Instructor: Karen Lesser  Phone: (703) 323-3202
Office: McDiarmid Building – Room CM308  Fax: (703) 323-3841 (located in CT336)
Office Hours: Tues/Wed/Thurs from 12:20 – 2:00pm  Email: klesser@nvcc.edu
Available other times by appointment  Webpage: www.nvcc.edu/home/klesser

Class Meeting Info: Monday and Wednesday, 9:30am – 10:45am, Room CN104

Course Description:
Continues the study of estimations and hypothesis testing with emphasis on correlation and regression, analysis of variance, chi-square tests, and non-parametric methods. Lecture three (3) hours per week.

General Course Purpose:
The purpose of this course is to provide the student with the necessary abilities in inferential statistics to understand the results of statistical studies and to perform inferential statistical studies within their areas of interest. The course concepts would be beneficial for the student with an interest in statistics. Emphasis will be placed upon the use of the computer and the graphing calculator to perform statistical computations.

Entry Level Competencies/Prerequisites:
The prerequisite is MTH241 - "Statistics I" or equivalent.

Course Objectives / Educational Outcomes:
Upon completion of this course, the student should be able to:

– Compare and contrast $z$-tests, $\chi^2$ -tests, and $F$-tests for testing hypotheses
– Use the $F$-test to determine homogeneity of treatments
– Use software or calculator to compute and graph linear regression equations
– Use software or calculator to compute and interpret the Pearson correlation coefficient
– Formulate and test hypotheses concerning correlations
– State the assumptions in the ANOVA models
– Perform an analysis of variance for the completely randomized design and the randomized block design
– Use nonparametric methods for testing hypotheses
– Design a model for an experimental investigation
– Conduct a survey, analyze the data, and draw appropriate conclusions
– Use software to calculate $z$-scores, $t$-scores, $\chi^2$ -scores, and $F$-scores

Academic Dishonesty:
Please refer to the current NVCC College Catalog or http://www.nvcc.edu/curcatalog/admin/academic.htm for information regarding this policy.

ADA Policy:
Students with documented disabilities should contact a Counselor for Disability Services in the Annandale Campus Counseling Center in Room CG211 or at (703) 323-3200. Please provide your instructor with proper documentation from the Counseling Center before the end of the second week of classes so that appropriate accommodations can be arranged. All discussions are confidential.

Emergency/Inclement Weather Policy:
In case of an emergency while in class, please follow the emergency procedure as outlined in the “Emergency Response Guide” posted in the classroom. For weather related closings, please visit the college website for details. If class is cancelled for a non-weather related emergency, an announcement will be posted on the course BlackBoard site. Also, the instructor will email students using their NVCC email address.

Campus and Classroom Conduct:
You should feel safe and comfortable anywhere on this campus. Inform your instructor, her supervisor, the Dean of Students or the Provost if any unsafe, unwelcome or uncomfortable situation arises that interferes with the learning process. While in class, you are expected to conduct yourself in an appropriate manner conducive to a learning environment. It is requested that cellular phones and pagers be turned off prior to entering the classroom. Disruptive behavior will NOT be tolerated; this includes arriving late, leaving early and talking during class. Students can be asked to leave class or can be subject to seat re-assignment within the classroom if the behavior becomes habitual; if problems persist, disciplinary action will be taken at the division level.
Attendance:
You are expected to attend all scheduled classes, unless otherwise advised by the instructor. Regular attendance is extremely important for success in this course and will be used in computing your final grade. You will receive two (2) points for each class attended, and points will be deducted if you arrive late or leave early. If you must miss a class for any reason, please try to inform the instructor in advance. You are expected to keep current and make up any work missed during your absence.

Homework:
Homework will be assigned for each section. You are expected to do ALL homework assignments, as the instructor reserves the right to occasionally collect and grade homework. Bring your most recent homework to class each day, along with any questions you had about the assignment.

Group Research Project:
A statistical research project will be assigned and is worth 50 points toward your final grade. Your group will need to collect data and analyze the information gathered using a statistical software product of the group’s choosing. The group will submit a single report outlining the procedures used and the conclusions drawn. Additional information and guidance for these group projects will be provided near the middle of the semester.

Exams:
A total of four (4) exams will be given, and each exam is worth 100 points. A make-up test will be given ONLY if PRIOR arrangements have been made with the instructor. DO NOT ASSUME THAT THE INSTRUCTOR WILL ALLOW YOU TO MAKE UP AN EXAM BECAUSE YOU ARE ABSENT FROM CLASS. Please plan accordingly! See the Assignment Schedule provided with this syllabus for tentative exam dates.

Please be advised that points will be deducted on any exam for incoherent and incomplete work. Be aware that you must clearly show your work to earn full credit. Even if your answer is correct, you will lose points if legible supporting work is not provided. Although you may use your textbook, notes, and classroom presentation materials, you are expected to submit your own original work. If two (or more) students are suspected of collaborative work on an exam, then all students involved will earn no credit for those problems. Also, the use of cell phones, PDAs and other communication devices during an exam is strictly prohibited. If you forget your calculator, do NOT ask the instructor to borrow one — in other words, be prepared on exam day!

Grading System:
Your final grade for this course will be based on a 500-point system:

| Attendance: 25 Classes × 2 points | = 50 points |
| Project: 1 Project × 50 points | = 50 points |
| Exams: 4 Exams × 100 points | = 400 points |

**FINAL GRADE BASED ON:** 500 points

Final grades will be determined as a percentage of the 500-point system as follows:

A – 90% - 100%   D – 60% - 69%   W – Withdrawal
B – 80% - 89%   F – 59% or below   X – Audit
C – 70% - 79%   I – Incomplete

To receive a W or X, you must withdraw or change to audit status before March 26, 2010. The award of W after this date requires official documentation and the signature of the Dean of MS&E. Be aware that it is YOUR responsibility to withdraw before this date. A grade of incomplete (I) will be given ONLY if you cannot take the final exam for verifiable, unavoidable reasons that are documented and presented to the instructor. You will be expected to make up the final exam to receive a letter grade for the course. The last day for schedule adjustments with tuition refund is January 28, 2010. The last day to apply for graduation is March 1, 2010.