

Statistics 201 Statistics I – Fall 2007

Instructor	Cindy Kaus	Office	Saint John's Hall 307
Email	Cindy.Kaus@metrostate.edu	Phone	651-793-1425
Address	College of Arts and Sciences, Metropolitan State University, 700 E. Seventh Street, Saint Paul, MN 55106		
FAX	651-793-1446 (ATTN: Cindy Kaus)		

Office Hours To be announced at the 2nd class meeting after getting feedback from students on schedules. I have an open door policy and walk-ins are always welcome!

Text *The Practice of Statistics*, Third Edition by Yates, Moore and Starnes and a free subscription to *The New York Times* online (you can access the NY Times at www.nytimes.com/university)

Calculator TI-83 or TI-84 series Graphing Calculator Required

Prerequisite The prerequisite for this course is satisfactory completion of Math 101 or placement at the STAT 201 level on the mathematics assessment test offered by Diagnostic Services. If you did not take the test consult with me first and then check the class schedule for specific times and call Diagnostic Assessment at (651)793-1537 to reserve a space to take the exam.

Introduction On a daily basis, we receive information connected to statistical data on subjects ranging from politics, health care, finance and education. An understanding of the discipline of Statistics may be one of the most beneficial tools that an informed citizen can possess. It is extremely important for citizens in today's society to be able to properly evaluate data and the claims made with that data. With the proper tools from statistics, people are able to make informed decisions. Those decisions may relate to the natural sciences, the social sciences, medicine, business or even every day life situations.

Statistics is a mathematical science pertaining to the collection, analysis, interpretation, and presentation of data. It is applicable to a wide variety of academic disciplines, from the physical and social sciences to the humanities. It is also used and misused for making decisions in all areas of business, health and government. Statistical methods can be used to summarize or describe a collection of data; this is called descriptive statistics. Inferential statistics is used to make conclusions about a general population based on data from a sample of the population. In this course, we will learn the basics of both descriptive and inferential statistics and examine how an understanding of these can lead to being a more informed and involved citizen.

Competence Statement A student who successfully completes this course will know the principles and methods of statistics used in the description and analysis of data, including collection of data, design of experiments, sampling, correlation, regression, confidence intervals, and significance tests.

Grade Breakdown Your final grade will be based on the following:

EXAM I	20%
EXAM II	20%
EXAM III	20%
Group Project	25%
Group Work	15%

You will be guaranteed an

A if you earn at least **90%** of the total points

B if you earn at least **80%** of the total points

C if you earn at least **70%** of the total points

D if you earn at least **60%** of the total points

F if you earn less than **60%** of the total points

Exams There will be 3 exams. All exams will be closed book; however, you will be allowed to use both sides of one 8 ½ x11 page of notes for each exam. Make up exams will be given only to students who have contacted me prior to the exam time and have a legitimate excuse for missing the exam.

Group Project This course is developed with the same goals as the standard STAT 201 course but with an emphasis on preparing students to play active roles in addressing the problems and challenges of the larger society and world in which they live, using statistics as a tool. This is done through semester-long group projects involving social issues. You will work in groups of 2, 3 or 4 students on a topic of your choice. The end result will be a written report and oral report of your statistical findings and a plan to disseminate the results to a wider audience.

To aid your group in communicating about the project, a Desire2Learn course web site will be created where you can communicate within your group, with the instructor or with other classmates.

Homework and Group Work The tentative schedule for homework is given below. Homework will **not** be collected. However, I strongly encourage you to work together in groups on the homework assignments and to write up each assignment in a professional manner. I will answer questions on the homework via email, phone, during office hours and at the beginning of class.

My courses require your active participation. One way to participate in class is through group work. You will work in groups of 3 or 4 students during class time. Each student will hand in an individual write-up of the assignment at the end of the activity. I will collect the assignment, grade each one individually and then return them at our next class meeting. Because of their nature, there will be no make-ups.

Expectations Students should attend class fully prepared to engage in the course material. This means that the sections in the book that are going to be covered that day should be read and reviewed *before* attending class. During the lecture portion of the class, students are expected to ask questions. Remember, the only “dumb” question is the question that is not asked.

