Syllabus for Math 102 – Pathway to Statistics – Del Norte Education Center			
Semester & Year	Fall 2016		
Course ID and Section #	Math 102 - 040297		
Instructor's Name	Amber Buntin		
Day/Time	Mon/Wed 12:30-3:00pm		
	Tues/Thurs 12:30-1:55pm		
Location	DM 36		
Number of Credits/Units	6 units (5 units Lecture + 1 unit Lab)		
<b>Contact Information</b>	Office location	E2 in the "Faculty Clubhouse"	
	Office hours	TBA	
	Phone number	707-465-2316	
	Email address	amber-buntin@redwoods.edu	
Textbook Information	Title & Edition	Outliers: The Story of Success	
	Author	Malcom Gladwell	
	ISBN	0316017930 (10); 978-0316017930 (13)	

#### **Course Description**

As stated in CR's catalog: A course designed to be a nontraditional, accelerated pathway to transferlevel 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.

Note: Math 102 may be taken for a Letter Grade or you can file for the Pass/NoPass option.

#### **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 707-465-2352.

#### Syllabus for Math 102 – Pathway to Statistics – Del Norte Education Center

#### **Academic Support**

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</u> <u>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 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: <a href="http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services">http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services</a>. 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; 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 the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website at: <u>http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services</u>.

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** <u>Del Norte</u> **campus:**

Please review the campus evacuation sites, including the closest site to this classroom (posted by the exit of each room). The Crescent City campus emergency map is available at

(<u>http://www.redwoods.edu/delnorte/Maps-and-Directions; scroll down to the Safety Map</u>). For more information on Public Safety, go to <u>http://redwoods.edu/publicsafety</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.

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, 707-476-4112, <a href="mailto:security@redwoods.edu">security@redwoods.edu</a>, 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.

# Math 102 ~ Pathway to Statistics

Mon/Wed – 12:30-3pm, Tues/Thurs 12:30-1:55pm – DM 36 Course number 041762

## Instructor Contact Info

Amber Buntin, Department of Mathematics

Phone: 707-465-2316 Email: <u>amber-buntin@redwoods.edu</u>

**Canvas message** is the preferred way to contact me!

Office hours: BY APPOINTMENT (message me) Math Lab Open Hours: Mom/Wed 3:30~4:30pm, Tues/Thurs 11:30~12:30pm

(You must be signed up to utilize the math lab! Credit and no credit options available.)

## Course Description

As stated in CR's catalog: 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. Note: Math 102 may be taken for a Letter Grade or you can file for the Pass/NoPass option.

### Classroom Environment and Attendance

It is essential to our class that both the students and teacher behave in a manner that will provide a comfortable learning atmosphere. Be respectful to one another. You should not hesitate to ask questions nor feel embarrassed to ask for help.

I cannot stress how important attendance is in this course. Will often be working in groups on activities, discussions, projects, and presentations that cannot be made up. If you anticipate missing class or not participating in class activities, then Math 102 may not be the course for you.

You are expected to arrive on time and to leave upon dismissal. Arriving late or leaving before class is dismissed is disruptive and disrespectful to your fellow students as well as your teacher. Please be prepared with your headphones put away and cell phones SILENCED. If you have a job where you have to have a radio/walkie, or your phone on, please let me know right away!

## Grades

Homework	.20%
Participation	.10%
Discussions/In-Class Activities	.40%
Projects	.30%
rrojects	.50%

93~100%	А
90~92%	A~
88~89%	B+
83~87%	В
80~82%	B~
78~79%	C+
70~77%	C
0~69%	D~F

\*\*\* Final grade is at the professional discretion of the instructor \*\*\*



## **Required Materials**

Book: Outliers: The Story of Success Author: Malcolm Gladwell ISBN: 0316017930 (10); 978-0316017930 (13)

Supplies: A graphing calculator is required (TI-83+ or TI-84 recommended) and available to rent for \$15 per semester (see Lynn Durkee in the Library), pencils and erasers, a binder and notebook paper to create a portfolio, dividers, ruler or straightedge and graph paper. Access to a computer with internet capabilities is also a requirement for email and Canvas communication.

## Course Content

There will be a variety of assignments in this course ranging from, but not limited to homework, discussions (online and in class), quizzes, projects, reading assignments, journaling, and sharing ideas. Everyone will present to the class many times throughout the semester and presenting is required. By remaining enrolled in this course, you are agreeing that you are aware of and will participate in all course requirements. If you think this will be a problem, then Math 102 may not be the course for you. I am more then happy to talk individually with any student who has any questions or concerns about any aspect of the course. Most assignments will have rubrics for how they will be graded and some are solely based off of participation. More details to come on bigger projects/presentations!

## Canvas

Our course canvas page will be updated regularly and will contain a variety of items such as: course announcements, class documents, assignments, grades and much more! Be sure to turn on your notifications if you'd like to be notified about things like new announcements, changes to assignment due dates etc. You will be expected to check canvas daily and be aware of announcements made.

Link to Canvas: <u>https://redwoods.instructure.com/</u>

### How to Succeed in this Course

- <u>Be in class on time every day and actively participate</u>.
- <u>Do your homework!</u> Plan to spend at least 1-2 hours outside of class for every hour inside of class. That is the minimum investment of time for success in this course.
- <u>Work with classmates</u>. Mathematics is a social subject (but not a spectator sport). Working with fellow students helps in your own understanding of the ideas of the course.
- <u>Check canvas regularly.</u> You should check canvas daily for things ranging from required assignments to announcements and reminders.

