

ECON 231.01
Applied Statistics I
MWF 2:00pm-2:50pm
McCom 235

Dr. Ron Baker
325 McComsey Hall
717-872-3560
ron.baker@millersville.edu

Office Hours: Tues 9am-11am
Wed 3pm-4pm
Thurs 9am-11am
By appointment

Required Text: *Essentials of Statistics*, 2nd ed. by Mario Triola. Pearson Addison-Wesley 2005

Internet Resources (Blackboard): <http://muweb.millersville.edu/~muonline>

Course Objective: Statistics is a branch of mathematics concerned with the collection, organization, and interpretation of numerical data, especially the analysis of population characteristics based on sample inference using probability theory. Upon completion of this course, students should be able to 1) describe numerical data accurately and concisely through the use of summary statistics, tables and graphs; 2) learn basic methods of sampling and data collection; and 3) draw statistical inferences using the results obtained by the application of basic statistical methods through the use of *Microsoft Excel*.

Grading System: There will be 1000 possible points allocated to course assignments and exams. The breakdown of points is as follows.

Homework (best 5 of 7 assignments) –150 points total (30 points for each assignment)
Exam 1 (2/16)—200 points
Exam 2 (3/21)—200 points
Exam 3 (4/13)—200 points
Final (5/8)—250 points

Regular class attendance and participation is expected throughout the semester.

Grading Distribution:

93%-100%	A	80%-82%	B-	67%-69%	D+
90%-92%	A-	77%-79%	C+	63%-66%	D
87%-89%	B+	73%-76%	C	60%-62%	D-
83%-86%	B	70%-72%	C-	below 60%	F

Note: Scores will be rounded up at .5 or more and rounded down at .49 and lower. For example, a percentage of 89.5 will be rounded to 90, and a percentage of 89.49 will be rounded down to an 89.

Grades will be updated through Blackboard.

Class Policies

- Homework will be due the beginning of class. Late homework will not be accepted.
- If you have a documented, verifiable emergency (serious illness, death in the family) that will cause you to miss an exam, let me know as soon as possible. An unexcused absence will result in a grade of zero. In the case of an excused missed exam, the score on the final exam will also count for the score on the missed exam.
- I follow the policy outlined in the Student Handbook with regard to cheating and academic dishonesty (<http://muweb.millersville.edu/~govern/sect3/acaddis.html>). A grade of zero will be given to any assignment or exam on which the student is guilty of cheating, the incident will be reported, and further actions ranging from a written reprimand to expulsion will be taken.
- If you have any special needs documented by the Office of Learning Services, it is your responsibility to contact me by September 9 to ensure those needs are met.
- I will only use marauder email to send messages to the class. Please check your marauder email often.
- *Microsoft Excel* will be used for all calculations during exams. No use of graphing calculators, PDAs, and cell phones are permitted. Further, the lab will not be equipped with any of the add-ins supplied with the text CD-ROM. It is to your benefit to not rely on these programs when completing homework because they are not an option during exams.
- I will not tolerate any classroom disruption. Disruption includes but is not limited to: arriving late, packing up and leaving early, reading the newspaper, and any cell phone/PDA use. Further, when not using the computer in class, PLEASE TURN OFF THE MONITOR. I reserve the right to dismiss you from class for repeated disruptions. Treat your classmates and I with respect and respect will be given to you.

Semester Schedule

Week 1: (1/16 – 1/20)	Types of Data/Frequency Distributions Ch. 1 pp. 4-26 Ch. 2 pp. 26-44
Week 2: (1/23 – 1/27)	Visualizing Data/Measures of Center Ch 2. pp. 44-63
Week 3: (1/30 – 2/3)	Measures of Variation/Probability Ch. 2 pp. 68-81 Ch. 3 pp. 112-128
Week 4: (2/6 -2/10)	Probability/Binomial Distribution Ch. 3 pp. 131-145 Ch. 4 pp. 166-192

- Week 5: Exam 1 (2/15)/Normal Distribution
(2/13 – 2/17) Ch. 5 pp. 204-223
- Week 6: Sampling Distribution/Central Limit Theorem
(2/20 – 2/24) Ch. 5 pp. 226-244
- Week 7: Confidence Intervals using Z
(2/27 – 3/3) Ch. 6 pp. 266-294
- Week 8: Confidence Intervals using T
(3/6 – 3/10) Ch. 6 pp. 298-309
- Week 9: Spring Break
(3/13 – 3/17)
- Week 10: Exam 2 (3/22)/Hypothesis Testing
(3/20 – 3/24) Ch. 7 pp. 334-351
(Note: Last day for automatic withdrawal is 3/24)
- Week 11: Hypothesis Testing
(3/27 – 3/31) Ch. 7 pp. 354-379
- Week 12: Correlation/Regression
(4/3 – 4/7) Ch. 9 pp. 446-476
- Week 13: Correlation/Regression
(4/10 – 4/14) Ch. 9 pp. 446-476
(Note: 4/11 is a scheduled makeup day)
- Week 14: Variation and Prediction Intervals/Exam 3 (4/19)
(4/17 – 4/21) Ch. 9 pp. 481-487
- Week 15: ANOVA or Catch up
(4/24 – 4/28) Ch. 10 540-554
- Week 16: Open Date/Review for Final
(5/1 – 5/3)
- Week 16: Final Exam May 10 10:15am-12:15pm