| Syllabus for Introductory Statistics – Online | | |
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| Semester & Year | Fall 2018 | |
| Course ID and Section # | Math 15 V5112 | |
| Instructor's Name | Michael Butler | |
| Number of Credits/Units | 4 | |
| Contact Information | Office location Office hours Phone number Email address | T 7:30-8:30PM, Su 8:00-9:00PM (online) 476-4234 |
| Textbook Information | Title & Edition Author ISBN | |

Course Description

The study of statistical methods as applied to descriptive statistics and inferential statistics. An emphasis on the meaning and use of statistical significance will be central to the course. Students will use probability techniques to make decisions via hypothesis testing and will estimate parameters using confidence intervals.

Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-square and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings. The course includes applications using data from disciplines including business, social sciences, psychology, life science, health science, and education.

Student Learning Outcomes

- 1. Accurately communicate statistical ideas using correct statistical notation, graphs, and vocabulary.
- 2. Use descriptive and inferential statistics to solve real-world problems.
- 3. Demonstrate appropriate use of technology in making decisions based upon real-world data.

4. Read and interpret information that contains statistical analysis and be able to communicate these results.

5. Judge the validity of research reported in the mass media and peer reviewed journals.

Necessary Computer Skills

Need to be able to use a browser and must have easy access to a newer model Mac or PC. This class cannot be done using only a mobile device. Online courses require adequate computer skills. You should be able to navigate the course websites, open and download files, use a word processor and submit files to the class website. It is your responsibility to meet the technological demands of the course but there will be lots of support to help you meet those requirements.

Technology Requirements (computer, other hardware, and software)

A newer Mac, Windows, or Linux computer and an Internet provider are needed. Please do not use a Chromebook for this course. You should have regular access to high-speed internet (such as broadband) service from cable, DSL, or satellite provider, as there are required multimedia assignments. You need to have reliable access to the Internet at least four days a week for 10 weeks. Anticipate problems with your computer and internet access (including power outages) by not waiting until the last minute to submit assignments. *Portable Devices vs. Computers: You will not be able to participate in this class solely from a portable device.* Some of the software we will be using to do our work (Desmos) requires a Mac or a PC (or Linux). If you do decide to use your portable device for some of your class work, use the free Canvas app (called "Canvas by Instructure") available in iTunes (for iOS) and the Google Play Store (for Android) instead of trying to connect to Canvas using a web browser on your portable device. Your experience will be a lot better using the app, but will still not substitute for having regular access to a computer to complete work in this course.

Technology Support

Before contacting Technical Support please visit the Online Support Page at <u>http://www.redwoods.edu/online/Help</u>. For password issues with Canvas, Web Advisor or your mycr.redwoods.edu email, contact Technical

Support at <u>its@redwoods.edu</u> or call 707-476-4160 or 800-641-0400 ext. 4160 between 8:00 A.M. and 4:00 P.M., Monday through Friday.

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.

Regular Effective Contact

Contacting your teacher to ask questions, clarify assignment requirements, or inform why an assignment is going to be late are all-important to a successful experience in the online environment (just as they are in a face-to-face class). The methods available to contact me in this class include:

- the Canvas Discussion forum, email, the Canvas Message tool,
- the online office hours, and
- message phone.

I respond to questions posted in the Discussion forum or sent to me via email usually within 24 hours. The exception to this would be on the weekends or when I give prior notice that I will be out of the range of Internet service for more than 24 hours. The phone is for leaving messages only and I will respond to voice mail with a Canvas Message.

The Canvas Discussion forum is a great place to post questions about content from the material we are covering. If you are having trouble with an exercise or don't understand a concept in the reading, this is a great first stop to ask for help. Many times your peers will answer the question before I do. I encourage this and offer one point extra credit on an assignment for every question you answer (correctly) in the Discussion forum. Be sure and subscribe to the *Questions About Content* Discussion forum.

The Canvas Message tool (the Inbox link) is an excellent way to contact me with information that you need to communicate just to me. If you ask me content questions via email or through Message, I will post the response to the Canvas Discussion forum. If you need an extension on an assignment, sending a Canvas Message is the way to ask for that. If you use the Canvas Messaging system to email me, the course and section are automatically included in the message which really helps me with timely responses. If you need to use your personal email utility, please include the course name and section (Math 120 V2362) in the subject. Again, any content questions sent to me via email/Canvas-Message will be replied to in the *Questions About Content* Discussion forum

Online office hours are an excellent way to get real time help in the class! The Canvas system has a Conference tool that allows us an interactive whiteboard and desktop sharing. There is a poll where you can vote for what time the regularly scheduled office hours will occur at the end of Module One. We can also schedule additional office hours that fit your schedule. These sessions will be recorded and archived if you cannot attend.

