AU 2024 Syllabus
CSE 2421 – Systems I:
Introduction to Low-Level Programming and Computer Organization

<u>CHOOSING NOT TO READ AND RETAIN THE INFORMATION IN THIS DOCUMENT IS NOT A VALID EXCUSE FOR NOT KNOWING THE INFORMATION IN THIS DOCUMENT.</u>

"Health and safety requirements: All students, faculty and staff are required to comply with and stay up to date on all university safety and health guidance (https://safeandhealthy.osu.edu)."

Prerequisites

- CSE 2122 (Data Structures using C++) or 2133 (Business Programming) or 2231 (Software II) ***and***
- CSE 2321 (Foundations 1) or Math 2566 (Discrete Mathematical Structures) or Math 366

Course Description: Introduction to computer architecture at machine and assembly language level; pointers and addressing; C programming at machine level; computer organization.

Instructor:	Janis Jones
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Copyright disclaimer

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Office Hours:

My office hours will be Tuesday through Friday, 10:15 am - 11:15 am; or by appointment. Please do not hesitate to ask to make an appointment if my scheduled office hours do not work for you. I will be around some Mondays but will make no promises. I also try to schedule at least one hour every weekday for one of the undergraduate graders to be available for questions. There should be at least 10 - 12 hours each week where you can get in-person help. The graders' office hours schedule will be posted on Piazza as soon as it is finalized.

Textbooks:

REQUIRED: *Computer Systems: A Programmer's Perspective,* Bryant and O'Hallaron, **3rd edition**
ISBN-13: 978-0-134-12383-7
ISBN-10: 0-134-12383-2

RECOMMENDED: *C Primer Plus, 6th Edition by Stephen Prata*,
ISBN-13: 978-0-321-92842-9
ISBN-10: 0-321-92842-3

I highly recommend having ready access to both texts for the semester. It will make your life considerably less difficult. The Bryant & O'Hallaron text will be used over the entire semester (more heavily in the 2nd half) and the Prata text will be used heavily during the first half of the semester. **There are several required reading assignments in both texts.**

NOTE: There is a Piazza link that goes to a "known errors" site for the required text: **Bryant/O'Halloran Known Textbook errors**. I was not able to locate a similar site for the Prata text.

Course Goals:

- To master programming with pointers in C

- To be competent with application development and debugging in Unix/Linux environments

- To be competent in programming with dynamic data structures in C, and in using C string and I/O features, bit operations, and function pointers

- To be familiar with overall organization and design of computer systems

- To be competent with representation and manipulation of information in computer systems

- To be familiar with machine encoding of instructions, and be competent with a particular real instruction set

- To be familiar with programming in x86-64 assembly language

- To be familiar with Linking (static linking, relocatable object files, symbols and symbol tables, symbol resolution, relocation, loading executable object files)

BS CSE Program Outcomes:

- An ability to apply knowledge of computing, mathematics including discrete mathematics as well as probability and statistics, science, and engineering;

- An ability to design, implement, and evaluate a software or a software/hardware system, component, or process to meet desired needs within realistic constraints such as memory, runtime efficiency, as well as appropriate constraints related to economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability considerations;

- An ability to use the techniques, skills, and modern engineering tools necessary for practice as a CSE professional;

- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution;

- An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices;

Communication:

Please ensure that your OSU email account is properly set-up and that you check it regularly or have it properly forwarded to another address you use actively. Make a point to use this email address as the communication vehicle that you use within Piazza. Both general and time-sensitive (last minute due date extensions, class delays due to weather or illness, etc.) course announcements will be made within Piazza but, may also be sent via email.

To contact me, please use my OSU email (jones.5684@osu.edu) or a private message via Piazza. I check both of these regularly during the semester.

Course Mid-term and Final:

The date for the midterm exam will be on the daily course schedule, which will be posted on Piazza and Carmen. I am attempting to schedule a combined section exam.

The final exam date and time will be posted on Piazza and Carmen. I am attempting to schedule a combined section final. ***You must pass the final exam to pass the class***. Typically, a passing grade on a 100-point scale is designated to be 60%; however, the actual value of what a passing final exam score will be is at the discretion of the instructor (but will be no higher than the normal 100-point scale of 60%).

