

CS112: Introduction to Computer Programming (Summer 2022)

1 Course Basics

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Course Outcomes:

- An ability to use procedural programming language concepts including expressions, decision statements, simple data types, Boolean logic, input/output, loop constructs, and procedures.
- An ability to combine programming techniques to solve problems of varying degrees of difficulty.
- An ability to refine computer programs through testing and debugging to ensure proper operation.
- An ability to read, understand, and evaluate a program specification to independently implement the desired behavior.
- An ability to understand issues and ethics related to obtaining and using code from unknown, unreliable, or unethical sources, as a precursor to best professional practices.

Mason Core IT Learning Outcomes:

- Students will understand the principles of information storage, exchange, security, and privacy and be aware of related ethical issues.
- Students will become critical consumers of digital information; they will be capable of selecting and evaluating appropriate, relevant, and trustworthy sources of information.
- Students can use appropriate information and computing technologies to organize and analyze information and use it to guide decision-making.
- Students will be able to choose and apply appropriate algorithmic methods to solve a problem.

Prerequisite

C or better in MATH 104, 105, or 113 (or sufficient score on the math placement test).

1.1 Textbook

Required - [zyBooks Online Textbook](#)

- Sign up at learn.zybooks.com
- Enter zyBook code: **GMUCS112GonzalezSummer2022**
- Students that **retake the course** contact support@zybooks.com to ask if you could have added the book for free.

1.2 Piazza

- Announcements and course discussion of programming assignments will be on Piazza.
- You can ask a UTA to tag an instructor so that we can address your concern
- Public questions visible to all students, collaborate on responses must be posted without your solution code.
- You should read the discussion board daily for clarifications and potential updates.

1.3 Blackboard

- Course schedule, course syllabus, description of assignments, lab and lecture slides and/or lecture videos will be posted on Blackboard.
- All grades will be posted to Blackboard.
- All programming assignments will be submitted via Blackboard.
- Submission through email will be not taking into account.

2 Grading

Category	Points	Percent	Notes
Projects	80 each 400 in total 6 Projects	40%	Drop 1 lowest
Labs	10 each 100 in total 12 labs	10%	Drop 2 lowest
Zybook reading	10 points	10%	Subscribe to Zybook and complete all your reading to get full credit
Midterm Exam	100 points	15%	See Midterm replacement policy
Final Exam	100 points	25%	To get a passing grade Final exam must be $\geq 60\%$ or Avg. Exams ≥ 72

Assessment

A+ ($\geq 98.0\%$)	A ($\geq 92.0\%$)	A- ($\geq 90.0\%$)
B+ ($\geq 88.0\%$)	B ($\geq 82.0\%$)	B- ($\geq 80.0\%$)
C+ ($\geq 78.0\%$)	C ($\geq 72.0\%$)	C- ($\geq 70.0\%$)
D ($\geq 60.0\%$)		
F ($< 60.0\%$)		

2.1 Individual Programming Assignments

All programming assignments in CS 112 are individual efforts. You may only contact course staff with questions about the assignments. Any use of websites, discussing with other students, attempting to copy, share, buy, or otherwise acquire a solution other than self-creating it on your own will result in an honor code case with recommendation to fail the course (F) plus further measures.

Projects:

- All projects are to be submitted to Gradescope/Blackboard. You can submit your work an unlimited number of times to Gradescope/Blackboard prior to the assignment deadline, and by default only the last version will be graded.
- Projects tend to require at least 5-20 hours to complete, do not procrastinate them to the last minute.

Labs:

- Lab tasks require attendance at your *designated* lab recitation time to get the credit.
- Any missed lab assignment is simply missed, regardless of the reason why (travel, illness, work, traffic, receiving a major award, etc.). Two lowest lab grades will be dropped to cover the very rare cases of understandable missed labs.
- If you choose to miss some labs early on for no reason, and later, must miss for some understandable reason, you would have used up your two drops unnecessarily. Try to save the drops so you can throw out a bad grade, and not just hide a lazy zero. Pretending you don't have these available drops is your best approach

Grades:

Once a link for submission expires, resubmissions are not accepted, therefore, you need to verify that the right file was submitted and it can be download correctly (i.e., is not a corrupted file).

All your programming assignments are graded by your GTA. In case you want to clarify your grade, you should contact your GTA no later than 3 days after a grade is posted on Blackboard, otherwise, your original grade remains.

2.2 e-book Readings

- All zyBook readings assignments must be completed timely to get full credit.
- See the schedule page on Piazza for reading assignment due date.

