Learning a Programming Language
COMP SCI 368 001 ( 1 Credits )
2022 Spring [1224]

Description
For students interested in learning a particular programming language. Focuses on a specific language offered at one of three levels: beginner, intermediate, and advanced. Students may repeat the course if the topic title is different. Enroll Info: None

Prerequisite(s)
None

Instruction Mode
Classroom Instruction

Section Level Com B
False

Department: Computer Sciences
College: Letters and Science

2022 Spring [1224]
Term Start Date: Tuesday, 23-Nov-2021  Term End Date: Wednesday, 15-Jun-2022

Location and Schedule: Noland Hall 168 W 4:35 PM-5:25 PM
CRN: 686561224

How Credit Hours are Met:

This class meets one 50-minute class period each week over the semester and carries the expectation that students will work on course learning activities (reading, writing, problem sets, studying, etc.) for about 2 hours out of the classroom for every class period. The syllabus includes additional information about meeting times and expectations for student work.

Regular and Substantive Student-Instructor Interaction:
Participation in regularly scheduled learning sessions (where there is an opportunity for direct interaction between the student and the qualified instructor).

Provide personalized comments (in any medium) for an individual student's assignment or exam.

Actively facilitate an online discussion.

Instructor posts announcements, email, or social media check-ins about academic aspects of the class.

Provide an overview video to accompany recorded lectures.

Identify students struggling to reach mastery through observation of discussion activity, assessment completion, or even user activity and offer additional opportunities for interaction.

Use of small working/study groups that are moderated by the instructor.

Other Course Information:

- CS 368-MATLAB gives students an introduction to problem solving and programming techniques using MATLAB.
- Some programming experience is assumed (e.g., CS 200 or CS 220 or familiarity with structured programming concepts: functions/methods, variables, if-statements, loops). One semester of calculus (e.g., Math 221) is useful (but definitely not required). Students are expected to be able to draw upon information from prior (high school) math and science classes.
- No prior experience with MATLAB is necessary (or assumed).

INSTRUCTORS AND TEACHING ASSISTANTS (TAs)

Instructor

Young Wu

WU489@WISC.EDU

Instructor Availability and Preferred Contact:

- Office hours: 4:30 - 5:30 PM daily.
- Email: yw@cs.wisc.edu

TA Availability and Preferred Contact:

- The course uses Piazza for course communications.

COURSE OUTCOMES, GRADING, and OTHER COURSE MATERIALS

Course Learning Outcomes (CLOs):
Develop a basic understanding of and ability to use MATLAB basics: the MATLAB environment, built-in commands and functions, matrix and vector creation and manipulation.

Develop a basic understanding of and ability to use MATLAB as a programming language: functions and scripts, variables, operators, control flow, console and file I/O.

Develop a basic understanding of and ability to use MATLAB as a numeric computation tool: plotting, linear systems, data interpolation and approximation, successive numeric approximation algorithms, finding roots, areas under curves.

Grading:
- Programming assignments: 7 in total, 10% each.
- Quizzes (participation): 15 in total, 2% each.
- A numerical grade of 75% or higher corresponds to a letter grade of CR.

Course Website, Learning Management System and Digital Instructional Tools:
Course website: https://pages.cs.wisc.edu/~yw/CS368.html

Discussion Sessions:
None.

Laboratory Sessions:
None.

Required Textbook, Software, & Other Course Materials:
- No required textbook.
- MATLAB is required to complete this course. MATLAB is available at no charge for UW students through the Campus Software Library.

Homework & Other Assignments:
- There are weekly programming assignments to be completed individually.
- The assignments are submitted on the course website and on Canvas.

EXAMS, QUIZZES, PAPERS & OTHER MAJOR GRADED WORK
Exams, Quizzes, Papers & Other Major Graded Work:

- There are 15 quizzes, one during each lecture.
- The quizzes are non-cumulative, open-book, open-note, and the students can access electric devices.

### ADDITIONAL COURSE INFORMATION AND ACADEMIC POLICIES

**Teaching & Learning Data Transparency Statement**

The privacy and security of faculty, staff and students’ personal information is a top priority for UW-Madison. The university carefully reviews and vets all campus-supported digital tools used to support teaching and learning, to help support success through learning analytics, and to enable proctoring capabilities. View the university’s full teaching and learning data transparency statement.

**Privacy of Student Records & the Use of Audio Recorded Lectures Statement**

View more information about FERPA.

Lecture materials and recordings for this course are protected intellectual property at UW-Madison. Students in this course may use the materials and recordings for their personal use related to participation in this class. Students may also take notes solely for their personal use. If a lecture is not already recorded, you are not authorized to record my lectures without my permission unless you are considered by the university to be a qualified student with a disability requiring accommodation. [Regent Policy Document 4-1] Students may not copy or have lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities. Students are also prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor’s express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.

**How to Succeed in This Course**

Resource links to other campus services:

- University Health Services
- Undergraduate Academic Advising and Career Services
- Office of the Registrar
- Office of Student Financial Aid
- Dean of Students Office
Course Evaluations

Students will be provided with an opportunity to evaluate this course and your learning experience. Student participation is an integral component of this course, and your confidential feedback is important to me. I strongly encourage you to participate in the course evaluation.

Digital Course Evaluation (AEFIS)

UW-Madison uses a digital course evaluation survey tool called AEFIS. In most instances, you will receive an official email two weeks prior to the end of the semester, notifying you that your course evaluation is available. In the email you will receive a link to log into the course evaluation with your NetID. Evaluations are anonymous. Your participation is an integral component of this course, and your feedback is important to me. I strongly encourage you to participate in the course evaluation.

Students’ Rules, Rights & Responsibilities

Rights & Responsibilities

For fall 2021, instructors and students should consult the following website for current campus health and safety guidance: covidresponse.wisc.edu.

Diversity & Inclusion Statement

Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals. The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background – people who as students, faculty, and staff serve Wisconsin and the world.

Academic Integrity Statement

By virtue of enrollment, each student agrees to uphold the high academic standards of the University of Wisconsin-Madison; academic misconduct is behavior that negatively impacts the integrity of the institution. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these previously listed acts are examples of misconduct which may result in disciplinary action. Examples of disciplinary action include, but is not limited to, failure on the assignment/course, written reprimand, disciplinary probation, suspension, or expulsion.
Accommodations for Students with Disabilities

The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform faculty [me] of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. Faculty [I], will work either directly with the student [you] or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA. (See: McBurney Disability Resource Center)

Academic Calendar & Religious Observances

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