

Course Information

Course: COS 360 Programming Languages
Call #: 80097
Credit Hours: 3
Room: Payson Smith 211
Day/Times: M, W 2:00 P.M.– 3:15 P.M.
Prerequisites: Grade of C or higher in COS 280 and COS 285.
Textbook: Louden, K. & Lambert K., (2012). *Programming Languages Principles and Practices* 3rd Edition, Cengage Learning. ISBN: 9781111529413.

Instructor Information

Name: James Quinlan, Ph.D.
Office: 228 ScienceBuilding
Phone: (207) 780 – 4499
Email: james.quinlan@maine.edu
Contact through Brightspace
Office Hours: M/W 1:00 P.M.- 2:00 P.M.

Course description

Principles and techniques of high level programming language specification, including syntax and semantics, and implementation methods. Languages are considered as formal constructs representing computable functions and the course presents basic results of computability theory. Methods of recognition for regular and context free languages, the functional alternative to the state based imperative paradigm, use of parse trees as control constructs, and concurrent programming synchronization primitives are also covered.

Learning Outcomes

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

- Program in different language paradigms and evaluate their relative benefits
 - Describe the importance of understanding different programming languages and constructs
 - Explain the fundamental characteristics of the various programming language domains
 - Explain the structural differences among various programming language using various evaluation criteria
 - Discuss the influences on modern programming language design
 - Identify the various programming language categories
 - Explain the programming language design trade-offs
 - Write basic algorithms in functional programming language
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Course Evaluation and Grading Policies

Attendance and Participation (10%)

Regular attendance and fully engaged participation is expected of all students. I will post occasional (reading) quizzes to Brightspace. These quizzes will be due before the beginning of class.

Assignments (30%)

Weekly homework assignments will be due on Thursday by 11:59 PM. Upload assignments to Brightspace as a pdf or txt. Late submissions will **not** be accepted. In recognition of the fact that there may be unforeseen circumstances that prevent you from submitting some assignments, I will drop the two lowest homework grades.

Quizzes (20%)

Weekly quizzes will be given either in or outside of class on Brightspace. These will be announced at least one class prior and posted on Brightspace.

Project (10%)

The project will give you hands-on experience working individually (or collaboratively in a team) on a topic based on COS360 topics. In addition, you will gain (more) experience utilizing version control with Git and hosting your project on GitHub. The programming language you use for the project is open-ended, allowing you to choose the programming language of your choice.

Exams (30%)

Both exams (Midterm and Final) will be cumulative, emphasizing material covered since the previous exam. If you cannot take an exam at the scheduled time because of illness or other problems, please contact me through Brightspace beforehand to arrange a different time. Failure to make prior arrangements for a missed exam will result in a grade of 0 for the exam.

In summary, grades are based on the following weighted items:

Item	% Weight
Attendance/Participation	10%
Assignments	30%
Project	10%
Quizzes	20%
Exam	20%
Final exam	10%
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Total	100%

Letter grades are assigned based on the final percent using the interval values:

Grade	% bound
A	93 - 100
A-	90 - 92.9
B+	87 - 89.9
B	83 - 86.9
B-	80 - 82.9
C+	77 - 79.9
C	73 - 76.9
C-	70 - 72.9
D	60 - 69.9
F	<60

The grade, "I" (incomplete), can be given **ONLY** when a student, who is doing otherwise acceptable work (passing grade), is unable to complete a part of work (e.g., the final exam) because of documented illness or other conditions beyond the student's control. In the latter case, the student

must discuss with the instructor and complete an application form from the department before the part of work is due or as soon as the circumstances are known.

Student Success Tips

- attend all class meetings
 - read the material before coming to class
 - complete assignments by the due dates specified
 - create a study and/or assignment schedule to stay on track
 - read announcements
 - communicate regularly with your instructor and peers
 - read and respond to course email messages as needed
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Support Services

- **Request disability accommodations** | (207) 780-4706 | dsc-usm@maine.edu
- **Report interpersonal violence** | (207) 780-5767 | usm.titleix@maine.edu
- **Report on-campus emergencies and safety concerns** | (207) 780-5211 or your local police agency.
- **Get academic help** | mycampus.maine.edu/group/usm/learning-commons
- **Get technology help** | usm.maine.edu/computing/helpdesk
- **Meet with an academic advisor** | usm.maine.edu/advising

For USM’s most complete and current information on services available to students, as well as academic policies, use the QR Code to go to the Student Services and Policies Hub webpage.



Figure 1: <https://mycampus.maine.edu/group/usm/student-services-and-policies-hub>

Important Dates

Labor Day (no classes)	September 2, 2024
Classes Begin	September 3, 2024
Deadline to drop without penalty	September 16, 2024
Fall Break (no classes)	October 14 & 15, 2024
Registration for Winter 2024-25 Begins	October 16, 2024
Deadline to drop for a grade of “W”	November 5, 2024
Veterans Day Observance (no classes)	November 11, 2024
Open Registration for Spring 2025 Begins	November 25, 2024
Thanksgiving Break	November 27 – Dec. 1, 2024
Last day of classes	December 13, 2024
Final Exams	December 14 – 20, 2024

Syllabus Disclaimer

The syllabus is a statement of intent and serves as an implicit agreement between the instructor and the student. Every effort will be made to avoid changing the course schedule but the possibility exists that unforeseen events will make syllabus changes necessary. Remember to check Brightspace site often.
