COURSE SYLLABUS
FOR
INTRODUCTORY PROBABILITY AND STATISTICS
(STA/MTH 169) – SPRING 2008
CLASS LOCATION: LDB 219 -- MEETING TIME 1 – 2 MWF

TITLE: Introductory Probability and Statistics

INSTRUCTOR: Lindsay Brown
PHONE: 294-3518
OFFICE: LDB 404
OFFICE HOURS: 9:30 - 11:00 MF
10:00 – 12:00 T
& by appointment

TEXT: Elementary Statistics: A Step by Step Approach – A Brief Version,

DESCRIPTION: This course covers the fundamentals of statistical concepts and will guide
the student through basic statistical procedures to permit critical insight into the science of
collecting, classifying, presenting, and interpreting information from data. The topics
covered include descriptive statistics (graphic presentation of data, histograms, plots,
charts, etc.), measures of central tendency, dispersion, and position, probability concepts
and rules for calculating probabilities of compound event. This coverage includes the more
commonly occurring probability distributions such as the binomial and normal
distributions. Inferential statistics is emphasized in the latter part of the semester; this
coverage includes confidence intervals and hypothesis testing (including tests on single
population parameters as well as tests in the two population case).

OBJECTIVE: To develop an understanding of and a facility for the concepts and
applications of introductory probability and also descriptive and inferential statistics.

APPROACH:

1. Lectures on new concepts and applications.

2. Assigned problems for experience and familiarity with techniques.

3. Classroom discussions on applications --- appropriate usage and value.

4. Examinations to demonstrate understanding and ability to utilize
methods.

APPRAISAL:

Exam I.................................30%
Exam II.................................30%
Final Exam............................25%
Homework/Quizzes.............15%

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TOTAL 100%
SPECIAL NOTE: Performance on exams is directly related to success on homework —
all homework is to be kept current, neatly together, in sequence, and
ready to be handed in upon request.

POLICIES:

1. Make-up Exams --- DO NOT MISS AN EXAM!! Make-up exams are to be
   avoided. If you miss an exam because of illness and have a doctor’s release, all
   makeup exams will be given at an arranged time in the last couple days of the
   semester.

2. Withdrawal --- University policy will be followed: the last day for
drop/withdrawal is as documented in the Schedule of Classes for this semester.
   It is your personal responsibility to initiate and complete the drop/withdrawal
   process.

3. Homework --- Since topics in the course sequence build upon preceding topics, it
   is expected that you will remain current in all assignments; also you should have
   your homework neatly assembled together at all times and be ready to hand it in
   upon request.

4. Incomplete --- A grade of “X” or “Incomplete” is not appropriate for this
   course.

5. Attendance --- Since lectures and in-class discussions are for you, you are
   expected to be in attendance at all classes.

6. Class Behaviour -- Students will refrain from behavior in the classroom that
   intentionally or unintentionally disrupts the learning process and, thus, impedes
   the mission of the university. Cellular telephones and pagers must be turned off
   before class begins. Students are prohibited from eating in class, using tobacco
   products, making offensive remarks, reading newspapers, sleeping, talking at
   inappropriate times, wearing inappropriate clothing, or engaging in any other
   form of distraction. Inappropriate behavior in the classroom shall result in a
   directive to leave class. Students who are especially disruptive also may be
   reported to the Dean of Students for disciplinary action in accordance with
   university policy.

7. Academic Honesty --- All work that is handed in for evaluation is to reflect
   solely your individual performance. All students are expected to engage in all
   academic pursuits in a manner that is above reproach. Students are expected to
   maintain complete honesty and integrity in the academic experiences both in
   and out of the classroom. Any student found guilty of dishonesty in any phase of
   academic work will be subject to disciplinary action. The University and its
   official representatives may initiate disciplinary proceedings against a student
   accused of any form of academic dishonesty including, but not limited to,
   cheating on an examination or other academic work which is to be submitted,
   plagiarism, collusion and the abuse of resource materials.
COURSE SEQUENCE

WEEK 1: Chapter 1: Introduction -- The Nature and Probability of Statistics

WEEK 2: Chapter 2: Numerically Summarizing Data -- Bar Charts, Pie Charts, Histograms, Pareto Charts, and Other Descriptive Charts

WEEK 3: Chapter 3: Numerically Summarizing Data -- Measures of Central Tendency, Variation, Position and Associated Topics

WEEK 4: Chapter 3: Continued -- Numerically Summarizing Data

WEEK 5: Review and Exam 1

WEEK 6: Chapter 4: Probability and Counting Rules

WEEK 7: Chapter 4: Probability and Counting Rules (Continued)

WEEK 8: Chapter 5: Discrete Probability Distributions (Continued)

WEEK 9: Spring Break Week

WEEK 10: Chapter 6: The Normal Distribution

WEEK 11: Chapter 6: The Normal Distribution (Continued)

Review and Exam 2

WEEK 12: Chapter 7: Confidence Intervals and Sample Size

WEEK 13: Chapter 8: Hypothesis Testing -- Inferences in the Single Population Case

WEEK 14: Chapter 8: Hypothesis Testing (Continued)

WEEK 15: Chapter 9: Inferences in the Two Population Case

WEEK 16: Chapter 9: Inference in the Two Population Case (Continued)

WEEK 17: Review and Final Exam

HAVE A FANTASTIC SEMESTER!!