

Syllabus for Math4 – MATLAB Programming

Course Information

Semester & Year: Spring 2020
Course ID & Section #: MATH-4-E7564
Instructor's Name: Tony Luehrs
Day/Time: TR 4:30-5:55pm

Location: SC 202 Number of Units: 3

Instructor Contact Information

Office Location: SC 216E

Office Hours: M: 11:00-12:00 T: 1:00-2:00 W: 1:45-2:45 R: 3:30-4:30

Phone Number: 707-476-4531

Email Address: anthony-luehrs@redwoods.edu

Required Materials

Textbook Title: MATLAB: A Practical Introduction to Programming and Problem Solving (Free PDF)

Edition: 3rd

Author: Attaway

ISBN: 978-0-12-405876-7

Other requirement: N/A

Catalog Description

An introduction to programming in MATLAB, with emphasis on programming applications in science, mathematics, and engineering. Note: Students may work in campus computer labs to complete their assignments. Students wishing to work on assignments on their home computers must purchase the Student Edition of MATLAB or use Octave, a free and open-source "equivalent" to MATLAB.

Course Student Learning Outcomes (from course outline of record)

- 1. Complete independent work and research on scientific programming problems.
- 2. Communicate effectively, both in oral and written presentations.
- 3. Apply knowledge of basic science, mathematics, and engineering principles to solve computing and information processing problems
- 4. Write correct, efficient, and well-documented programs.

Evaluation & Grading Policy

This class will not have any quizzes or tests. All grades will be derived from homework assignments, projects, and code presentations. Your final grade in the course will be be determined according to the following components.

Homework 70% Code Presentations 15% Project 15%

Project grading rubrics will be distributed and discussed when the project is assigned.

Prerequisites/co-requisites/ recommended preparation

A passing grade in both Math25 (Trigonometry) and Math30 (College Algebra) is required.

Class participation and Attendance policy

Students will be expected to participate in class discussion, group activities, and student code presentation. Attendance is required; if necessary, a grade-based attendance policy will be instituted (but hopefully this is not necessary). All students should inform the instructor of any absences <u>before</u> they occur.

Homework

Students should expect homework to be assigned daily. Assignments will include both problems to verify the retention of concepts learned in class, as well as challenges to students to think beyond the material explicitly covered during course lecture.

Periodically, students will be asked to present code from their homework assignments. It is expected that this code will be well-formatted, commented, and able to be explained line-by-line by the presenter. All observing students are expected to actively listen to all presented material, and to constructively engage with the presenter after the presentation is complete.

Technology

This is a programming course, and therefore we will interact with technology every day of the course. All campus computers have the MATLAB software installed. Students who want to be able to work on course content on their own personal computers may choose to purchase a student edition of MATLAB (which I believe is \$50) or to install and use Octave. Octave is a free and open-source programming language intended to mimic MATLAB in everything but cost. In my experience, Octave and MATLAB are about 98% similar, and I will be happy to work with the small differences in exchange for students to be able to utilize <u>free</u> software like Octave.

Students should consider purchasing a USB flash drive or utilizing a cloud-based filesharing service (like Dropbox) for their file management during the semester. CR does offer "advanced accounts" for students in technology-heavy courses, but this has proved unreliable in the past, and so students are encouraged to buy a cheap flash drive to keep all course files over the course of the semester.

Final Exam

The final exam period for this course is **Thursday May 14, 3:15-5:15**. While we will not hold a traditional final exam in the class, we will still utilize this final exam period for final project presentations. As with all college courses everywhere – the final exam period is mandatory and unchangeable. If you cannot attend the final exam period, you should not take this course.

Institutional Policies

Special accommodations statement

College of the Redwoods complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your written accommodation request at least one week before the first test so that necessary arrangements can be made. No last-minute arrangements or post-test adjustments will be made. If you have a disability or believe you might benefit from disability related services and may need accommodations, please see me or contact Disabled Students Programs and Services. Students may make requests for alternative media by contacting DSPS at 707-476-4280.

