

CSE 110: Programming for Everyone: Introduction to Programming



Overview

Every day, computers and algorithms touch the lives of everyone around us in both mundane and profound ways. These algorithms are in the plants and distribution systems that bring you clean water and electricity, sensors that moderate the flow of traffic, in the tractors and combines that sow and harvest our food, and in the satellites that measure and predict the weather trends. If you are curious about what computers can do and how we instruct them to do those things - this course is for you. No prior programming experience is needed for this course. In addition to exposure to programming, you will gain a powerful set of thinking and problem-solving skills that you can use in your daily life. Start taking advantage of the power of computers around us to make our world a better place.

Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

What You'll Learn

- Demonstrate problem solving techniques for programming
- Develop algorithms to solve problems; demonstrate effective troubleshooting, testing, and debugging of programs
- Describe and apply variables, basic and composite data types, and collections to the development of programs
- Develop programs using fundamental structures of sequence, selection, and iteration.
- Write functions that accept parameters and return results
- Implement object-oriented programs
- Describe the importance and relevance of computing and programming skills in our lives and careers

Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours toward the Computer/Statistics/Quantitative Applications (CS) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

Exams and Grading

10%

Skill Challenges (5)

40%

Project Challenges (13)

20%

Midterm Exam

30%

Final Exam

Creators

Ryan Meuth

Lecturer,
Fulton Schools of Engineering

Ryan Meuth has published widely in journals and edited collections in communication studies. His articles have appeared in *Text and Performance Quarterly*, *Canadian Journal of Political and Social Theory*, *Western Journal of Communication*, *Journal of Homosexuality*, *Communication Studies*, and *Communication and the Disenfranchised*.



Phill Miller

Lecturer,
Fulton Schools of Engineering

Phill Miller is a Lecturer at Arizona State University in the Fulton Schools of Engineering. Phill joined ASU in 2014 after teaching computer science and software engineering courses for 14 years at the University of Advancing Technology in Tempe, AZ. His areas of expertise include programming languages, business application development, and software engineering.



Steven Osburne

Lecturer,
Fulton Schools of Engineering

Steven Osburn is a lecturer at Arizona State University in the Fulton Schools of Engineering. A California native, he grew up traveling the US, from Oregon and Washington State, to Montana and Arkansas, before landing in Phoenix. Steven spent several years in the military, and subsequently returned to Arizona for a job in industry, where he stayed for 18 years while teaching part-time at a local community college for 13 of those years. During that time, he completed his bachelor's and master's in systems engineering at ASU. He ultimately took the opportunity to teach full time at ASU, and has loved it ever since! His areas of expertise include software and hardware design, specifically control system.

