Syllabus for Math 102 – Eureka Campus					
Semester & Year	Fall, 2016				
Course ID and Section #	Math 102				
Instructor's Name	Levi Gill				
Day/Time	T Th 4:30-7:00, 7:20-8:45				
Location	SC 206				
Number of	6				
Credits/Units					
Contact Information	Office location	SC 216G			
	Office hours	M-Th 12-1			
	Phone number	707-476-4351			
	Email address	levi-gill@redwoods.edu			
Textbook Information	Title &				
	Edition	Outliers: The Story of Success			
	Author	Malcom Gladwell			
	ISBN	1615230823			

Course Description

A course designed to be a nontraditional, accelerated pathway to transfer-level statistics. Topics in algebra, data analysis and critical thinking skills relevant for success in statistics are the focus. The learning experience for this course emphasizes active learning via collaborative work. This course is designed for students who plan to major in fields such as biology, social sciences, nursing, art, and English, and not for students pursuing degrees in math, engineering, computer science, business or economics.

Student Learning Outcomes

- 1. Formulate questions that can be addressed with data, then organize, display, and analyze relevant data to answer these questions and communicate results.
- 2. Use the properties of algebra to simplify expressions, solve equations and answer questions in context.
- 3. Construct, use, and interpret mathematical models, specifically linear and exponential functions, to represent relationships in quantitative data.

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 <u>Disabled Students Programs and Services</u>. Students may make requests for alternative media by contacting DSPS at 707-476-4280.

Academic Support

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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.

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.

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Emergency Procedures for the <u>Eureka </u>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.

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• 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.

Mathematics Placement Statement

Is Math 102 appropriate for you?

What is Math 102?

Math 102 is a special course designed to accelerate students' progress through the mathematics sequence, so that the only required mathematics course needed to prepare the student for transfer is Math 102 and then Math 15 "Elementary Statistics." Math 102 is based on research and design from the California Acceleration Project.

Math 102 is not for everyone

Not appropriate for all disciplines
 Students who are pursuing a degree in Math, Science, or Engineering should not take this class. If your degree requires more mathematics beyond algebra, then you should talk to your advisor to determine the best math course for you.

Special Note: there is an error in the catalog description and students pursuing a degree in <u>biology</u> should <u>not</u> take this class. Most <u>nursing</u> Bachelors degrees do not require math other than statistics, so this class <u>would</u> be appropriate – however, you need to check with the particular school that you will be transferring to.

 Not appropriate if your math background already includes intermediate algebra (or "Algebra II") You should consult with your instructor to move to a higher level mathematics course (such as Math 15) if one of the following criteria holds:

- You passed one or more of the following courses in high school: Precalculus,
 College Algebra, Trigonometry, or IB Math HL.
- You earned a score of 3 or more on the AP Statistics exam.
- You earned a score of 4 or more on the IB Math SL or IB Math studies SL exam.
- o If you scored 34 or more on the Accuplacer College Level exam.

If your math experience includes intermediate algebra, but you are just "rusty" then there are other options, and you should talk to me about them.

• Not appropriate for all individuals.

Math 102 is a non-traditional class that will incorporate a lot of group work and discussion and minimal lecture. Attendance is crucial, not just for you but for the classmates you will be working with. Our class only meets twice a week and any absence would be the equivalent to missing half a week of instruction in other courses. Therefore, you must plan for perfect attendance (see more about attendance below).

Who should take Math 102?

Students who have not yet passed intermediate algebra and who want to transfer to a CSU or UC to major in humanities or social sciences can benefit from Math 102. Students wishing to take Math 15 Statistics for transfer will typically not be required to take any other math course for a B.A. degree (in humanities or social sciences).

Math 102 is an "Accelerated" Pathway

The aim of this course is to remove what has become a major obstacle for many students: getting stuck in the standard course progression from elementary algebra to intermediate algebra to a college-level course. Acceleration does not just mean getting *to* Statistics quicker, but getting *through* Statistics quicker. The intention is that you take Statistics immediately after the completion of Math 102, and that you do so in a focused way – don't overload your next semester with hard classes. You will need to focus on completing Math 15.

How is Math 102 Different?

In intermediate algebra, students often get bogged down in formulas and calculations that seem to have little relevance to their lives. Math 102 includes *some* intermediate algebra, but only the parts that are essential for students to succeed in college-level statistics. In many fields and careers statistics, rather than algebra, is sufficient (for students who are <u>not</u> majoring in science, engineering or mathematics)

The primary objective of Math 102 is to prepare you to take Math 15 at CR. Math 102 does not transfer to any other institution. It is not an algebra course and it's not a statistics course, but

rather, Math 102 focuses on some algebra and some pre-statistics concepts to help you succeed when you take Math 15. Topics include algebra, data analysis and critical thinking skills that are relevant to statistics. Math 102 will emphasize active learning via collaborative group work.

Where did Math 102 come from?



For years, educators have been trying different strategies and

efforts to help more students get through the math sequence required for an Associates Degree and/or transfer to a 4-year college or university.

Myra Snell, a mathematics teacher at Los Medanos College, realized that not all students really need all the mathematics that is taught in intermediate algebra. In 2009, she created an accelerated algebra "Path to Stats" that focused on only the algebra skills needed to succeed in an elementary statistics course. Katie Hern, an English instructor at Chabot College, had similar ideas about accelerating students through the sequence of English classes.

