

# Introduction To Probability - STA 4442/5440

## Fall 2013

**Prerequisite:** MAC 2312 (Calculus with Analytic Geometry II) and Integration by parts.

**Classes:** Tuesday/Thursday 11:00 AM – 12:15 PM, **OSB 0110**

**Instructor:** Dr. Debdeep Pati

- Email: debdeep@stat.fsu.edu (*When you send me an e-mail, use subject-line “[STA4442/5440]”* )
- Office: OSB 201D
- Office Hours: Tuesday/ Thursday: 3:15 – 4:15 pm (*If you are unable to meet at these times, then schedule an appointment with the instructor for an alternative time.*)
- Mailbox location: OSB 214 (accessible during 8:00am-5:00pm on working days only)

**Teaching Assistant:** Jalonda Coats

- Email: jcoats@stat.fsu.edu
- Office: 104E OSB
- Office Hours: Tuesday 12:30-1:30 pm and Wednesday 3:30-4:30 pm or by appointment

**Course Webpage:**

- **Class website:** [http://stat.fsu.edu/~debdeep/4442\\_f13](http://stat.fsu.edu/~debdeep/4442_f13). The class web site will have all information about the course except for the grades.
- **Blackboard class website:** To access the blackboard site go to <http://campus.fsu.edu/> and login using your FSUID and password. You are asked to check the blackboard for grades only.

**Textbook:**

- *A First Course in Probability, 8<sup>th</sup> Edition*, by Sheldon Ross. Bring the textbook and a calculator to every class meeting.

**Course objective:** To gain an understanding of the basic principles and tools of probability, and to obtain experience in applying these principles to solve practical problems.

**Syllabus:** Tentatively, we will cover following topics.

Topic	Chapter
Introduction, Review of Combinatorics	1
Axioms of Probability	2
Conditional Probability and Independence	3
Discrete and Continuous Random Variables, Cumulative Distribution Functions	4,5
Jointly Distributed Random Variables	6
Expectation and Variance	7
Limit Theorems	8

**Grading policies:** Attendance and class participation (10%), homeworks (20%), 2 mid-terms (40%) and final exam (30%). The lowest of the two midterms will be given a 15% weight, the highest will be given a 25% weight. There is no curving in this class, but there could be some bonus problems depending on the grades in the midterm. The following scheme will be used to convert the percentage points to letter grades.

$\geq 93\%$	A	90-93%	A-	87-90%	B+
84-87%	B	80-84%	B-	77-80%	C+
73-77%	C	70-73%	C-	67-70%	D+
63-67%	D	60-63%	D-	< 60%	Fail

Table 1: Percentage to grade conversion

**Attendance:** You will get the 10% points for attendance and class participation if you do not miss more than four classes. Please note that if you miss more, except in very special cases, you will get 0% on attendance. You are strongly encouraged to attend all classes.

Also, I will take attendance for most of the classes. A white sheet will be handed out in the beginning of the class on which you are required to sign. I will collect the sheet at the end of the class.

**Homeworks:**

- Homework assignments and their due dates will be communicated in class. The solutions must be handed to me during class on the due date. Late assignments will not be accepted for any reasons, medical or otherwise. One assignment, with the lowest grade, will be dropped. Please write clear and detailed answers to the homework problems. Homework solutions will be posted at the time the homework is due. Any questions concerning homework grades should be addressed to the grader during his/her office hours.
- To receive credit for the homework you must show **all** work neatly, write in blue or black pen or pencil (never in red), clearly **label** each problem, **circle** your final answers, **STAPLE** your entire assignment together in the correct order with your **FULL NAME PRINTED** (as appeared in the blackboard) on the first page. Any homework violating any of these rules will receive a grade of **ZERO** for the entire assignment.
- Each homework carries equal weight.
- You are allowed to work with other students on the homework problems, however, verbatim copying of homework is absolutely forbidden and constitutes a violation of the Honor Code. Therefore, each student must ultimately produce his or her own homework to be turned in and graded.

**Exam dates:**

- Midterm 1: October 3 (Thursday).
- Midterm 2: November 7 (Thursday).
- Final exam: December 11 (Wednesday) 12:30-2:30 p.m. in OSB 110.

**Add/drop dates:** See [http://registrar.fsu.edu/dir\\_class/fall/acad\\_cal.htm](http://registrar.fsu.edu/dir_class/fall/acad_cal.htm)

**Homework/exam regrade:** You have one week to request a regrade of a homework or exam from the date on which the graded homework/exam is available to the students of the class. Submit a written request detailing the nature of the grading error to the grader or instructor along with the relevant homework or exam.

**Exam policies:** The exams will be closed book and closed notes, but the use of a pocket calculator will be permitted. No student is exempt from any exams. If you have a medical or some other situation that prevents you from appearing at the exam, you have to talk to me in advance and obtain permission.

*“The Academic Honour System of The Florida State University is based on the premise that each student has the responsibility to uphold the highest standards of academic integrity in the students work, refuse to tolerate violations of academic integrity in the academic community, and 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.

**Disability policy:** 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.

This syllabus and other class materials are available in alternative format upon request. For more information about services available to FSU students with disabilities, contact the:

Student Disability Resource Center 874 Traditions Way

108 Student Services Building

Florida State University

Tallahassee, FL 32306-4167

(850) 644-9566 (voice)

(850) 644-8504 (TDD)

[sdrc@admin.fsu.edu](mailto:sdrc@admin.fsu.edu)

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

**Free Tutoring from FSU:** On-campus tutoring and writing assistance is available for many courses at Florida State University. For more information, visit the Academic Center for Excellence (ACE) Tutoring Services comprehensive list of on-campus tutoring options - see <http://ace.fsu.edu/tutoring> or contact [tutor@fsu.edu](mailto:tutor@fsu.edu). High-quality tutoring is available by appointment and on a walk-in basis. These services are offered by tutors trained to encourage the highest level of individual academic success while upholding personal academic integrity.

**Syllabus Change Policy:** Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.