For both the midterm and the final exam, I do not plan to offer any alternative exam times except for those students with valid, **written** excuses from OSU or other official personnel. Examples of valid excuses would be 1) participation in an OSU sanctioned athletic event, 2) participation in an OSU ROTC sanctioned event, 3) sickness or injury severe enough to require consultation with a medical professional (documentation will be required), 4) hospitalization.

Exams are due at the end of the examination period as announced by the instructor. Continuing to work on your midterm or final exam after the examination period has ended may result in your work being considered late and a subsequent reduction in you score. Your score could be affected up to and including receiving a score of 0 for the exam. After I have left the examination room at the end of the examination period, all exams not in my possession will be scored a 0.

Attendance:

This is an in-person course. Even though lecture slide decks will be available to you, if you do not attend class, you will find that they are not a replacement for being in class.

Class attendance is strongly encouraged and expected, though technically not required. Past experience strongly supports the conclusion that your final grade will be closely correlated with the frequency of your attendance. The more regularly you attend class, the higher your course grade is likely to be. Extremely few students turn out to be exceptions to this.

Students are responsible for all material covered, all assignments made, and all due dates that are announced in class whether or not they are updated on line. Please get to know your classmates. Whenever you miss class, **it is your responsibility** to get notes from a classmate and go over them on your own first; after doing that, *but only after doing that*, if you still have questions, please contact me.

Please attend the lecture section for which you are registered. Attending another section, especially one later in the day, when there is an exam or in-class assignment creates fairness issues and your work may not be accepted. If you have reason to want to attend a section other than your own, you may do so **IF** you contact me prior to 9:00AM on the day you wish to attend another section and receive permission to do so. Stopping by my office or sending email are both appropriate forms of contact. Keep in mind that fire code prevents me from having more students in a room than is specified. I won't be able to give permission for you to be in a class other than that for which you are registered, if I believe all regularly scheduled students are likely to be in attendance. (For example, all students are likely to be in attendance on the day of the mid-term.) If you choose to attend another section without permission to do so, you forfeit any credit for any grade you would have received for attending the class (yes, there will be a few of these) or for any work turned in during the class.

Class Discussion, Materials, and Assignments:
This term we will be using Piazza for class discussion and materials for class; lab and lecture slides will

be posted there. Due dates for labs and homework will also be on Carmen. You should have received an e-mail about setting up an account, and you should do that as soon as possible. The system is highly catered to getting you help quickly and efficiently from classmates, the graders, and the instructor. Rather than emailing questions to the teaching staff, I encourage you to post your questions on Piazza (but be sure to see the limitation below). If you have any problems or feedback for the Piazza developers, email team@piazza.com.

Only blue ink, black ink, pencil or typewritten/printed in a standard format can be used to complete any assignment for this class. Any assignment turned in that does not follow these guidelines will receive a 50% reduction in points for the assignment. For example, a 100 point assignment turned in with red ink would start with a 50 point deduction before grading the answers commenced.

Do not post code for labs or answers to homework questions on Piazza (or any other online site for that matter)! Posting these on Piazza could negatively affect your semester grade and get you an all-expense paid trip to the CoAM committee. If you are not sure whether it is acceptable to post something, post it privately or e-mail me, and you can send me the code you are unsure about. I can then advise you about how you can post any questions you have on Piazza to try to get the kind of help which is permitted from others. You should understand that ***it is your responsibility to debug your code***, and not the responsibility of either the teaching staff or other students. If you are getting an error or warning when you try to compile your code, you can post the error/warning itself (but not the line or lines of code related to the error), and the teaching staff and other students can give you suggestions about where to look for problems, but the ultimate responsibility for debugging is yours. **Learning to debug is a critically important part of learning to build software in a given language and environment; furthermore, the best way, indeed, the only way, to learn how to do it is to do it yourself. (i.e. practice, practice, practice)**

You are responsible for being aware of any announcements made via Carmen, Piazza or email. Please keep in mind that not every student is on the same schedule or progressing through a given assignment at the same pace as you might be. Do not post questions that "give away the answer" to a lab or homework assignment. This negates the opportunity for other students to learn from the exercise.

