Syllabus for MATH-102-E5104 Pathway to Statistics					
College of the Redwoods– Eureka Campus					
Semester & Year	Fall 2018				
Course ID and Section #	Math 102-E5104				
Instructor's Names	Tami Matsumoto & Guy Adams				
Day/Time	TTh 1:15pm-3:45pm and 4:05pm-5:30pm, 8/21/18-12/14/18				
Location	SC 202, at College of the Redwoods Eureka Campus				
Number of Credits/Units	6 units				
	Office location	SC 205B, behind copier upstairs in SC Bldg			
	Office hours	MW 2:30-3:30, plus by chance and by appointment.			
Tami's	Phone number	Office: (707) 476-4543			
Contact Information	Email address	tami-matsumoto@redwoods.edu			
		Include "Math 102" as part of the email Subject line			
	Social Media	https://twitter.com/tamimathcr			
		https://www.facebook.com/TamiMathCR			
	Office location	BSS344 at Humboldt State University			
	Office hours	Mon 9-9:50 and 3-3:50; Wed 11-11:50 and 3-350, Fri 1-1:50.			
Guy's	~ 1 .	Also by appointment			
Contact Information	Phone number	Office (at HSU): (707) 826-3492			
	Email address	Guy-Adams@redwoods.edu			
		Include "Math 102" as <i>part of</i> the email Subject line			
Textbook Information	Title & Edition	Outliers: The Story of Success			
	Author	Malcolm Gladwell			
	ISBN 0316017930 (10); 978-0316017930 (13)				

Math 102 Course Information (excerpted from the Course Outline of Record):

#### **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 the social sciences and other fields where transfer-level algebra is not a degree requirement. This course is not for students pursuing degrees in mathematics, engineering, computer science, finance, economics, nursing, or the physical or life sciences (including biology).

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

# 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/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: <u>http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services</u>, 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 <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:

(<u>http://www.redwoods.edu/aboutcr/Eureka-Map</u>; choose the evacuation map option). For more information on Public Safety, go to <u>http://www.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 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 <u>https://www.GetRave.com/login/Redwoods</u> 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 <u>security@redwoods.edu</u> 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.

### In the event of an emergency requiring immediate assistance:

- Someone in class should call 9-1-1: can use telephone at Teachers station or cell phone (if possible). It could take minutes for help to arrive, so
- someone else in class should also call CR Security's Emergency number: 707-476-4111 or just dial "4111" on the telephone at the Teachers station or at a "Courtesy Phone" and/or hit the "Panic Button" on a CR telephone (Line 2) to inform CR Security of the emergency.

#### In case of fire,

- calmly exit the classroom and go down the stairs to leave the building. Do not use the elevator.
- At the bottom of the stairs (on either side) **<u>pull the Red Fire Alarm</u>** on the wall near the exit (before exiting the building).

#### *In case of earthquake*: **DUCK—COVER—HOLD ON**.

• The parking lot and Highway 101 are in the Tsunami Zone, so **WAIT** until we know whether it is safe to drive away. **Don't just leave!** 

#### In case of Power Outage

- The classroom (and office) telephones probably will NOT work.
- The doors in SC, HU, and Administration Buildings will automatically lock so if you exit a room and the door closes, the door will automatically lock behind you and card-key won't work

Additional Information about services and help available to CR Students:

#### Tip Line

Anyone wishing to make an anonymous report of a crime may use the tip line at 707.476.4555 Or by emailing <u>CRTip@redwoods.edu</u>.

See also: <u>https://www.redwoods.edu/publicsafety/How-do-I-File-a-Report</u>

### Students get Microsoft Office365 FREE

All CR Students and faculty can get OFFICE 365 for \*free\* -- for PC, Mac, Smartphone, Tablet – up to 5 devices -- using your @mycr.redwoods.edu email address.

