

South Plains College
Common Course Syllabus: MATH 1342
Revised December 2019

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 1342

Course Title: Statistical Methods

Available Formats: conventional and internet

Campuses: Levelland, Reese, Plainview, Lubbock Center and Dual Credit

Course Description: Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing.

Prerequisite: Minimum score of 350 on the TSIA, TSI-exempt status, or a successful completion with a grade of 'C' or better in MATH 0337.

Credit: 3 **Lecture:** 3 **Lab:** 0

Textbook: *Elementary Statistics: A Brief Version*, Bluman, 2014, 7th Edition, McGraw-Hill.

Supplies: Please see the instructor's course information sheet for specific supplies.

This course partially satisfies a Core Curriculum Requirement: Mathematics Foundational Component Area (020)

Core Curriculum Objectives addressed:

- **Communications skills**—to include effective written, oral and visual communication
- **Critical thinking skills**—to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- **Empirical and quantitative competency skills**—to manipulate and analyze numerical data or observable facts resulting in informed conclusions

Student Learning Outcomes: Upon completion of this course and receiving a passing grade, the student will be able to:

1. Explain the use of data collection and statistics as tools to reach reasonable conclusions.
2. Recognize, examine and interpret the basic principles of describing and presenting data.
3. Compute and interpret empirical and theoretical probabilities using the rules of probabilities and combinatorics.
4. Explain the role of probability in statistics.
5. Examine, analyze and compare various sampling distributions for both discrete and continuous random variables.
6. Describe and compute confidence intervals.

7. Solve linear regression and correlation problems.
8. Perform hypothesis testing using statistical methods.

Student Learning Outcomes Assessment: A pre- and post-test questions will be used to determine the extent of improvement that the students have gained during the semester

Course Evaluation: There will be departmental final exam questions given by all instructors.

Attendance Policy: Attendance and effort are the most important activities for success in this course. Records of your attendance are maintained throughout the semester. Five (5) absences, **for any reason**, are allotted to the student for the semester. Tardies count as one-half (1/2) of an absence. Tardies will be applied for consistently being late to class, as deemed by the instructor and leaving class early. If this number is exceeded, the instructor has the right to drop you with a grade of F or an X, depending on their discretion.

Plagiarism violations include, but are not limited to, the following:

1. Turning in a paper that has been purchased, borrowed, or downloaded from another student, an online term paper site, or a mail order term paper mill;
2. Cutting and pasting together information from books, articles, other papers, or online sites without providing proper documentation;
3. Using direct quotations (three or more words) from a source without showing them to be direct quotations and citing them; or
4. Missing in-text citations.

Cheating violations include, but are not limited to, the following:

1. Obtaining an examination by stealing or collusion;
2. Discovering the content of an examination before it is given;
3. Using an unauthorized source of information (notes, textbook, text messaging, internet, apps) during an examination, quiz, or homework assignment;
4. Entering an office or building to obtain an unfair advantage;
5. Taking an examination for another;
6. Altering grade records;
7. Copying another's work during an examination or on a homework assignment;
8. Rewriting another student's work in Peer Editing so that the writing is no longer the original student's;
9. Taking pictures of a test, test answers, or someone else's paper.

Student Code of Conduct Policy: Any successful learning experience requires mutual respect on the part of the student and the instructor. Neither instructor nor student should be subject to others' behavior that is rude, disruptive, intimidating, aggressive, or demeaning. Student conduct that disrupts the learning process or is deemed disrespectful or threatening shall not be tolerated and may lead to disciplinary action and/or removal from class.

Diversity Statement: In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

Disability Statement: Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland (Student Health & Wellness Office) 806-716-2577, Reese Center (Building 8) 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

Nondiscrimination Policy: South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number 806-716-2360.

Title IX Pregnancy Accommodations Statement: If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To [activate](#) accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Director of Health and Wellness. Once approved, notification will be sent to the student and instructors. It is the student's responsibility to work with the instructor to arrange accommodations. Contact the Director of Health and Wellness at 806-716-2362 or [email cgilster@southplainscollege.edu](mailto:cgilster@southplainscollege.edu) for assistance.

Campus Concealed Carry: Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations and Frequently Asked Questions, please refer to the Campus Carry page at: <http://www.southplainscollege.edu/campuscarry.php>. Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

SPC Bookstore Price Match Guarantee Policy: If you find a lower price on a textbook, the South Plains College bookstore will match that price. The difference will be given to the student on a bookstore gift certificate! The gift certificate can be spent on anything in the store.

