

<b>Syllabus for Math-102-E3121: Pathway to Statistics</b>		
<b>Semester &amp; Year</b>	Fall 2017	
<b>Course ID and Section #</b>	Math-102-E3121	
<b>Instructor's Name</b>	Jon Pace	
<b>Day/Time</b>	M W 8:30 – 11:00 & 11:20 – 12:45	
<b>Location</b>	SC 202	
<b>Number of Credits/Units</b>	6	
<b>Contact Information</b>	<i>Office location</i>	SC 216H
	<i>Office hours</i>	T TH 12:00 – 1:00 PM or by drop-in
	<i>Phone number</i>	(707) 476-4222
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<b>Textbook Information</b>	<i>Title &amp; Edition</i>	Outliers: The Story of Success
	<i>Author</i>	Malcom Gladwell
	<i>ISBN</i>	9780316017930
<b>Course Description</b>		
<p>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.</p>		
<b>Student Learning Outcomes</b>		
<ol style="list-style-type: none"> <li>1. Formulate questions that can be addressed with data, then organize, display, and analyze relevant data to answer these questions and communicate results.</li> <li>2. Use the properties of algebra to simplify expressions, solve equations and answer questions in context.</li> <li>3. Construct, use, and interpret mathematical models, specifically linear and exponential functions, to represent relationships in quantitative data.</li> </ol>		

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### 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

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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 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.***

***\* I reserve the right to change this syllabus at any time as I deem necessary***

## 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 biology should not take this class. Most nursing Bachelor's degrees do not require math other than statistics, so this class would be appropriate – however, you need to check with the particular school that you will be transferring to.

***Special Note II:*** Many required nursing tests will require algebra skills!

- *Not appropriate if your math background already includes intermediate algebra*

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.
- 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 not 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.

## Important Dates

Labor Day – No class!	Sept. 4 <sup>th</sup>
Last day to drop a course without a ‘W’ and with a refund	Sept. 8 <sup>th</sup>
Last day to drop a course with a ‘W’ and without a refund	Nov. 10 <sup>th</sup>
Last day for faculty-initiated withdrawal without a refund	Nov. 10 <sup>th</sup>
Final Exam Week	Dec. 11 – 15 <sup>th</sup>

## Materials

*Outliers: The Story of Success*, by Malcom Gladwell

**Graphing Calculator:** A Graphing Calculator, such as a TI-83 Plus, TI-84 is required. You may rent a calculator for \$15. Follow the link below for more details.

<https://www.redwoods.edu/math/Resources/Calculator-Rentals>

There are also many good **apps** for smartphones

Android: [WabbitEmu](#) (Free)

iPhone: [GraphNcalc](#) (\$7.00)

## **Composition Notebook**

A composition notebook is like a personal “Wikipedia” where you make entries on topics that you’ve learned in class. These entries may include a description of what is being discussed, pictures, graphs, formulas, and/or examples.

## **Grading**

	<b><i>In-class Activities</i></b>	<b><i>Quizzes</i></b>	<b><i>Projects</i></b>	<b><i>Homework</i></b>
A 4 pts for each	Completed at least 95% of class work	Average of at least 85% on quizzes	Average of at least 90%	All online assignments completed
B 3 pts for each	Completed at least 90% of class work	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 class work	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

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

If you fall below a C in any two categories listed above, you will be given an F.

## Homework

The homework will generally consist of readings and subsequent Discussion posts on Canvas designed to prepare you for class. These will open up after class on Wednesday. Your initial discussion post will be due by Friday @ 11:59PM and your responses will be due by Sunday @ 11:59PM. If you do not have them completed by the time class starts on Monday, you will complete these in class by yourself before you are allowed to join any activities. Consequently, will lose points **both** for the homework and the in-class activity.

## Quizzes

At various times throughout the semester you will be given short in-class quizzes. Quizzes cannot be made up so it is critical to attend class. You will be allowed to use your composition book on all quizzes.

## Projects

There will be two major projects which will ask you to answer a research question. These projects will always be completed as group assignments and graded on the following components:

- 1: Written research proposal
- 2: Written final report containing calculations, charts, and analysis
- 3: A presentation to the class.

A detailed rubric will be given for each project.

## Attendance

This class is built on group work and success in this class is attained through group work. If you are not in class you cannot participate in the group work. Thus, ***if you miss more than two classes throughout the semester*** you will be dropped if it is prior to Nov. 10<sup>th</sup> or receive an F if it is after Nov. 10<sup>th</sup>.



## Classroom Environment

It is essential to our class that both students and teacher behave in a manner that will provide a comfortable learning atmosphere. Be respectful of one another. We are all adults and an open, comfortable environment is crucial for learning. Therefore, you should not hesitate to ask any questions, feel embarrassed to ask any question, or offer any insight you want. Folks who are rude to other classmates will be asked to leave and it will count as an absence. **Turn cell phones to "Airplane Mode" before entering the classroom.**

## Useful Resources

### **Students get Microsoft Office365 FREE**

All CR Students can get OFFICE 365 for \*free\* -- for PC, Mac, Smartphone, Tablet -- using the @[mycr.redwoods.edu](mailto:mycr.redwoods.edu) email address.

- Go to <https://portal.office.com/start?sku=78e66a63-337a-4a9a-8959-41c6654dfb56> (If you get an Error message using the hyperlink, copy and paste the url directly into your browser.)
- Enter "mycr" student email account (e.g., [jdoe555@mycr.redwoods.edu](mailto:jdoe555@mycr.redwoods.edu))
- Go into student email account; click on the verification link in the Microsoft email.
- The link will take you back to the website and you can download the software at that time, OR access the account at a later time via: <https://login.microsoftonline.com>

See also: <https://www.redwoods.edu/online/Help-Student>

## **Classes for Academic Support (register in one or more of these to benefit from them)**

- Math Lab classes: Drop-in math help, during open hours. Many classes such as Math 372L or Math 252 (for students in Math 272 or Math 372)
- CIS 210: Free drop-in assistance with computers and programs such as Word, Excel, Photoshop, and many more, during open hours! (Eureka campus, check schedule in WebAdvisor)
- LIGHT Center classes open to all students: GUID 143, 145, 146, 147, 148, 205, 215.
- ESL classes such as ESL 211 are free and support academic students. *You can show up to sign up!*

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