- Go to: <u>http://office.com/getoffice365</u> (If you get an Error message using the hyperlink, copy and paste the url directly into your browser.)
- Enter your "mycr" student email account (e.g., <a href="mailto:idee555@mycr.redwoods.edu">idee555@mycr.redwoods.edu</a>)
- Go into your 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: <u>https://login.microsoftonline.com</u>

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

**Mathematica** -- symbolic mathematical computation program, sometimes called a computer algebra program, used in many scientific, engineering, mathematical, and computing fields.

All faculty, staff, and students are welcome and are entitled to a free version of Mathematica for personal use. See: <u>https://www.redwoods.edu/math/Mathematica</u>

#### Associated Students of College of the Redwoods (ASCR)

- ASCR is run by and for CR students. If you aren't involved already, you might like to check it out. See <u>https://www.redwoods.edu/ascr/</u>
- There are many student clubs and organizations. Contact ASCR if you would like to start a new one! <u>https://www.redwoods.edu/ascr/Orgs</u>

Support Classes (a partial list of what's available for students at CR's Eureka campus)

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. There are different math lab class options for Math 15 students: Math 15L or Math 252
- LIGHT Center classes open to all students: GUID 143, 145, 146, 147, 148, 205, 215.
   For information: 476-4290 (Eureka campus)
   NOTE: Many GUID classes can be taken by any students (even if not DSPS)
- ESL classes such as ESL 211 are free and support academic students. You can sign up in class!
- Math Review Courses: Math 301, Math 302, Math 303 short, 9 hours of class time total
- CIS 210: For help with computers, computer programs/software, such as Excel, Canvas

#### Student Services (a partial list of what's available for students at CR's Eureka campus)

### ACADEMIC SUPPORT AVAILABLE AT CR

- Academic Support Center (ASC) -- variety of services to help students succeed, including free tutoring and proctored testing. <u>https://www.redwoods.edu/asc</u>
  - Testing Center in ASC -- for make-up tests, and when accommodations cannot be made in the regular classroom: <u>https://www.redwoods.edu/asc/Testing-Policies-</u> <u>Procedures/Accomodations</u>
  - Tutoring Services -- free for all CR students, by appointment (you do not need to be enrolled in a Math Lab class to meet with an ASC Tutor). <u>https://www.redwoods.edu/asc/Tutoring-Services</u>
- Calculator Rental -- <u>https://www.redwoods.edu/math/Resources/Calculator-Rentals</u>
- Math Lab -- students must be registered in a Math Lab course to receive math help in the Math Lab. <u>https://www.redwoods.edu/math/Lab</u> There are many sections of MathLab associated with different math classes. Any student can sign up for non-credit Math Lab (Math 252) to get help with math-related work. This course is available at DN, EKA, and KT
- Tutoring and Writing Help: The Eureka Campus ASC provides help and tutoring for writing and many other classes. Tutoring is available, by appointment, to any CR student (you do not have to be registered in a special class). Some special programs (such as TRiO, EOPS, DSPS) also have tutoring available for students in those programs.
- Math Textbooks many available for check-out from Library; free textbooks online for Math 276, Math 376, Math 380, Math 120. <a href="https://www.redwoods.edu/math/Free-Math-Textbooks">https://www.redwoods.edu/math/Free-Math-Textbooks</a>; also copies of texts in the MathLab class for use while you are there. Some special programs (such as TRIO, EOPS) may have textbooks available for students in those programs.
- Mathematica Software -- <u>https://www.redwoods.edu/math/Mathematica</u>
- Online Practice in Mathematics, "OPTIMATH" -- http://msenux2.redwoods.edu/optimath
- Math Review website -- <u>https://www.redwoods.edu/math/Resources-Algebra-Review</u>