If students have already purchased textbooks and then find a better price later, the South Plains College bookstore will price match through the first week of the semester. The student must have a copy of the receipt and the book has to be in stock at the competition at the time of the price match.

The South Plains College bookstore will happily price match BN.com & books on Amazon noted as *ships from and sold by Amazon.com*. Online marketplaces such as *Other Sellers* on Amazon, Amazon's Warehouse Deals, *fulfilled by Amazon*, BN.com Marketplace, and peer-to-peer pricing are not eligible. They will price match the exact textbook, in the same edition and format, including all accompanying materials, like workbooks and CDs.

A textbook is only eligible for price match if it is in stock on a competitor's website at time of the price match request. Additional membership discounts and offers cannot be applied to the student's refund.

Price matching is only available on in-store purchases. Digital books, access codes sold via publisher sites, rentals and special orders are not eligible. Only one price match per title per customer is allowed.

Note: The instructor reserves the right to modify the course syllabus and policies, as well as notify students of any changes, at any point during the semester.

MATH 1342—Statistical Methods
South Plains College, Levelland campus
Spring Semester 2020

Sections: 001—MW, 9:30 – 10:45 AM
 003—TR, 11:00 AM – 12:15 PM

Rooms: Levelland MECS Bldg., Room 112
 Levelland Agriculture Bldg., Room 105

Instructor: Mr. Robert E. Plant, II, M.S.

Office Info: Room—Levelland MECS Bldg., Room 116B
 Phone—(806) 716-2734
 Hours—the following table will display the regular office hours.

Monday	Tuesday	Wednesday	Thursday	Friday
15:00 – 16:00	8:15 – 10:15	15:00 – 16:00	8:15 – 10:15	9:00 – 11:00
OR BY APPOINTMENT				

E-mail: rplant@southplainscollege.edu

O.P.I.*: Lecture materials for this course will be provided by the Instructor through Blackboard as made available; this Syllabus is © 2020 by Mr. Robert E. Plant, II
 * O.P. I. means “other pertinent information,” or in layman terms, “something else that you need to know.”

Tutoring: Free tutoring is available in room 116 of the Mathematics-Engineering Building, at the Reese Center campus in Rooms RC211 and RC212, and at the Lubbock Center (40th and Avenue Q). (Please remember to verbally request a tutor and to sign in when you seek the help of a tutor in each of these places.)
 Videos for this course are also available. Students are encouraged to view these by accessing them online via YouTube.
 There are alternate tutoring resources available online for students upon request.

“Practice & Application Sustain Success! #PASS”

—Instructor

Guide to Solving Mathematical Problems

When solving a mathematical problem, the following questions must be answered:

Q1. What *known* information does the problem give me?

A1. You will be shown, through examples given by the instructor, how to list the known information of the problem. Use this process unless a more suitable one is known by you. Spare no details until you have ***mastered*** this concept of setting up the problem. Once you have done so, then you can afford to spare some of the details.

Q2. What information given in the problem do I *not know*, and how do I *find* it?

A2. In this course, you will deal with problems that have unknown information which must be found. Most of these problems will have one unknown; however, there will be a few that will have two, which is the ***maximum*** number of unknowns that will be examined for any problem. The instructor will show you the procedures necessary for finding these unknowns.

Q3. When is the problem solved or completed?

A3. The problem will be solved or completed ***when there is no unknown information remaining***. Each section covered in this course will have problem exercises that are designed to reinforce the concept(s) of the section, and there will be more than one problem assigned per concept (unless otherwise stated by the instructor at the time of assignment).

Expectations of the Student for the Instructor

The Student is within all rights to expect that the Instructor do the following:

- Show up, as scheduled, to teach all information pertaining to the course.
- Use the entirety of the lecture period as well as the allotted lab time for this course.
- Provide notice of any schedule changes.
- Maximize the time allotted for this course by assessing student aptitude of covered information at the close of each lecture, when time permits.
- Present the material in a manner that can generally be understood by most of the class.
- Be accessible to those who need assistance outside of the classroom setting, by way of e-mail or in person, during office hours or reasonably scheduled appointment times.
- Respond to all e-mails in a timely and discretionary manner
- Hold to any assignment(s) given during the semester unless removed.
- Uphold the policies of the college as it pertains to the student's welfare in the course.
- Not make any exceptions regarding the dismissal of any student from the course for reasons listed herein.
- Allow each student the opportunity to discuss the material presented during the lecture period.
- Provide examinations based on the information discussed in class that contain problems which use solving methods ***like*** those assigned from sections pertaining to the exam.

