

**Syllabus for** [name of class here] – Eureka Campus

<b>Semester &amp; Year</b>	Fall 2016
<b>Course ID and Section #</b>	MATH5 E0716
<b>Instructor's Name</b>	R. Carter
<b>Day/Time</b>	Tuesday Thursday 11:40AM-1:05PM 08/30/2016-12/16/2016
<b>Location</b>	SC204
<b>Number of Credits/Units</b>	3

<b>Contact Information</b>	<i>Office location</i>	
	<i>Office hours</i>	
	<i>Phone number</i>	
	<i>Email address</i>	robin-carter@redwoods.edu
<b>Textbook Information</b>	<i>Title &amp; Edition</i>	Using and Understanding Math
	<i>Author</i>	Jeffrey Bennet and William Briggs
	<i>ISBN</i>	0-321-45820-6

**Course Description**

An approved CR and CSU General Education course designed primarily for non-science majors. This course is a study of selected topics from contemporary mathematics. Typical topics, which are chosen by the instructor, will be from areas including: inductive and deductive reasoning, mathematical modeling and analysis of linear and exponential functions, geometric symmetries, geometry of fractals, sequences and series, dynamics of population growth, statistics, mathematics of finance and management science, mathematics of methods of voting, fair division, and problem-solving techniques.

**Student Learning Outcomes**

1. Accurately communicate mathematical ideas using correct mathematical notation, graphs, and vocabulary.
2. Use of the graphing calculator or other technology to explore mathematical concepts and also to verify their quantitative conclusions.
3. Solve problems and applications demonstrating the skills required for college-level mathematics.
4. Examine the quantitative arguments on both sides of issues currently in the news.
5. Explain the concepts of mathematics of social choice, statistics, growth, symmetry, finance, and/or management science and use the concepts to solve problems in these fields.

**Special Accommodations**

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.

**Academic Support**

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.

**Academic Honesty**

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 at: <http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services>, and scroll to AP 5500. 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 Classroom 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, he or she 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 at: <http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services> and scroll to AP 5500. 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.

### **Emergency Procedures for the Eureka campus:**

Please review the campus evacuation sites, including the closest site to this classroom (posted by the exit of each room). The Eureka **campus emergency map** is available at: (<http://www.redwoods.edu/aboutcr/Eureka-Map>; choose the evacuation map option). For more information on Public Safety, go to <http://www.redwoods.edu/publicsafety>. 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 Incident Commander or campus authorities. (CR's lower parking lot and Tompkins Hill Rd are within the Tsunami Zone.)

**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 <https://www.GetRave.com/login/Redwoods> 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 [security@redwoods.edu](mailto:security@redwoods.edu) if you have any questions.

*College of the Redwoods is committed to equal opportunity in employment, admission to the*

*college, and in the conduct of all of its programs and activities.*

### **2016 FALL Course Topics**

This course is composed of three selected fields of mathematics.

Part I looks at the evolution of mathematics and art as a development of visualizing our world. Topics include the origins of written numbers from physical clay tokens, Pythagorean graphical number theory, Euclid's geometry, polyhedra, and conceptions of space from pre-historic to modern times are surveyed.

As this is an election year, Part II will be on a quantitative analysis of voting methods, finding averages and means, and how representation and congressional apportionment operate in our government. This semester will feature a special guest speaker Dr. Charles Biles, professor emeritus Humboldt State University.

Part III looks at personal financial issues such as savings, loans, and mortgages.

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### **Materials Needed**

You will need a TI scientific calculator. Calculators can be rented for the semester from the Math Lab located in the back of the Academic Support Center ASC in the library (Learning Resource Center LRC)

A textbook is not necessary for the Fall 2016 course.

We will be using rulers, compass, protractors, scissors, tape, pencils, drawing paper, among other items, and these will be provided to you in class, but if you have your own, you are welcome to bring it.

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### **Exercises and Research**

Examples will be shown in class, and practice exercises given for homework. Assignments given in class will generally be due the next class period. Homework may require a response through the class website.

A semester project is your opportunity to research a topic and present your research to the class. Research ideas are listed in the Research Ideas file.

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### **Assessment and Grading**

A letter grade is generated on  
50% homework,  
20% a semester project,  
15% mid-term exam,  
15% final exam  
as an overall semester average.

The A/P slide applies to borderline scores, i.e. attitude and participation in class activities determine rounding up or down.

A mid-term will be on Part I and a final exam will be on Part II and III so that Student Learning Outcomes can be assessed.