#### SPECIAL PROGRAMS AT CR

- **CalWORKs** California Work Opportunity & Responsibility to Kids (CalWORKs) assists students who are parents of children under age 18, who are receiving assistance. <u>https://www.redwoods.edu/calworks</u>
- DSPS Disability Services and Programs for Students (DSPS) is a special program funded by the State of California to provide services, accommodations and classes to students with disabilities. <u>https://www.redwoods.edu/dsps</u>
- **EOPS** Extended Opportunity Programs and Services (EOPS) is a state-funded program designed to provide financial assistance, support and encouragement for eligible low-income students. <a href="https://www.redwoods.edu/eops">https://www.redwoods.edu/eops</a>
- TRiO The TRiO Student Success Program is a multi-faceted support program—offering assistance and encouragement to low-income, first-generation students, and/or students with disabilities. <u>https://www.redwoods.edu/trio</u>
- **Honors Program** a challenging program designed for successful transfer to a competitive four-year college. <u>https://www.redwoods.edu/honors/</u>
- Veteran Resource Center to support and facilitate academic success for Active Duty Military, Veterans and Dependents attending CR through relational advising, mentorship, transitional assistance, and coordination of military and Veteran-specific resources. <u>https://www.redwoods.edu/vets</u>

#### Other Services (a partial list of what's available for students at CR's Eureka campus) OTHER SERVICES FOR CR STUDENTS

- **Child Development Center** (CDC) -- subsidized childcare for eligible, low income families. Private-pay childcare may be available if space allows. <u>https://www.redwoods.edu/cdc</u>
- Food Pantry / Resource Center -- <u>https://www.redwoods.edu/resourcecenter</u>
- Health Services for Students Free Flu Shots (while they last). Health care available at little or no cost at the Student Health Center during open hours. PE building 114. 476-4149. Closed Holidays and Breaks. <u>https://www.redwoods.edu/studenthealth</u>
- Multicultural and Diversity Center in LRC 103
- Parking information -- Permit is required. <u>https://www.redwoods.edu/publicsafety/Parking</u>
- Scholarships --
  - CR Scholarship office offers scholarships from dozens of courses -- all on just one application. https://www.redwoods.edu/financialaid/Scholarships
  - Outside Scholarships to apply for (a partial list) https://www.redwoods.edu/financialaid/Types-of-Aid/Scholarships/Scholarship-List
- Security/Public Safety -- Security Officer is on duty 24 hrs/day, 365 days/yr.
  - Can be reached from "Courtesy Phones" and call boxes located across campus.
  - Emergency Line: 476-4111 (Non-emergencies 476-4112) <u>https://www.redwoods.edu/publicsafety</u>
- Technical Support:
  - Email <u>its@redwoods.edu</u> at any time and get a response within one business day.
  - Phone (707) 476-4160 or 800-641-0400, ext. 4160 (8am-4pm Mon-Fri).

#### ADDITIONAL BENEFITS TO CR STUDENTS

- Art Gallery -- Admission is Free during open hours. <u>https://www.redwoods.edu/artgallery</u>
- Bus Pass -- There will be bus passes in the Bookstore that CR Students can purchase at 50% off (31-day pass). EOPS will provide them for students in that program.
- Humboldt Botanical Gardens -- Open Wed-Sun. The gate is kept closed to keep deer out; during open hours, walk in and be sure to close the gate. <u>http://www.hbgf.org/visit</u>
- Preferred Name in Canvas: Students now have the option of having an alternate first name appear in Canvas. Use this form from the Admissions website <a href="https://www.redwoods.edu/Portals/28/Forms/Student%20Information%20Update%20form.pdf?ver=2016-08-30-140231-443">https://www.redwoods.edu/Portals/28/Forms/Student%20Information%20Update%20form.pdf?ver=2016-08-30-140231-443</a> . Social Security card is ONLY required for official name change Not required for Canvas "preferred name" change.
- Workshops such as Financial Literacy, Support Groups check CR Events list <u>https://www.redwoods.edu/events</u>

## **Mathematics Placement Statement**

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

#### What is Math 102?

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



#### These two courses together – Math 102 and Math 15 – form a two-

semester sequence. Every Math 102 student is expected to take Math 15 Statistics at College of the Redwoods. Math 102 does not satisfy any other requirement or prerequisite. There is no reason to take Math 102 except to get into Math 15.

