

Mount Saint Mary College
Newburgh, NY 12550
Division of Mathematics and Information Technology

MTH 2070-G1 - Elementary Statistics - Three Credits

Spring 2008 - Accelerated Schedule

Instructor: Prof. Robert P. Conti, Sr.

Office Hours: By appointment and before and after class, where possible.

Office: Aquinas Hall, Room 50B 845-569-3272 (Leave message with secretary)

Snow Line: 845-569-3500

E-mail: rconti@my.msmc.edu. My email address will be the primary source of contact this semester - students will be expected to have an email account as well as an id to the MSMC academic computing facilities.

URL: <http://faculty.msmc.edu/rconti>.

All class notes can be found in the directory: P:\rconti\Class Notes

All SPSS files can be found in the directory: P:\rconti\SPSS

Course Description:

This course introduces the student to the fundamental concepts of applied statistics, including descriptive statistics, frequency distributions, sampling distributions, hypothesis testing, estimation, correlation and regression. Emphasis is given to applications in the managerial, business and behavioral sciences. Students will also be using SPSS, a statistical software package for the social sciences, and will have access to the software in class.

Pre-requisites: Satisfactory score on math placement test or MTH 0150 (Algebra). Experience with PC software packages, including Excel is recommended.

Required text: Kendrick, J. Richard, Social Statistics: An Introduction Using SPSS for Windows 2nd Ed, Pearson Publishing, 2005.

SPSS Student Version 15.0 - highly recommended for part-time students to use on their home computers; full-time students are expected to use SPSS on the main campus.

Additional requirements: any scientific calculator (graphing calculator OK); CD-RW disk or flash drive.

Course Objectives: At the conclusion of this course, the student will be able to:

- ❖ Understand the uses and abuses of statistics
- ❖ Understand methods of descriptive statistics (e.g., measures of central tendency and measures of dispersion), apply them appropriately for data analysis, and interpret results
- ❖ Understand methods of inferential statistics, including appropriate methods of hypothesis testing and interpret results
- ❖ Understand the uses and abuses of statistics
- ❖ Create and analyze contingency tables
- ❖ Evaluate associations between numerical variables, including correlation and regression analysis
- ❖ Use SPSS and case studies to create and analyze data sets developed during the semester

Course requirements:

Tests (3) 80% - Two of these tests will be 90 minutes in length and will be held on the following dates: 4/2 and 5/7. The third test consists of weekly 20 point quizzes 20-30 minutes in length (except 2/13 and the two test dates). The lowest quiz grade will be dropped. Test grades will not be dropped or curved, so it is extremely important that you do your best.

Projects (2) 20% - Students will analyze a data set or case study. To analyze the data, students will use SPSS or case study to answer a specific set of questions. The majority of these projects will be done outside of class. Details for each project will be given at a later date. The due dates are listed in the course schedule. **If any class is cancelled due to snow, an additional project will be assigned for each class missed.**

Homework and Readings - you will be expected to read each chapter before class and homework will be assigned weekly. The Kendrick text has three types of problems:

- **Skills Practices** - sample problems throughout the text with the answers at the end of each chapter. These problems will not be assigned for HW, but may be used for discussion purposes. These problems are recommended for additional practice.
- **General Exercises (GE)** - These are problems that consist of questions based on the readings or manual (non-SPSS) calculations. The answers to the odd numbered exercises are given in Appendix G (pp. 513-548). The even numbered problems will be assigned for homework.
- **SPSS Exercises (SPSS (A), (B) or (C))** - These problems involve analyzing SPSS data sets. The "(A), (B) or (C)" correspond to the three data sets from the 2002 General Social Survey (GSS) and are named gss2002A.sav, gss2002B.sav, and gss2002C.sav, respectively. Like the GE's, the answers to the odd numbered exercises are given in Appendix G; evens are assigned for HW.

Note: While HW will not be collected and graded, the weekly quizzes will be used to evaluate the student's mastery of the HW and readings.

Penalties for late submissions: Projects will be due as scheduled. A penalty of five points will be assessed for each week the projects are not turned in. Once projects have been returned and graded, no credit will be given.

Attendance Policy:

Attendance will be taken at the beginning of each class. In accordance with the registrar's rules, four consecutive unexplained absences will be reported to the Registrar. Additionally, if you have four or more unexcused absences (consecutive or not), you will be ineligible to receive an I grade for the course. Excessive absences (and lateness) can be detrimental to the final grade. As in any mathematics course, what is learned in class is based on what was previously covered before. Make-ups will only be given for excused

absences; please plan accordingly. Excused absences include: death in the family, illness, business trip (appropriate documentation will be required for excused absences); all other absences will be considered unexcused). Also, you will be permitted two excused absences for quizzes (i.e., a make-up quiz will be given). After that, a zero will be given for each subsequent quiz missed. I have the final decision on granting excused absences.

Since this is an accelerated class, please keep in mind that you will be completing the equivalent of a 14-week course (28 class meetings) in a 12-week period (12 class meeting). Therefore, extra time outside of class will be required, including readings, SPSS exercises, projects, etc.

Grading Scale:

A	93-100	C+	75-77	F	Below 60
A-	88-92	C	72-74		
B+	85-87	C -	68-71		
B	82-84	D+	65-67		
B-	78-82	D	60-64		