Cedar Crest College
ℙrobability and Statistics - MAT 110 02 2
Spring 2010
MWF 11:00 am-11:50 am CUR 206

Professor: Dr. Michael Sarver   Phone: ext. 4449
Office: Curtis 219   e-mail: mwsarver@cedarcrest.edu

Office Hours
Monday, Wednesday, Friday 9:00 a.m. - 9:50 a.m.
Monday, Wednesday 1:00 p.m. - 3:00 p.m.
Additional office hours are available by appointment.

Required Text:
   Bluman, Elementary Statistics, 7th ed., McGraw Hill, 2009.

Course Description:
   This course examines the collection, organization, analysis, and interpretation of data in the context of applications from such fields as business, education, political science, economics, psychology, sociology, nutrition, and medicine. The importance of experimental design and sampling techniques are studied and stressed throughout the course. Elementary probability theory is introduced as well as the following theoretical distributions: binomial, normal, and Student's t. Linear regression techniques and correlation analysis are used to study bivariate populations. An algebra background is required as well as a scientific or statistical calculator.

Course Outcomes:
   Students will demonstrate critical reasoning and problem solving skills within the following contexts:

- Discussing statistics as a necessary way of understanding a world that is increasingly number and information oriented.

- Examining how statistics can be distorted and misused.

- Emphasizing ways information can be simplified and described.

- Exploring useful methods of making predictions based upon available information considering elementary probability theory and the following important theoretical distributions: binomial, normal, Student's T, and chi-square.

- Studying bivariate populations through linear regression and correlation analysis.

Assessment:
   There will be three exams each worth $\frac{1}{3}$ of your final grade.

   The grade scale that I will use to assign final grades is A [93-100], A- [90-93), B+ [87-90), B [83-87), B- [80-83), C+ [77-80), C [73-77), C- [70-73), D+ [67-70), D [60-67), F [0-60).

   Attendance in class is expected of all students and mandatory on exam days, but it will not be factored numerically into your grade. Make-up exams will be given only with prior notification and documentation of a legitimate excuse.

Notes

- I fully support the Cedar Crest College Honor Code and the Classroom Protocol code as stated in the Customs Book. Appropriate classroom behavior is implicit in the Cedar Crest College Honor Code. Such behavior is defined and guided by complete protection for the rights of all students and faculty to a courteous, respectful classroom environment. That environment is free from distractions such as late arrivals, early departures, inappropriate conversations and any other behaviors that might disrupt instruction and/or compromise students' access to their Cedar Crest College education.

- Collaboration on daily homework is expected and encouraged, but any work turned in for a grade should be your own. Violations of the college plagiarism policy will be reported to the dean and result in a grade of zero for the particular exam.

- It is vitally important for you to keep current with the work. Students who fall behind early quickly find themselves in a hole that is very difficult, if not impossible, to get out of. I'm more than willing to meet with you during my office hours or otherwise to help you succeed, but you must make the effort. Feel free to drop by my office, even if it's not my scheduled office hour.

- The format of the course will be lecture/discussion with much emphasis on homework discussion. In order for this to work it is vitally important for you to come to class prepared.

- It will be beneficial for you to have read the day's material before coming to class.

- Students with documented disabilities who may need academic accommodations should discuss these needs with me during the first two weeks of class. Any student who wishes to request accommodations should contact the Advising Center.

Tentative Schedule

Date	Day	Sections
Jan 20	Wednesday	Intro, 1-1
Jan 22	Friday	1-2, 1-3
Jan 25	Monday	1-4
Jan 27	Wednesday	2-1, 2-2
Jan 29	Friday	3-1
Feb 01	Monday	3-2
Feb 03	Wednesday	3-3
Feb 05	Friday	3-4
Feb 08	Monday	Review
Feb 10	Wednesday	**Exam #1**
Feb 12	Friday	4-1
Feb 15	Monday	4-2
Feb 17	Wednesday	4-3
Feb 19	Friday	4-4
Feb 22	Monday	4-5
Feb 24	Wednesday	4-5
Feb 26	Friday	5-1
Mar 01	Monday	5-2
Mar 03	Wednesday	5-3
Mar 05	Friday	Review/Problem Session
Mar 08	Monday	Spring Break
Mar 10	Wednesday	Spring Break
Mar 12	Friday	Spring Break
Mar 15	Monday	5-4
Mar 17	Wednesday	Review
Mar 19	Friday	**Exam #2**
Mar 22	Monday	6-1
Mar 24	Wednesday	6-2
Mar 26	Friday	Review/Problem Session
Mar 29	Monday	6-3
Mar 31	Wednesday	6-4
Apr 02	Friday	No Class
Apr 05	Monday	No Class
Apr 06	Tuesday	7-1
Apr 07	Wednesday	7-2
Apr 09	Friday	7-3
Apr 12	Monday	7-4
Apr 14	Wednesday	Review/Problem Session
Apr 16	Friday	8-1
Apr 19	Monday	8-2
Apr 21	Wednesday	8-3
Apr 23	Friday	8-4
Apr 26	Monday	10-1
Apr 28	Wednesday	10-2
Apr 30	Friday	11-3
May 03	Monday	Review/Problem Session
May 05	Wednesday	Review
TBA		**Exam #3**