#### Math 102 is not for everyone – not for all *majors*.

• Not appropriate for all disciplines.

Any student interested in pursuing a degree in mathematics, science, or engineering <u>should **not**</u> <u>take</u> 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 instructors can assist you in switching into a different math class. See Math Pathways Flyer <u>https://www.redwoods.edu/Portals/53/MathPathways\_051518.pdf</u>

#### Math 102 is not for everyone – not for all *levels*.

• Not appropriate if your math background already includes intermediate algebra (or "Algebra II").

You should definitely consult with your instructors 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, Math Analysis, 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.

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 a couple other options are:

• take Math 303 (a 1-unit Intermediate Algebra Review) and then re-test to place into a transfer-level mathematics class such as Math 15 Statistics.

 Or, review intermediate algebra independently and re-test. Review materials are available at <u>http://mathrev.redwoods.edu/mathjam/?s=public&r=303-Intermediate-Algebra-Review</u>

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

### Math 102 is not for everyone – not for all *learning styles*.

• Not appropriate for all individuals.

Math 102 is a very demanding, <u>non-traditional</u> class that will incorporate a lot of group work and discussion. <u>It is vitally important that all students are not just "present," but **fully engaged** and <u>actively participating</u> in the class, at all times.</u>

If you anticipate that you will not be able to attend every class session, arriving by 1:15 and staying to 5:30 every Tuesday and Thursday from now through the entire semester, then you should not take this class. Or if you anticipate that you will not be able to do groupwork 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** a good fit 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 <a href="http://edsource.org/2012/new-statistics-course-accelerates-college-students-path-to-success/6495">http://edsource.org/2012/new-statistics-course-accelerates-college-students-path-to-success/6495</a>).

#### 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 <u>not</u> 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 Prealgebra – Elementary Algebra – Intermediate 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. More recently, other CR faculty have also attended CAP Conferences, including Amber Buntin, Jon Pace, Levi Gill, and Phil Zastrow.

Math 102 was first taught at CR in Fall 2015, and we have been excited to see how Math 102 students do when they subsequently take Math 15 Statistics at CR.

# Math 102 Pathway to Statistics

Information follows in these sections:

- 1. Team Teachers and "EPIC" Leader
- 2. Important Semester Dates
- 3. Materials you will need
- 4. Course Requirements
- 5. Course Content
- 6. Sources of Math Help
- 7. Creating your own personal Math Reference Book
- 8. Grading information

# 1. Team-Teachers and "EPIC" Leader (Supplemental Instruction)

This class has been lucky enough to have a team of two teachers and to be included in the EPIC supplemental instruction program! "EPIC" is an acronym for Embedded Peer Instruction Cohort.

#### Your Team Teachers are Guy Adams and Tami Matsumoto, and your EPIC Leader is Mike Kuhn.

The Teacher Team will work together to guide all of you through the course, and will both be available at every class to work with you. Guy and Tami are both experienced teachers of mathematics and statistics who have known each other and worked together for many years.

Mr. Mike Kuhn is a higher-level CR student who previously took Math 102 and Math 15 Statistics at CR. We are truly fortunate to have Mike, who has already experienced what you are about to go through as the "EPIC Peer Leader" for our class. The Peer Leader will attend every class with us and will be available to assist us during class. The Peer Leader will serve as a math student role model and will also offer supplemental study sessions outside of class every week.

# 2. Important Semester Dates

Class meets TTh 1:15pm-3:45pm and 4:05pm-5:30pm, starting August 21, 2018, and runs 15 weeks, followed by Finals Week. Class meets in person in room SC202 on the Eureka campus.