Academic Support and Resources

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. The following resources are available to support your success as a student:

- CR-Online (Resources for online students): <u>http://www.redwoods.edu/online</u>
- Library (including online databases): <u>http://www.redwoods.edu/library/</u>
- o Canvas help and tutorials: <u>http://www.redwoods.edu/online/Canvas</u>
- Student Online Hand Book: <u>http://www.redwoods.edu/Portals/72/Documents/Students/CR-OnlineStudentHandbook.pdf</u>

Course Communication

Contacting your teacher to ask questions, clarify assignment requirements, or inform why an assignment is going to be late are all-important to a successful experience in the online environment (just as they are in a face-to-face class). The methods available to contact me in this class include:

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I respond to questions posted in the Discussion forum or sent to me via email usually within 24 hours. The exception to this would be on the weekends or when I give prior notice that I will be out of the range of Internet service for more than 24 hours. The phone is for leaving messages only and I will respond to voice mail with a Canvas Message.

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 College of the Redwoods:

RAVE – College of the Redwoods has implemented an emergency alert system. In the event of an emergency at the college 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.

Proctoring

The Final is to be taken in a proctored environment (NOT at home) as follows:

- You can either take the exam at a CR testing center **OR** use the online proctoring tool provided by the college.
- You must take the exam on one of the days specified for that exam and at times provided by the testing center or proctor you'll use;

While you are taking the exam:

- You may <u>not</u> use any printed or hand-written material (such as books, notes/notebook, etc.).
- You may <u>not</u> use your personal computer UNLESS authorized by instructor in writing to proctor / testing center;
- On the proctor's or testing center's computer used for the exam:
- You may <u>only</u> open and use the testing system (e.g. a web browser tab/window opened to Canvas or other exam delivery program);
- You may <u>only</u> use the online testing system (e.g. Canvas) to <u>take</u> the exam: you may <u>not</u> use it for any other purpose (such as viewing lecture documents, old quizzes, discussion forums, lecture videos, etc.); and
- You may <u>not</u> use the computer during an exam to search the web in any way or to access any other program, website, device or document during testing.
- A browser program may be used by the testing center that blocks access to everything on the computer and the web except the exam in progress.

Any variance from these requirements may be considered academic dishonesty, which is a violation of the Student Conduct Code. 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

http://www.redwoods.edu/Portals/50/BoardPolicies/Chapter5/AP%205500.pdf

Required Resources:

- 1. Text: Intermediate Algebra Student Workbook 4ed. You can get the <u>text for free as a pdf</u> or a <u>printed copy from Lulu</u>. Please buy a printed copy of the textbook. You will need it to write up your homework.
- 2. You will need a TI-84 graphing calculator or emulator. The physical calculator can be found at many retail stores or online. It cost around \$100. There are inexpensive of free emulators that will run on your iOS or Android phone or tablet. If you chose to use one of the inexpensive emulators, you will need to show that your phone is in Airplane mode during the proctored assessment.
- 3. A positive attitude is also essential in this course. There will be times when you are tempted to give up or procrastinate about doing your lessons. A positive attitude and knowing that you can succeed in math will go a long ways in helping you through those tough times. For more on how attitude helps with math acquisition go to <u>YouCubed.org</u> and click on the student link.

Student Commitment:

This course requires at least 15 hours per week for ten weeks of your time. You will need to carefully read the text, watch videos, participate in online discussions, complete weekly quizzes, and complete exercises from the text. Conscientiousness, attention to details, and skills in reading and writing are critical for success. It is **not** expected that you have any previous experience in the use of the Demos software.

Instructor Commitment:

I access the class website regularly and respond to posted questions and messages usually within 24 hours and no later than 48 hours. Additionally, I participate in the discussions where appropriate. There are also regular instructor-based communications with weekly announcements, lectures, and evaluative feedback to your discussion posts.

Homework:

The Modules link in Canvas are where you will find the homework assignments. Homework is an essential part of this course and if you want to succeed, you need to make a commitment now to staying up with the homework.

Writing Assignments:

There will be writing assignments posted to the Discussion area in Canvas for each module. Most of these writing assignments are based on the current material being covered and sometimes will require you do an activity in Desmos. There purpose is to help you find clarity in the concepts presented and to give you an idea of where mathematics is used in the real world. I hope you find these assignments engaging!

Quizzes:

There will be two short quiz in each module taken via Canvas. The quizzes will generally be between 5 and 10 questions and come from the current weeks reading, homework, and videos. The first quiz assigned is a Practice Quiz that you are allowed to take as many times as you want but must earn at least 80% on. The content on these quizzes will come from the problem sets assigned in homework and also cover key concepts from that module. The second quiz, the "Module Quiz", is a one shot affair. It is summative and gives you feedback on how well you did comprehending the material covered in that module. Many of the questions on this quiz (in fact all) will be modifications of the questions from the Practice Quiz. No makeup Module Quizzes are allowed without prior arrangements. The Module quizzes are timed at between 20 to 40 minutes. If you try to use the text or other resources for help, you will run out of time prior to completing the quiz. Keep in mind it is your education we are working on here and that you are expected to adhere to the Student Code of Conduct when taking quizzes and exams.

Exams:

There will be two exams in this course, a midterm and a final. Both will be administered in Canvas. Again, you are expected to adhere to the student code of conduct when taking these exams. You are **not** allowed to use your text or other websites during these exams. Since the exams are timed (2 hours), you will not be able to complete them if you are using your text and other resources. The final exam will be proctored. Information on proctoring can be found on the Canvas site in Module Three.