Student Accessibility Statement and Academic Support Information

Academic support is available at Counseling and Advising and includes academic advising and educational planning, Academic Support Center for tutoring and proctored tests, and Extended Opportunity Programs & Services, for eligible students, with advising, assistance, tutoring, and more.

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Eureka: 707-476-4280, student services building, 1st floor

Del Norte: 707-465-2324, main building near library

Klamath-Trinity: 530-625-4821 Ext 103

Student Access

These standards are required by federal regulation. Students will have access to this course that complies with the Americans with Disabilities Act of 1990 (ADA), Section 508 of the Rehabilitation Act of 1973, and College of the Redwoods policies. Course materials will include a text equivalent for all non-text elements; videos will include closed captioning, images will include alt-tags, hyperlinks will use descriptive/meaningful phrases instead of URLs and audio files will include transcripts. All text will be formatted for use with screen readers and all course materials will be understandable without the use of color.

Students who discover access issues with this class should contact the instructor.

Admissions deadlines & enrollment policies

Spring 2020 Dates

Classes begin: 1/18/20

Martin Luther King Jr. Day (all-college holiday): 1/20/20

Last day to add a class: 1/24/20

Last day to drop without a W and receive a refund: 1/31/20

• Census date: 2/3/20 or 20% into class duration

- Lincoln's Birthday (no classes): 2/14/20
- Last day to petition to file P/NP option: 2/14/20
- President's Day (all-college holiday): 2/17/20
- Last day to petition to graduate or apply for certificate: 3/05/20
- Spring break (no classes): 3/16/20-3/21/20
- Last day for student-initiated W (no refund): 4/3/20
- Last day for faculty initiated W (no refund): 4/3/20
- Final examinations: 5/9/20-5/15/20
- Semester ends: 5/15/20
- Grades available for transcript release: approximately 6/1/20

Students who have experienced extenuating circumstances can complete & submit the *Excused Withdrawal Petition* to request an Excused Withdrawal (EW) grade instead of the current Withdrawal (W) or non-passing (D, F & NP) grades. The EW Petition is available from the Admissions and Records Forms Webpage. Supporting documentation is required.

Academic dishonesty

In cases involving academic dishonesty, determination of the grade and of the student's status in the course is left primarily to the discretion of the faculty member. In such cases, where the instructor determines that a student has demonstrated academic dishonesty, the student may receive a failing grade for the assignment and/or exam and may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the College Catalog and on the College of the Redwoods website.

Disruptive behavior

Student behavior or speech that disrupts the instructional setting will not be tolerated. Disruptive conduct may include, but is not limited to: unwarranted interruptions; failure to adhere to instructor's directions; vulgar or obscene language; slurs or other forms of intimidation; and physically or verbally abusive behavior. In such cases where the instructor determines that a student has disrupted the educational process, a disruptive student may be temporarily removed from class. In addition, the student may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the College Catalog and on the College of the Redwoods website.

Canvas Information

Log into Canvas at https://redwoods.instructure.com

Password is your 8 digit birth date

For tech help, email its@redwoods.edu or call 707-476-4160

Canvas Help for students: https://www.redwoods.edu/online/Help-Student

Students have the ability to have an alternate first name and pronouns to appear in Canvas. Contact Admissions & Records to request a change to your preferred first name and pronoun. Your Preferred Name will only be listed in Canvas. It does not change your legal name in our records. See the Student Information Update form.

Gender-Inclusive Language in the Classroom

College of the Redwoods aspires to create a learning environment in which all people feel comfortable in contributing their perspectives to classroom discussions. It therefore encourages instructors and students to use language that is gender-inclusive and non-sexist to affirm and respect how people describe, express, and experience their gender. Just as sexist language excludes women's experiences, non-gender-inclusive language excludes the experiences of individuals whose identities may not fit the gender binary, and/or who may not identify with the sex they were assigned at birth. Gender-inclusive/non-sexist language acknowledges people of any gender (for example, first year student versus freshman, humankind versus mankind, etc.), affirms non-binary gender identifications, and recognizes the difference between biological sex and gender expression.