#### Important dates for Fall 2018\*:

- Tuesday, August 21 First day of class
- Friday, Aug. 31 Last Day to drop without a "W" on your transcript and receive a refund
- Monday, Sep. 3 Labor Day HOLIDAY. No Classes. Campus will be CLOSED.
- Friday, Oct. 19 Science Night at CR, 5-9pm (Attendance is not required, but you'll enjoy it!)
- Thursday, Oct. 25 Last Day to petition to graduate / receive certificate this semester
- Friday, Nov. 2 Last Day for Student-Initiated Withdrawal (no refund, and get a "W")
- Monday, Nov. 12 Holiday for Veterans Day. No classes (campus will be closed)
- Monday-Friday, Nov. 19-23 Fall Break No Classes (Campus closed on Thursday-Friday)
- Thursday, Dec. 6 Last regular class session for us in Math 102
- Finals Week: December 10-14.
  - Our Class Final Time Period: <u>1:00pm</u>-3:00pm on Thursday, Dec. 13, 2018
- Friday, Dec. 14 Last day to submit any late work.

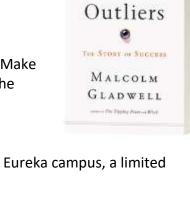
\*Admissions dates should be double-checked at the Admissions webpage

# 3. Materials you will need:

- Required Text: Outliers: The Story of Success, by Malcolm Gladwell
- Bound Notebook with Grid Paper: Roaring Spring #77475 or Ampad #26-251 (about \$2 - \$6), for example. Make sure it is bound and has graph paper in it. You will use this throughout the course to build yourself a reference book (see the "Reference Book Information" handout also).
- **Calculator**: A *Graphing* Calculator (TI-83 or TI-84 recommended). On the Eureka campus, a limited number of rental calculators are available from the Math Lab in the ASC.
- Suggested Supplemental Book: Statistical Reasoning in Sports, by Josh Tabor & Chris Franklin
- **Time. Lots!!** In your own weekly schedule please make sure that you have blocked out at least 15 hours (*possibly as much as 20 hours*), per week, to devote to this class.
- Computer Access for:
  - Email: We expect you to have regular access to a computer and expect to be able to contact you easily. The College uses your "mycr.redwoods.edu" email address to communicate with you so it is important that you receive those email messages; you can set it up to autoforward those emails to another email address if you prefer.
  - "Canvas" for course materials. We will have some course materials available using Canvas. (This is separate from your email but you need access to a computer for this also.)
- **Paper**: Homework Paper and scratch paper, lots of it! It's ok to RE-USE paper. Paper that's only been used on one side is still fine (in general) on the other side. You will also need some graph paper. Get it in a pad or a package of loose-leaf sheets (rather than stuck in a notebook), or print it from the web. Many people find it helpful to get graph paper with heavier lines on every fifth line to make counting easier.
- **Supplemental Handouts**. There will be lots of handouts some of which you may have to print from Canvas. It is your responsibility to make sure that you get a copy of all supplemental material, even if you miss class.

### 4. Course Requirements (subject to change with fair notice)

Participation in Class Activities: Attendance and participation are essential to the learning process. In addition, everyone benefits from your input and participation, and most of the work we do will be in groups. A hugely important aspect of this course is the incorporation of active learning in class; this requires everyone's participation, particularly during in-class activities. Also, the best way to insure having a successful experience in any course is to come to every class meeting and keep up with the assignments. There will often be handouts during class to be turned in at the end of class. If you miss more than four class sessions, you may be dropped from the course.



We realize that sometimes things come up and getting to class is impossible. In those cases, just communicate with one of us as soon as you possibly can and be sure to make up work that you missed, including your part of any group assignments. This is especially important in this lecture-lab group-activity-based course.

Note that ALL students remain responsible for ALL assignments given and those assignments are expected to be turned in ON TIME. If you miss a class, the assumption is that you will get the necessary information to complete the assignment by the due date and be prepared to continue in the normal flow of the course.