Class Environment:

It is expected that everyone involved in this class, teachers and students alike, will act in a manner conducive to providing a comfortable environment for learning, a place where students feel free to ask and answer questions without fear of embarrassment or ridicule. It is important to stay on task. Hence, posts to Canvas that do not pertain to the subject at hand will be removed. If you have an issue with another student's posts, please direct those concerns to me. It is essential for student success to maintain a good environment in our virtual classroom. If you have any difficulties with the learning environment, please send me an email with your phone number with a time to contact you. Please review the <u>Principles of Netiquette</u> for how to get the most out of an online course.

Communication Policy:

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Drop Policy:

Please confirm your presence in our online classroom. Log in to the website and post to the "Student Introductions" discussion forum no later than 11:59pm on **Wednesday, of the first week of class** to confirm your presence in the online classroom. Doing so will confirm your enrollment in the course and avoid being dropped as a "no show." You will be dropped from the class if you do not log in and post to the "Student Introductions" Discussion Forum in Canvas by **Wednesday, of the first week of class**. A student from the waiting list may then be added in your place.

If you are struggling to keep up in the participation level required to succeed in this class, I will contact you and ask if you plan on continuing in the course. Please respond to that contact! I will take a "no response" as "you do not wish to continue" and initiate a Faculty Withdrawal from the class. Again, if you are having troubles with any of the course materials or the course format, contact me and let's see what we can do to get you back on track.

Attendance in an online class means participation. Logging into our course on a regular basis (at least three times per week) is akin to coming to class in a face-to-face class. But just as in a face-to-face class, participation in the class is part of the requirements for success. This means that you need to actively participate in the weekly Discussions. You need to read the textbook pages assigned and then take the Practice Quiz early in the week. You need to ask for help in a timely fashion when a concept or assigned exercise is causing you trouble. In addition to the regular feedback and grading that I do each week, I also check to see if you have been spending time on all of these tasks. If you are struggling to keep up in the participation level required to succeed in this class, I will contact you and ask if you plan on continuing in the course. Please respond to that contact! I will take a "no response" as "you do not wish to continue" and initiate a Faculty Withdrawal from the class. Again, if you are having troubles with any of the course materials or the course format, contact me and let's see what we can do to get you back on track.

Late Work Policy:

There are a variety of items that have to be turned in each week of the course. With few exceptions you will need to submit:

- a Reading Quiz (two attempts and is due Wednesday but open until Sunday),
- a Primary Post (due Thursday) and Replies to Peers (due Sunday) in a Discussion Question,
- an Online Homework Exercises (due Sunday),
- and a Module Quiz (due Sunday).

It is my hope that you see that turning things in on time or early is important to your progress in the course. But, life happens and you may need more time to finish an item. If you need extra time ask for it in advance of needing it. I am pretty good about extensions for reasonable needs. If you flake and just forget to do an assignment, then the following late policy will be applied:

- Reading Quiz: Must take and pass to move on in module (can be taken late with no penalty until end of weeks module).
- Discussion Questions: Half points at most can be earned.
- Assignment from Text: A few points deducted for being at most three days late. Half points at most can be earned after that. No late Assignment will be accepted if more than a week late.
- Module Quiz: Not allowed to take late without prior warning.

In addition there will be a Midterm Quiz and a Final Quiz in the course. You are not allowed to take either of these after the due date. There will be a week's window to take each these assessments in. If you need to take either of these assessments outside of the week assigned, you must contact me in advance or have a valid medical/family emergency that is verifiable.

Videoconferences:

We all need to work together to form a sense of community in our online classroom. I have found that attending the videoconference sessions on a regular basis can really help in making the class feel more engaging and interesting. See if you can make that a regular part of your week!

Technical Support:

Before contacting Technical Support please visit the <u>CR-Online</u> page and see if your issue can be resolved using the resources there.

For access issues with Canvas, Web Advisor or your mycr.redwoods.edu Email, contact Technical Support at <u>its@redwoods.edu</u> or call 707-476-4160 or 800-641-0400 ext. 4160 between 8:00 A.M. and 4:00 P.M., Monday through Friday.

Tutoring and Additional Help:

There is a Discussion area for asking questions about assigned problems from the text. Please make this your first stop for asking questions. If you email me a question, I will reply to you in Discussions so others can also benefit from your query. Please help each other! Sometimes a peers explanation will make more sense to you then the one I post. There will be several optional assignments during the course that can help you regain points if you fall behind. We also have access to **NetTutor**. Details on NetTutor are given in our Canvas site in the Course Introduction Module.

I do requests! If you are finding the explanations in the videos are not enough, you can request additional problems to be worked on video. It usually takes about 48 hours to turn it around, so ask early if possible. There is free tutoring in the Math Lab on the CR Eureka campus. If you live in the Eureka area, then you should consider signing up for the non-credit Math 252. It is a free course that allows you access to the tutors in Math Lab.

Any questions of concerns, please email me at michael-butler@redwoods.edu

Disclaimer: I make every attempt to provide accurate information in this syllabus. If there are errors or the need for a change in policy, I will inform you of the changes prior to implementation.