Expectations of the Instructor for the Student

The Instructor is within all rights to expect that the Student do the following:

- Show up, as scheduled, to receive and learn all information pertinent to the course and be mindful of any schedule changes.
- Take advantage of **all** resources available to you. These resources, which include the Office Hours and the Tutoring Lab, have been previously stated in the syllabus.
- Be respectful of your peers and the Instructor as stated in the SPC Student Handbook.
 - In the collegiate setting, all students are adults and are expected to uphold conduct worthy of such consideration.
 - Failure to do so provides sufficient grounds for the Student to be dismissed from the course.
- Be willing to work together with—**BUT NOT DO WORK FOR**—fellow classmates.
 - Networking is an essential tool both in the workforce and in the classroom; furthermore, the greater the numbers of minds there are involved, the less mental labor is required for everyone.
 - No one is an island... **except on the exams!**
- Be mindful of the classroom setting and the roles therein.
 - While student tuition is vital to the well-being of this academic institution, this does NOT warrant the concession of any instructor to you in a manner that compromises the integrity of the classroom setting and that of the institution itself.
- **Write all graded work legibly and in pencil only. All work not done in pencil will not be accepted by me and will cause you to receive a grade of zero percent (0%) for the work in question.**
- Turn all electronic devices **off** that have no use in the classroom setting.
 - This means all music players, cellular telephones (or cell phones), etc.
 - If a cell phone must be on (family emergencies only), then the phone must be put on vibrate mode and placed on your desk.
 - **Tablets and digital notebooks during lecture are allowed.**
 - If a disallowed device is in use during an exam, then the grade for said exam will be zero percent (0%).
- Bring all materials needed for the course and refrain from bringing anything that is not needed. This allows you to pay attention to the subject matter only and shows me that you are prepared to learn.
- Obtain all missed information and assignments from a fellow classmate.
 - In the spirit of holding to all course objectives in a manner that warrants personal accountability, I will not relay such information unless necessary.
 - This means that **if there is no documented reason for missing the information, then find your peers, not me.**
- **READ THE SYLLABUS!!!**
 - If you lose the copy I give you, then you will have to obtain another copy from Blackboard.
 - There are **no exceptions** to this rule!

Required & Disallowed Materials for the Course

The following materials are required of the Student for this course:

- Pencil—This will be required for all work that is to be graded by the Instructor
- Ruler—This will be required for the Graphing portion of this course
- Multi-subject Notebook (with at least 5 sections)—This will be required for the Student to keep his/her notes; any writing utensil may be used to take notes, and ***the notebook is to be used in this course only***
- Three-ringed Binder—This will be required to store all Homework (HW) that is assigned in the course; should be stocked with at least 250 sheets of loose-leaf writing paper and at least 100 sheets of graphing paper, which are sold separately
- **Scientific calculators**—The calculator ***must be non-graphing***; no extra calculators are required of the Instructor to provide in the event of the Student not having his/her own
- Syllabus Acknowledgment of Receipt—The filling in, signing, and returning of said form is prerequisite for any accommodations stated in the syllabus to be recognized for the Student; nonetheless, the Student is still expected to uphold any responsibilities that are stated herein

The following materials and situational items are disallowed in this course:

- Cell phones—Usage of cell phones during lecture is prohibited in this course
 - Usage during lecture may result in dismissal from lecture and a counted absence
 - Usage during an exam is grounds for immediate dismissal from the course
- Online math answering programs—Programs that provide “solutions” to unworked problems, such as Chegg, MathWay, PhotoMath, and Wolfram Alpha are strictly prohibited from use in this course
 - First Offense—Dismissal from lecture and counted absent
 - Second Offense—Student will be dropped from the course
- **Graphing calculators**—Due to the wide range of capabilities for these calculators, the use thereof is prohibited; cell phone calculator usage is also disallowed; repeated violation will result in the ***dismissal of the Student from the course***
- Pen for doing graded work—Use thereof in said circumstance will result in a zero percent (0%) for the assignment in question
 - All work must be shown in pencil
 - Writing each question in pen is permitted
 - Circling/boxing answers in pen/highlighter is allowed
- Notes on exams—Use thereof in said circumstance that is not permitted by the Instructor will result in the immediate dismissal of the Student from the course.
- Student Solutions Manuals during class time—Use thereof in said circumstance will result in the Student being dismissed from the classroom and being counted as absent for the day in question

If the Student has any concerns pertaining to the information above on this page, then the Student is to contact the instructor by the means stated in this document. The Instructor cannot be reasonably expected to address any such concerns if no communication is had with the Student.

