

## Class Syllabus

Course #: 15866

Course Title: STAT 2480: Elementary Statistical Methods

Credit Hrs: 4

Term: Fall 2020

Course Meetings & Online Course

Location: August 24, 2020 – December 11, 2020

Prerequisite Courses: One of 1320, 1508, 1411, TCCN 1314 or equivalent

Instructor: Dr. Yin Lin

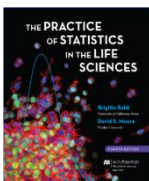
Contact Info: Math Department Phone number: (915) 747-5761

E-mail address: ylin4@utep.edu

**E-mails will be answered between 9:00 am and 5:00 pm Mondays-Fridays.** E-mails received outside of these windows will be addressed during the next period. No assignments will be accepted via email.

Office Hours: To access office hours: sign in to Blackboard> on the left menu, click the Collaborate Ultra > select the office hours session> join.

Textbook The Practice of Statistics in the Life Sciences, fourth edition, by Baldi and Moore,  
**ISBN-13: 978-1-319-01337-0**



Available only on Macmillan website and UTEP Bookstore  
The Sapling Plus online homework package is required.

### Required Technology/ Materials

- Sapling Plus homework account
  - must access from Blackboard initially
- MiniTab 19 –Statistical Software
  - the temporary license provided by UTEP

You will also need regular access to a computer, stable, consistent internet, Blackboard, and your UTEP e-mail account.

Course Objectives (Learning Outcomes): STAT 2480 is an introductory statistics class primarily for biological and life sciences. At the successful completion of this class:

- I. A student will be able to identify key components of a statistical study, including experimental design, sampling plan, descriptive statistics, statistical analysis, and will be able to critique the conclusion of the study based on strengths and weaknesses throughout the paper.
- II. A student will be able to calculate and interpret data utilizing both numerical and graphical summaries to support conclusions.
- III. A student will be able to calculate and model problems using fundamental probability properties and basic probability distributions
- IV. A student will be able to choose the appropriate statistical test for a given data set, perform the test, and utilize the conclusion to make a decision about a formal hypothesis.
- V. A student will be able to design and implement all of the elements of a statistical study, including experimental design, sampling plan, descriptive statistics, statistical analysis, and will present the findings in a formal research paper.

Activities and Assignments: The course is split into topic modules. Modules include a combination of textbook reading, lecture notes, writing assignments, labs, and homework.

Video Lectures: I have assembled videos on the various topics we will cover in class. You are expected to do the assigned readings from your book and watch the associated videos.

Office hours: I am going to host an office hours twice a week. During this session, I will make announcements, answer questions, and work out additional problems as needed. The sessions will be recorded, so you can access them later if you are unable to attend.

Office hour: from 11:30 pm – 12:30pm on Mondays and Wednesdays in the Blackboard Collaborate.

Exams: There are three exams for the course: two mid-terms and a comprehensive final. The exams will be conducted **on Sapling**. You will have a practice exam for each that counts towards your Learning Curve (participation) grade.

Project: you will design a research study, collect and analyze data, and present your findings in a written paper. This will involve updates throughout the semester. The final project will be submitted during the last week of the semester. Specific due dates can be found in the Project Module of **Blackboard**.

Labs: Labs consist of a quiz, and a lab assignment from the manual. All of these components are together in a folder for each module.

Homework: There are 12 homework assignments for the course, one per non-test module. They are solely conducted **on Sapling Plus**. Due date information can be found on the Calendar (last page) and in Sapling Plus.

Writing Assignments: You will have a variety of writing assignments throughout the semester. Each one has different instructions and is related to a specific module. They fit into one of two broad categories 'Exploring an Article (EAS)'. A comprehensive guide to each of these is included **on Blackboard**. Individual instructions for assignments is also included in each respective module.

Learning Curve: Learning curve is an adaptive learning tool **on Sapling plus**. These assignments introduce you to the textbook material with easy questions. You get points for each question you get correct and do not lose points for questions you miss. Once you have reached the target goal for the Learning Curve, it is considered complete. You will be graded on the number of Learning Curves you complete.

Course Schedule: A comprehensive course schedule is attached as the last pages of this syllabus. Semester highlights are included.

