

## **MATH 130.05: ELEMENTS OF STATISTICS I FALL 2009**

- Instructor:** Dr. Antonia Cardwell
- Office:** 206B Wickersham
- Phone:** x3479 (You can leave a message on my voice mail if I'm not in, but e-mail is better.)
- E-mail:** Antonia.Cardwell@millersville.edu
- Webpage:** <http://www.millersville.edu/~cardwell/fall09/130-05/130-05.html>
- Lecture Hours:** 11:00 - 12:15 TR, 218 Wickersham Hall
- Office Hours:** 10:00 - 11:00am MWF, 9:00 - 10:00 TR  
If the above times are inconvenient, see me after class and we'll make an appointment. I am also around at other times, so feel free to drop in.
- Text:** *Fundamentals of Statistics* (Second Edition) by Michael Sullivan III  
We will cover the following sections in the text: 1.1 - 1.4, 2.1 - 2.3, 3.1, 3.2, 3.4, 3.5, 5.1 - 5.5, 6.1, 6.2, 7.1 - 7.3, 8.1, 9.1 - 9.3, 10.1 - 10.4 and 11.1 - 11.2. If you miss class please contact me or a classmate, or check the webpage, as soon as possible to find out what you missed.  
You are required to have access to a scientific calculator; it will be needed for some of the problems on the tests and the homework. Please note that you cannot share a calculator with someone else during an exam, and you may not use a cell phone as a calculator. If you have any questions about whether a calculator is acceptable, please ask.
- Description:** Math 130 is a 3-credit course covering derivation of basic formulas; measures of central tendency and variability; probability and normal curve; sampling and hypothesis testing and confidence intervals. The prerequisite is any 100 level MATH course or MPT. This course may not be taken for credit towards the math or computer science major. This course may be taken for G2 credit except for majors in the School of Science and Mathematics (except for nursing majors.)  
  
In this course you will: be introduced to elementary probability and its applications; be introduced to some basic methods of statistical analysis; be provided enough statistical training that you can read research articles, communicate with statisticians, and interpret computer outputs involving means, standard errors, significance levels, confidence limits and other fundamental measures; and be introduced to a statistical computing package (Minitab) and use this package to solve problems in probability and statistics.
- Minitab:** You may obtain a student copy of Minitab by taking a blank CD-R to the help desk in Boyer. You will be participating in an in-class training session for Minitab (tentatively scheduled for 9/15/09). You will need to bring a flash drive with you on this day to save your work. Also, you will need to be required to authenticate ('log on') to the PCs in the lab. You may want to check and make sure you can log on to a PC in the Math lab \*before\* the lecture date. If you have trouble doing this, call the Help Desk at ext. 2371.
- Attendance:** Attendance is not compulsory but is *highly* recommended (and you lose points if you miss graded work).

**Grading:** Your grade will be calculated based on the following work:

|   |            |
|---|------------|
| 3 in-class exams (100 points each):     | 300        |
| Final exam:                             | 150        |
| Best 3 of 4 Quizzes (15 points each):   | 45         |
| 4 Minitab assignments (15 points each): | 60         |
| Total points:                           | <u>555</u> |

**Homework:** Homework will be assigned daily and is an essential part of the course.

**Exams:** The final exam for this section will be held on Tuesday, December 15th, 2009, from 8:00am - 10:00am. You will need a *documented* excuse to take a test at any time other than the scheduled time. If possible, contact me ahead of time so that alternative arrangements can be made. Tests will not be rescheduled to accommodate vacation travel - be sure to make your travel arrangements so that they do not conflict with exams, class times or deadlines. For an assignment that is handed in after the specified due date, five points will be deducted for each class date that the homework is late, unless a valid excuse is given. You may hand in your assignments early.

**Grades:** To calculate your grade, I will add up the points that you have accumulated from tests, quizzes, and

| Percentage Range | Grade |
|------------------|-------|
| 93.0 - 100.0     | A     |
| 90.0 - 92.9      | A-    |
| 87.0 - 89.9      | B+    |
| 83.0 - 86.9      | B     |
| 80.0 - 82.9      | B-    |
| 77.0 - 79.9      | C+    |
| 73.0 - 76.9      | C     |
| 70.0 - 72.9      | C-    |
| 67.0 - 69.9      | D+    |
| 63.0 - 66.9      | D     |
| 60.0 - 62.9      | D-    |
| 0 - 59.9         | F     |

**Academic Honesty/Integrity:** The University's policies regarding academic honesty can be found at <http://muweb.millersville.edu/~govern/sect3/acaddis.html>. Students should observe these policies as I will enforce them.

**Special Accommodations:** It is University policy to provide reasonable accommodations to students with disabilities. Please contact the Learning Services Office, 348 Lyle Hall, 717-872-3178, to discuss accommodation needs.

**Mathematics Assistance Center:** There is a Mathematics Assistance Center (MAC), staffed by our math majors, that is located in 100 Wickersham, and is open beginning with the second week of class. You might also find it helpful to form study groups to help each other with the homework. Space is allocated on a bulletin board at the MAC for students to place "study partner wanted" ads.