Do not post to Piazza that something that has been presented as factual within the slides or other class product and broadcast to the entire group that it is false, unless you are absolutely sure that you are correct. To do so and then, find that you have misinterpreted something or misunderstood something, can result in the entire Piazza group (~140 students) becoming confused. Contact me directly before posting something like this to the entire group. I'm quite happy to find errors within the class materials and correct them; you could even end up with an extra point or two for your effort.

Find our Piazza class page at: https://piazza.com/osu/autumn2024/cse2421

Grading Policy:

Description	Percentage of Grade
Programming Labs	12%
Homework	12%
Assignments	6%
Midterm	30%

Final Exam – must pass   40%

You must pass the final exam in order to pass the course.

Yes, this means you do a lot of work in labs, assignments and homework for very little credit. The point of this though is that it allows you to crash and burn on those assignments, but still do **really well** in the class if you can understand the concepts being taught prior to the midterm and the final.

A typical 100-point scale will be used to assign grades. However, it is at the discretion of the instructor to determine whether or not any additional curve to the scale will be applied for any particular assignment.

Final grades are at the discretion of the instructor. Prior to assigning final grades, I look at each student's scores individually to determine whether there is a *valid* reason to round up a score/grade, such as, but not limited to:
- doing progressively better as the semester goes on
- scoring exceptionally well on the final
- one bad score that pulled your overall score down
- did you turn in all the labs? on time?
- did you turn in all the homework? on time?
- how many Pearson/Carmen assignments did you complete?
- did you participate in class? on Piazza?

I curve grades based on factual, performance reasons only. I will *not* curve grades for any of the following reasons:
- "I need you to curve my grade so I don't have to repeat this course."
- "I need you to curve my grade so that I can graduate on time."
- "I need you to curve my grade so that I can get in to the major."
- Others in this same vein

The time to be thinking about the things above is when you are deciding: 1) whether to come to class today, 2) whether to turn in a homework/lab assignment or blow it off, 3) how to prioritize your time each and every day of the semester.

By the time each of you see a final grade, I've done what I'm willing to do with respect to curving grades. ***Sending me an email after your semester grade has been posted asking me to "curve your grade" wastes both your time and mine***. The only item that might further affect your semester grade is an incorrect score on an assignment. But, based on the paragraph below, almost all grade appeals should already have been addressed by the time final grades are published.

Questions about how an assignment was graded:

You have one week (7 calendar days) to ask about any grade concerns you have on an assignment or exam, from the time grades are released on Carmen. Since almost (if not all) assignments will be submitted via Carmen during the semester, you have 7 calendar days after the grade in Carmen is posted.

If you have any concerns or questions related to a grade, you **must** contact the grader or instructor (See process instructions below) within that one-week time frame. To document that you have contacted the teaching staff within the time allowed, you should email the grader for homework or lab assignments, or the instructor for exams, and keep a copy of the message you sent. **After that**

week deadline, although you may still ask questions (at any time**), a grade change will not be made even if one would normally be available**. The intent is that you should be concerned about your grade, and to communicate any concerns you have to the grader and/or me, in a timely manner.

The process for questions on any assignment other than an exam is as follows:

1) Contact (usually via email) the person who graded your assignment and discuss your concern in a personable, professional manner.

2) If the two of you cannot come to an agreement, then you may escalate your concern to me.

3) Expect me to contact the person who graded your assignment. I will be asking them about how polite you were with them and why they chose not to change their opinion of your work. Note that it may be because I have indicated to the grader that they should not do so for certain types of answers/lab results.

Exceptions will not be made for:

1) Not turning in the complete assignment. Do not ask for an exception to be made because you were not responsible enough to turn in your entire assignment. This could mean that you "forgot" to scan one of the Homework questions into your PDF that you submitted to Carmen. It could also mean that you forgot a file in your .zip file submitted for a lab and that program you spent 20 hours on doesn't compile.

2) Not putting the certification template at the top of any submission where it was required.

3) Any lab that does not compile without warnings or errors.

4) Any lab that seg faults while being tested/graded when valid input is being used.

5) Any answer that cannot be read/understood by me or one of my graders.

6) Any asked for exception where all submissions would have to be regraded in order to be fair to all students unless I determine there was a mistake on my part in the question. In which case all student submissions **will be** regraded.

