

# Syllabus for Math3 – Intro to Comp. Methods in Python

#### **Course Information**

Semester & Year:	Fall 2019
Course ID & Section #:	MATH-3-E8725
Instructor's name:	Tony Luehrs
Day/Time:	[Lecture TR 1:15-2:40] [Lab TWR 2:50-3:50]
Location:	Science 214
Number of units:	4

#### **Instructor Contact Information**

Office location:	Science 216E	
Office hours:	[Tues. 10:30-11:30] [Wed. 9:00-10:00, 1:00-2:00] [Thurs. 10:00-11:00]	
Phone number:	707-476-4531	
Email address:	Anthony-luehrs@redwoods.edu	

#### **Required Materials**

Textbook Title:	None
Other requirements:	This is a programming course, and as such will require constant computer interaction. The
	required software (the Python programming language) is available in all computers in SC214 and
	SC210 (the Geek Room), and is also available for free download onto a personal computer
	(Anaconda install of Python is recommended).

#### **Catalog Description**

This is an introductory course in computational methods primarily using the Python programming language. Students will use the concepts of variables, functions, conditionals, and loops in conjunction with the powerful Python mathematics packages NumPy and Pandas to explore the ideas of iteration, recursion, algorithms, and simulation. Students will analyze self-collected data sets utilizing code within the Python framework. The course includes coverage of the interplay of software with the physical world and will be compliant with the standards of the Association for Computing Machinery (ACM). Note: A term project will be required and may include the use of the Raspberry Pi computer system.

# Course Student Learning Outcomes (from course outline of record)

- 1. Complete independent work and research with respect to 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**

Your grade in this course will be based on weekly programming assignments as well as two projects. The project grades will be based not only on properly running code, but also on your ability to present your ideas, to have well-formatted code, and to constructively interact with other students' projects.

We will not take any quizzes or tests in this course; all of your grade will be based on coding assignments and presentations.

# Prerequisites/co-requisites/ recommended preparation

Students must have earned a passing grade of C in Math30 (College Algebra) to take this course.

# 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 <u>Disabled Students Programs and Services</u>. 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 <u>Counseling and Advising</u> and includes academic advising and educational planning, <u>Academic Support Center</u> for tutoring and proctored tests, and <u>Extended Opportunity Programs & Services</u>, for eligible students, with advising, assistance, tutoring, and more.

# Institutional Policies

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Eureka: 707-476-4280, student services building, 1<sup>st</sup> floor

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

Klamath Trinity: 530-625-4821 Ext 23

#### **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

#### Fall 2019 Dates

- Last day to add a class: 8/23/19
- Last day to drop without a W and receive a refund:9/6/19
- Census date:9/9/19
- Last day to petition to graduate or apply for certificate:10/31/19
- Last day for student-initiated W (no refund):11/1/19
- Last day for faculty initiated W (no refund): 11/1/19
- Veteran's Day (all campuses closed):11/11/19
- Fall break (no classes):11/25/19 11/30/19
- Thanksgiving (all campuses closed):11/28/19 11/29/19
- Final examinations:12/14/19 12/20/19
- Semester ends:12/20/19
- Grades available for transcript release: approximately 1/6/20

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 the academic community, the high value placed on truth implies a corresponding intolerance of scholastic 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**

For this course, all homework will be assigned via Canvas, all other course handouts will be accessible via Canvas, and all quizzes and their keys will be posted in Canvas after they are returned.

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

Password is your 6 digit birth date

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

# 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 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.

# Emergency procedures / RAVE

College of the Redwoods has implemented an emergency alert system. In the event of an emergency on campus you can receive an alert through your personal email and/or phones at your home, office, and cell. Registration is necessary in order to receive emergency alerts. Please go to <a href="https://www.GetRave.com/login/Redwoods">https://www.GetRave.com/login/Redwoods</a> and use the "Register" button on the top right portion of the registration page to create an account. During the registration process you can elect to add additional information, such as office phone, home phone, cell phone, and personal email. Please use your CR email address as your primary Registration Email. Your CR email address ends with "redwoods.edu." Please contact Public Safety at 707-476-4112 or <a href="mailto:security@redwoods.edu">security@redwoods.edu</a> if you have any questions.

# **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>. In an emergency that requires an evacuation of the building:

- 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.

# **Eureka 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:

- a. Evaluate the impact the emergency has on your activity/operation and take appropriate action.
- b. Dial 911, to notify local agency support such as law enforcement or fire services.
- c. Notify Public Safety 707-476-4111 and inform them of the situation, with as much relevant information as possible.
- d. Public Safety shall relay threat information, warnings, and alerts through RAVE emergency alert system, Public address system, and when possible, updates on the college website, to ensure the school community is notified.
- e. Follow established procedures for the specific emergency as outlined in the College of the Redwoods Emergency Procedure Booklet, (evacuation to a safe zone, shelter in place, lockdown, assist others if possible, cooperate with First Responders, etc.).
- f. If safe to do so, notify key administrators, departments, and personnel.
- g. Do not leave campus, unless it is necessary to preserve life and/or has been deemed safe by the person in command.