- August 24 – Classes Begin
- September 7 – Labor Day (No Class Meeting)
- September 9 – Census Day (Last day to drop without a W)
- **September 30 – Exam 1 Due on Sapling**
- **October 28 – Exam 2 Due on Sapling**
- October 30 – Course Drop Deadline
- December 3 – Last Day of Classes
- December 4 – Dead Day
- **December 9 – Final Exam Due on Sapling**

Grading Policy: You will be graded on homework, exams, labs, discussion boards, learning curve, and the project. The course grade is based on:

- 15% Exam I
- 15% Exam II
- 15% Cumulative Final Exam
- 20% Project
- 15% Homework Assignments
- 10% Lab Quizzes and Lab Minitab files
- 5% Writing Assignments (EAS)
- 5% Learning Curve

Letter grades are determined according to the following scale:

A: 90-100; B: 80-89; C: 70-79; D: 60-69; F: <60

Make-up Policy: Lab quizzes and lab minitab files, Writing Assignments, and Learning Curves cannot be submitted late for credit. If you feel like you have some extenuating circumstance, or have an excused absence that will keep you from completing an assignment or quiz, please contact me right away and be prepared to show supporting documentation. I reserve the right to excuse or exempt assignments and quizzes if the situation is warranted.

Exam: A make-up exam will only be given in extraordinary circumstances (severe illness, death in the immediate family), and with appropriate documentation (e.g., doctor's note).

Attendance Policy: Because this is an online class, participation is assessed by the completion of module activities. You can fully participate in class by:

- Completing all assigned readings and watching video lectures
- Completing the Writing Assignments and commenting on classmates' posts
- Completing all module activities (labs, assignments)
- Completing all major assignments (exams, project)

Each aspect of the course builds on the previous topic. By completing things in the order provided, you are building the foundation needed for the next step.

**Failure to submit any weekly assignment for two weeks, or failure to complete an exam will result in being dropped from the course.**

**Anyone who has not registered for Sapling and has not submitted assignments by Sunday, August 30, at 11:59 pm will be dropped from the course.**

Academic Integrity Policy: The University policy is that all suspected cases or acts of alleged scholastic dishonesty must be referred to the Dean of Students for investigation and appropriate disposition. Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes, but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. Each student is responsible for notice of and compliance with the provisions of the Regents' Rules and Regulations, which are available for inspection electronically at <https://www.utsystem.edu/offices/board-regents/regents-rules-and-regulations>.

All students are expected and required to obey the law, to comply with the Regents' Rules and Regulations, with System and University rules, with directives issued by an administrative official in the course of his or her authorized duties, and to observe standards of conduct appropriate for the University.

Netiquette: You will be interacting with your fellow students in an online setting. Your tone should be professional and respectful. When commenting on other's posts, ensure your contribution addresses the work, not the person. You should only say things you would be comfortable saying in a face to face setting.

Blackboard is not a public internet venue; all postings to it should be considered private and confidential. Whatever is posted on in these online spaces is intended for classmates and professors only. Please do not

copy documents and paste them to a publicly accessible website, blog, or other space. If students wish to do so, they have the ethical obligation first to request the permission of the writer(s).

**Disability Statement:** If you need accommodations for your success, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by e-mail to [cass@utep.edu](mailto:cass@utep.edu), or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website <https://www.utep.edu/student-affairs/cass/>

The student is responsible for informing me of the accommodations needed and will be responsible for proactive actions regarding having accommodations met.

**Military Statement:** If you are a military student who may potentially be called to military service or training during the semester, you are encouraged to contact your instructor as soon as possible.

**Drop Deadlines:** The last day to drop the course without a "W" is September 7. The last day to drop the course with a "W" is October 30. Students who decide to drop the course must process a drop form, with the Registrar's Office, before October 30. Please note that the College of Science will remain aligned with the University and will not approve any drop requests after that date.

Failure to make adequate forward progress in the course is grounds for instructor initiated drops.

## Class Procedures

1. On the first day of class, August 24, go to Homepage on Blackboard, there are a total of 16 weeks of classes on the homepage. Each week consists of multiple modules with several subparts:
  - a. Module overview – topics to be cover in this module.
  - b. Module assignment – detail of lists of assignments due in this module, such as reading material, learning curves, writing assignments, lab, and homework.
  - c. Reading and lecture notes – Detailed textbook reading assignments and lecture notes/PowerPoint.
  - d. Learning Curve – Concept practice in Sapling (link)
    1. Below each learning curve on Sapling are videos and other resources. They are not for a grade, but you are welcome to use them to practice.
  - e. Writing Assignment – Follow the instructions and post your assignment on Blackboard.
  - f. Lab folder –Lab Manual, Lab quiz, Lab Minitab file Assignment Instructions, and all relevant documents.
  - g. Homework Assignment – Link to Sapling Assignment

I strongly recommend you do the modules in the order they are presented. The readings help with the Learning curves, which lead to concept practice, which help with the labs, which prepare you for the homework.

2. This class is asynchronous, not self-paced. You do not have to be working on class materials at a specified time each day, but you do need to plan your time to meet the designated deadline.

I hope this will help to get you started in the course. You should be able to start to view the Blackboard beginning Monday, August 24. Please log in on August 24 and get started on the course. **Anyone who has not registered for Sapling and has not submitted assignments by Sunday, August 30, at 11:59 pm will be dropped from the course.**

Please let me know if you have any questions. Good luck with the course!