2.3 Exams

- Exams are closed book/notes unless specified otherwise by instructor.
- The final exam is cumulative. If you perform better on the final exam than your midterm exam, we will replace the midterm grade with the final grade.
- If you know in advance that you are unable to take an exam by the deadline posted for a valid and unavoidable reason (such as a scheduled surgery, etc.), you must notify the professor at least one week before the scheduled exam date to make arrangements for a make-up.
- If you miss an exam deadline due to a university-accepted excused absence (such as an illness or car accident the day and time of the exam), you must notify your professor within 24 hours of your absence to make arrangements for a makeup. Failure to follow either of these policies will result in a zero on the exam.
- Per departmental policy, you must pass a significant exam threshold to receive a passing grade in this class, regardless of your performance on other assignments. Failing the final exam (<60.0%), will result in a failing grade (F) for the entire course unless you have achieved an average exam score $\geq 72\%$. This average is calculated as $(\text{Midterm Exam} + \text{Final Exam})/2$. Note that midterm grades will not be "replaced" with the final grade for this calculation.

3 Office Hours and Discussion Board

There is support available to you outside of lecture time in the form of office hours and the online discussion board (Piazza). If you are having difficulty on a programming assignment or lab, we encourage you to reach out **as early as possible**. Please note that Piazza is a discussion forum for you, the students, to discuss the course and the course material. There will be UTAs assigned to check on this forum regularly and try to moderate the discussion.

3.1 Rules for Office Hours

- For students seeking help with programming assignments during office hours, students must identify the line number, through debug print statements, where they believe an error to be before seeing the TA or instructor. This implies that you must have at least one test case that fails to bring to office hours before the TAs or instructor can help you.
- For more general programming assignment questions, students must bring their own pseudocode to office hours before the TA or professor can help you.
- Under no circumstances will the professor or GTA reveal more than three lines of code at a time during office hours. Students must make significant individual effort on all programming assignments before coming to see a GTA/professor. **Waiting until the last minute, in the expectations that the entire programming assignment will be explained in one office hours session, is not feasible.**
- Office hours are often crowded - do not rely on them for last minute help, as we cannot guarantee that we will be able to spend significant time with every student.
- If you have any questions about what you are/aren't permitted to do on a programming assignment or lab, and you and the TA cannot find the answer written somewhere, you should ask your professor. **"So-and-so said" will not be an accepted as a reason for grade re-evaluations** (unless "so-and-so" is your professor).

3.2 Rules for the Discussion Board

- Students are encouraged to use the discussion board, Piazza, to ask and answer questions about assignments, labs, course material, etc.
- No sharing answers or code solutions to assignments on the discussion board. See [Honor code](#) section below for more details.
- Students can post questions and code privately, although the instructor reserves the right to make any post public, so that other students can see the responses.
- For students wishing to post their code privately to Piazza, the same rules apply as when coming to office hours; if you have code written, you must produce at least one failing test case where you have identified what line number is giving you problems.
- UTAs will be assigned to moderate the student discussion, help review student answers, answer private questions, and address questions which have not received a student answer. Therefore, responses to questions can be expected **within 24 hours**, though often much sooner.
- Statements made on the discussion boards, even by TAs and especially by other students, should NOT be considered the definitive word on the subject unless it is verified by your professor (in the assignment description, in class, posted on Piazza, etc.). The UTAs can flag professors if/when clarifications are needed.
- If you have any questions about what you are/aren't permitted to do on a programming assignment or exam, and you/others cannot find the answer written somewhere, you should ask your professor. **"So-and-so said" will not be an accepted as a reason for grade re-evaluations** (unless "so-and-so" is your professor).

