

Math 0342/1342 Corequisite Statistical Methods COURSE DESCRIPTION: The Statistical Methods Support Course (MATH 0342) is the study of the basic algebraic concepts necessary for success in MATH 1342, to include order of operations, exponent rules, polynomials, radical expressions, graphing, and the solution of equations and inequalities. This course is not applicable toward any degree. Prerequisites: Math level 6, Reading level 7. Co-requisite: MATH 1342 (3:3:0)

In Statistical Methods (MATH 1342), the collection, analysis, presentation, and interpretation of data will be covered. Analysis includes descriptive statistics, probability, correlation and regression, confidence intervals, and hypothesis testing. It includes a heavy emphasis on applications. A grade of C or better is required from Math0342, Math0337, or Math0320. (3:3:0)

COURSE MATERIALS:

- **REQUIRED:** Any scientific Calculator, notebook paper and a spiral.
- Math 1342 Elementary Statistics Workbook by Pat Foard

GRADE RANGE:

90 – 100 A

80 – 89 B

70 – 79 C

60 – 69 D

Below 60 F (or X for non-completion of

course due to lack of attendance)

If you make a grade of A, B, or C then that is the grade you will be awarded for both halves of the course. However, if you COMPLETE THE COURSE and make a grade of D or F, then your grade for the Math 0342 course will be assessed at your professor's discretion. If you pass Math 0342 but not the Math 1342 portion of the course you will be able to register for Math 1342 in future semesters.

HOMEWORK/TEST MAKE-UP POLICY:

Homework and other assessments are mandatory. Knowledge of material will be assessed through graded assessments. Homework will be assigned on a daily basis. If a class is missed, it is the student's responsibility to obtain a copy of the notes, to pick up any worksheets or handouts, and to do the assigned homework. (Absence is not an excuse for failure to do homework.) Homework done after the due date will **not** be accepted. Completing all assignments is understood and expected, not optional.

There are **no retakes** on tests or the final exam. Exactly one test grade may be replaced with a higher final exam grade.

Class: Math 0342.C001/1342.C001
 Instructor: Alma F. Lopez
 Email: alopez@southplainscollege.edu

MTWT 11-12:15 am M112

Semester: Spring 2020
 Office: M116D 806-716-2640

Monday	Tuesday	Wednesday	Thursday	Friday
Jan 13 Syllabus and 1.1(28-29)	Jan 14 1.2 Freq Dist (30-32)	Jan 15 Integer operations	Jan 16 Order of operations	Jan 17
Jan 20 MLK Day	Jan 21 1.3 Graphs (33-38)	Jan 22 Review	Jan 23 Test 1	Jan 24
Jan 27 1.4 Central Tend (39-40)	Jan 28 CT on grouped data	Jan 29 Simplifying Radicals	Jan 30 1.5 Variation (41-44)	Jan 31
Feb 3 Variation on grouped data	Feb 4 1.6 Position (45-49)	Feb 5 Slope/Basic Graphing	Feb 6 Review	Feb 7
Feb 10 Test 2	Feb 11 Equations of Lines	Feb 12 2.1 Correlation (58-63)	Feb 13 Correlation (tests)	Feb 14
Feb 17 2.2 Regression (64-69)	Feb 18 Regression/Sest	Feb 19 Confidence Intervals	Feb 20 Finding sample sizes	Feb 21
Feb 24 Review	Feb 25 Test 3	Feb 26 Sample Spaces	Feb 27 3.1 Probability (89-92)	Feb 28
Mar 2 3.2 Probability	Mar 3 3.1 Probability (93-95)	Mar 4 Probability	Mar 5 Review Probability	Mar 6
Mar 9 3.3 Counting(96-98)	Mar 10 3.4 Binomial (99-102)	Mar 11 Binomial Applications	Mar 12 3.5 Normal Prob (103-106)	Mar 13 See you after Spring Break!
Mar 23 Normal Probabilities cont...	Mar 24 Review	Mar 25 Test 4	Mar 26 Solving linear inequalities	Mar 27
Mar 30 Intro to Hypothesis Testing	Mar 31 4.1 Single mean(127-130)	Apr 1 4.1 Single mean cont...	Apr 2 4.2 Proportions (132-134)	Apr 3
Apr 6 4.2 Variations (132-134)	Apr 7 4.3 one sample (135-137)	Apr 8 4.4 2 mean (138-140)	Apr 9 Applications	Apr 10
Apr 13 4.5 two prop (141-143)	Apr 14 4.5 Variances (141-143)	Apr 15 Applications	Apr 16 Review	Apr 17
Apr 20 Test 5	Apr 21 Final Project Assigned	Apr 22	Apr 23 LDTD	Apr 24
Apr 27 Topics	Apr 28 Review for final I	Apr 29 Review for final 2	Apr 30 Final Project Due!	May 1
May 4 Final Exam 10:15-12:15 am	May 5	May 6	May 7	May 8 Graduation!!

Common Course Syllabus: MATH 0342
Revised December 2019

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 0342

Course Title: Statistical Methods Support Course

Available Formats: conventional

Campuses: Levelland

Course Description: Math0342 is to be taken concurrently with MATH 1342. Background topics which are necessary for a student to successfully complete MATH 1342 will be covered, with an emphasis on integers, percentages, graphing, fractions, and exponents.

Prerequisite: Maximum score of 349 on the TSIA without an ABE score, or a successful completion of NCBM 0105..

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

Textbook: None

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

This course partially satisfies a Core Curriculum Requirement: None

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 cqjilster@southplainscollege.edu](mailto:cqjilster@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.