#### **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.
- <u>Library Services</u> 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.

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**Homework**: Homework will be assigned weekly, with each assignment expected to be completed by the following week.

**Final Exam**: This course will not have a final exam, but will still meet to present final projects during the final exam period of **Thursday, December 19**<sup>th</sup> **from 1:00-3:00.** Every student will attend this final exam period with no exceptions.

**Attendance**: Attendance is required. I reserve the right to drop any student from the course who misses more than 4 course meetings. If you know you are going to miss a class, it is your responsibility to be in contact with me <u>before</u> class is missed. Quizzes may not be taken after they've been returned to the class.

**Updates**: I reserve the right to make changes to this syllabus as I see fit. All changes will be announced in class and/or in an Announcement in Canvas.

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#### **General Expectations**

To ensure that we can all share in a positive learning environment, it is important that we all have proper expectations for how we'll work together, and it is important that we are all held to those expectations.

# What you, the student, should expect from me, the professor:

You should expect me to begin and end class on time every day.

You should expect me to always be well-prepared to teach the day's topic.

You should expect me to be present and able to assist you during all office hours.

You should expect me to assign homework (almost) every class period.

You should expect me to grade and return all homework in a timely manner.

You should expect me to have respect for all of your questions and answers (that are course-related).

# What I, the professor, will expect from you, the student:

I expect you to plan to attend every day of the course.

I expect you to arrive in class on time.

I expect you to contact me <u>before</u> any missed classes.

I expect you to complete all homework assignments by the given deadline.

I expect you to seek help if you struggle with the homework.

I expect you to <u>need</u> to seek help; experiencing the struggle is part of the essence of education.

I expect you to participate in class by verbalizing questions and answers relating to class discussion.

I expect you to interact in a positive manner with other students in the class.

I expect you to have respect for my teaching process by keeping classroom distractions to a minimum.

I expect you to have respect for your fellow students by not engaging in side conversations that make it difficult for surrounding students (and myself!) to focus.

I expect you to mute and put away cell phones for the entire duration of every class.

I expect you to have respect for me and my teaching style, and for any disagreements about that to be discussed in a professional and constructive manner in a private setting.

Any student who fails to meet any of the last 5 student expectations may be removed from the course.

#### Some incorrect expectations:

Some students believe that because I do not take daily attendance that attendance is optional. As each part of the course builds on previous parts, missing a lot of class will prevent you from understanding future material. This issue is compounded by the fact that this course will increase in difficulty as the semester progresses.

Some students believe that they are placing some undue burden on me by asking for extra help. Helping you learn is literally 100% of my job. What <u>is</u> a burden to me is lying awake at night wondering why the students who just failed the last test haven't come to see me to make an improvement plan for the next chapter. Don't make me lose sleep - just have me help you! It's my job!

Some students believe that because this is <u>community</u> college, expectations will be lower than if you were to take this course at, for example, Humboldt State University. Instead, you should understand that the operative word here is "college", and that I hold students to the exact same level of expectation here as I've held students to when I've taught this course in a state university setting. The learning outcomes and course content for this course are mandated by the state and are therefore identical for all offerings of this course no matter where you go in the state of California, so you should not expect any different level of expectation here than anywhere else you might take this course; the math is all the same.

Some students believe that they can "wing it" at the beginning of the semester, and worry about their grade closer to the end of the semester. It is <u>very</u> rare that a student performs better on the harder material at the end of the course than they did on the easier material at the beginning of the course. Passing any class is a <u>full-semester process</u>, and should be treated as such. If you are performing poorly on homework and tests, don't wait until the second half of the semester to do something about it. Students are expected to be proactive and to self-advocate to obtain the resources necessary for their success.

Some students believe that they have the right to schedule the course as they see fit. While I consider myself a pretty friendly and flexible guy, I am quite rigid when it comes to tests and the final exam going exactly according to schedule for all students. Do not miss tests. For any reason. Period. Students who no-show a test (meaning didn't attend and didn't communicate about the lack of attendance beforehand) will have three (3) school days to provide proof of an extreme circumstance to me, after which the test grade will be an irreplaceable zero. For example, if your car breaks down on the way to campus to take a test, the first thing you need to do is email me to ensure that you've communicated your situation to me BEFORE the test occurs. Showing up to class the day after the test and telling me "I couldn't make it, I got a flat tire" will result in an irreplaceable zero for the test, as this does not constitute extreme and documented circumstances, and was not communicated to me before the test occurred. If you have a very legitimate reason to miss a test but fail to communicate the proof of your circumstance to me within three school days, you will have missed your make-up test opportunity, regardless of the legitimacy of your lack of attendance. Life will happen, but if you stay in communication with me about it, everything will be fine.