INSTRUCTOR INFORMATION

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Office: Godbey 50, Mall 105A
Office hours: Posted in Blackboard

IMPORTANT:
- The recommended browser to use with the current version of Blackboard is Mozilla Firefox. Other browsers are inconsistent in their performance with Blackboard. When taking tests or quizzes, USE a wired connection.
- Check your VCCS email regularly and respond/keep in touch with your instructor.

COURSE DESCRIPTION

Description: Presents elementary statistical methods and concepts including descriptive statistics, estimation, hypothesis testing, linear regression and categorical data analysis. (Credit will not be awarded for both MTH 157 and MTH 240.)
Prerequisites: MTT 6 and a placement recommendation for MTH 151.

Credits: 3
Submissions: There are 25 sections covered with MyStatLab; online homework due for each of them. There are 7 chapters covered with one or more online quizzes for each chapter, for a total of 10 quizzes. There will be four proctored tests.
Assessments/Tests: 5
Online Activities: Required
Prerequisite: MTT 6

COURSE MATERIALS

Author: Mario F. Triola, Publisher: Pearson

Calculator: TI-36X Pro, or the TI-84 which is what I would recommend.
Software: Microsoft Excel 2007 or later. Excel will not be required or available during the proctored tests.

Note: NRCC assumes no liability for virus, loss of data, or damage to software or computer when a student downloads software for classes.

NRCC Bookstore is located in Martin Hall, Dublin Campus. Books/materials can also be purchased online - http://www.nrbookstore.com/.

The Student’s Guide to Distance Education is available at http://www.nr.edu/de/pdf/stuguide.pdf
COURSE INFORMATION

Prepared By: Travis Coake
Approved By: Dr. Janice Shelton

A. INTRODUCTION

This is a Distance Education course designed specifically for those students whose learning styles are best served by providing instructional opportunities beyond the traditional classroom setting.

B. COURSE OUTCOMES

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

1. Solve application problems by interpreting the materials presented, including determining the nature and extent of the information needed, and present the answer in standard English.
2. Estimate and consider answers to mathematical problems in order to determine reasonableness.
3. Distinguish between population and sample, parameters and statistics.
4. Distinguish between types of data (numerical, categorical, nominal ordinal, interval, ratio).
5. Distinguish between types of statistical studies.
6. Determine the type of sampling that is used in a study and whether biases might result.
7. Simulate different types of sampling techniques.
8. Construct frequency distributions, histograms, bar charts, pie charts, stem plots, and box plots.
9. Read statistical graphs and use the graphs to analyze the data.
10. Calculate the mean, median, mode, range, quartiles, variance and standard deviation for a set of data.
11. Construct tables for two variable data, time plots, and scatter plots.
12. Calculate correlations and regression equations.
13. Use regression equations for prediction.
14. Construct and use discrete probability distributions.
15. Calculate the expected value of a discrete probability distribution.
16. Find probabilities and proportions using the standard normal distribution and the Empirical Rule.
17. Calculate z-scores and percentiles.
18. Use the Central Limit Theorem and the probability distribution of sample statistics to find probabilities.
19. Estimate population means, and proportions using the z-distribution.
20. Write a complete, concise interpretation for a confidence interval using standard English.
21. Test hypotheses about means and proportions.
22. Calculate and interpret P-values.
23. Test hypotheses about regression equations (optional).
24. Write a complete, concise conclusion for a hypothesis test for a given significance level using standard English.
25. Use a computer application such as Microsoft Excel to do statistical calculations and construct statistical graphs (optional).
C. **GRADING/EVALUATION**

1. The final grade for the course will be determined as follows:

   **Tests:** There will be five (5) proctored tests assessed through Blackboard. Each test will have a corresponding due date; however, any test may be taken at anytime up till the due date. There will be no makeup tests. The lowest of the 4 attempted tests will be dropped. If you miss a test the grade for that test will be recorded as a zero and will NOT be dropped. All tests must be attempted. All tests must be taken in a proctored setting at any of the NRCC approved sites, or on campus in the testing center.

   **Homework:** There will be online interactive homework assignments for each section covered in each chapter. Late penalty will be applied for late work.