Assignments:

These are practice problems based on the current course material. These assignments may be given out at any time and either concluded in the current class lecture period or asked to be returned in a future class period. **Using your class notes and/or lecture slides to help you work through these assignments is allowable and encouraged**. These assignments will not be posted or otherwise given out electronically. The goals are to:

(1) Encourage students to do active learning during the class period; and

(2) Ask questions during class if you do not understand the material; and

(3) Keep up with learning the course material. All Carmen assignments will count toward the "Assignments" portion of your final grade.

There will be absolutely no "excused absences" or make-ups for these assignments; you will be allowed, however, to miss 20% of these assignments with no penalty. Since there will be at least 15 to 20 of these, that means you can safely miss 3 or 4, depending upon the final number we actually have. This should allow for instances where you need to miss class because of job fairs or interviews, sickness, "just can't take one more class today" moods, etc. Solutions for these problems will only be provided during class (i.e. they will not be posted on line or distributed in any other form).

These assignments can be either written work (if I want to see how you derived the answer so that I have the option of giving partial credit) or electronic work. ***To be appropriately prepared for these***

assignments, make a point to bring paper and a writing implement as well as some electronic device from which you can access Carmen to class each day. The electronic device should be capable of connecting to the *eduroam* network so that you have no issues "connecting" during class. Not having paper and/or a pen/pencil or a device is not a valid excuse for not turning in the assignment at the expected time.

Homework/Lab Assignments:

These are graded assignments based on the grading policy given above. Each lab assignment will be worth the same percentage (~1.7% of your semester grade). The instructions on how to turn in each assignment are given in the written description of each assignment, which will be posted on the Piazza page for the course. There will be a 24-hour late period for most of these assignments, during which the submission will be accepted, but with a 25% reduction in the grade for the lab if you turn in the assignment any time within 24 hours after the original due date. Some homework assignments **may** also have a late assignment option, but not all of them. If an assignment is more than 24 hours late, unless an extension is both requested and granted **before the original submission deadline**, and which must be due to some circumstances which are beyond the student's control, the submitted material will not be accepted or graded, and a grade of zero will be given.

NOTE: I've found that Carmen considers the time listed as "due" as the first minute that an assignment is late. For example, if something is due at 11:30PM on a particular date, and the time stamp on your submission to Carmen says 11:30PM, then Carmen considers it to be late rather than on time. Beware. I do not consider the assignment late in this instance, although Carmen will tell you that it's late.

In addition to penalties for late assignments, all Lab assignments will have an early due date listed. If your lab is turned in prior to the early due date, you will receive a 10% bonus to your lab score. (i.e., if a lab is worth 100 points, you will receive a 10-point bonus if it is turned in prior to the early due date.) Sometimes I assign labs where there is an opportunity for a 25% bonus for turning the lab in extremely early.

All homework and lab assignments **must be done individually.**

Students are not permitted to discuss specific answers to lab or homework assignments with other students; please come to office hours if you are having trouble. Using previous work of other students in prior semesters as a "model" is also considered a type of academic misconduct. If we see similarity between your work and the work of other students which cannot be explained plausibly as a coincidence, we are required by the Rules of the University Faculty at Ohio State to report it to the Committee on Academic Misconduct (CoAM).

Homework may be either a Carmen assignment or a Carmen quiz or a Pearson assignment. If it is a Carmen assignment, then **homework must be submitted via uploading to Carmen in the format specified in the assignment; the problem solutions must appear in the same order in which they were given in the assignment.** If you wish to complete the problems out of order, do each one separately and scan them to a single file in the correct order. The grader's feedback will also be posted on Carmen. **The grader is authorized to deduct up to 25% of your overall homework score if you choose to not adhere to this requirement.**

Lab assignments must be submitted via uploading to Carmen in a .zip file; all files required to create your executable program must be contained within the .zip file. A REAME file of some sort

may also be required depending upon the specific requirements of each lab. This README file could be included within the .zip file.