Grading Policy*

90% or above	A	In-Section Exercises: 28% (28 @ 1%) Weekly Homework: 12% (12 @ 1%) In-class examinations: 40% (4 @ 10%) Final examination: 20% [Bonus for Printed Notes: TBD]
80-89%	B	
70-79%	C	
60-69%	D	
59% or below	F	

*All grades are rounded from the first decimal. Borderline grades (within 2% of the minimum) will be handled by the Instructor based on the Student's compliance with the Syllabus. Upon the submission of grades at the end of the semester, **ALL GRADES ARE FINAL!**

Holiday/Travel Statement

If you the student have pre-existing plans to either travel out of the area during scheduled class times, you must inform me by **NO LATER THAN Monday, February 3, 2020**. Failure to do so will result in the forfeiture of any assignments that will come into question during your dates of absence.

Religious Holy Days

In accordance with Section 51.911, Texas Education Code, South Plains College will allow a student who is absent from class for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within seven (7) calendar days after the absence. Students are required to file a written notification of absence with each instructor within the **first fifteen (15) days of the semester** in which the absence will occur. Forms for this purpose are available in the Student Services Office along with instructions and procedures. "Religious holy days" means a holy day observed by a religion whose place of worship is exempt from property taxation under Section 11.20, Tax Code.
(Copied from current South Plains College Catalog)

Midterm Examination Policy

On the day of the exam, be sure to **take care of your "bathroom business" BEFORE STARTING**; also, **empty ALL of your pockets** and **turn all smart devices OFF**.

1st Offense: Warning and 20% Penalty

2nd Offense: 0% on the Exam in question

Final Examination Policy

There will be a final examination for this course. **All students are required to take this exam at the appointed time listed herein**. Also, due to the insurance of outcomes assessment at the end of any semester, there will be no guarantee of exemption from the final exam for this course. **If any exam is missed, then the final will replace ONE such exam upon notification before the exam is scheduled**. All other exams missed will receive a grade of 0% or be handled at the Instructor's discretion. **If the final exam is missed by any student required to take such, the student will receive a 0% for the final and an "F" for the course!**

Sexual Misconduct Confidentiality Statement

As a faculty member, I am deeply invested in the well-being of each student I teach. I am here to assist you with your work in this course. If you come to me with other non-course-related concerns, I will do my best to help. It is important for you to know, however, that all faculty members are mandated reporters of any incidents of sexual misconduct. That means that I cannot keep information about sexual misconduct confidential if you share that information with me.

The Director of Health & Wellness can advise you confidentially as can any Counselor in the Health & Wellness Center. They can also help you access other resources on campus and in the local community. You can reach the Director by phone at 716-2563, by e-mail at cgilster@southplainscollege.edu, or by going to the Health & Wellness Center. You can schedule an appointment with a Counselor by calling 716-2529.

Key SPC Dates

September 11th – 12th Class Day

October 11th – Fall Break

November 14th – Last Day to Withdraw from Classes

December 9th-12th – Finals Week



The “Course Fishing” Rule

This rule has been implemented for the Fall Semester of 2007 and is effective hereafter. As per House Bill 116 (Senate Bill 1231) of the Texas legislature, **all** students will be limited to a total of six (6) mid-semester withdrawals for their entire undergraduate academic career. A mid-semester withdrawal is one that occurs after the twelfth (12th) class day and is noted on the student’s transcript as a “W”, and upon the student receiving the sixth W, all future attempts to withdraw from a course mid-semester will be denied. As a result, a terminal course grade (A, B, C, D, or F) will be issued for the course in question. This does not include any withdrawals acquired by the student before the Fall Semester of 2007, so the count for each student under this rule is currently zero (0). **BE SURE OF YOUR INTENTIONS TO FINISH OUT THE COURSE BEFORE CONTINUING!**

