



**Math 210: Elementary Statistics**  
**Course Syllabus**  
**Jennie Weber**  
**Spring 2020**

**Instructor Information:**



**Contact Information:**

**Email:** [jennie.weber@lrsc.edu](mailto:jennie.weber@lrsc.edu)

This is the best way to contact me. I check my email daily during weekdays and at least once on the weekend (this is the bare minimum, I actually check my email a lot more). Sometimes email fails to transmit to the receiver without an error indication to you. I **always** answer emails. If you don't receive an acknowledgement of your email from me please resend your email.

**Office:** Online in ClassLive (Live tab in upper right, then click on ClassLive) or Lync. Just let me know and we can schedule a time to meet and work on problems!

**Office Hours:** By Appointment (I am **happy** to speak with you on the phone, in the chat room, at your convenience so please let me know if you need to schedule time with me! You are also welcome to just email or call me **anytime**.)

**Time Zones:** I run this class on Central Time because that is where LRSC is located. I am happy to accommodate **your** time zone as long as you let me know in the first week.

**Cell:** 907-795-6655 (I will answer texts - best from 11 AM to 11 PM CST, Alaska is **three hours behind** ND, please consider that when calling. **Your 8 AM is my 5 AM**)

**Never be afraid to call me – that's why this number is here. Use it if you need it!**

**Fax:** Available Upon Request

**Education:**

B.A. (History), University of North Dakota

B.S. (Mathematics), University of North Dakota

M.A. (History), University of North Dakota

M.L.I.S., Kent State University

Graduate Certificate in Statistics, University of Alaska

## **Course Information:**

**Course Name:** Elementary Statistics

**Course Dept & Number:** Math 210

**Class Number:** 17118

**Dates:** January 13, 2020 – May 15, 2020

**Credit Hours:** 3

**Prerequisites:** Math 103

## **Course Materials:**

This course uses MyStatsLab (MSL) and this comes with an electronic copy of the book. Therefore, you are not required to buy an actual textbook, but rather this program. You can still buy a “real” book if you want, but you do not need to. You get instant feedback as you do homework by using MSL, which I feel is what makes this a critical addition to the class. You will access (and purchase) MSL through our eCollege course shell. While you shouldn’t need it, the course ID for MSL is weber83937. You cannot pass this class without purchasing MSL and it must be done right away. If you’d like a copy of the book for any reason, it is available through [LRSC's bookstore](#) or through many online stores.

You are also required to have Microsoft Word and Excel (or another program that is approved by the instructor). This is the program that LRSC chooses to use for its computers. It is also recommended you have access to Adobe Acrobat (which is available for free download at [www.adobe.com](http://www.adobe.com)).

You should also have a scientific calculator for this course. The following keys are required on the calculator you have:  $x!$ ,  $e^x$ , and  $y^x$  (or  $x^y$ ). Your homework and tests will expect you have access to this, so not having it will negatively affect your grade. The ones that Wal-Mart (or similar stores) sell for about \$10-\$20 are usually fine.

I will provide additional materials each week that you will access online through the course website.

## **Optional Textbooks:**

1. Triola, Mario F., *Elementary Statistics*, 12<sup>th</sup> ed. Addison –Wesley. 2012. ISBN: 978-0321836960. [Optional –13<sup>th</sup> edition ebook embedded in course.]

## **Course Due Dates:**

The dates of all major events and assignments follow below. All assignments are due by 11:59 PM on the day listed. I run this class on Central Time, which is where LSRC is. If you aren’t in CST (and I’m not myself) and turning in assignments on CST will be a problem, just let me know at the beginning of the course, and we’ll adjust. All homework and exams will be turned in through MyStatsLab by the due date. You will also have the option if you can’t figure out a problem at all with my and MyStatsLab’s help to scan, fax or type up the problem and send it to me to receive credit for it that way. This method will be listed on the homework assignment sheet in more detail.

Participation is due weekly on the last day of each week. A “week” runs from Monday to Sunday.

