

**Dept. of Computer Science and Engineering/College of Engineering
CSE 102 - Fall 2021**

Course Information

This syllabus is subject to change any time during the semester. The changes will be announced in the class and then reflected in this document. Any changes made since the original distribution of the syllabus will be highlighted in yellow.

Instructor Information

| Instructor Name | Office Hours location | Office Hours* (<i>and by appt.</i>) | Email | Phone Number | Calendar to Make Appointments |
|---------------------|-----------------------|---------------------------------------|--|--------------|-----------------------------------|
| Yolanda Anderson | 1107 EB | Mon 9-11 | cse102@msu.edu | 517.353.0682 | Bookings Calendar |
| Marilyn Wulfekuhler | 1107 EB | Tues 9-11 | | | |
| Kevin Ohl | Virtual via zoom** | Wed 2-4 | | | |
| Phil Sands | Virtual via zoom** | Thurs 2-4 | | | |

***There are no office hours on exam days.**

****The office hours Zoom link is in D2L.**

Note that all four instructors may be available during all of the listed times, and you may talk to any one of us. If these times are not convenient to your schedule, you may make an appointment.

Course Description

Problem solving using a computer. The fundamentals of computing, algorithms and programming. Programming and problem solving using a high-level language such as Python. Algorithmic topics including repetition and decision structures, functions, and data structures. Integrating programs with other applications such as spreadsheets.

Prerequisites

(MTH 103 or MTH 103B or MTH 116 or MTH 124 or MTH 132 or MTH 152H or LB 118) or designated score on Mathematics Placement test

Course Structure

This is a flipped classroom model course, meaning that your “lecture” delivered material and instruction is done outside of class, while what would traditionally be considered “homework” is done during your scheduled class period, where you have TA help available. More information about the Flipped Learning model can be found here:

<https://er.educause.edu/articles/2017/9/myths-and-facts-about-flipped-learning>

Dept. of Computer Science and Engineering/College of Engineering CSE 102 - Fall 2021

Note that all sections except the online section 730 are expected to meet physically in their classroom and stay for the entire class period if there is outstanding work (e.g., labs, projects) to be done. And, as a reminder, all students registered in in-person classes are required to be vaccinated for COVID-19 and are required to wear mask covering their nose and mouth while inside any building at MSU. Note that section 730 will have the same assignment deadlines and schedule as the in-person classes. Section 730 will have “progress checks” in lieu of engagement credit.

Textbook and Course Materials

Required Text

zyBooks are used as a required text. It is an online, interactive book that requires a subscription. You **must** use your MSU email when making your zyBooks account and you must enter your NetID. Your NetID is the first part of your MSU email before the “@msu.edu”. To access the book, go to learn.zybooks.com, enter zyBooks code **MSUCSE102Fall2021**, and subscribe. A subscription is \$69, and the subscription will last until **Jan 1, 2022**.

You must use the Fall2021 version of the book; there have been changes since last spring. If you had a subscription to a previous version of the book, you do not have to pay for it again. Send email to support@zybooks.com and explain your situation to them so you can get access to the Fall 2021 version of the book.

Other Required Resources

We will use D2L to give you all materials that are not part of the textbook. This includes your weekly checklist of assignments, videos and other documents.

Course Objectives

This course will:

1. Provide you with foundational computing skills, including:
 - 1.1. Software
 - 1.2. Algorithmic thinking
 - 1.3. Problem solving skills
2. Teach you to write a program, meeting specified requirements, using a high-level language such Python
3. Train you in how to become self-sufficient in your use of common computing tools and resources
4. Facilitate long-term acquisition of computing skills, by helping students learn how to learn such skills
5. Provide you with foundational awareness of the computing environment
6. Provide you with an enhanced sense of citizenship in the computing environment
7. Help you develop and enhance critical thinking and problem-solving skills

Learning Outcomes

By mastering the course objectives, you will achieve the following learning outcomes:

- Analytical Thinking
 - Acquires, analyzes, and evaluates information from multiple sources
 - Synthesizes and applies information within and across disciplines

