# **CR** COLLEGE REDWOODS

# Syllabus for Intro to Statistics

#### **Course Information**

Semester & Year: Spring 2021 Course ID & Section #: MATH-15-V0299 and MATH-15S-V0300 Instructor's name: Ward Nickle Day/Time of required meetings: Monday and Wednesday/11:30 - 1 Location: <u>https://cccconfer.zoom.us/j/93680605783</u> Course units: 5

#### **Instructor Contact Information**

Office location: Online Office hours: Wednesdays 1 - 2 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.

From Math 15S: A support course for Math 15, "Introduction to Statistics." Through hands-on activities and group work, students learn skills and explore concepts crucial for success in transfer-level statistics. NOTE: This course is intended for students concurrently enrolled in Math 15, "Introduction 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.

Math 15S

- 1. Apply numerical and algebraic techniques to understand and evaluate statistical formulas.
- 2. Interpret graphs and represent data graphically to support statistical arguments.

3. Implement effective learning strategies.

### Prerequisites/co-requisites/ recommended preparation

Math 15 - Pre-requisite: Completion of Intermediate Algebra or appropriate placement based on AB 705 mandates.

Math 15S - Co-requisite: Math 15

#### Textbook

Title: Introductory Statistics. Edition: 1<sup>st</sup> Author: Illowsky and Dean ISBN-13: 978-1-938168-20-8 ISBN-10: 1938168208 The <u>digital text</u> is open-source and freely available, while the <u>physical text</u> can be purchased for \$22.

# 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<sup>st</sup> floor
- Del Norte: 707-465-2324, main building near library
- Klamath-Trinity: 530-625-4821 Ext 103

During COVID19—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.

# **Evaluation & Grading Policy**

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

Homework	40%
Support Sessions	30%
Exams	30%

#### Homework

Homework will be due on Sundays at 11:59 pm. You may retry the homework problems for full credit until the due date. Late homework can be submitted at a 10% per day late penalty.

#### **Support Sessions**

You are expected to read the text and watch the videos before the synchronous sessions on Zoom. These MANDATORY 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 use breakout rooms to do group work. You will assign yourselves to groups in Canvas according to your Zoom breakout room. One student from each group will upload the assignment for the entire group. Participation in these meetings will be assessed 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 one Midterm Exam and a Final Exam. These will be given on Canvas in a format similar to the homework; however, unlike the homework, you will have only one attempt to answer each question. The Midterm will cover Chapters 1 - 7 and the Final will cover Chapters 8 - 13.

# **Course Calendar**

Math 15 - Spring 2021						
1.1 1.2	Wednesday, January 20, 2021		Review	Monday, March 22, 2021		
1.3 1.4	Monday, January 25, 2021		Midterm	Wednesday, March 24, 2021		
2.1 2.2	Wednesday, January 27, 2021		8.2 8.3	Monday, March 29, 2021		
2.3 2.4	Monday, February 1, 2021		9.1 9.2	Wednesday, March 31, 2021		
2.5 2.6	Wednesday, February 3, 2021		9.3 9.4	Monday, April 5, 2021		
2.7 3.1	Monday, February 8, 2021		9.5 10.1	Wednesday, April 7, 2021		
3.2 3.3	Wednesday, February 10, 2021		10.3 10.4	Monday, April 12, 2021		
3.4 3.5	Wednesday, February 17, 2021		11.1 11.2	Wednesday, April 14, 2021		
(3.7) 4.1	Monday, February 22, 2021		11.3 11.4	Monday, April 19, 2021		
4.2 4.3	Wednesday, February 24, 2021		11.5 12.1	Wednesday, April 21, 2021		
5.1 5.2	Monday, March 1, 2021		12.2 12.3	Monday, April 26, 2021		
6.1 6.2	Wednesday, March 3, 2021		12.4 12.5	Wednesday, April 28, 2021		
7.1 7.2	Monday, March 8, 2021		12.6 13.3	Monday, May 3, 2021		
7.3	Wednesday, March 10, 2021		Review	Wednesday, May 5, 2021		
			Final	Monday, May 10, 2021 10:45am - 12:45pm		

**Note**: The calendar is an indication of what you should ALREADY have completed reviewing before the given date. For example, you should review Sections 3.2 and 3.3 before Wednesday, February 10.

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