

8. Calculate the mean, median, mode, range, quartiles, variance and standard deviation for a set of data.
9. Construct tables for two variable data, time plots, and scatter plots.
10. Calculate correlations and regression equations.
11. Use regression equations for prediction.
12. Construct and use discrete probability distributions and binomial distributions.
13. Calculate the expected value of a discrete probability distribution.
14. Find probabilities and proportions using the standard normal distribution and the Empirical Rule.
15. Calculate z-scores and percentiles.
16. Use the Central Limit Theorem and the probability distribution of sample means to find probabilities.
17. Use the t distribution to find probabilities.
18. Estimate population means, and proportions using the z-distribution.
19. Estimate population means using the t-distribution.
20. Test hypotheses about means and proportions.
21. Calculate and interpret P-values.
22. Test hypotheses about regression equations.
23. Use the TI-83 or similar calculator to do statistical calculations and construct statistical graphs.

Material may be omitted according to time.

IV. Grading

Tests. There will be 5 tests given during the semester. The content of each test will be determined by the material covered up to that time. There will be no make up tests. Any test missed will receive the grade of 0. (See section **Final Exam**.) The test average will count as 50% of the course grade.

Quizzes. Homework will be assigned in every class period. There will be 4 to 5 quizzes over homework problems. Quizzes will include "Calculator Check-offs." These will be certain calculator proficiencies that students must individually come to the instructor to demonstrate. (i.e. creating graphs). For In-class portions of quizzes, there will be no make ups. Any quiz missed will be given the score "0". (See section Class Work.) The quiz average will count as 20% of the course grade

Class Work. Often problems will be assigned to be completed in class using notes and textbook. In-class assignments cannot be made up. The average of these problems throughout the semester can be used to replace the lowest Quiz score, including any missed quiz.

M&M Project. A hands on project involving M&Ms will be assigned in parts throughout the semester and a final summary project will be due at the end of the semester. Details about this project will be given later. The M&M project will count as 10% of the course grade.

Final Exam. There will be a comprehensive exam given during finals week. The average on the final can also be used to replace the lowest test score (including any missed test.) The Final Exam is 20% of the course grade.

Course Grade. Course grades will be calculated and the grading scale used as follows:

$$\text{Course Average} = 0.5(\text{Test Avg}) + 0.2(\text{Quiz Avg}) + 0.1(\text{M\&M Avg}) + 0.2(\text{Final})$$

Course Average	Letter Grade
90-100	A
80-89	B
70-79	C
60-69	D
Below 60	F

V. Class Procedures

During tests students should have nothing on their desk except the materials permitted for the test. All other books, papers and notebooks must be under the desk. Only instructor provided scratch paper and formula sheets are allowed.

All mobile phones should be turned off or turned to silent during class. Please no food or drink in class.

VI. Cheating

Giving or receiving help from another student or unauthorized individual on any graded portion of the course is considered cheating and will not be tolerated. Use of books, notes, homework, electronic devices (calculators permitted) or any unauthorized material during tests is considered cheating. Cell phone calculators are not permitted.

Any student found cheating will receive a grade of "0" on that particular assignment and possibly an "F" for the course. This "0" cannot be made up or replaced by any other score.

VII. Attendance and Withdrawal Policy

Attendance. Attendance will be taken at the beginning and end of each class meeting, if necessary. Students missing class are responsible for any material covered and assignments made in their absence. Graded in-class work cannot be made up. (See also **Homework** in section IV and **Instructor Initiated Withdrawal**, below.)

Withdrawal. The following is taken from the college catalog, pages 28 and 29:

Student Initiated Withdrawal

A student may drop or withdraw from a class without academic penalty during the first 60 percent 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 60 percent of a session, a student who withdraws from a class 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.

Late withdrawal appeals will be reviewed and a decision made by the Director of Student Services.

Instructor Initiated Withdrawal

A student who adds a class or registers after the first day of class is counted absent from all class meetings missed. Each instructor is responsible for keeping a record of student attendance in each class.

Students who have not attended class 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.

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When a student's absences equal twice the number of weekly meetings of a class, the student may be dropped for unsatisfactory attendance in the class by the instructor.

When an instructor determines that absences constitute unsatisfactory attendance, a Faculty Withdrawal Form should be completed and submitted to the Admissions and Records Office within five days of when the student met the withdrawal criteria. The last date of attendance must be documented. A grade of “W” will be recorded during the first sixty percent (60%) period of a course. Students withdrawn after the sixty percent (60%) period will receive a grade of “F” except under documented mitigating circumstances when a letter of appeal has been submitted by the student. A copy of this documentation must be placed in the student's academic file.

The student will be notified of the withdrawal by the Admissions and Records Office. An appeal for reinstatement into the class may be approved only by the instructor.

VIII. Disability Statement

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

IX. 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.