**Dept. of Computer Science and Engineering/College of Engineering
CSE 102 - Fall 2021**

- Identifies and applies, as appropriate, quantitative methods for defining and responding to problems
- Identifies the credibility, use and misuse of scientific, humanistic and artistic methods
- Effective Citizenship
 - Applies knowledge and abilities to solve societal problems in ethical ways
- Integrated Reasoning
 - Uses a variety of inquiry strategies incorporating multiple views to make value judgments, solve problems, answer questions, and generate new understanding

Course Schedule

Refer to the course calendar in D2L for specific dates and times. Activity and assignment details will be explained in detail within the learning modules in D2L. Programming topics will be in the Python Programming language. Note that while you access all of your class material online, you are required to attend your regularly assigned class, and you must continue to work diligently on CSE 102 until the end of class, unless you have extenuating circumstances (and be sure to notify the instructors or TAs if you do).

| Topics (In Order) | Readings | Course Objectives | Activities |
|---------------------------------------|----------|----------------------|--|
| Problem Solving and Critical Thinking | Ch 1 | 1.2, 1.3, 4, 7 | Videos, Activities, and Lab |
| Introduction to Python | Ch 2 | 1.2, 1.3, 2, 4, 6, 7 | Videos, Activities, and Lab |
| Variables and Expressions | Ch 3 | 1.2, 1.3, 2, 4, 7 | Videos, Activities, and Lab |
| Branching | Ch 4 | 1.2, 1.3, 2, 4, 7 | Videos, Activities, and Lab Project 1 Exam 1 |
| Using Functions | Ch 5 | 1.2, 1.3, 2, 4, 7 | Videos, Activities, and Lab |
| Creating Your Own Functions | Ch 6 | 1.2, 1.3, 2, 4, 7 | Videos, Activities, and Lab |
| Types, Introduction Strings | Ch 7 | 1.2, 1.3, 2, 4, 7 | Videos, Activities, and Lab |
| More on Strings | Ch 8 | 1.2, 1.3, 2, 4, 7 | Videos, Activities, and Lab |
| Loops | Ch 9 | 1.2, 1.3, 2, 4, 7 | Videos, Activities, and Lab Project 2 |
| More on Loops | Ch 10 | 1.2, 1.3, 2, 4, 7 | Videos, Activities, and Lab |
| Lists and Dictionaries | Ch 11 | 1.2, 1.3, 2, 4, 7 | Videos, Activities, and Lab Exam 2 |
| Files | Ch 12 | 1.2, 1.3, 2, 4, 7 | Videos, Activities, and Lab |
| Exceptions | Ch 13 | 1.2, 1.3, 2, 4, 7 | Videos, Activities, and Lab Project 3 |
| Review | | | Exam 3 |

* Due dates, project dates, and exam dates are listed on the calendar in D2L. *

* Makeup exams are the Saturday following the regularly scheduled exam. *

**Dept. of Computer Science and Engineering/College of Engineering
CSE 102 - Fall 2021**

Grading Policy

Graded Course Activities

| Percentage | Description | Note |
|------------|--------------------|---|
| 5% | Engagement | You can drop 3 engagement grades |
| 5% | zyBooks Activities | There are activities for each chapter in the book |
| 15% | Labs | You may drop 1 lab |
| 15% | Projects | 3 projects for the semester |
| 20% | Exam 1 | Each exam is equally weighted |
| 20% | Exam 2 | Each exam is equally weighted |
| 20% | Exam 3 | Each exam is equally weighted |
| 100% | Total | |

Textbook Activity Deadlines

zyBooks reading and chapter activities are normally due Sunday at 9:00 pm. Labs will normally be due on Friday at 9:00 pm the week they were assigned. Projects will be available for more than a week but will normally be due on Friday at 9:00 pm. Any exceptions will be posted in D2L and in zyBooks.

Viewing Grades

Each week, your grades will be updated in the gradebook in D2L. You will receive an announcement when grades have been updated and a deadline to raise any issues. Make sure to verify your grades **each week**. After the deadline, your grade is written in stone. We will not go back and give you points at the end of the semester as you try and raise your grade.

