INTRODUCTION TO MATHEMATICAL STATISTICS STA 4321/5323

Instructor: Dr Anuj Srivastava, Office: 106D, OSB, Office Hours: Monday and

Wednesday: 10:00 - 11:00 am.

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Grader: Ms. Tingting Hu, t.hu@stat.fsu.edu

Office Hours: Monday and Wednesday 2:00-3:00pm

Office Locations: Room 308 BioUnion (located at the intersection of

Chieftan Way and W. Call St.)

Time and Location: Room 110, OSB, Monday and Wednesday 12:30 pm – 1:45pm

Course Objective:

To gain an understanding of the basic principles and methods of mathematical statistics, and to obtain experience in applying these principles to practical applications.

Prerequisites: MAC 2313 (Calculus III)

Required Text:

Probability and Statistics (Fourth Edition) by M. H. DeGroot and M. J. Schervish, printed by Addison-Wesley.

Course Material:

- Calculator: You may need to use a scientific calculator for assignments and exams.
- 2. Class Website: I will post home works, solutions, and other material on the blackboard website created for this class. You can access it using your ACNS username and password.

Course Outline: (Roughly two-three weeks on each topic)

- 1. Introduction to Probability
- 2. Conditional Probability
- 3. Random Variables and Distributions
- 4. Expectation
- 5. Special Distributions
- 6. Large Random Samples
- 7. Time permitting, Additional Topics Estimation, Sampling Distributions

Grading Policy: The final score will consist of these items

40% homework, 30% mid-term exams (15% + 15%) and 30% final exam

The final letter grade will based on your final score according to:

| 93 or more | Α | 90 – less than 93 | A- |
|-------------------|----|-------------------|----|
| 86 – less than 90 | B+ | 83 – less than 86 | В |
| 80 – less than 83 | B- | 76 – less than 80 | C+ |
| 73 – less than 76 | С | 70 – less than 73 | C- |
| 66 – less than 70 | D+ | 63 – less than 66 | D |
| 60 – less than 63 | D- | Less than 60 | F |

There is no curving of grades in this course. Your grade is based solely on your performance.

Homework:

It will be assigned every week (and posted on the class blackboard page) and will be due the next week. The solutions must be turned in the class on the due date. Late assignments will not be accepted for any reason, medical or otherwise. One assignment with the lowest grade will be dropped.

Please write clear and detailed answers to the homework problems. The solutions will be posted on the blackboard website after the due date.

Examinations:

There will be two mid-term exams and one final exam. All are in-class exams. These tests will be closed books, closed notes but the use of a scientific calculator is permitted. You are allowed to bring an 8.5x11 inch sheet (both side usable) of formulas to these exams. This sheet must be prepared by you and must be submitted with your exam.

No student is exempt from any of these exams. If you have a situation, medical or otherwise, that prevents you from taking an exam you have to inform me in advance and take my permission to miss the exam. If you are permitted to skip a mid-term exam, your score from the final exam will be scaled to account for this mid-term. There will be no make-up exams in this class.

The mid-term exams are tentatively scheduled at the end of January and early March. The final exam will be held as scheduled by the university.

Attendance Policy:

It is strictly required to attend all the lectures. I will take occasional attendance to monitor student participation. It is the student's responsibility to make up for the material covered in the class during his/her absence.

Academic Honor System:

"The Academic Honor System of The Florida State University is based on the premise that each student has the responsibility to: 1) Uphold the highest standards of academic integrity in the student's work, 2) Refuse to tolerate violations of academic integrity in the academic community, and 3) Foster a high sense of integrity and social responsibility on the part of University community."

Please note that violations of this Academic Honor System will not be tolerated in this class. Specifically, incidents of plagiarism of any type or referring to any unauthorized material during examinations will be rigorously pursued by this instructor. Before submitting any work for this class, please read the "Academic Honor System" in its entirety (as found in the FSU General Bulletin and in the FSU Student Handbook) and ask the instructor to clarify any of its expectations that you do not understand).

Students with Disabilities

Students with disabilities needing academic accommodation should:

- 1. Register with and provide documentation to the Student Disability Resource Center; and
- 2. Bring a letter to the instructor indicating the need for accommodation and what type.

This should be done during the first week of class. For more information about services available to FSU students with disabilities, contact:

Student Disability Resource Center 97 Woodward Avenue, South 108 Student Services Building Florida State University

Tallahassee, FL 32306-4167 (850) 644-9566(voice)

(850) 644-8504 (TDD) sdrc@admin.fsu.edu

http://www.disabilitycenter.fsu.edu/