#### CAUTION: the material builds from one week to the next and so IT IS VITALLY IMPORTANT THAT ALL STUDENTS ATTEND ALL CLASSES.

- **Homework Assignments:** Assignments will be described in class and posted in Canvas. There will be two categories of assignments: "Basic" and "Advanced." To Pass this class with a "C" you do not need to do any "Advanced" assignments. Only those who want a grade higher than "C" need to do "Advanced" assignments.
- Quizzes: There will be quizzes, some will be assigned for you to do in Canvas, and some will be in class (not always announced ahead). You should always bring a pencil with you to class each day to be ready for a quiz. Bring your reference book (which may be allowed for some quizzes).
- **Other assignments**: There will be some projects that involve a bit more than just "homework," including at least two major group projects beyond the in-class group activities. Information will be given in class and posted in Canvas.
- Reference Book: Each student is required to create his/her own personal Math Reference Book throughout the term. It should be made in a bound notebook. It should have a title page at the front, followed by a table of contents. The contents should include material learned in the course. For the most part, it is up to you to decide exactly what to include, though there will be a few items we will direct you to be sure to include. Each page should be one separate topic. Suggestion: as you make entries of your own, note the source material including url or page # to refer back to, if needed.
- **Final class official date and time:** <u>Thursday December 13,1:00-3:00pm</u>, during finals week. Note the <u>1:00pm start time</u> for that session only (even though class normally begins at 1:15pm).
- **HELP?!** If you have questions, please get help! It is **your** responsibility to seek help if you need it. We will go over some questions in class, but we will not have enough time to answer all of everyone's questions.
- **DUE DATES and LATE WORK**: Caveat on "due dates": While we are, by necessity, confined within a certain time framework, it is important that you understand the material given that, if you have made progress on an assignment but are having trouble completing it by the due date, communicate with one of us to make appropriate arrangements.

# 5. Course Content

The primary objective of Math 102 is to prepare you for success in Math 15 Statistics. Accordingly, Math 102 course content includes:

- Graphing and Exploratory Data Analysis
- Numerical Reasoning
- Algebraic Reasoning
- Basic Principles of Study Design
- Mathematical Models
- Probability
- Use of Graphing Calculator for Statistics

# 6. Sources of Math Help

If you have questions, please get help! It is your responsibility to seek help if you need it. We will answer some questions in class, but unfortunately, we will not have enough time to answer all of everyone's questions durign class. Some sources of help are:

### EPIC Sessions

 $\circ~$  Our EPIC Leader, Mike, will hold one or two 50-minute EPIC Sessions outside of class time for supplemental instruction.

### • Courses you can sign up for to get academic support:

- Math Tutoring Lab (Math 372L or 376L or 380L or 120L or 194L) (strongly recommended but not required). Register for a 1-unit or ½-unit section for this opportunity for drop-in tutoring in the Math Lab during open hours. Math Lab is a class; register for it using WebAdvisor; it is Credit/No Credit. For 1 unit of "credit" you must have 45 hours of documented attendance by the end of the semester (22.5 hours for 1/2-unit). You can sign up for ½ -unit and change to 1-unit later if you choose to.
- Math 252 Non-credit alternate version of Math Lab. You get the same drop-in tutoring help as Math 52, with the same hours, but this is -0- units and there is no hours requirement.
- **CIS 210**: A free drop-in class for help with computers, Canvas, email, Excel, and lots more! This semester, there are two sections of CIS210 for two different parts of the semester. Register for both and then you can drop in throughout the entire semester. If you never attend, no problem.
- o **GUID classes**: Many GUID classes can be taken by any students (even if not in DSPS program)
- People
  - **ASC one-on-one Tutoring**: Any CR student can sign up to meet with a tutor in many disciplines, not just mathematics. Contact the ASC. (You do not need to be registered in Math Lab for this.)
  - $\circ$  ~ Tutors in special programs (for example DSPS, EOPS) ~
  - Private tutors
  - Your Classmates form study groups. You can contact classmates via discussion forums or email.
  - O Your EPIC Leader
  - Instructors (yours and other instructors): You can visit during office hours, or by appointment; feel free to call or email to connect. Other instructors are willing to help, too, when available.