Letter Grade Assignment

| Grade | Percentage |
|-------|-------------------------|
| 4.0 | 90% of points available |
| 3.5 | 85% of points available |
| 3.0 | 80% of points available |
| 2.5 | 75% of points available |
| 2.0 | 70% of points available |
| 1.5 | 65% of points available |
| 1.0 | 60% of points available |

You must earn at least 40% of total project points and 40% of total exam points in order to be eligible to receive a non-zero grade.

The instructors reserve the right to adjust the scale for course grades, if necessary. Scores may or may not be curved, depending on the performance of the class. You should not expect a curve nor rounding; you can gauge your performance compared to other students by comparing your scores to the median score.

CSE 102 is a large enrollment course and grades are assigned according to student performance in the course components outlined in this syllabus. It is not possible to make grade adjustments (up or down) based on factors outside of the grade components and course

Dept. of Computer Science and Engineering/College of Engineering CSE 102 - Fall 2021

policies. This includes end of semester requests for grade reductions and requests to “round up” to the next grade level.

Course Policies

Grief Absences

Any student impacted by a grief absence or other extenuating circumstances should fill out the grief absence request with their college. Once a grief absence is approved, it is the student’s responsibility to reach out to the course instructors to help make a plan for making up work and / or adjusting deadlines. Note that it is always better to notify the instructors before work is seriously impacted than it is to wait until you have fallen behind.

Engagement / Progress

Daily credit for engagement will be based on specific activities undertaken in class. Most times this will be your weekly lab assignments, and projects as they are assigned. To receive engagement credit, you must be present for the entire class period, diligently working on CSE 102 related material, unless all your outstanding assignments (for example, all labs and projects) are finished at 100%. If all your assignments are finished, you can get started on the next week’s readings and activities. It would be rare that you leave class early, and you should check out with your TA to make sure you will not lose engagement credit if you do. Students enrolled in section 730 will have progress milestones they need to meet to receive engagement/progress credit.

To accommodate an occasional absence or technology disruption, students may lose engagement in three classes and still earn 100% for the class engagement component (5%) of their overall grade. This policy is intended to cover most **excused** absences. There is no provision to make up lost engagement credit *regardless of reason* (excused or not). If you decide to take discretionary days off early in the semester, and then later have an illness, technology disruption, or university excused absence, you will not be given more drops.

Any extenuating circumstances that impact on your participation in the course should be discussed with your instructor as soon as those circumstances are known (such as extended absences due to illness, religious observances, or other required school activities) so we can consider the circumstances in the event there are more than 3 **excused** absences.

Exams

Each of the three exams will be during your regularly scheduled class time on the dates listed in the calendar on D2L. There are no office hours on exam days.

There is no exam during finals week. The third exam will be held during the last week of class during your regularly scheduled class time.

Exams - Online section 730

For exams, you will either come to campus physically for a proctored exam, or you will need:

Dept. of Computer Science and Engineering/College of Engineering CSE 102 - Fall 2021

1. a computing device, such as a laptop or desktop computer, with a working camera and microphone, with access to the internet and a web browser.
2. to install MSU's lockdown browser on this computer.
3. a separate mobile device like a phone or tablet with a working camera to position as a side view.

If you cannot install the lockdown browser, or if you do not have a computer with a working camera and microphone, or you do not have a second device with a working camera you can position for a side view, you will have to come to campus physically to take a proctored exam, or potentially pay for a proctored exam site if you are out of the country. The exam dates for the online section will need to be taken within the same days as the in-person section exams.

Students enrolled in sections other than section 730 are not eligible for remote or online exams.