**January 13:** First Day of Class

**January 20:** Martin Luther King Day – LRSC Closed

**January 21:** Assignment 1 Due

**January 26:** Assignment 2, Practice Test 1, Test 1, Part I Due

**February 2:** Assignment 3 and R Assignment Due

**February 9:** Assignment 4 Due

**February 17:** Presidents’ Day – LRSC Closed

**February 18:** Assignment 5, Practice Test 2, Test 2, Parts II Due

**February 23:** Assignment 6, Part III Due

**March 1:** Assignment 7 Due

**March 8:** Assignment 8 Due

**March 16 – 22:** Spring Break – LRSC Closed

**March 22:** Assignment 9 Due

**March 29:** Assignment 10, Practice Test 3, Test 3 Due

**April 5:** Assignments 11 Due

**April 10:** Good Friday – LRSC Closed

**April 13:** Easter Monday – LRSC Closed

**April 14:** Assignment 12 Due

**April 19:** Assignment 13 Due, Practice Test 4, Test 4 Due

**April 26:** Assignment 14

**May 3:** Assignment 15, Part IV Due

**May 10:** Assignment 16, Part V Due

**May 15:** Practice Test 5, Test 5, Extra Credit (optional) Due, Last Day of Class

**Catalog Description:**

An introduction to statistical methods of gathering, presenting and analyzing data. Topics include probability and probability distributions, confidence intervals, hypothesis testing, and linear regression and correlation. [From the [LRSC 2019-2021 Course Catalog](#), pg. 83]

**Topics Covered (this is not comprehensive):**

- Descriptive Statistics
  - Frequency distributions and histograms
  - Statistical graphs
  - Measures of center and variation
  - Probability
  - Binomial and Poisson distributions
  - Normal, student t and chi-square distributions
- Inferential Statistics
  - Estimation of a population parameters
  - Hypothesis testing
  - Two Sample Testing
  - Correlation and Regression

- Contingency Tables
- Analysis of Variance
- Statistical Technology
  - Excel
  - TI graphing calculators
  - StatCrunch
  - Introduction to R

### **Student Outcomes/Competencies and General Education Objectives:**

It is the goal of this course for students to become proficient in Elementary Statistics (see catalog description for a list of topics) as well as the other objectives outlined below. The corresponding numbers of [Lake Region State College General Education goals](#) (pg. 3 - 4) are placed in the parentheses with the full text after them.

- Apply knowledge of mathematics in daily life [V.1: To develop a conceptual understanding of mathematics and a practical knowledge of mathematical application—numerical. I.3: To apply knowledge gained in the educational process and use that knowledge in everyday living—apply knowledge to the real world]
  - Students will create and apply data to apply their skills as they learn them.
- Analyze and understand the language of mathematics [II.3: To use information objectively for solving problems and arriving at alternative solutions-problem-solving skills.]
  - Students will be able to process and understand problems presented in the language of mathematics so that they can solve them.
- Improve logic skills [V.4: To foster an attitude of intellectual inquiry and methodology which will expand one’s view of the universe and the place of humanity within it – scientific method/inquiry.]
  - Students will have improved their logic skills in assessing problems and figuring out ways to solve problems.
- Increase their computer skills [VI.2: To develop a working knowledge of computer and computer programs and their functions – computer literacy.]
  - Students will be able to use programs such as Microsoft Excel, to create statistical models, graphs and perform tests.
- Value the role of math in their careers [VII.2: To nurture and promote the ability to adapt to an ever-changing society-adapt to the future.]
  - Students will be able to use the skills in this class in their subsequent career fields.

### **Grading Policy:**

It is important that you complete all course material in a timely manner. The project will not be accepted after the final due date. Late homework assignments will only be accepted until you have completed the exam. Late homework is docked a 1/2 point per day it is late down to half credit. Once you complete the exam, I will not accept any late homework that was due before the exam. You also must take all the exams. I WILL NOT assign you a passing grade if you have not completed all exams. If reasons beyond your control arise it is your responsibility to contact the instructor. A grade of incomplete

("I") is not automatic and will only be given with justification. Incompletes must be arranged with the instructor. All work must be completed by the last day of the course in order to receive a grade for the course, unless the instructor awards a grade of incomplete. Incomplete grades will revert to a letter grade at the end of the next term. Extensions must be justified and approved by the instructor.