# 7. Creating Your Own Personal REFERENCE BOOK

During the term, you will create your own personal Reference Book. If you have one from a previous class (such as Math 276) and you wish to continue using that book for this class, it is fine as long as your book has a Title Page and a Table of Contents that corresponds with your contents.

In your Reference Book, you will write definitions, examples, and instructions of things that we learn in this class. This book will be useful to you throughout this course, and especially in Math 15 Elementary Statistics.

You will be allowed to use your Reference Book on our "Reference Book Quizzes" as well as when you are studying and working on your homework, of course, and on part of the Final Exam.

- Get a bound notebook with grid paper in it (sometimes called "quad ruled"). Composition books are about \$2 to \$4 dollars and are sold at the CR and HSU bookstores, Staples, and other places. Let us know if you cannot find one (apparently supplies are low in local stores).
- Make a Title Page. The first page of the book (a right-side page) should be made into a title page. Create a title for your book, and include identifying information so it could be returned to you if lost/found.
- Start the Table of Contents. On the top of the <u>next</u> page (right side) write "Table of Contents" and reserve the next several pages for your Table of Contents to grow into. Skip at least 4 pages more if your writing is large or if you anticipate entering particularly detailed information in your "T O C."
- Page 1. The first page that you write actual content information on should be numbered "1".
- Number the following pages. Number the pages, either odd and even on front and back, or you might prefer to number just the right-side pages 1, 2, 3, and so on, leaving the left sides blank at first.
- Enter information regularly as you study and do your homework. Keep just one basic topic on each page, even if you don't fill up every page. The important thing to remember is to make this useful for yourself, so that a year from now (for example), you will be able to find whatever you look for easily. (Write the source of the information in case you want to look back at it again later for clarification.)
- As you add information, write corresponding entries in the T O C, listing the number of the corresponding page *in your reference book* to the <u>right</u> of the T O C entry.
- What to write: At times, we will direct you to include specific information in your Reference Book. Also, as you study, go over your class notes and read corresponding material in the text, synthesize important information and put it into your Reference Book. Definitions and explanations in your own words will be easier for you to understand later. Include examples and pictures, too.

Your Reference Book will be graded several times during the term. Correctness will be spot-checked (due to lack of time – not for lack of interest!). The Reference Books are graded on three areas: completeness, general correctness, and presentation.

# 8. Grading information (subject to change with fair notice)

	In-class Work	Projects	Reference Book	Homework Quizzes
For A-/A	At least 90% completed satisfactorily	At least 85% average	Excellent Reference Book, with all or most topics covered, with corresponding table of contents	<ul> <li>at least 90% of At least 85% "Basic" problems average</li> <li>completed in a legible, satisfactory way;</li> <li>good work done on majority of "Advanced" problems</li> </ul>
For B- /B/B+	At least 80% completed satisfactorily	At least 75% average	Good Reference Book, covering majority of course content with corresponding table of contents	<ul> <li>at least 80% of "Basic" problems completed in a legible, satisfactory way;</li> <li>good work done on at least some "Advanced" problems</li> </ul>
For C- /C/C+	At least 70% completed satisfactorily	At least 65% average	Basic Reference Book has basic topics covered	<ul> <li>at least 70% of "Basic" problems completed in a legible, satisfactory way</li> <li>At least 65% average</li> </ul>
For D	At least 60% completed satisfactorily	At least 60% average	Reference Book must have at least one page of content	<ul> <li>Majority of "Basic" At least 60% problems completed in a legible, satisfactory way</li> </ul>

# For the grade options at left, you must meet all the requirements in that row of the chart.

For determination of +/- grades, the entire class spread will be considered at the end of the term.

CAVEAT: The above procedures are subject to change.