Makeups

Documented university-sanctioned conflicts or documented health-related issues that prevent a student from taking the exam at his or her regularly scheduled class time will be reviewed for accommodation. Students are expected to be proactive and notify their section assistant(s) and the CSE 102 course instructors of known conflicts at the earliest possible point, via email. No accommodation will be provided for conflicts or issues without supporting documentation, or for conflicts that are not university or health-related. Scheduling of meetings, career fairs, family vacations, or job interviews on exam dates will not be accommodated. ***Students who have a conflict with an exam in another course should contact the instructor in the other course for an alternate testing date, since the CSE 102 exams are all during regularly scheduled class time.***

For conflicts that are known in advance, students are required to inform their section assistants of such conflict and deliver acceptable supporting documentation to the CSE 102 instructors ***at least*** one week before the exam is offered (e.g., by 05:00 PM on Monday for exam the following Monday) or sooner if the conflict is known before that. If feasible, the student will be scheduled into a different section (day and/or time) to take his or her exam. No accommodation will be provided for any conflict known in advance that is not communicated in a timely manner.

If an emergency issue (e.g., illness, accident, etc.) arises that precludes a student from attending an exam, he/she must notify his/her section assistants and provide supporting documentation to the CSE 102 office (EB 1107) within 24 hours of when his/her exam was scheduled, unless it is medically infeasible to do so. Any emergency issue must be supported by appropriate documentation (e.g., medical documentation from physician) that includes a third-party statement confirming an inability to attend class and associated dates. **A statement simply indicating that the student had an appointment or was seen by a doctor will not be sufficient.** We reserve the right to confirm any documentation via verification with third parties.

Absent extenuating circumstances, a student who starts an exam but cannot finish will **not** be given full accommodation in the way of a make-up exam. If a student is not feeling well, he or she should consider seeking medical help before beginning his or her exam.

Makeup exams, if not taken during a different class period, will be offered on the Saturday following the scheduled exam.

Dept. of Computer Science and Engineering/College of Engineering CSE 102 - Fall 2021

There is no cumulative final exam. Non-native English speakers may bring a paper dictionary or use translate.google.com during an exam.

zyBooks Reading, Activities and Labs

Each week, there will be assignments for zyBooks readings, activities and for labs. These are delineated by zyBooks chapter.

Labs are generally assigned and available at the beginning of a given week. The majority of labs will be completed in zyBooks and are normally due at the end of the week. It is expected that a majority of work on labs will be completed during your assigned class time. However, if you need additional time to work on labs, you may do so outside of class up to the end-of-week due date. Lack of conscientious effort on labs during your entire class time will result in loss of engagement credit for the day.

Readings for a given zyBooks chapter and completion of its associated interactive activities are generally due by the Sunday evening prior to when the labs for that chapter are due. These readings and activities must be completed to gain the necessary understanding for the coming week's class sessions in which you will be working on the assigned zyBooks labs. You must complete the zyBooks readings and activities to be the best prepared for in-class Lab work that will be undertaken.

Due dates for chapter activities and for labs can be viewed in the upper right panel of zyBooks.

Projects

There will be 3 project assignments given throughout the semester, which collectively make up 15% of your final grade.

Each project must be your own individual effort. While we encourage discussion and collaboration for readings, activities, and labs, you are NOT allowed to work as a team for the projects. If you discuss the project with other students, make sure you are just discussing the projects *in general*, and NOT sharing code. Verbally discussing a project with other students is acceptable, but the discussion should not be turned into an implementation. It is considered academic dishonestly if you share project code with another student. To be safe, when discussing the project with another student, neither of you should be looking at actual code during the discussion. It is also your responsibility to protect your files and your intellectual property. If you give access to your files to someone else who then copies your work, you **will** receive an Academic Dishonesty Report and a 0 for the assignment, even if they took your work without your knowledge. Simply showing your solution to another student almost guarantees a zero score as past experience shows that a student who asks to "look at" your solution will copy parts of it or pass it along to someone else. Leaving your laptop open while logged in to zyBooks is not protecting your intellectual property, and if someone then copies your work, you will both receive 0s and Academic Dishonesty Reports. If your laptop / flashdrive is lost or stolen, you should notify the class instructors so that we will be aware of the situation.

