: Monday, Wednesday, Friday: 0800-0830 REID201 – this will be recorded and the videos available on Brightspace an hour after class
    - You can also attend class through zoom during our class times
    - https://zoom.us/j/94712187394?pwd=SXhYL3V0Q0duZUpEOTRJUGpsYVhVUT09
    - Meeting ID: 947 1218 7394
    - Passcode: 093485
- Help/review/work on assignment: Monday, Wednesday, Friday: 0830-0850 REID201
- Lab: Friday 12:00-4:00pm open lab, ROBERT111 – NO LAB FIRST WEEK

Instructor

- Dr. Mary Ann Cummings
    - E-mail: mary.cummings1@montana.edu
    - Phone: (406) 994-3547
    - Virtual Office Hours: MWTh 10:00-11:00am, or by appointment **only**.
        - Through zoom and email
        - https://zoom.us/j/92559886174?pwd=a1V2aXNic0I4MVd3QW1UUGtvQzhldz09
        - Meeting ID: 925 5988 6174
        - Passcode: 974334

TA Information

Both TA's will hold office hours and lab hours through their discord.

- Section 1: Seth Bassetti - sethbassetti@gmail.com, office hour: Fri 11-noon, lab: 12-2
- Section 2: Greg Martin - gmartin406mt@gmail.com, Office hour: Wed 11-noon, lab: 2-4

Extra help – 495 Tas – do not grade

- Janet Madrid – jancod26@gmail.com, lab: 10-12, through zoom: Meeting ID: 835 874 9314, Passcode: 9uBHkt
- Logan Ladd - laddlogan@gmail.com, lab 12-2, in person in Roberts 111

Textbook

Problem Solving and Program Design in C, Jeri R. Hanley& Elliot B. Koffman, Eighth Edition. Available at https://redshelf.com/book/600009/problem-solving-and-program-design-in-c-subscription-600009-9780134015132-jeri-r-hanly-elliot-b-koffman

Course Description

This course is designed to provide you with sufficient foundation to create computer applications in the C language. Students will learn how to write procedure-based programs in C and become familiar with the C standard library. The course puts emphasis on the usage of pointers and data structures and discusses important aspects of memory management. Students will gain hands on experience through multiple programming assignments.

This course has two types of students: those who have taken other CS courses (like CSCI127 and CSCI132) and those who have only taken a beginning programming class. To search both types of students, we will spend time on syntax and on higher level concepts. Because of this, some students will feel this course is too slow at times and some will feel it is too fast. I hope the help sessions (0830-0850 each class day) will help this.

Learning objectives

By the end of the course, students should be able to:

- Write code using C syntax.
- Build computer programs using the C language
- Apply that knowledge to solve basic real-world problems.
- Take advantage of major capabilities of the C language, including points and dynamic memory allocation
- Apply the power of pointers and strings to C programs.
- Explain the difference between procedural programming and object oriented programming.

Tools Used

1) Brightspace for announcements, lecture videos/documents, assignment descriptions, grades
2) Brightspace discussion forum for questions about assignments
3) CodePost for lab and program submittal – will need your preferred email to start your account

Policy

- All announcements will be in Brightspace announcements. You are responsible for reading all announcements there.
- **All assignments must be turned in by the due date time. BUT, each student will get one free late pass for labs (not programs).** This means that each student will be able to turn in ONE lab (there are 6) within 1 week after the lab is due. No questions asked.

ONLY ONE LAB. Use this wisely. If you use this early in the semester and then something unforeseen happens, you still must submit the lab on time. Please do not challenge this policy. When you use this late pass, you will have to email me your lab submittal. Our submission tool (CodePost) will not allow late submittals.

- N**o texting or talking on cell** phones in class. If you must use your mobile/cell device you must leave the classroom. You can use your phone to take pictures of the screen.
- Be respectful of your fellow students and me. Do not talk to your classmates during class.
- If you have any problems getting the source code from our Linux server to CodePost or taking screenshots and getting those to CodePost, get it fixed before lab1 is due. (I will be glad to help you get this fixed). You will lose points starting with lab1 if you do not submit all the parts of the assignments on CodePost. (Use the extra credit assignment on the first week to make sure this all works).
- You are required to use our Linux server (csci112.cs.montana.edu) to write, compile and execute your code.

Advice

- Do not wait till the due date to start the assignment.
- If you do not know how to solve a problem, come "see" me during my virtual office hours! I can help. The TA's can also help during their office hours. Also, I can provide help during the help session each class time.
- Going to lab is not mandatory, but the lab and the TAs are there to help you. Use these resources. BUT, you never have to go to lab if you can do the assignments without help.

