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.

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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)

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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 Icleavinger@southplainscollege.edu or go by the Health and Wellness Center. You can schedule an appointment with a counselor by calling 716-2529.

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*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 AG103

Instructor: Alma F. Lopez

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

Semester: Spring 2019

Office: M116D 806-716-2640

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COURSE MATERIALS:

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

STUDENT LEARNING OUTCOMES:

MATH 0342

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MATH 1342

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