Getting a solution from the internet through sites such as Chegg, or using code that was posted on reddit or sites such as stack overflow, is a guaranteed way to be flagged for plagiarism. We use an algorithm similar to Turnitin for writing which compares student coding solutions to detect plagiarism. Many beginning programmers imagine that there are only one or two ways to solve

Dept. of Computer Science and Engineering/College of Engineering CSE 102 - Fall 2021

a programming problem, so they believe they won't get caught if they use the same solution as someone else. This is the same as believing that plagiarizing a short story but changing the character's names will not be detected. Do not take the risk.

The penalty for plagiarism on a project is at a minimum, a score of 0 on the project, a further 10% deducted from your final grade (that is, a full letter grade reduction), and an Academic Dishonesty Report filed with the university. Repeat or egregious offenses (such as using online resources) will receive a 0 as your final grade in the class.

Instead of searching for questionable help on the internet for your problems, we encourage you to use the class help resources – ask for help during class, post your questions to Piazza (our online help forum), go to instructor office hours, or go to CSE help rooms. Seeking help from students at other universities, family friends, or outside tutors also runs the risk of those people obtaining code from online sources, or giving the same code to multiple people, which will in turn cause you to get flagged. Don't take the risk! Do your own work with your own thought processes.

Project Deadline Policy

Projects are typically due at 9:00 pm on Fridays. Based upon that, scoring of projects will be according to the following:

- Projects with 100% turned in before the 9:00 Friday deadline will receive a 10 point bonus for that project
- There is a grace period of 3 hours following the deadline (typically midnight Friday), where projects turned in within that grace period will receive their full score as reported by zybooks.
- Projects turned in by the following Sunday at 9:00 pm (48 hours after the deadline) will receive their original score within the grace period as reported by zybooks plus 75% of the additional points earned after Friday's grace period.
- No credit for projects submitted after 48 hours after the original deadline

NOTE: Since projects, labs, and activities are submitted in an electronic system that records the current time, your work will be considered late if it is submitted even 1 minute or a fraction of a minute after the deadline. If 1500 students are all trying to submit 1 minute before the deadline, not all of them may get in before the deadline expires. Accommodation will NOT be given due to system slowdown. Consider your personal deadline to be 10-15 minutes before the actual due time, and do not wait until literally the last minute. You may submit as many times as you wish before the deadline, and the system will keep your highest grade. So submit early and submit often.

As a reminder, there are only 3 projects, the projects make up 15% of your final grade, you are **not** allowed to collaborate on projects, you are **not** allowed to drop a project, and late projects will have a reduced grade according to the schedule above.

Communication

D2L - Course Website

Information related to the course is available on <https://d2l.msu.edu/d2l/home/1302606>.

Dept. of Computer Science and Engineering/College of Engineering CSE 102 - Fall 2021

Help rooms

There will be several opportunities outside of your regularly scheduled class time to get additional help on activities or projects, or to ask questions about concepts you do not understand. The time and logistics of the help rooms will be announced the second week of class, but they will be virtual this semester via zoom. Note that help rooms get extremely busy especially around project due dates, so starting early is a good strategy to avoid the rush. If you have multiple questions and the help rooms are exceptionally busy, you may only get a limited time with the TA and may be asked to get back in line to give other students a turn.

Piazza

Piazza is an online help forum set up for this class to encourage class discussion. Students can post questions, and instructors, TAs, and students may answer. There will be scheduled times when TAs will be monitoring the questions so that you can get answers quickly. The system is highly catered to getting you help fast and efficiently from classmates, the TAs, and the instructors. Rather than emailing questions to the teaching staff, you are encouraged to post your questions on Piazza.

Use of Piazza will commence two or three weeks into the semester. You will receive an enrollment email from Piazza with pertinent start up details to setup your access.

Piazza is a tool for students to post questions on the course materials, including projects. It is a communication tool to help students with their assignment questions. Piazza can neither be used as a venting tool to express frustrations toward the class material and topics, nor can it be used as a tool to change the students' perception towards the TAs and the instructors of this class. It is not a social media platform. Those who do not follow this simple etiquette will be blocked from piazza for the rest of the semester and will be reported to Dean of Students. Keep in mind that though your questions may appear to be anonymous to other students, they are not anonymous to the TAs and instructors. Keep it professional.