4 Honor Code

- The honor code at George Mason is an important part of our academic culture. A degree from this institution should be a direct measure of your own progress and abilities, and as such, at all times we must ensure that all work that should be your own is your own.
- All students are expected to abide by the [GMU Honor Code](#). This policy is rigorously enforced.
- The computer science department has an [CS Honor Code Policies](#) to understand better what constitutes cheating in the CS setting. It clarifies some scenarios that are unique to our sort of assignments. Note that the CS department doesn't have any "extra" policy for the honor code on top of the university's, this document merely helps you to understand how the honor code applies to programming and CS, but it doesn't restrict it at all.
- We take the honor code quite seriously. Any attempts at copying or sharing code, algorithms, or other violations of the honor code simply will not be tolerated. Cheating will be prosecuted and result in a notification of the Honor Committee as outlined in the GMU Honor Code.
Sharing, collaboration, or looking at any code or algorithm related to programming assignments that is not your own is considered cheating. This includes using code found on the internet.
- As seductively simple as it may seem to just copy and paste work from a friend, or even to just work on the assignment on your own machines next to each other, remember that it is just as easy to compare your work automatically and electronically, and discover the similarities in text and structure. We use automated software to flag suspicious cases, and then review them to find the cases that must be submitted to the Office of Academic Integrity.
- **Confirmed cases of cheating result in a final grade of an F in the course.**
- Please read [Understanding the Honor Code](#) - Dr. Snyder's thoughts about the purpose of the honor code in a computer science course.
- Sharing of instructor-created materials, particularly materials relevant to assignments or exams, to public online "study" sites is considered a violation of Mason's Honor Code. For more information, see the Office of Academic Integrity's [summary of information about online study sites](#).
- There are opportunities to study, work, and learn together throughout this course - zybook questions, lab exercises, and more. Mostly you will need to work independently for any sort of "test" and for homework assignments.

5 Learning Disabilities

- Students with a learning disability or other condition (documented with GMU's Office of Disability Services) that may impact academic performance should speak with the professor ASAP to discuss appropriate accommodations. We are quite happy to assist as is appropriate, but it must be documented ahead of time. Bringing the accommodation paperwork with you to a scheduled assessment is far too late! Even if you don't know if you plan on utilizing the accommodations ahead of time, it's in your best interest to prepare ahead of time.

6 University Policies

- There is a limit of two graded attempts for this course. A W does not count as a graded attempt. Please see the University Catalog and consult with your academic advisor if you have any questions.
- George Mason University, an intentionally [inclusive community](#), promotes and maintains an equitable and just work and learning environment. We welcome and value individuals and their differences including race, economic status, gender expression and identity, sex, sexual orientation, ethnicity, national origin, first language, religion, age, and disability. As a member of the George Mason University community, the Computer Science department plays an integral role in building an educational environment that is committed to anti-racism and inclusive excellence. For more information on how to continuously cultivate the practice of anti-racism, see this guide from the National Museum of African American History and Culture on how to be anti-racist: <https://nmaahc.si.edu/learn/talking-about-race/topics/being-antiracist>.
- Title IX: As a faculty member and designated “Responsible Employee,” I am required to report all disclosures of sexual assault, interpersonal violence, and stalking to Mason’s [Title IX Coordinator](#) per [university policy 1412](#). If you wish to speak with someone confidentially, please contact the [Student Support and Advocacy Center](#) (703-380-1434) or [Counseling and Psychological Services](#) (703-993-2380). You may also seek assistance from [Mason’s Title IX Coordinator](#) (703-993-8730; titleix@gmu.edu).
- Student Support Resources on Campus: <https://stearnscenter.gmu.edu/knowledge-center/knowing-mason-students/student-support-resources-on-campus/>.
- Incomplete Grades: <https://chssundergrad.gmu.edu/other-forms/incompletes>.
- Campus Closure due to Weather: If the campus closes or class is canceled due to weather or other concern, students should check Blackboard/Piazza for updates on how to continue learning and information about any changes to events or assignments.

7 Others

- What is listed on the syllabus are our/Mason’s usual course policies. However, this is not a “usual” time. We fully understand that each of us may face new obstacles, or old obstacles in novel ways, during this time. Please communicate with us if such things are getting in your way in this class. **Our goal is to facilitate your growth and success in this strange and uncertain time**; we can only do that if you tell us what is happening.
- If you are experiencing feelings of anxiety, panic, depression, sadness during the semester, Student Health Services and Counseling and Psychological Services Offices (703-993-2380) provides a range of resources to assist and support you.
- Students can call (703-993-2831) or walk-in during open hours to schedule an appointment to talk with a health care provider. If you or someone you know experiences a mental health crisis or emergency, seek help immediately. Call 911 for local emergency services, the National Suicide Prevention Lifeline (1-800-273-8255), or text the Crisis Text Line (741-741) anytime.
- We believe we learn best when we can show up as whole and healthy people. To learn effectively we need to have basic security: a roof over our head, a safe place to sleep, a stable place to live, and enough food to eat. If you are struggling to meet any of these basic needs, visit our campus food pantry (<https://ssac.gmu.edu/patriot-pantry/>), or reach out to other Mason resources <https://learningservices.gmu.edu/campus-resources/>. Remember, asking for assistance and advocating for yourself is an important part of your collegiate experience. **YOU** are not alone.