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

STUDENT LEARNING OUTCOMES:

MATH 0342

Upon successful completion of this course, the student will be able to:

1. Add, subtract, multiply, and divide real numbers.
2. Use order of operations to evaluate expressions.
3. Simplify and perform operations with radical expressions.
4. Solve linear equations and equalities of a single variable.
5. Graph linear equations functions.
6. Understand quadratic equations and modeling.
7. Understand the basics of statistical concepts.

MATH 1342

Upon successful completion of this course, students will:

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.

GENERAL EDUCATION OUTCOMES:

1. CRITICAL THINKING – Students will develop habits of mind, allowing them to appreciate the processes by which scholars in various disciplines organize and evaluate data and use the methodologies of each discipline to understand the human experience.
2. COMMUNICATION SKILLS – Students will communicate ideas, express feelings and support conclusions effectively in written, oral and visual formats.
3. EMPIRICAL & QUANTITATIVE SKILLS – Students will develop quantitative and empirical skills to understand, analyze and explain natural, physical and social realms.

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)

GRADING FORMULA:

Enrollment in this course does not guarantee advancement to the next course level. The final responsibility for learning lies with the student. The final letter grade for this course will be based on the following:

6 Tests	60%
Homework/Other Assessments	20%
Final Exam	20%
Total	100%

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.

ATTENDANCE POLICY: **If** a student misses class, it is *the student's* responsibility to obtain a copy of the notes, pick up any worksheets or handouts, and to do the assigned homework.

CLASS PARTICIPATION POLICY: You are expected to come to class on time every day. You are responsible for being in class to take notes. There are no make-up grades for missed quizzes.

CLASSROOM ETIQUETTE: Class attendance is expected, not optional. Preparation for class (including homework) is to be completed before – not during – the lecture. Chronic tardiness (entrance after lecture has begun) will be handled on an individual basis at the instructor's discretion but can include notation as absent and/or exclusion from admittance to class.

NO tobacco use of any form is allowed in the classroom.

All electronic communication devices are to be silenced and put away during class. A 20-point penalty will be assessed for accessing cell phones during lecture and a 100-point penalty will be assessed for accessing a cell phone during an exam (without permission).

Discussion of course material among students is encouraged during class, but habitually disruptive students will be asked to leave.

STUDENT SUPPORT: South Plains College provides free tutoring on a variety of subjects. Tutoring is FREE and is here to benefit you. There is a Student Tutoring Center on each campus.

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 Center 806-716-2577, Reese Center Building 8: 806-716-4675, Plainview Center Main Office: 806-716-4302 or 806-296-9611, or the Health and Wellness main number at 806-716-2529.

NON-DISCRIMINATION: 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.

SEXUAL MISCONDUCT: 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 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. Dr. Lynne Cleavinger, 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 Dr. Cleavinger at 716-2563 or lcleavinger@southplainscollege.edu or go by the Health and Wellness Center. You can schedule an appointment with a counselor by calling 716-2529.

DIVERSITY: 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.

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, please refer to the SPC policy at: (http://www.southplainscollege.edu/human_resources/policy_procedure/hhc.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.

HONESTY STATEMENT: South Plains College students should exhibit honesty, integrity, and high standards in their academic work. Members of the college community benefit from an open and honest educational environment. Upholding academic integrity is the responsibility of everyone. Refer to the Student Handbook Section: Policy on Cheating, Plagiarism, and Collusion.

USE OF STUDENT EMAIL: The College provides a free, official email account to all students to ensure efficient and secure communications between you and the College. Students will be required to use their college-issued email address to communicate with their instructors and all other college personnel, so it is easy to distinguish a student's email from spam. The College expects that students will utilize their college email addresses to send and receive communications with college personnel and will read email on a frequent and consistent basis.

WITHDRAWAL POLICY: Students starting college for the first time in Fall 2007 or after may only receive six grades of W (grade received from a course dropped after the census date) from all Texas public colleges and universities attended. Grades of W in developmental courses or courses taken while in high school will not count in the six grades of W. After six grades of W are received, students must receive grades of A, B, C, D, or F in all courses. There are other exemptions from the six-drop limit and students should consult with a Counselor/Educational Planner before they drop courses to determine these exemptions. Students receiving financial aid must get in touch with the Financial Aid Office before withdrawing from a course. It is the student's responsibility to drop. Excessive absences (7 or more absences) may result in an administrative withdrawal with a Grade of X. If you plan to withdraw, please consult with the instructor immediately.

*During exams and labs the use or possession of smartphones, smart watches, water bottles or any labeled bottled drinks, and bathroom breaks are not allowed. Any infraction will be penalized with a minimum 15 point deduction on exam and can result in the removal of the student from the course.

Class: Math 0342.C01/1342.C01 MTWT 8-9:15 am M112 Semester: Fall 2019
Instructor: Alma F. Lopez Office: M116D 806-716-2640
Email: alopez@southplainscollege.edu

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