

Computer Science 312

Principles of Programming Languages

Fall 2024

Syllabus

Instructor

Dr. Timothy A. Davis
McGlothlin-Street Hall 133
Office hours: MWTh 5:00–6:00
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TAs: Danny Otten dsotten@wm.edu
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Course Webpage

<http://www.cs.wm.edu/~tadavis/cs312>

Class Meetings

Section 1: MW 2:00–3:20 Boswell 341
Section 2: MW 3:30–4:50 Boswell 341

Course Description

A study of programming language principles and paradigms. Formal syntax, including grammars and semantics. Paradigms, including: imperative, object-oriented, functional, logic, event-driven, and concurrent, with an emphasis on C and C++. Run-time implementation issues, including: memory management, parameter passing, and event handling.

Textbooks

Michael L. Scott, *Programming Language Pragmatics (Fourth Edition)*, Morgan Kaufmann, 2015. [recommended]

Prerequisites

CS 241 – Data Structures
CS 243 – Discrete Structures

Grading

Final grades will be based on assignments, a midterm test, and a final exam with appropriate weights based on difficulty. Letter grades will be based on a 10-point scale with +/- designations awarded accordingly. All grades will be posted on Blackboard

Assignments	35%			
Midterm	25%			
Final Exam	40%	Section 1: Thursday	Dec 12	2:00–5:00
		Section 2: Tuesday	Dec 10	9:00–12:00

Last day to drop: Monday, September 9, 2024
Last day to withdraw: Monday, October 28, 2024

Course Policies

To be successful in this course, you must follow several guidelines, listed below.

- **Attendance** Attendance is not required, but students are responsible for everything discussed in class. I will try to post class recordings, but these are not guaranteed, and some information, such as assignment solutions review, will not be included.
- **Class Cancellation** Students are expected to wait for 15 minutes after the scheduled class starting time before leaving if the instructor is late.
- **Professionalism** All students are expected to act professionally during class, which includes not distracting other students with conversations or electronic devices, such as laptops, cell phones, tablets, etc. Additionally, any sort of audio/video recording is forbidden, unless prior permission has been obtained.
- **Assignments** Written assignments will be collected in class and should be typeset using LaTeX or a word processor, with multiple pages and problems/pages in proper order. All work must be shown; otherwise, points may be deducted. Further, problems must be completed according to methods covered in class; alternate methods that produce the same or different results will be counted as incorrect. Points may be deducted even if your answer is correct if your solution is more complicated than it needs to be, difficult to read or understand, not expressed in correct technical English, or incomplete.
- **Projects** All projects must be submitted through Blackboard or GradeScope and must run on the linux computers available in the CS lab. Of course, any project can be completed on your home computer or laptop, but failure to ensure that it compiles and runs on the department machines may result in significant point deductions.
- **Independent Work** You must work on written assignments and projects independently. Cheating of any kind will not be tolerated and will result in significant penalties and/or academic integrity charges. Cheating involves any viewing, copying, or discussion of problems or code from the internet, including accessing AI (e.g., ChatGPT), or consulting with other individuals, whether enrolled in this course or not. Please seek help from me or the TAs only.
- **Deadlines** Deadlines will be enforced, with late work penalized 10 points/day. Submissions will not be accepted after three days past the due date. Additionally, no emailed assignments or projects will be accepted.
- **Grade Disputes** Scores for graded work will be posted on Blackboard. Any questions or disputes concerning assignments, exams, or programs, must be resolved, no sooner than 24 hours after the assignment has been returned and no later than one week after the date the graded work is posted/ returned; otherwise, all grades are final. Please note that the entire homework, project, or exam, not just the part in question, is subject to regrading.

University Policy

Accommodation William & Mary accommodates students with disabilities in accordance with federal laws and university policy. Any student who feels s/he may need an accommodation based on the impact of a learning, psychiatric, physical, or chronic health diagnosis should contact Student Accessibility Services staff at 757-221-2512 or at sas@wm.edu to determine if accommodations are warranted and to obtain an official letter of accommodation. For more information, please see www.wm.edu/sas.