



# Welcome to Elementary Statistics

Course Name: Elementary Statistics Summer 2022 (May 21 to July 21)

Section #: V3961

Instructor: Michael Butler

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**Information from your instructor:** Greetings and Welcome to an adventure in statistics! This course will show you how data and analysis of that data is used to make decisions that change all of our lives. From why you brush your teeth at least twice a day (and floss, you do floss right?) to why it is the “law” to wear a seatbelt when you drive, our daily activities are tailored by analysis of data. This course is a start at pulling the curtain back on the mathematics that underpins this decision-making process. It will require all of your mathematical maturity and a willingness to struggle with complex ideas. But the payoff is worth the work. Unlike any other mathematics course I teach, I can guarantee that you will use this material again. You may need statistics for your major, but we all need it to digest the news that streams into our daily lives full of claims of significance.

Let the journey begin!

**Course delivery:** *This course is delivered and taught 100% online; there are no classroom meetings.*

**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 frequency distributions, graphs, measures of relative standing, measures of central tendency, measures of variability, correlation, and linear regression to explore descriptive statistics. Students will use the laws of probability and statistical tests (t-tests, chi-square, ANOVA, and regression analysis) to make decisions via hypothesis testing and estimate parameters using confidence intervals.

**Student Commitment:** *This online class will require at least as much time as you dedicate to a traditional class. Since this is a summer session, that means you will need to set aside about 20 hours per week for this class.*

**Computer Skills:** Provide students with a list of computer/tech skills they need to be successful in your class.

*Example: Online courses require computer skills. Before beginning, make sure you can:*

- *navigate the course Learning Management System (Canvas),*
- *receive and respond to your CR email,*
- *upload and download files using Canvas, and*
- *use a word processor (such as Microsoft Word).*

*If you need help with any of these things, please let me know and we'll hook you up with assistance!*

**Technology Requirements:** You should have high-speed internet (such as broadband) service from cable, DSL, or satellite providers as there are videos that require this speed. You need to have reliable access to the internet for the duration of the course. Anticipate problems with your computer and internet access (including power outages) by not waiting until the last minute to submit assignments. It is your responsibility to meet the class deadlines.

**Portable Devices vs. Computers:** Although you can use late-model portable devices (such as Android or iOS phones & tablets) for some things, you should plan on doing most of your work (especially exams and assignments) from a reasonably late-model notebook or desktop computer (Mac or PC). *Do NOT plan to participate in this class solely from a portable device.* 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 App Store (for iOS) and the Google Play Store (for Android). Do not try to connect to Canvas using a web browser on a portable device. Your experience with Canvas will be a lot better using the app.

**Proctored Exams:** There are no proctored exams for this class

**Textbook:** The required textbook for the class is: OpenIntro Statistics Forth Edition which is a free open-source textbook. This can be found online at: <http://www.openintro.org> Chose OpenIntro Statistics 4<sup>th</sup> edition. You can also purchase a hard copy using the links on this site.

**Other Materials:** We will be using Rguroo to do our statistical analysis. The 6-month subscription costs \$12. More information can be found on our Canvas site or at [www.rguroo.com](http://www.rguroo.com)

**Course Availability:** The course will be available on CR's Canvas system beginning 5/28/22. On or after that date, you should login to Canvas at <https://redwoods.instructure.com> to enter our "classroom." There is a Discussion post due by Wednesday the end of the first official week of class. If you do not complete this post by the due date, you may be withdrawn from the course.

**Student Resources:** There are instructions on how to log in to Canvas, the basics of using Canvas, and additional support for taking an online course at College of the Redwoods on the [CR-Online](#) web page.

**Other resources you might find helpful:** If you are new to online learning, or feel unsure about how to succeed in the online modality, please watch the first 6 videos linked here: [Online Class Readiness](#)

**Confirm your presence in the online classroom:** *Log in to our class in Canvas and post to the "Student Introductions" discussion forum no later than 11:59pm on Wednesday to confirm your presence in the online classroom. Doing so will confirm your enrollment in the course and will ensure you aren't dropped as a "no show." If you have any issues with this at all, send me an email and let me know, so we can work something out.*