STT 315 Spring 2004  Syllabus Version 1-9-04

NOTE CORRECTIONS TO THE FINAL EXAM SCHEDULE.
NOTE THAT UP TO 4 ABSENCES ARE NOW ALLOWED.

Lecture 2 (all even sections) 12:40-2:00 p.m., MW, N100 BCC
Lecture 1 (all odd sections) 3:00-4:20 p.m., MW, N100 BCC
Lecture 2 meets earlier!

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This syllabus may be revised. You are enrolled in one recitation section. Every recitation section meets for 50 minutes each Thursday.

Office Hours: MW 2-3, N100BCC and by appt.

Help room in C100 Wells Hall: Hours for the help room will be posted on the department website www.stt.msu.edu and also posted outside C100 Wells Hall.

I.D.: Each student of 315 is required to have their valid MSU student I.D. with them for all lectures and examinations. Be sure to update or replace your I.D. as needed. You will not be able to take or submit examinations without your I.D. and you may have points deducted from your course total if you are called upon in lecture and do not have it on your person.

Attendance: Attendance is required for all lectures and recitations. Beginning January 26, every student must scan his or her I.D. card through the card reader at the entrance to the lecture hall N100 BCC. THIS INCLUDES EXAM DAYS. Your record of attendance will figure in your course grade. All students enrolled in even recitation sections attend Lecture 2 beginning at 12:40. All students enrolled in odd sections attend Lecture 1 beginning at 3:00. Any student called upon in lecture or recitation may be awarded points at the discretion of the instructor. If a student is called upon but is not present or chooses not to participate points will be withdrawn at the discretion of the instructor.

Textbook: Complete Business Statistics, Fifth Edition, by Amir D. Aczel and Jayavel Sounderpandian, McGraw-Hill 2002. This is also the required textbook for MSM 317. We will not use the CD-ROM or Excel. Some students find them helpful so look them over.

Exercises: Exercises will be placed on the website. We use exercises designed by your instructor as well as some from the text.

Key dates:
January 12, Monday, first class, late enrollment fee begins.
January 16, Friday, last day to change from CR/NCR or visitor; close of open adds.
January 19, Monday, Martin Luther King Day, class will not meet.
February 4, Wednesday, Exam 1 (see below).
February 6, Friday, end of tuition refund period.
March 1, Monday, Exam 2 (see below).
March 3, Wednesday, mid-semester, last day to withdraw or drop course with NG reported; last day to drop class using electronic system (’til 6 p.m.)
March 8 through 12, Spring break, class will not meet.
March 31, Wednesday, Exam 3 (see below).
March 28, last day to withdraw.
April 21, Wednesday, Exam 4 (see below).
April 26, Monday, review.
April 28, Wednesday, review, last STT 315 lectures.
April 29, Thursday, last STT 315 recitations.
May 3, Monday, Lec. 1 Final Exam, 3-5 p.m., N100BCC
May 6, Thursday, Lec. 2 Final Exam, 12:45-2:45 p.m., N100BCC.

STT 315 Exams: All exams, including the final, are in N100BCC. Calculators are allowed for exams (bring a backup calculator and pencils as none are provided). Notes, papers, or books are not allowed. No headphones may be used. Calculators may not be passed (shared). Points will be withdrawn for violations of this policy.

● Exam 1, Wednesday, February 4 (Chapter 2, probability; Probability Exercises handout).
● Exam 2, Monday, March 1 (Random variables, pp. 114-143; 151-160; Random Variables and Probability Models Exercises handout).
● Exam 3, Wednesday, March 31 (Chapters 4 and 5; Handout A).
● Exam 4, Wednesday, April 21 (Chapter 6 and part of chapter 7; Confidence Intervals and Testing handout).
● Final Exam Lecture 1: Monday, May 3, 3-5 p.m., N100 BCC.
● Final Exam Lecture 2: Thursday, May 6, 12:45-2:45 p.m., N100 BCC.

No makeup exams will be given. With prior approval points may be shifted to a future exam.

