

Introduction to Computer Science I

Computer Science 120

Instructor: Ariel Webster

Email: acwebster@smcm.edu

Office: Schaefer 150

Office Hours: Monday and Wednesday 2-2:30 or by Appointment.

Overview: This course surveys computer science as a discipline and introduces object-oriented programming. A survey of the pivotal fields of computer science, including software engineering; computer networks; programming languages; algorithms; computer architecture; models of computation; operating systems. Students begin to solve simple problems using object-oriented programming.

Objectives.

By the end of this course, students will be able to:

1. Give a basic description of computer science and who a computer scientist can be
2. Interpret class and activity diagrams
3. Identify areas of concentration in computer science
4. Use decision making control structures
5. Use looping control structures
6. Replicate object-oriented programs
7. Implement variables of assorted types

Evaluation.

The breakdown of the grading is as follows:

- Labs – 30%
- Project – 25%
- Worksheets – 10%
- Short Essays – 10%
- Quizzes - 20%
- Participation – 5%

Mask Policy: For the health and safety of our community, within all campus buildings, including classrooms and laboratories, all students are required to wear face coverings over the nose and mouth and comply with social distancing guidelines to the extent possible. Students who are unable or unwilling to wear a face covering are required to enroll in the remote option of this course. Failure to comply will result in your being excused from the class session, subsequent class meetings, and potentially from the residential campus experience.

Policies Cell Phones: Be sure to silence all electronic devices when you are in class. If they go off in class they are distraction not only to myself, but to everyone else in the class as well. Habitual offenders will be excused from the class with a 0 for any quizzes or labs that day.

Attendance and Tardiness: Attendance is highly recommended. I start class on the hour and expect the students to be in class at that time. If you have circumstances that can prevent you from being in class on time, please let me know as soon as possible.

Late Policy: Labs and essays that are turned in after the due date will receive a penalty of 5% a day for the first week. After the first week the lab may not be submitted for credit.

There will be limited opportunity to make up the presentation after the live presentation date. There will be a 10% penalty for doing so as well, as your classmates will have lost the advantage of hearing you present and you will have missed their presentations.

Final Exam: The final exam in this class is optional. You may take it if you wish in order to attempt to improve your grade. Regardless if you choose to take the final or not, every student is required to attend the final period. Failure to attend the final period will result in an F in the course.

Academic Dishonesty: Any violation of academic integrity will result in an automatic zero for that assignment and will be reported to Academic Services. Severe violations of academic integrity or a second offense will result in a more severe penalty up to, and including, an automatic F in the course.

Closing: The most important thing in any of my classes is that you are learning and expanding your horizons. If you are having any undue difficulty with your work as it pertains to this class, please contact me as soon as possible. Always remember that professors win when you don't need us any longer.

Tentative Schedule

Week	General Topic
One	Your first Program
Two	History of CS
Three	Algorithms
Four	Methods
Five	Truth Tables
Six	If Statements
Seven	Fall Reading Days and Practice
Eight	Practice
Nine	Classes and Objects
Ten	Objects
Eleven	While Loops and Cryptography

Twelve	While Loops and Thanksgiving
Thirteen	For Loops and Data Science
Fourteen	Topics in CS
Fifteen	Final Presentations
	Final Exam