Academic Dishonesty Plagiarism and cheating will not be tolerated. All students are expected to complete their own assignments and take their tests without anyone (or anything) else’s help. The professor reserves the right to fail (F) anyone who demonstrates academic dishonesty.

Students with disabilities Special accommodations can often be made for those with learning disabilities. If you have a documented learning disability, or if you suspect you have a learning

disability that may impact your opportunity to succeed in this course, please talk to me and/or contact the Disability Services Office at (651) 793-1540 or tty (651) 772-7687.

Math Tutoring There is math tutoring available in the math center. Please be aware that this is a walk-in service so plan accordingly. Contact the math center for hours of operation (651)793-1460.

Final Grade Please note that your final grade is the grade that you earned during the course of the semester. You do not *receive* a grade, you *earn* it. I will be glad to sit down with you during the semester and discuss your grade and how *YOU* can improve that grade. Please take me up on this offer if you have any concerns at any time during the semester.

Note Changes may be made to this syllabus. You should be aware of any announcements made in class.

Statistics 201
Tentative Schedule for Fall 2007

Week	Date	Section	Homework to be completed by next class
1	8/31	Introductions 5.1 5.2 <i>GP Stage 1: Brainstorming for Group Project Topics</i>	5.1, 5.3, 5.5, 5.7, 5.11, 5.13, 5.15, 5.21 5.33, 5.39, 5.41, 5.43, 5.45, 5.49, 5.53
2	9/7	1.1 1.2	1.5, 1.7, 1.10, 1.11, 1.15, 1.28, 1.29 1.31, 1.34(omit e), 1.37, 1.39, 1.43, 1.47, 1.57ab
3	9/14	2.1 2.2 <i>Students Fill out Preference Sheet for Topics</i>	2.1, 2.3, 2.5(omit e), 2.7(abc), 2.9, 2.12, 2.15 2.23, 2.25, 2.29, 2.33, 2.44, 2.45, 2.51, 2.54
4	9/21	3.1 3.2 3.3 <i>Groups for Projects Formed</i>	3.1, 3.5, 3.7, 3.9, 3.15, 3.21, 3.23, 3.27 3.33, 3.39, 3.43, 3.53 3.59, 3.63, 3.71, 3.81
5	9/28	EXAM I	Covering Ch. 5, 1, 2, and 3 (sections covered in class)
6	10/5	4.2 4.3 <i>GP Stage 2: Proposal of Group Project Due</i>	4.23, 4.25, 4.27, 4.31-4.35, 4.37, 4.38 4.41, 4.45, 4.47, 4.53
7	10/12	6.2 7.1	6.5, 6.7 6.24, 6.29, 6.33, 6.35, 6.37, 6.39, 6.41, 6.47, 6.48 7.2, 7.3, 7.5, 7.7, 7.11, 7.13, 7.15
8	10/19	7.2 8.1 <i>GP Stage 3: Data Collection Due</i>	7.23, 7.27, 7.34 8.1, 8.3, 8.5, 8.7, 8.11, 8.13, 8.15, 8.19
9	10/26	9.1 9.3	9.1, 9.2, 9.7, 9.10, 9.11, 9.13 9.31, 9.32, 9.35, 9.39
10	11/2	EXAM II	Covering Ch. 4, 6, 7, 8, 9 (sections covered in class)
11	11/9	10.1 10.2 <i>GP Stage 4: Rough Draft of Project Due</i>	10.1, 10.3, 10.5, 10.9, 10.11, 10.13, 10.15 10.27, 10.28, 10.31, 10.33
12	11/16	11.1 11.2	11.1, 11.3, 11.5, 11.9, 11.11, 11.15, 11.21 11.29, 11.31, 11.33, 11.37, 11.39

Week	Date	Section	Homework to be completed by next class
13	11/23	Thanksgiving Break – no classes	
14	11/30	11.3 11.4	11.43, 11.45, 11.47, 11.49, 11.53 11.59, 11.61
15	12/7	EXAM III	Covering Ch. 10, 11 (sections covered in class)
16	12/15	<i>GP Stage 5 & 6: Final Written Project with Action Plan Due & Oral Presentation to Class</i>	