Syllabus for Math 5 (E3191) – Eureka Campus		
Semester & Year	Fall 2017	
Course ID and Section #	MATH-5-E3191	
Instructor's Name	Holland Heese	
Day/Time	TTh 11:40 am -1:05 pm	
Location	SC202	
Number of Credits/Units	3	
Contact Information	*Office location*	Math Lab in the Library
	Office hours	TTh 10:00-10:30 am
	Phone number	TBA
	Email address	holland-heese@redwoods.edu
Textbook Information	*Title & Edition*	Math in Society
	Author	David Lippman
	ISBN	978-1479276530

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. Identifying the contributions of mathematicians throughout history and describe how those contributions affect mathematical thinking.
2. Evaluate the validity of a math based argument.
3. Relate mathematics to society by modeling real-world problems in fields such as social science, business, finance, art and science.

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 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.

Course Syllabus

Math 5 - Fall 2017

Instructor: Holland Heese
College of the Redwoods
holland-heese@redwoods.edu
Office: Math Lab in Library
Office Hours: TTh 10:00-10:30 am

0.1 Course Topics

In this course we will cover many different and interesting topics. Here is a list of potential topics we will cover in the class:

- Everyday Life Mathematics
- Voting theory
- Apportionment
- Graph Theory and Networking
- Cryptography
- Statistics and Probability
- Sabermetrics (Baseball and other Sports)
- How to model reality using Mathematics
- History of Mathematics

0.2 Course Goal

This course is designed to help students expand their understanding of the scope and breadth of mathematics. As sub goals, I anticipate that you will have fun with at least some of the topics covered, you will expand your imagination, and you will realize that some serious issues can be tackled by mathematics in unique and interesting ways. You may come to realize that serious issues have been tackled by mathematics in unique and interesting ways.

0.3 Required Materials

Math in Society, by David Lippman. You do not have to purchase the book, it is freely available online in PDF form, and I will post every section that we will be using on our online homework system.

0.4 Technology Policy

I fully welcome the use of tablets, phones and computers in the classroom, as long as they are being used for an academic purpose (not surfing the web, messaging friends, etc) and you can still pay attention in class. Please, do not purchase a calculator for use in this class as it is not needed unless you do not have a different device capable of doing math. Phones and tablets will be allowed on tests as long as they are **NOT** connected to the internet and only sanctioned apps (calculator apps/math apps) are running. Any usage of unsanctioned apps or connection to the internet will result in a zero on the exam.

Further all assignments will be announced in class and posted online on MyOpenMath. If you desire a paper copy, you must ask me in advance or print one yourself.

0.5 Class Requirements

0.5.1 Participation

Full participation is an absolute necessity in this course. It means you should come to class every day and engage in the activities. There is simply no other way to get all the material in this course as some activities are not in the text. In addition I will not be able to evaluate your ability or help you improve if you don't make an effort. Further, I will ask a question every day that you will need to give me a written response for. This written response will be graded. You will also need to have access to your book in class because we will work on problems in groups some days.

0.5.2 Homework Assignments

Online assignments will be given within the MyOpenMath Web system `http://myopenmath.com`. Paper homework or in-class work will also be given for some topics especially those not covered in the text. You will also be required to create and turn in a spreadsheet of calculations for at least one topic. The online homework will allow immediate feedback. I will provide details on logging in to the MyOpenMath System by the end of the first week so you can start working online.

0.5.3 Quizzes

We will have one quiz per topic that we cover at the end of that topic. These quizzes are to ensure that you have been paying attention and have some understanding of the material covered.

0.5.4 Research Paper

You will be expected to write one research paper on a topic of mathematics of your choosing. This paper is expected to be around 3-5 pages (double spaced). I will expect a rough draft and an annotated bibliography to be turned in two weeks, and four weeks respectively before the final draft is due. This is so I can monitor your progress, comment and offer suggestions to you. More information will follow on this project.

0.5.5 Presentation

You will be expected to make a presentation based on your research paper. The presentation is expected to be about 5 minutes long. It must include a visual element (Powerpoint/Beamer/Keynote, poster board, etc.).

0.5.6 Exams

We will have one in class cumulative exam during the semester. You should mark these dates in your calendar now, and plan accordingly, as **all exams will be given only at the scheduled times below**, no exceptions.

0.5.7 Exam and Research Paper Dates

Exam	Date
Exam	Tuesday December 12 10:45 am
Bibliography	Thursday October 19
Rough Draft	Thursday November 2
Final Draft	Thursday November 16
Presentations	November 30 - December 7

0.6 Grades

0.6.1 Weighted Grading Components

Components	Percentage
Homework	20%
Exam	15%
Quizzes	25%
Participation	10%
Presentation	10%
Research Paper	20%

0.6.2 Grade Breakdown

Grades	Percentage
A	>90%
B	80% to 90%
C	70% to 80%
D	60% to 70%
F	<60%

I reserve the right to take into consideration special circumstances or apply a different scheme to the entire class as long as the grades are greater than or equal to those computed as described.

0.7 Getting Help

0.7.1 Class Expectations

You are expected to arrive on time and to leave when the class is dismissed. If you must miss a day, please check with a classmate to see what you missed. I expect you to be a responsible, respectful, and courteous member of the class. If you find that you can not abide by these rules, then you are in the wrong class and I will ask you to transfer to another class. You are more than welcome to come to my office hours at CR in the Math Lab on TTh 10-10:30 am, and at HSU in BSS 312 on MTh 3-4 pm.

0.7.2 Math Lab and Math 194L

Tutoring service is located in the library in the Learning Resource Center (LRC). Math 5L is a lab course that offers 0.5 to 1.0 units of credit to get assistance with your math skills. If math has been a struggle or you are in search of the A grade, I strongly recommend Math 5L. It has been very successful in helping students achieve their goals in mathematics.

0.7.3 Caveat

This syllabus is subject to change at any moment. For example, if we move faster or slower than anticipated the test dates may change. All changes will be announced in class and posted on the class MyOpenMath page.