Elementary Statistics Oriented Towards Life Sciences
Writing to Learn Class
Spring 2003
Course Syllabus

Instructor: Dr. Jayawardhana               Phone: 235-4414
Office: 207 Yates Hall                  e-mail: ananda@pittstate.edu
Office Hours: Check the timetable below
Class web page: http://faculty.pittstate.edu/~ananda/MATH143LSWL.HTML
Prerequisites: College Algebra

Coverage:

Chapter 1: Introduction (1.1-1.7)
Chapter 2: Summarizing Data: Listings and Groupings (2.1-2.4)
Chapter 3: Summarizing Data: Statistical Descriptions (3.1-3.8)
Chapter 4: Possibilities and Probabilities (4.1-4.5)
Test 1
Chapter 5: Some Rules of Probability (5.1-5.3, 5.4, 5.5)
Chapter 6: Probability Distributions (6.1, 6.2, 6.4, 6.6, 6.7)
Chapter 7: The Normal Distribution (7.1-7.4)
Test 2
Chapter 8: Sampling and Sampling Distributions (8.1-8.4)
Chapter 9: Problems of Estimation (9.1-9.3, 9.5)
Test 3
Chapter 10: Tests Concerning Means (10.1-10.9)
Chapter 11: Tests Based on Count Data (11.1-11.6)
Test 4
Chapter 12: Regression and Correlation (12.1-12.5)

Final exam will be comprehensive.

Evaluation:   Hour Tests = 400 points
               Quizzes = 100 points
               Computer Assignments = 50 points
               Weekly Writing Assignments = 100 points
               Final = 200 points

Grading Scale: 90%-100% = A
                80%-89% = B
                70%-79% = C
                60%-69% = D
                <60% = F

Instructor keeps the right to lower the scale if necessary.
The Writing Component

Statement of Intent:

You will be expected to write about some concepts you learned during the week and turn it in on next Monday at the beginning of the hour. Late assignments will not be accepted. However the two lowest scores from weekly writing assignments will be dropped. There will be a quiz every Friday and whenever possible a writing component will be attached to the quiz. All the in-class exams will have a writing component, which is worth less than 20% of the total points. You will be expected to write about statistical concepts. Any late assignment will be given half credit after the due date. Writing will be an integral part of this course and you will be expected to express yourself clearly and accurately. Neatness will be counted in the grading. You are encouraged to go to the Writing Center if you need help. There will be very little group work but class discussions will be encouraged.

Philosophy of Writing:

Clear thinking and presenting is very important in statistics. Often analyzing data and reporting results involves a lot of organizational, analytical, and presenting skills. You will be successful if a non-statistician could understand your writing and if you could understand a well-written statistical report or paper meant for general audience. Writing will help you think more clearly and eventually clear thinking will improve your writing.

Weekly Writing Assignment:

Instructor will assign a topic for each week at the beginning of the week. These assignments should be about two pages long. All the assignments should be double-spaced and typewritten. Please write on one side only. Please staple the sheets from the left-hand top corner. Ten percent of the grade of writing assignments will be given to neatness. At the end, weekly writing assignments will be scaled to 100 points.

Weekly Writing Assignment Guidelines:

- Explain the topic: Definition, formula, and intuition behind the definition and formula if possible
- Write about related definitions those are important to understand the topic and give some simple examples to explain the related definitions (This is not the main topic)
- Write about how to apply the concepts, any rules related to the topic, how to use tables if applicable, any exceptions to the rules, etc. (This is a major part of the writing)
- Relate this topic to real life situations if possible and give an example
- If possible report about a related magazine or newspaper article, research article, or radio or television program
General Comments

Regular attendance is expected, but it is not counted in your grade. Students with poor attendance record will be dropped out of the class. Exam dates will always be announced at least two class sessions ahead of time. The last in-class exam may be given during the last week of classes. There will be at least one quiz every week. No make-up will be given for these quizzes unless prior arrangements are made with the instructor, but the two lowest scores from the quizzes will be dropped. At the end quizzes will be scaled to 100 points. You are expected to do the suggested homework and go to the blackboard whenever I ask you to. No tests will be made up except for absences due to official university activities or health problems with a Dr.’s excuse.

If you have a special need addressed by the American with Disabilities Act, please notify me immediately so that appropriate accommodations can be provided.

Suggested Homework

Chapter 1: 1.2, 1.5, 1.8, 1.11, 1.14
Chapter 2: 2.11, 2.22, 2.30, 2.31, 2.40
Chapter 3: 3.7, 3.18, 3.31, 3.35, 3.49, 3.51, 3.60, 3.65, 3.86, 3.89, 3.94
Chapter 4: 4.11, 4.26, 4.28, 4.39, 4.41, 4.43, 4.51, 4.55, 4.58, 4.76, 4.81
Chapter 5: 5.6, 5.12, 5.13, 5.14, 5.24
Chapter 6: 6.2, 6.11-6.17, 6.61, 6.63, 6.68
Chapter 7: 7.1, 7.8-7.13, 7.15, 7.25-7.30
Chapter 8: 8.21, 8.36-8.39
Chapter 10: 10.12, 10.13, 10.16, 10.22, 10.25, 10.26, 10.38, 10.39, 10.42
Chapter 11: 11.11-11.13, 11.15, 11.23
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