CR COLLEGE REDWOODS

Syllabus for Intro to Statistics

Course Information

Semester & Year: Spring 2023 Course ID & Section #: MATH-15-E4876 Instructor's name: Ward Nickle Day/Time of required meetings: Tuesday and Thursday/9-11:05 Location: SC 202 Course units: 4

Instructor Contact Information

Office location: <u>Online</u> Office hours: by appointment Phone number: use email Email address: ward-nickle@redwoods.edu

Catalog Description

Math 15: An introduction to basic concepts of descriptive and inferential statistics, with emphasis on the meaning and use of statistical significance. Students will use probability techniques to make decisions via hypothesis testing and will estimate parameters using confidence intervals. The course includes applications from a variety of technical and social science fields. NOTE: A TI-83 or TI-84 graphing calculator is required. The MATH-15S support course is strongly recommended to take concurrently for students without previous mathematical experience in courses such as Algebra II or Pathway to Statistics.

Course Student Learning Outcomes

Math 15

- 1. Accurately communicate statistical ideas using correct statistical notation, graphs, and vocabulary.
- 2. Use descriptive and inferential statistics to better understand 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.

Prerequisites/co-requisites/ recommended preparation

Completion of Intermediate Algebra or appropriate placement based on AB 705 mandates.

Accessibility

College of the Redwoods is committed to making reasonable accommodations for qualified students with disabilities. If you have a disability or believe you might benefit from disability-related services and accommodations, please contact your instructor or <u>Disability Services and Programs for Students</u>

(DSPS). Students may make requests for alternative media by contacting DSPS based on their campus location:

- Eureka: 707-476-4280, student services building, 1^x floor
- Del Norte: 707-465-2324, main building near library
- Klamath-Trinity: 530-625-4821 Ext 103

If you are taking online classes DSPS will email approved accommodations for distance education classes to your instructor. In the case of face-to-face instruction, please present your written accommodation request to your instructor at least one week before the needed accommodation so that necessary arrangements can be made. Last minute arrangements or post-test adjustments usually cannot be accommodated.

Textbook

Required Text: Title: Introductory Statistics. Edition: 1st Author: Illowsky and Dean ISBN-13: 978-1-938168-20-8 ISBN-10: 1938168208 The digital text is open-source and freely available.

Recommended Text: Title: Elementary Statistics. Edition: 4th Author: Navidi and Monk ISBN-13: 978-1260727876 ISBN-10: 1260727874 The <u>digital text</u> can be rented for \$57.

Evaluation & Grading Policy

All assignments will be submitted on Canvas. Your grade will be calculated according to the following weights.

Homework	40%
In-Class Assessments	20%
Exams	40%

Technology

We will be primarily be using MS Excel in this course. No prior knowledge of spreadsheet software is assumed. You are welcome to use graphing calculators. However, in general, I will not be presenting both methods in class.

Homework

Homework will generally be due on Monday at 11:59 pm. You may retry the homework problems for full credit until the due date. You have the ability to submit the homework late for a 10% per day penalty.

In-Class Assessments

You are expected to read the text before class meetings. Attendance is MANDATORY and the sessions are intended to provide activities to support and further your existing understanding from having participated in the course. We will typically work through some examples, demonstrate technology, and do activities, quizzes, and group work. While you may use many tools throughout the course, you will only be able to use a **calculator** and Excel on the quizzes. **No cell phone** use will be permitted during quizzes. Participation in these assessments will be graded according to the following rubric.

10	Excellent effort which demonstrates a thorough understanding. The solutions/explanations are correct and communicated effectively.
8	Good effort and demonstration of understanding. The solutions/explanations are mostly correct; communication could be improved.
6	Some effort and demonstration of partial understanding, but a significant portion of the assignment is incomplete, incorrect, or poorly communicated.
4	Little to no effort and/or demonstration of understanding.

Exams

There will be two Midterm Exams and a Final Exam. While you may use many tools throughout the course, you will only be able to use a **calculator** and Excel on the exams. **No cell phone** use will be permitted during exams. The tentative exam schedule is on the calendar.

Course Calendar

The calendar is published to Canvas as a separate document.

The syllabus is subject to change. Any changes will be announced and posted to Canvas.