**Grading Criteria:**

This itemizes where all your points will come from.

240	Homework (16 at 15 points each)
255	Participation (17 weeks at 15 points each)
75	Practice Tests (5 at 15 points each)
15	Project Participation
15	R Assignment
15	Orientation
250	Tests (5 at 50 each)
250	Final Project

**Grading Scale:**

Grades will be awarded based on the traditional ten point grading scales.

A	100-90%
B	89-80%
C	79-70%
D	69-60%
F	59-0%

**Assessment Tools and Procedures:**

This course is set up in "weeks." A week begins on Monday morning at 12:01 AM and ends Sunday night at 11:59 PM.

All project parts must be in Microsoft Word/Excel unless otherwise approved by the instructor.

All homework, practice exams and exams are due through MSL by 11:59 PM on the date listed (which will normally be the end of each week). Homework can be scanned, faxed or typed into Microsoft Word/Excel if you are having issues with MSL.

You are welcome to use your lecture notes and book on the exams and quizzes, but remember they are TIMED, so you don't have time to look up much and finish the exam. While you can use your materials, having someone help you (another student, a tutor, etc.) constitutes academic dishonesty. I reserve the right to require you get a proctor if I have questions about your academic honesty.

Participation will be assessed by the instructor and graded weekly. Because of the nature of this course (online) it is very important that you keep up on your homework and participate fully!

The project is due through Blackboard through the term. You do have to correct it as you go or you will **severely** docked in the final presentation (as in you can go negative).

### **Academic Honesty:**

Lake Region State College policies are in effect. Academic honesty is required of all members of a learning community. Hence, the college will not tolerate cheating or plagiarism on tests, examinations, research papers, or other course assignments. Students who engage in such dishonesty may be given a failing grade on the assignment or exam and in the course. For definitions and descriptions of cheating, plagiarism, and collusion see the following description in the LRSC College Catalog. (Scholastic Dishonesty is discussed on pg. 30-1 of the [College Catalog](#).)

For a better understanding of plagiarism, see this [website](#).

### **Resources Available:**

#### **Help Desk:**

If you have any trouble with an eCourse, please contact the NDUS/Blackboard Online 24-hour Help Desk at 1-866-457-6387 for support or LRSC Helpdesk at 701-662-1596.

You can email the Help Desk at [helpdesk@lrsconline.com](mailto:helpdesk@lrsconline.com)

Help Desk staff are waiting for your call 24 hours a day, 7 days a week, 365 days a year.

You have access to Smartthinking through LRSC and this provides 24 hour, 7 day a week online tutoring (there is a link in the course shell itself under Course Home). You can also contact [Andy Wakeford](#), the online advisor, to find out about all the in person tutoring options available.

#### **Online Library:**

The Paul Hoghaug Library, located on the Lake Region State College campus, is a wonderful resource for you. You don't need to be on-campus to use the resources. Once you have a library card, you can access library resources online through ODIN (Online Dakota Information Network).

If you do not have a College library card yet, you can apply online and check out books online.

### **Academic Division Mission Statement:**

The Academic Division focuses on the student, providing high-quality, accessible educational opportunities in the liberal arts. The Division strives to maintain an educational environment in which students learn to think critically and creatively and

express themselves cogently, broadening their understanding of life and their ability to function successfully in a complex and changing society to their full potential.

The main functions of the Academic Division are to:

1. Provide the curricula for an associate of arts degree and/or academic transfer to a four-year institution with adequate preparation for academic success.
2. Provide additional academic assistance to those students who need academic skills or knowledge prior to enrolling or as they enroll in a course of study.
3. Provide curricula that give the student a foundation for life-long learning.
4. Providing a program of general education courses that will enable the student to fulfill the system-wide general education requirements as set forth by the North Dakota University System.