Mr. Robert E. Plant, II
Fall 2019 Lecture Calendar
MATH 1342

Week	Monday	Wednesday
1 (1/13 to 1/17)	Introduction; 1.1	1.2 & 1.4
2 (1/20 to 1/24)	Mon: MLK, Jr. Holiday Tues: Follow-up	2.1 & 2.2
3 (1/27 to 1/31)	3.1, 3.2	3.4
4 (2/3 to 2/7)	Exam 1	10.1
5 (2/10 to 2/14)	10.2	4.1
6 (2/17 to 10/21)	4.2 & 4.3	Follow-up
7 (2/24 to 2/28)	5.1, 5.2 & 5.3	Follow-up
8 (3/2 to 3/6)	Exam 2	6.1
9 (3/9 to 3/13)	6.2	6.3
10 (3/16 to 3/20)	SPRING BREAK – NO CLASSES	
11 (3/23 to 3/27)	7.1, 7.2 & 7.3	Follow-up
12 (3/30 to 4/3)	Exam 3	8.1
13 (4/6 to 4/10)	8.2	8.3
14 (4/13 to 4/17)	Mon: Easter Break Tues: Follow-up	8.4
15 (4/20 to 4/24)	9.1, 9.2	Exam 4 Review
16 (4/27 to 5/1)	Exam 4	Q&A—Final Exam Review
17 (5/4 to 5/8)	FINAL EXAMINATION Wednesday, 5/6, 8:00 – 10:00 AM (Section 001) Tuesday, 5/5, 10:15 AM – 12:15 PM (Section 003) ORIGINAL CLASSROOM	

Mr. Robert E. Plant, II
TENTATIVE HOMEWORK CALENDAR
MATH 1342

Week	Week Day 1	Week Day 2
1 (1/13 to 1/17)	1.1: In-Section Exercises	1.2 & 1.4: In-Section Exercises
2 (1/20 to 1/24)	Mon: MLK, Jr. Holiday Tues: Follow-up	2.1 & 2.2: In-Section Exercises Weekly Homework #1
3 (1/27 to 1/31)	3.1: In-Section Exercises; 3.2: In-Section Exercises	3.4: In-Section Exercises; Weekly Homework #2
4 (2/3 to 2/7)	Exam 1	10.1: In-Section Exercises; Weekly Homework #3
5 (2/10 to 2/14)	10.2: In-Section Exercises	4.1: In-Section Exercises Weekly Homework #4
6 (2/17 to 2/21)	4.2 & 4.3: In-Section Exercises	Weekly Homework #5 & #6
7 (2/24 to 2/28)	Chapter 5: In-Section Exercises	Weekly Homework #7
8 (3/2 to 3/6)	Exam 2	6.1: In-Section Exercises
9 (3/9 to 3/13)	6.2: In-Section Exercises	6.3: In-Section Exercises; Weekly Homework #8
10 (3/16 to 3/20)	SPRING BREAK – NO CLASSES	
11 (3/23 to 3/27)	Chapter 7: In-Section Exercises	Weekly Homework #9
12 (3/30 to 4/3)	Exam 3	8.1: In-Section Exercises
13 (4/6 to 4/10)	8.2: In-Section Exercises	8.3: In-Section Exercises; Weekly Homework #10
14 (4/13 to 4/17)	Mon: Easter Break Tues: Follow-up	8.4: In-Section Exercises
15 (4/20 to 4/24)	9.1: In-Section Exercises; 9.2: In-Section Exercises	Weekly Homework #11
16 (4/27 to 5/1)	Exam 4	Weekly Homework #12; Final Exam Review
17 (5/4 to 5/8)	FINAL EXAMINATION Wednesday, 5/6, 8:00 – 10:00 AM (Section 001) Tuesday, 5/5, 10:15 AM – 12:15 PM (Section 003) ORIGINAL CLASSROOM	

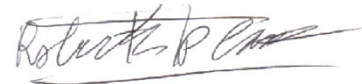
ACKNOWLEDGMENT OF RECEIPT

As a student in this course, I hereby acknowledge that I have received, read, and clearly understood the syllabus. Furthermore, I hold myself accountable for adhering to the expectations stated therein. I also acknowledge that it is my duty and responsibility to notify the instructor of all personal situations that affect my standing in this course before any occur. I am fully aware that any breach of said expectations and responsibilities on my part will result in any necessary consequences that the instructor has stated to me through the syllabus, and that any differences of opinion will be discussed with the instructor in a manner befitting of adults. Finally, in the event of a later dispute by me, I will refer to the syllabus and will, by my signature, forfeit any pursuit that is not backed by the syllabus.

Student's Printed Name

Date of Acknowledgment

Student's Signature



Instructor's Signature

Monday & Wednesday Schedule		Tuesday & Thursday Schedule	
<u>Class</u>	<u>Time</u>	<u>Class</u>	<u>Time</u>