Computer Science 312
Principles of Programming Languages
Summer 2025
Syllabus

Instructor

    Dr. Timothy A. Davis
    McGlothlin-Street 133
    Office Hours: MTTh 12:00-1:00 (in-person: 12:00-12:15; Zoom: 12:30-1:00)
    `tadavis@wm.edu`

    TA: Jonathan Irwin   `jlirwin`

Course Webpage

    `http://www.cs.wm.edu/~tadavis/cs312`

Class Meetings

    MTWR 10:10–12:00 Chancellors 114

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. Run-time implementation issues, including: memory management, parameter passing, and event handling.

Textbooks

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

    Allen B. Tucker and Robert E. Noonan, *Programming Languages: Principles and Paradigms (Second Edition)*, McGraw-Hill, 2007. [out of print]

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	40%
Midterm	25%
Final Exam	35%

Course Policies

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

- **Attendance** Attendance is not required, but strongly recommended. The student is responsible for acquiring class notes for any missed lectures.

- **Class Cancellation** Students are expected to wait for 15 minutes after the scheduled class starting time before leaving if the instructor is late.

- **Time Management** Due to the compressed schedule of the summer session, due dates do not allow much extra time. Start homework early and manage time wisely!

- **Assignments** Written assignments 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 and must run on the linux computers available in the lab in MS Hall.   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, unless explicitly stated otherwise. 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 or other individuals, whether enrolled in this course or not, and the use of AI for any purpose, including writing code for projects, answering problems for class, consultation on projects, tests, etc. Any work found with AI-generated results, techniques not discussed in class, or work which cannot be explained by the student, will result in significantly reduced credit.   Please seek help from me or the TA only.

- **Deadlines** Deadlines will be enforced, with late work accepted only under extreme circumstances. 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 in 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.

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**.