Prerequisites: No previous contact with statistics is assumed. Algebra and some ideas from calculus are part of the requirement and are used. Calculations for homework and exams primarily use arithmetic. Facility with fractions and simple calculations is an asset. A basic calculator with power, root, exponential and logarithm is needed. Formulas
are interpreted in the context of mathematical notation. Operations are executed from “the inside out.” For example

- \(3 \times 7\) means to multiply \(x\) by 3 and deduct 7 from the result (multiplication priority);
- \(3 \times (x - 7)\) means deduct 7 from \(x\) and multiply the result by 3 (or (giving the same result) multiply \(x\) and 7 each by 3 then take the difference (distributive law);
- \(3x \div 7\) means multiply \(x\) by 3 then divide by 7 or (giving the same result) divide \(x\) by 7 then multiply by 3 (associative law);
- \(1 / (3 / 7) = 7 / 3\) (reciprocals of reciprocals).
- In statistics we often “average the squares of the incomes” which means to first square every income (i.e. multiply income by itself) then average these squares. The result of this operation will in general be larger than “square the average of incomes.”

If such examples are the slightest bother to you be sure to prepare yourself by doing a lot of standard calculations to hone your skills before STT 315 gets very far along.

**Participation in lectures:** As a student of STT 315, it is part of your responsibility to ask for clarification when you need it. Don’t wait to see if something clears up. In a large lecture this may be hard for you to do (at least at first) because you may feel that it will be difficult to get your question across (often it will be) or you may feel it will bother other students or make you look bad (it can). Those considerations are not important. After all, with 300 people there are dozens who are a bit shaky or suffer inattention on any given point. You might just be the one who helps focus the attentions of your classmates and kick-starts the lecture. If everyone steps up to this shared responsibility, the resulting give and take will help keep the class lively and give each of you an idea of how your classmates are thinking.

**Tevised segments:** Each week there will be a one hour live television segment in which Dr. LePage presents an overview of the material for the week. The schedule for these broadcasts is given below. Copies of these TV broadcasts will be made available for viewing in the AV section of the main library.

- Mondays, 8 a.m. to 9 a.m. and 8 p.m. to 9 p.m. Campus Channel 5 and AT&T cable channel 29 for East Lansing, Haslett and Okemos viewers.
- Tuesdays, 9 a.m. to 10 a.m. and 7 p.m. to 8 p.m. Campus Channel 5 and AT&T cable channel 29 for East Lansing, Haslett and Okemos viewers.

**Involvement with learning:** There are parallels between learning and exercise. Modest amounts applied consistently seem to work well. Read, talk things over with someone, particularly within a few hours of the end of class. Play with a few problems now and then to keep your hand in. Think about trying to apply what you currently are studying to a real problem in your life. Like a little exercise, these tell your body what to do and inform your mind that this is a priority but not a crisis. Be upbeat. It becomes an easy habit. Work with your TA and classmates to prepare a backup recourse for when you get stuck. No need for loose ends.

**Modifications to the Course Plan:** This plan is subject to adjustments depending upon unforeseen circumstances or in the interests of achieving academic objectives. In particular, additional material may be introduced or material may be deleted. The course material is covered at about 12 pages of text per lecture. Do not be misled by this, after all you are expected to develop problem-solving skills and that takes time beyond what the readings may suggest.

**Grading:** The following scale is intended as a guide. It may be revised in the case of broken questions or other unforeseen circumstances. You will be kept informed of any changes.

- Exam 1 = 25 points
- Exam 2 = 25 points
- Exam 3 = 25 points
- Exam 4 = 25 points
- Final Exam = 40 points

**Attendance** = 10 points for missing at most four lectures.

Being called upon in class may change your point total.

Course total = 150.

- 134 or above = 4.0
- 127, 134 = 3.5
- 120, 127 = 3.0
- 112, 120 = 2.5
- 105, 112 = 2.0
- 97, 105 = 1.5
- 90, 97 = 1.0
- below 90 = 0.0