Students have the ability to have an alternate first name and pronouns to appear in Canvas. Contact <u>Admissions & Records</u> to request a change to your preferred first name and pronoun. Your Preferred Name will only be listed in Canvas. It does not change your legal name in our records. See the <u>Student Information Update form</u>.

Emergency procedures / Everbridge

College of the Redwoods has implemented an emergency alert system called Everbridge. In the event of an emergency on campus you will receive an alert through your personal email and/or phones. Registration is not necessary in order to receive emergency alerts. Check to make sure your contact information is up-to-date by logging into WebAdvisor https://webadvisor.redwoods.edu and selecting 'Students' then 'Academic Profile' then 'Current Information Update.'

Please contact Public Safety at 707-476-4112 or <u>security@redwoods.edu</u> if you have any questions. For more information see the Redwoods Public Safety Page.

In an emergency that requires an evacuation of the building anywhere in the District:

- Be aware of all marked exits from your area and building
- Once outside, move to the nearest evacuation point outside your building
- Keep streets and walkways clear for emergency vehicles and personnel

Do not leave campus, unless it has been deemed safe by the campus authorities.

Del Norte Campus Emergency Procedures

Please review the <u>Crescent City campus emergency map</u> for campus evacuation sites, including the closest site to this classroom (posted by the exit of each room). For more information see the <u>Redwoods Public Safety Page</u>.

Klamath Trinity Campus Emergency Procedures

Please review the <u>campus emergency map</u> for evacuation sites, including the closest site to this classroom (posted by the exit of each room). For more information on Public Safety go to the <u>Redwoods Public Safety Page</u> It is the responsibility of College of the Redwoods to protect life and property from the effects of emergency situations within its own jurisdiction.

In the event of an emergency:

- 1. Evaluate the impact the emergency on your activity/operation and take appropriate action.
- 2. Dial 911, to notify local agency support such as law enforcement or fire services.
- 3. Follow established procedures for the specific emergency as outlined in the College of the Redwoods Emergency Procedure Booklet.
- 4. If safe to do so, notify key Klamath-Trinity Instructional Site administrators and personnel.
- 5. Do not leave site, unless it is necessary to preserve life and/or has been deemed safe by the person in command.
- 6. If safe to do so, move to the nearest evacuation point outside building (Pooky's Park), directly behind the Hoopa Tribal Education Building.

Student Support Services

The following online resources are available to support your success as a student:

- <u>CR-Online</u> (Comprehensive information for online students)
- Library Articles & Databases
- Canvas help and tutorials
- Online Student Handbook

Counseling and Advising offers academic support and includes academic advising and educational planning

Learning Resource Center includes the following resources for students

- Academic Support Center for instructional support, tutoring, learning resources, and proctored exams.
- Library Services to promote information literacy and provide organized information resources.
- Multicultural & Diversity Center [waiting for hyperlink and Mission]
- Math Lab & Drop-in Writing Center

Special programs are also available for eligible students include

- <u>Extended Opportunity Programs & Services (EOPS)</u> provides financial assistance, support and encouragement for eligible income disadvantaged students at all CR locations.
- The TRiO Student Success Program provides eligible students with a variety of services including trips to 4year universities, career assessments, and peer mentoring. Students can apply for the program in <u>Eureka</u> or in <u>Del Norte</u>
- The <u>Veteran's Resource Center</u> supports and facilitates academic success for Active Duty Military, Veterans and Dependents attending CR through relational advising, mentorship, transitional assistance, and coordination of military and Veteran-specific resources.
- Klamath-Trinity students can contact the CR KT Office for specific information about student support services at 530-625-4821
- The Honors Program helps students succeed in transferring to a competitive four-year school.