It is at the discretion of the instructor to ask a student about any assignment that is submitted. Should there be a concern of any kind about the materials submitted by a student, it is appropriate for the instructor to request an explanation of the submitted/assigned material. (i.e. You should be able to intelligently discuss your homework answers, any code submitted for your labs or their results.) **You MUST be capable of answering questions about any assignment or exam that you submit for a grade for at least 14 calendar days after it is submitted**. The result of this discussion may cause me to conclude that the student is unaware of how the solutions were determined or what the code does, thus making the submission of the assignment unacceptable.

Each student is responsible for knowing the course rules for assignments as stated above. If you do not think you can remember them, it is strongly advised that you review this part of the syllabus before submitting work.

Make-up Policy:

At times, there are extraordinary circumstances that may require a make-up or a later due date than designated for an assignment. ***Notification must be made, and the extension must be granted by the instructor prior to the assignment due date*** by e-mail, phone or in person, if at all possible. Leaving a voice mail or e-mail, however, is not enough. Also, in order to have a request for a make-up or extension considered, you must make the request as early as possible, within reason. You must have confirmation by the instructor to be considered for a make-up or extension. In a case where a person is unable to make notification in advance (e.g., for a documented medical emergency), notification must be made as soon as possible, within reason.

It is the policy of this course that:

- Only in the case of documented emergencies will students be given the option for a make-up.

- Written documentation will *always* be required to obtain an excused absence for any exam or lab/homework assignment.

- Make-ups will not be given to students who miss assignments due to "oversleeping" or "not knowing of the assignment", etc.

- Make-ups will not be given for Carmen assignments since there is a 20% miss-without-penalty option.

As you make your choice with respect to whether to ask for an exception, ask yourself: "If my instructor were my boss **at a job I wanted to keep**, would I ask for this same exception?" ***Do yourself and your career a favor and behave as a professional during the course.***

NOTE: If you plan to attend a conference or have some other excused absence from the course, your excused absence is for any work assigned <u>and also due</u> while you are away. Also, your excused absence is not valid until the minute that I receive notice from you of the excused absence. Any work that was assigned prior to the start of your excused absence is expected to be submitted on time unless a specific extension is agreed upon with me in writing prior to the start of your excused absence.

For example, 1) if you are going to be gone for a week, but don't send your excused absence paperwork to me until Wednesday of that week at 2:00PM, your excused absence is for any work assigned and due from Wednesday at 2:00PM forward. 2) A lab or homework is assigned 1-2 weeks before your excused absence starts, but is due while you are away. Then you are expected to submit

the lab or homework on time or early if you do not want to have to work on it while you are away. I expect you to organize your time appropriately to do this.

Fairness to Students

Disability Issues

The university strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

If you are isolating while waiting for a COVID-19 test result, please let me know immediately. Those testing positive for COVID-19 should refer to the Safe and Healthy Buckeyes site for resources. Beyond five days of the required COVID-19 isolation period, I may rely on Student Life Disability Services to establish further reasonable accommodations. You can contact them at slds@osu.edu; 614-292-3307; or slds.osu.edu.

NOTE1: It is the student's responsibility to contact SLDS. No accommodations will be granted on any assignment assigned prior to me being notified by SLDS that you have registered with them and been granted specific accommodations.

Statement on Mental Health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614--292--5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at 614--292--5766 and 24 hour emergency help is also available 24/7 by dialing 988 to reach the Suicide and Crisis Lifeline.

Sexual misconduct/relationship violence

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at http://titleix.osu.edu or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu

Diversity Statement

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth

and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

Religious Accommodations

It is Ohio State's policy to reasonably accommodate the sincerely held religious beliefs and practices of all students. The policy permits a student to be absent for up to three days each academic semester for reasons of faith or religious or spiritual belief.

 Students planning to use religious beliefs or practices accommodations for course requirements must inform the instructor in writing no later than 14 days after the course begins. The instructor is then responsible for scheduling an alternative time and date for the course requirement, which may be before or after the original time and date of the course requirement. These alternative accommodations will remain confidential. It is the student's responsibility to ensure that all course assignments are completed.

Academic Misconduct:

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's Code of Student Conduct, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute Academic Misconduct.

The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: Any activity that tends to compromise the academic integrity of the University or subvert the educational process. Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination (http://oaa.osu.edu/coam.html). Ignorance of the University's Code of Student Conduct is never considered an excuse for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

Students who violate the University's policies regarding academic misconduct are stealing academic credit and skewing the grading process against students who are honestly participating in the course. Their actions diminish the value of an academic degree when they falsely represent themselves as competent in subject matter to their instructor, their peers, and in the workplace.