Inclusive Learning Environment

This classroom is a place where you will be treated with respect. I welcome individuals of all ages, backgrounds, beliefs, ethnicities, genders, gender identities, gender expressions, national origins, religious affiliations, sexual orientations, ability – and other visible and nonvisible differences. All members of this class are expected to contribute to a respectful, welcoming, and inclusive environment for every other member of this class.

When to attend class in person

In order to maintain social distancing in class during this unique semester, a portion of students will come to class each class day. Below is who should attend when:

- Mondays - those students whose last name starts with A through Haedt
- Wednesdays - those students whose last name is between Hilyard and Reap
- Fridays - those students whose last name is between Renfro and Zubeck

Wearing Masks in Classrooms is Required

Face coverings are required in all indoor spaces and all enclosed or partially enclosed outdoor spaces. MSU requires all students to wear face masks or cloth face coverings in classrooms, laboratories and other similar spaces where in-person instruction occurs. MSU requires the wearing of masks in physical classrooms to help mitigate the transmission of SARS-CoV-2, which causes COVID-19. The MSU community views the adoption of these practices as a mark of good citizenship and respectful care of fellow classmates, faculty, and staff.

The complete details about MSU's mask requirement can be found at https://www.montana.edu/health/coronavirus/index.html.

These requirements from the Office of the Commissioner of Higher Education are detailed in the MUS Healthy Fall 2020 Guidelines, Appendix B.

For more information: https://www.montana.edu/health/coronavirus/prevention/index.html

Compliance with the face-covering protocol is expected. If a you do not comply with a classroom rule, you may be requested to leave class. Section 460.00 of the MSU Code of Student Conduct covers "disruptive student behavior."

Accommodations for Not Wearing a Mask

Individuals whose unique and individual circumstances require an exception to the face covering requirement, as indicated by a medical professional, may request one in accordance with the campus ADA policies. Students should contact the Office of Disability Services at 994-2824 or drv@montana.edu to receive written permission from the Office of Disability Services at MSU. It is strongly recommended that students make contact prior to arriving on campus in order to provide adequate time for their request to be evaluated.

Health Related Class Absence

Please evaluate your own health status regularly and refrain from attending class and other on-campus events if you are ill. MSU students who miss class due to illness will be given opportunities to access course materials online. You are encouraged to seek appropriate medical attention for treatment of illness. In the event of contagious illness, please do not come to class or to campus to turn in work or attend class. Instead notify me by email me about your absence as soon as practical, so that accommodations can be made. Please note that documentation (a Doctor's note) for medical excuses is not required. MSU University Health Partners - as part their commitment to maintain patient confidentiality, to encourage more appropriate use of healthcare resources, and to support meaningful dialogue between instructors and students - does not provide such documentation.

All lectures are recorded so you can view them remotely. All homework and tests will be done remotely and turned in online.

Students with Disabilities

To ensure equity for each student's educational experience, those with any documented disability and required accommodations should contact me early in the semester so that all learning needs may be appropriately met. I must see your blue card before you use those accommodations in this class. Accommodations are approved through the Office of Disability Services located in SUB 174. www.montana.edu/disabilityservices

Grading

Labs (6) ==> 48%
2 programs ==> 22%
3 Tests ==> 30%

At the end of the semester, final grades will be determined as follows (this is a rough estimate at this point, as there would be a curving):

- 93+: A
- 90+: A-
- 87+: B+
- 83+: B
- 80+: B-
- 77+: C+
- 73+: C
- 70+: C-
- 67+: D+
- 63: D
- 60: D-

Help

- CS Department Tutoring Center. Free help from upper division undergraduate and graduate students.
- SmartyCats Tutoring. Paid help from CSCI 112 tutors.
- Website to help you practice: https://www.w3resource.com/c-programming-exercises/

Collaboration Policy

You *may* (unless otherwise noted)

- Share ideas with other people.
- Help other people debug their programs.

You may *NOT*

- Share code with other people.
- Submit code that you did not write.

- Modify someone else's solution and claim it as your own.
- You may not submit screenshots that do not come from the code you submitted
- Use any outside sources (books, notes, electronic devices, other people) on the midterm or final exam, unless otherwise noted.

I use a plagiarism checker in CodePost which will catch if any code between students is very close. If the checker flags your code, I will give you one warning. If it happens again, I will have to turn you into the Dean of Students. Do not pass code around.

Failure to abide by these rules (as stated in the previous paragraph)will result in everyone involved being reported to the Dean of Students, getting a 0 on the assignment and possibly receiving an F for the course.