In 2010 Myra Snell and Katie Hern founded the *California Acceleration Project*. Armed with research from the Carnegie Foundation for the Advancement of Teaching and the Community College Research Center at Columbia University's Teachers College, they encouraged others to offer accelerated sequences in math and English. Since then, more English and mathematics faculty at more California Community Colleges have developed their own "accelerated" courses. Several CR faculty attend California Acceleration Project (CAP) conferences and training. CR Professors Todd Olson, Mike Haley, Steve Jackson, and Erik Kramer went to CAP and subsequently developed Math 102 at CR.

Math 102 began in Fall 2015, and we are excited to see how our students succeed and this program grows from student feedback.

Important Dates

Last day to drop a course without a 'W' and with a refund	September 4
Labor Day Holiday	September 7
Science Night!!!	October 21
Last day to drop a course with a 'W' and without a refund	October 30
Last day for faculty-initiated withdrawal without a refund	October 30

Veterans Holiday November 9

Thanksgiving Holiday November 26-27

Final Exam Week December 7-12

Materials you will need:

Textbook

Outliers: The Story of Success, by Malcom Gladwell

Calculator: You need to have a TI-83 or TI-84 calculator for this class.

Rental: The Math Department has rental calculators for \$15. There are only a limited number available!

Pay at the Cashiers office, then take the receipt to the Betsy Buchanen in the Math Lab (back of the library)

There are also many good apps for smartphones

Android: WabbitEmu (Free)

iPhone: <u>GraphNcalc</u> (\$7.00)

Computer Access for

Email: You should regularly check your CR student email! But for this class I will be communicating primarily through Canvas. You should check daily.

Microsoft Office: You will be writing projects proposals, making slideshow

presentations, and working with data. You'll want a current copy of Microsoft Office.

Students at CR get a free copy of Microsoft Office. Use the following link and login with your student email username:

https://portal.office.com/start?sku=e82ae690-a2d5-4d76-8d30-7c6e01e6022e

Flash Drive or online storage account (such as Dropbox, Box, etc.)

Three Ring Binder (and dividers)

This will contain all your work (including material I have returned to you), notes, inclass journaling, and other material. The goal is to be able to show the progress that you have made in this course.

[Optional] Colored Pens and/or Colored Sharpies

We'll be making posters in-class. If you like to make them spiffy, you'll want these.

Grading

	In-class Assignments	Quizzes	Major Projects	Homework
A 4 pts for each	Completed at least 100% of in class homework		Average of at least 90%	All online assignments completed

B 3 pts for each	Completed at least 90% of assigned homework	Average of at least 75% on quizzes	Average of at least 80%	90% of online assignments completed
C 2 points for each	Completed at least 80% of homework	Average of at least 60% on quizzes	Average of at least 70%	80% of online assignments completed
D/F See below	See below	See Below	See below	See below

A: 14 to 16 points

B: 11 to 13 points

C: 8 to 10 points

D: if you fall below a C in any one category listed above, you will be given a D.

F: if you fall below a C in any $\underline{\text{two}}$ categories listed above, you will be given an F.

Homework:

Homework will be assigned on Canvas. The homework will consist of activities and readings to prepare you for the next class. If you do not have them completed by the time class starts, you might not be able to participate in the in-class activity.

Quizzes

There will be quizzes given at various points in the semester to assess your comprehension of the various skills we have learned. They will not necessarily be announced or regularly scheduled, which means you should attend every class period if possible. They may also be posted on Canvas, so check regularly.

Quizzes missed cannot be made up.

Projects: There will be two major projects which will ask you to answer a research question. These projects will typically be graded on the following components: (1) written research proposal, (2) written final report containing calculations, charts, and analysis and (3) a PowerPoint presentation to the class. These projects will always be completed as group assignments.

Appealing a Grade: If you believe you have received the wrong (or an unfair) grade for an assignment, please come talk! I am completely open to discussing that with you.

Attendance: Daily attendance is required to be successful for this class. Missing three or more classes without instructor approval will most likely result in being withdrawn from the course, and you will receive a W on your transcripts. If you miss a day, please check with a classmate to see what you missed. I also post lecture slides on Canvas. You are responsible for knowing the class material.

Class Rules: As a general rule *be respectful to your classmates and help provide a healthy environment for learning.*

Please do not talk unnecessarily during class, arrive on time and leave when class is dismissed. When you attend, give your attention to the material or activities we are working on. Please do not use class time to work on other projects. Do not come to

class stoned, drunk or otherwise chemically compromised, and please do not come to class reeking of weed. (If you do, I will ask you to leave.)

Be aware that people have allergies, so please minimize deodorants and perfumes.

Technology: We are using computers. Please don't distract yourself or others by surfing the web. Same goes for cell phones. I'm not going to police usage, but if I start to feel like you or others are being distracted by them, then I will begin to deducting points from your grade.

Assistance: If you have a documented disability or believe you can benefit from any of the services offered by Disabled Student Programs & Services (DSP&S), please contact the DSP&S office 476-4280.

Syllabus subject to change with appropriate notice