Do NOT post portions of your code publicly on Piazza to ask questions. If you do so, it can allow someone to easily copy your code putting yourself at risk for an academic integrity violation. Instead, send a private message that contains the code.

Enrollment and Drops

CSE 102 follows the university-published calendar for enrollment changes. Students should consult the registrar's enrollment site and click on the relevant CSE 102 section number to access relevant enrollment information. Any grades/scores (i.e., attendance, in class exercises, quiz, or exams) missed due to enrollment issues other than university error (e.g., accidental course drop, university hold, late add, etc.) cannot be made up.

In accordance with university policy, we review student course activity and will administratively drop any student who is registered in the course but is not making an apparent effort to perform class activities. This includes not attending a significant majority of class sessions and/or not attempting Activities, Labs, Projects, and Exams.

Dept. of Computer Science and Engineering/College of Engineering CSE 102 - Fall 2021

Accommodations

Students requiring accommodation under the Americans with Disabilities Act (ADA) need to register with MSU's Resource Centers for Disabilities (RCPD) and submit their Verified Individualized Services and Accommodations (VISA) form to the instructors at the beginning of the semester. Instructors are available to meet individually to discuss any specific needs outlined within the VISA form. No accommodation can be given if we are not provided a formal VISA form, and we cannot offer accommodation without more than 2 business days advance receipt of the VISA form, nor is retroactive accommodation provided for needs that are not communicated in a timely manner.

Student-athlete conflicts should be communicated via delivery of a valid SASS form to the student's section Assistants at the earliest point in the semester.

Commit to Integrity

Academic Integrity: Article 2.3.3 of the Academic Freedom Report states: The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards. In addition, CSE adheres to the policies on academic honesty specified in General Student Regulation 1.0, Protection of Scholarship and Grades; the all-University Policy on Integrity of Scholarship and Grades; and Ordinance 17.00, Examinations. (See Spartan Life: Student Handbook and Resource Guide and/or the MSU Web site.) Unless explicitly stated otherwise, we expect all solutions to Homework assignments, programming assignments, and exams will be solely your own work. You are expected to develop original work for this course; therefore, you may not submit course work you completed for another course to satisfy the requirements for this course, nor may you submit work you found on the internet or elsewhere.

Students who violate MSU rules may receive a penalty grade, including but not limited to a failing grade on the assignment or in the course, and they will be reported to the registrar for academic dishonesty.

There is no tolerance for academic dishonesty.

The Spartan Code of Honor:

"As a Spartan, I will strive to uphold values of the highest ethical standard. I will practice honesty in my work, foster honesty in my peers, and take pride in knowing that honor is worth more than grades. I will carry these values beyond my time as a student at Michigan State University, continuing the endeavor to build personal integrity in all that I do."

Examples of academic dishonesty include, but are not limited to:

- Copying another student's code or exam answers
- Sharing files with partial or whole solutions to projects or activities
- Using code implemented by someone else intended to solve this class's assignments (i.e., don't get someone else - whether a classmate, another person, or some anonymous person on the internet - to do your assignment for you!).
- Writing code that deceptively passes the test cases, but doesn't solve the problem given. In other words, abusing automatic grader mechanisms to gain unearned points
- Using websites and sources, whose purpose is to provide assignment solutions.
- Distributing course content without instructor permission.

***Dept. of Computer Science and Engineering/College of Engineering
CSE 102 - Fall 2021***

- Submitting a solution that you don't understand / can't explain to an instructor.
- Providing false information to the instructor about matters related to the course.

Depending on the severity of the incident, repercussions for academic dishonesty include failing the assignment, final grade reductions, failing the course, and/or more severe sanctions at the college/university level.

- You can learn more by following this link. (<https://ombud.msu.edu/>), which has resources regarding academic integrity among other topics.