   **Quizzes:** There will be one or more quizzes for each chapter totaling 10 quizzes for the course. The lowest of all the quizzes will be dropped.

   **Orientation:** Orientation will consist of registering with MyMathLab and completing the orientation homework assignment. In addition, you must email me when this work is completed by the due date.

   **Course Grade:** Your Course Average will be determined by your performance on the graded components of the course:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
<tr>
<td>Homework (MyMathLab)</td>
<td>15%</td>
</tr>
<tr>
<td>Quizzes (MyMathLab)</td>
<td>10%</td>
</tr>
<tr>
<td>Proctored Tests</td>
<td>55%</td>
</tr>
</tbody>
</table>

2. **Grading Scale:**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 - 100%</td>
</tr>
<tr>
<td>B</td>
<td>80 - 89%</td>
</tr>
<tr>
<td>C</td>
<td>70 - 79%</td>
</tr>
<tr>
<td>D</td>
<td>60 - 69%</td>
</tr>
<tr>
<td>F</td>
<td>Below 60%</td>
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D. **WITHDRAWAL POLICY**

**Student Initiated Withdrawal Policy**  
A student may drop or withdraw from a class without academic penalty during the first sixty percent (60%) of a session. For purposes of enrollment reporting, the following procedures apply:

a. If a student withdraws from a class prior to the termination of the add/drop period for the session, the student will be removed from the class roll and no grade will be awarded.

b. After the add/drop period, but prior to completion of sixty percent (60%) of a session, a student who withdraws or is withdrawn from a course will be assigned a grade of "W." A grade of "W" implies that the student was making satisfactory progress in the class at the time of withdrawal, that the withdrawal was officially made before the deadline published in the college calendar, or that the student was administratively transferred to a different program.

c. After that time, if a student withdraws from a class, a grade of "F" will be assigned. Exceptions to this policy may be made under documented mitigating circumstances if the student was passing the course at the last date of attendance.

A retroactive grade of "W" may be awarded only if the student would have been eligible under the previously stated policy to receive a "W" on the last date of class attendance. The last date of attendance for a distance education course will be the last date that work was submitted.

Late withdrawal appeals will be revised and a decision made by the Coordinator of Admissions and Records.

**No-Show Policy**  
A student must either attend face-to-face courses or demonstrate participation in distance learning courses by the last date to drop for a refund. A student who does not meet this deadline will be reported to the Admissions and Records Office and will be withdrawn as a no-show student. No refund will be applicable, and the student will not be allowed to attend/participate in the class or submit assignments. Failure to attend or participate in a course will adversely impact a student’s financial aid award.

**Instructor Initiated Withdrawal**  
Since attendance is not a valid measurement for Distance Education (DE) courses, a student may be withdrawn due to non-performance. A student should refer to his/her DE course plan for the instructor’s policy.

In accordance with the No-Show Policy, a student who has not attended class or requested/accessed distance learning materials by the last day to drop the class and receive a refund must be withdrawn by the instructor during the following week. No refund will be applicable.

The student will be notified of the withdrawal by the Admissions and Records Office. An appeal of reinstatement into the class may be approved only by the instructor.
E. CHEATING/PLAGIARISM POLICY

A grade of zero will be awarded to any writing assignments or tests that show cheating or plagiarism. To plagiarize is “To use and pass off as one’s own the ideas or writings of another.” (Definition adapted from the American Heritage Dictionary.) Remember that plagiarism includes lifting words or ideas from Internet sites, as well as copying from print sources.

F. DIVERSITY STATEMENT

The NRCC community values the pluralistic nature of our society. We recognize diversity including, but not limited to, race, ethnicity, religion, culture, social class, age, gender, sexual orientation and physical or mental capability. We respect the variety of ideas, experiences and practices that such diversity entails. It is our commitment to ensure equal opportunity and to sustain a climate of civility for all who work or study at NRCC or who otherwise participate in the life of the college.

New River Community 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: Dr. Mark C. Rowh, Vice President for Workforce Development and External Relations, 217 Edwards Hall, 540-674-3600, ext. 4241.

G. DISABILITY STATEMENT

If you are a student with a documented disability who will require accommodations in this course, please register with the Center for Disabilities Services located in the Advising Center in Rooker Hall for assistance in developing a plan to address your academic needs.