## Tutoring

- If you think you may need extra support, you should enroll in MATH 380L for 1/2 unit or 1 unit of credit in order to obtain supplementary help. Also available is the FREE Math 252 no credit course. This is the cheapest tutoring option available on campus and I can't stress enough how valuable it is.
- Algebra Review: The CR Math Jam webpage is a great way to review algebra and contains lessons as well as OPTIMATH assignments: http://mathrev.redwoods.edu/mathjam/?s=public

## Accommodations

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 (Building T20, behind Bookstore) at 476-4280 phone or 476-4418 fax. Also, I am more than happy to help you out with this process.

## Final Words

A few words about my expectations for you and myself in this course: My responsibilities include coming to class prepared, assigning carefully chosen homework problems that are relevant to our course and carefully preparing discussion, and quiz questions that will accurately measure your progress in the course. Additionally, I am responsible to be available to you outside of class for consultation in office hours.

Likewise, I believe that you are ultimately responsible for your college education and I expect you to come to class motivated to learn the material. This involves keeping up with completing projects, activities, and homework assignments, seeking additional help either from me or from the many resources available to you here on campus, before it is too late.

## Mathematics Placement Statement

#### We want every student to be in the right mathematics class. Is Math 102 the appropriate mathematics class for you?

### What is Math 102?

Math 102 is a special course designed to accelerate students' progress through the mathematics sequence and into Math 15 "Elementary Statistics," which is a transfer-level course for college credit. After successful completion of Math 102, students can take Math 15 "Elementary Statistics" and will not need any other math class at CR. Math 102 is based on research from the California Acceleration Project.

#### Math 102 is not for everyone.



- Not appropriate for all disciplines. Any student interested in pursuing a degree in mathematics, science, or engineering should not take Math 102. If your degree path requires more mathematics beyond algebra (more than statistics), then you should talk to your advisor to determine the best math course for you. Your Math 102 instructor can assist you in switching into a different math class.
- Not appropriate if your math background already includes intermediate algebra (or *"Algebra II"*). You should definitely consult with your instructor to move to a higher-level mathematics course (such as Math 15 Statistics), 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.
  - $\circ$  You earned a score of 3 or more on the AP Statistics exam.
  - $\circ$  You earned a score of 4 or more on the IB Math SL or IB Math Studies SL exam.
  - Also, if you scored 34 or more on the Accuplacer College Level exam, you should see an advisor immediately to find out if you can move up to a higher-level mathematics course.

If your math experience includes intermediate algebra, but you are just "rusty" then you may consider reviewing intermediate algebra independently and re-test. Review materials are available at http://mathrev.redwoods.edu/mathjam/?s=public&r=303-Intermediate- Algebra-Review

Please talk with your instructor and, for graphic information see http://msenux2.redwoods.edu/mathdept/docs/student/Advising\_Chart\_Math120.pdf.

• Not appropriate for all individuals. Math 102 is a non-traditional class that will incorporate **a lot** of group work and discussion. If you anticipate that you will not be able to attend every class session, arriving on time and staying to the end of class Mon-Thurs from now until December (except holidays), then you should not take this class. Or if you anticipate that you will not be able to work collegially and collaboratively with your classmates, respecting everyone's ideas, and treating everyone with kindness and consideration throughout the whole semester, then you should not take this class.

Furthermore, if you would rather sit quietly in a math class, listen to lecture, take notes, go home, do a bunch of math problems independently, check the answers in the back of the book, and come back and do that all over again, then this class is not for you.

### 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. (At CR, the Intermediate Algebra courses are Math 120 and Math 194). 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). So those students who are interested in making the commitment to work together through this nontraditional group-intensive course for the whole semester, and plan to take Math 15 Elementary Statistics at College of the Redwoods afterwards, should take Math 102.

### Math 102 is an "Accelerated" Pathway

Math 102 aims 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, such as statistics. Data: In Fall 2010 in California's 112 community colleges, only 55% of students taking a math course for an associate degree or to transfer passed their math class (EdSource http://edsource.org/2012/new-statistics-course-accelerates-college-students-path-to-success/6495).

### 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 leaves out parts that are not essential for students to succeed in college-level statistics. In many fields, statistics, rather than algebra, is sufficient (for students who are **not** majoring in science, engineering or mathematics).

The only objective of Math 102 is to prepare you to take Math 15 Elementary Statistics at CR. Math 102 does not transfer to any other institution. The combination of Math 102 and Math 15 is a 1-year sequence designed to help students complete math requirements faster; it takes two years (or more) for students to complete the traditional Prealgebra – Elem. Algebra – Int. Algebra – Math 15 sequence.

Math 102 is not an algebra course and is not a statistics course, but rather, Math 102 focuses on some algebra and also pre-statistics concepts to help you succeed when you take Math 15 Elementary Statistics. Topics include algebra, data analysis and critical thinking skills that are relevant for success in 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 in 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" course 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 Advanced 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 attended California Acceleration Project (CAP) conferences and training. CR Professors Todd Olsen, Mike Haley, Steve Jackson, and Erik Kramer went to CAP and subsequently developed Math 102 at CR.

Math 102 was first taught at CR in Fall 2015, and we are excited to see how those students do this semester in Math 15 Elementary Statistics.

Check out the main CAP webpage at the following link: <u>http://cap.3csn.org/</u>