In accordance with Faculty Rule 3335-31-02, all instances of alleged or suspected academic misconduct will be reported to the Department Chairperson and the Committee on Academic Misconduct (COAM). Alleged or suspected misconduct cases will be resolved via COAM's hearing processes as described in the University's Code of Student Conduct(http://studentaffairs.osu.edu/csc/). **It is not my responsibility (nor do I want it to be) to determine whether or not academic misconduct has occurred. It is my responsibility to report any behavior that I believe *could be* academic misconduct.**

Please be sure to familiarize yourself with the OSU academic misconduct rules and policies which include examples and details defining academic misconduct: http://oaa.osu.edu/coamfaqs.html.   **It is your responsibility as a student to be aware of actions that are considered prohibited by the university.**

Academic misconduct includes, *but is not limited to*:

- giving or receiving information or assistance during an exam,

- allowing a student to copy the work you have done for a graded assignment, including lab or homework assignments. This would include posting to or getting answers from a web site such as Chegg, Reddit, etc.

- **submitting plagiarized work (work originally done by others, and not by the student submitting the work) for academic requirements,**

- **electronically generating code in one programming language from code written in another programming language and submitting it as code you wrote,**

- **submitting any code in a lab or any answer in a homework that you cannot adequately explain should you be asked to do so.**

- changing graded material and turning it back in to be re-graded for a higher score,

- obtaining or providing current term exam information - in verbal, paper or electronic form – from/to another student taking the course (no matter which section) prior to taking the exam yourself on the same information,

- obtaining or providing homework or lab information or answers - in verbal, paper or electronic form – from/to another student taking the course in this or in a previous semester in order to "model" current answers based upon previously submitted work,

- posting lab, homework, or exam questions from this course to Chegg or other coursework help web sites, any WeChat link or searching for and reading answers to any question that are already posted. Note that many of these sites cooperate with OSU with respect to identifying instances of academic misconduct. Beware.

- submitting work that was originally done in another course, either during the same term, or a different term, for credit in this course this term. Even if you took another section of this course in a different term, you are not permitted to submit work done for the course in an earlier term for credit in this course this term, nor are you permitted to make use of work that you did in an earlier term in completing an assignment for this course this term. All work submitted for credit in this course during this term must be done during the current term.

Finally, if you think a particular action or activity *may* constitute academic misconduct, *you should assume that it does*, and ask the instructor in order to be sure that it does not, before engaging in such an action or activity.

Specific consideration for ChatGPT, Sudowrite and other similar AI software
All students have important obligations under the Code of Student Conduct to complete all academic and scholarly activities with fairness and honesty. Our professional students also have the responsibility to uphold the professional and ethical standards found in their respective academic honor codes. Specifically, students are not to use "unauthorized assistance in the laboratory, on field work, in scholarship or on a course assignment" unless such assistance has been authorized specifically by the course instructor. In addition, students are not to submit their work without acknowledging any word-for-word use and/or paraphrasing" of writing, ideas or other work that is not your own. These requirements apply to all students — undergraduate, graduate, and professional.

To maintain a culture of integrity and respect, these generative AI tools should not be used in the completion of course assignments unless an instructor for a given course specifically authorizes their use. Some instructors may approve of using generative AI tools in the academic setting for specific goals. However, these tools should be used only with the explicit and clear permission of each individual instructor, and then only in the ways allowed by the instructor.

It this course (CSE 2421) there are no permitted uses of ChatGPT or other similar AI software. And, to keep the work in this class as honest as possible…
The presence of GitHub Copilot in your development environment will be considered active intent to commit

academic misconduct. The use of GitHub Copilot is academic misconduct in this class.

If GitHub Copilot is observed to be installed in your development environment, you will be given a zero for the current assignment even if Copilot is not observed actively doing anything. Consider this the equivalent of inviting your roommate to sit with you during an exam and making sure that they can easily see the exam and your responses. If GitHub Copilot is seen suggesting code, the case will be given to CoAM. Consider this the equivalent of said roommate whispering suggestions in your ear during an exam.