Statistics
MAT-12 Section Number 49276

Instructor: Mrs. Diana Pell

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Office: MTSC 122

Office Hours: MWF 11 AM - 12 PM and T 9:30 AM - 11:30 AM (and by appointment).

Communication: I will be using an app called Remind to communicate with you. In order to receive my notifications text @mat1294 to 81010.

Course Website: websites.rcc.edu/pell

Prerequisites: MAT 35

Course Description: A comprehensive study of measures of central tendency and variation, correlation and linear regression, probability, the normal distribution, the t-distribution, the chi-square distribution, estimation, testing of hypotheses, analysis of variance, and the application of statistical software to data, including the interpretation of the relevance of the statistical findings. Applications using data from business, education, health science, life science, psychology, and the social sciences will be included.

Required Materials: Graphing or scientific calculator.

Textbook: Elementary Statistics: A Step-By-Step Approach, 9th Ed., Bluman. You may buy the textbook with an access code for ConnectMath (bookstore price $160) OR you may buy the access code only (bookstore price $126.50) OR see instructions below on how to
purchase an access code online ($100 for the access code and $15 to order a loose leaf copy of the text). Access code itself comes with e-book. Physical textbook is not required. **If you are looking for the best deal and you are ok with an e-book, purchase the $100 option.**

**Student Learning Outcomes:** Upon successful completion of the course, students should be able to:

(1) Distinguish among different scales of measurement and their implications.

(2) Identify the standard methods of obtaining data and advantages and disadvantages of each.

(3) Interpret data displayed in tables and graphically.

(4) Calculate measures of central tendency and variation for a given data set.

(5) Apply probability concepts.

(6) Calculate the mean and variance of a discrete distribution.

(7) Calculate and interpret probabilities using normal and t-distributions.

(8) Distinguish between sample and population distributions and analyze the role played by the Central Limit Theorem.

(9) Determine and interpret levels of statistical significance, including p-values.

(10) Identify the basic concepts of hypothesis testing, including Type I and II errors.

(11) Interpret the output of a technology-based statistical analysis.

(12) Construct and interpret confidence intervals.

(13) Formulate hypothesis tests involving samples from one and two populations, including selecting the appropriate technique and interpreting the result.

(14) Use linear regression and ANOVA for estimation and inference and interpret the associated statistics.
Use appropriate statistical techniques to analyze and interpret applications based on data from business, education, health science, life science, psychology, and the social sciences.

**ConnectMath:** The ConnectMath Access Code is a mandatory part of this course. To obtain this code, go to the website [www.connectmath.com](http://www.connectmath.com) and follow instructions to sign up. If you purchase ONLY the code (costs $100), you will have access to an on-line version of the textbook. You may request a loose leaf copy of the textbook for additional $15.

The Course Code is: AXYNN-LU4RW

Once the course begins, click on the “HELP” link within ConnectMath if you experience technical difficulties. **DO NOT CALL YOUR INSTRUCTOR!!!** The ConnectMath telephone number is 949 - 390 - 2095.

**Homework:** Online homework will be assigned weekly. Some homework assignments might be written.

**Exams:** There will be three exams (in class) and a comprehensive final exam at the end of the term. No make-up exams will be given unless you provide documentation.

Exam I is on Friday, September 18.
Exam II is on Friday, October 9.
Exam III is on Wednesday, October 28.
Exam IV is on Wednesday, November 18.
Final Exam is on Wednesday, December 14 from 8:00 am to 10:30 am in the usual classroom.

**Grading:** Your grade will be based on the weighted average of your exams, in-class work, and homework scores, according to this formula: Quizzes, groupwork, and written homework 5%, online homework 10%, 60% in-class exams (15% each), and 25% final.

This course is graded on the following scale:

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A = 90 - 100\%; \quad B = 80 - 89\%; \quad C = 70 - 79\%; \quad D = 60 - 69\%; \quad F = 59\% \text{ or lower.}
\]
Attendance: It is extremely important that you attend every class session. Leaving early or arriving late is disrespectful and disruptive. Any student with two consecutive unexcused absences or a total of three unexcused absences may be dropped from the course. (An absence is unexcused if prior notification with an acceptable reason and/or documentation of an emergency is not provided). Arriving late or leaving early may count as an absence. Any student with any unexcused absences in the first two weeks of the course is subject to being dropped from the course. You must be signed up for ConnectMath within the first two weeks of the course with a permanent account or you may be dropped from the course.

Cell Phones: Please silence your cell phones while in class.

Special Needs: If you have a physical, psychiatric/emotional, medical, or learning disability that may impact your ability to carry out assigned course work, I urge you to contact the staff in the Disability Resource Center Office at (951) 222-8060. DRC will review your concerns and determine, with you, what accommodations are necessary and appropriate. All information and documentation is confidential.

Resources: I recommend studying together by forming study groups. Your classmates can be an excellent resource. You are also always welcome to come see me during my office hours. Tutoring is available in the Math Learning Center (located in MLK 305/307/308).

Cheating Policy: Students are expected to abide by the colleges policies regarding plagiarism and cheating. According to board policy, an instance of academic dishonesty may result in a reduced score, failing the course, or a recommendation of suspension from the course. A second offense may result in expulsion proceedings.

Important Dates:

Last day to add: September 11, 2015
Last day to drop without a W: September 13, 2015
Last day to drop with a W: November 20, 2015

0I reserve the right to make small changes to both your grade and the schedule due to unforeseen factors.