**Syllabus of Math2260: Introduction to Prob. & Statistics**

3 credit hours, Fall 2014

Instructor: Dr. Taixi Xu, Office R2-328, email: txu@spsu.edu

Meetings: Section 002: 11:00 – 11:50 MWF Q-108
 Section 004: 1:00 – 1:50 MWF J-215A

Office Hours: 4:00pm – 5:30pm MW, 2:00pm-4:00pm F.
 If you would like to meet the instructor other times, make an
 appointment by email.

Web Site: http://fac-web.spsu.edu/math/txu/math2260/

Text Book: Understandable Statistics, ninth ed., by Charles H. Brase and Corrinne P.
Brase, Brooks/Cole, ISBN-13: 978-0-618-94992-2.
Chapters 1-9.

Calculator: A TI-84Plus or TI-83Plus calculator is required.

Learning Elementary concepts of probability, standard probability distributions;

Outcomes: Review of sampling distributions; organization and data analysis, theory and methods of point estimation and hypothesis testing, interval estimation.
Upon completing this course students should be able to:
1. Calculate elementary probabilities.
2. Compute probabilities related to normal random variables.

 3. Construct confidence intervals.
 4. Construct and evaluate hypothesis tests.

Evaluation: There will be three tests worth 100 points each, and a comprehensive final exam worth 150 points. Quizzes will be worth a total of 100 points. The lowest scores for both tests and quizzes will be dropped. The grades may be curved to a normal distribution if necessary at the end of the semester.

Grading: Tests: 200 points 90% - 100% Grade A
Quizzes 100 points 80% - 89% Grade B
Final Exam: 150 points 70% - 79% Grade C
Total: 450 points 60% - 69% Grade D Below 60% Grade F

Schedule: Test 1 – Wed. Sep. 17
Test 2 – Wed. Oct. 22
Test 3 – Mon. Nov. 24
Final Exam: TBA

Make-ups: Make-ups will only be given at the discretion of the instructor, and
with a valid excuse (proof documents needed) for the absence. In order to request a make-up you must email the instructor prior to the exam or quiz.

Homework: Homework will be assigned section-by-section and should be done on time. Some of them will be discussed during the next class. Remember that you cannot learn this subject without doing the homework.

Attendance: Regular attendance is essential. You are strongly recommended to attend every class. A signup sheet will be passing around to keep track of attendance. You are responsible for knowing any material discussed and any announcements made in class, whether you are present or not.

Cell Phones: Please turn off all cell phones before class begins. Except in the case of an emergency, cell phone use, including texting, is not permitted in this class.

Honor Code: SPSU has an Honor Code and a new procedure relating to when academic misconduct is alleged. All students should be aware of them. Information about the Honor Code and the misconduct procedure may be found at <http://spsu.edu/honorcode/>

Disability Students with disabilities who believe that they may need
Statement: accommodations in this class are encouraged to contact the counselor
 working with disabilities at (678) 915-7226 as soon as possible to better
 insure that such accommodations are implemented in a timely fashion.

Important Wed. Aug. 13 First Day of Class
Dates: Mon. Aug. 18 End of Drop/Add
 Mon. Sep. 1 Labor Day Holiday
 Thur. Oct. 2 Withdrawal Day
 Nov. 26 – Nov. 28 Thanksgiving Holiday
 Mon. Dec. 1 Last Day of Class
 Wed. Dec. 3 – Tue. Dec 9 Final Exams

Note: The instructor of the course reserves the right to make changes on this syllabus if it is necessary. In such events, students will be notified of any changes ahead of time by the instructor.

Suggested homework exercises:

Section 1.1   pp. 11:  1-8
Section 1.2   pp. 17: 3, 4, 5, 11, 12, 15
Section 1.3   pp. 27: 3, 4, 5

Section 2.1   pp. 47: 2, 3, 4, 6, 7, 9, 10, 11, 15
Section 2.2   pp. 55: 1, 2, 5-9

Section 3.1   pp. 83: 2, 3, 5, 8, 12
Section 3.2   pp. 97: 2, 4, 8, 9, 11, 13, 14
Section 3.3   pp. 109:  2, 3, 4, 5, 7, 10

Section 4.1   pp. 131: 6, 9, 10, 12
Section 4.2   pp. 147: 1-7, 9-15, 22, 24, 25
Section 4.3   pp. 161: 1, 3, 9, 13-20, 23, 24, 25

Section 5.1   pp. 179:  2, 4, 6, 7, 9, 10, 12, 15, 17
Section 5.2   pp. 191: 2, 5, 6, 7, 8-11, 14, 18, 21
Section 5.3   pp. 203: 2-4, 8-11, 13-17, 20-23
Section 5.4   pp. 217: 1-4, 6, 8, 10-13, 16-19, 25

Section 6.1   pp. 245:  2, 5, 7, 9, 12, 15
Section 6.2   pp. 257: 6, 7, 8, 9, 11-18, 29-37
Section 6.3   pp. 269: 21-27, 29, 31, 34, 35, 37
Section 6.4   pp. 279: 4, 5, 8, 10, 11, 13

Section 7.1   pp. 11:  3, 6, 8
Section 7.2   pp. 307: 6, 8, 9, 11, 15, 16, 17, 20
Section 7.3   pp. 319: 2-7, 10, 11, 13

Section 8.1   pp. 339:  1, 4, 5, 6, 7, 8, 10-12, 13, 14, 17, 19
Section 8.2   pp. 349: 7-10, 11, 16, 17, 18, 20, 21
Section 8.3   pp. 363: 3, 4, 6, 9, 12, 14, 17, 19, 21
Section 8.4   pp. 377: 3, 7, 8, 10, 12, 13, 15, 16, 17, 19, 21, 24

Section 9.1   pp. 413:  6-11, 13, 14
Section 9.2   pp. 427: 1-7, 11, 13, 15, 17, 19, 21, 23-26
Section 9.3   pp. 437: 4-11, 15, 16
Section 9.4   pp. 449: 3, 7-9, 11, 12, 15, 16
Section 9.5   pp. 471: 4-8, 10-12, 14-17, 19, 21, 23, 27