

Probability and Statistics
Fall 2008
Course Syllabus

Instructor: Dr. Jayawardhana

Phone: 235-4414

Office: 207 Yates Hall

e-mail: ananda@pittstate.edu

Office Hours: Check the timetable below

Class web page: <http://faculty.pittstate.edu/~ananda/PROBSTAT/probstat.html>

Text: Probability and Statistical Inference (Seventh Edition) by Hogg and Tanis, Prentice Hall

Prerequisites: Calculus II

Course Objectives:

The objectives of this class are to learn in detail about the concept of probability, discrete and continuous probability distributions, and sampling distribution theory. This course will provide a mathematical background to understand some probabilistic models and their applications in many modern fields.

Coverage: Chapter 1: Probability (1.1-1.6)
Test 1
Chapter 2: Discrete Distributions (2.1-2.6)
Test 2
Chapters 3 & 4: Continuous Distributions (3.1-3.5 and 4.5-4.6)
Test 3
Chapter 5: The Normal Distribution (5.1-5.4)
Test 4

Final exam will be comprehensive.

Evaluation:	Hour Tests	= 300 points
	Homework	= 100 points
	Quizzes	= 100 points
	Paper	= 25 points
	Final	= 200 points
	Total	= 725

Grading Scale:	90% - 100%	= A
	80% - 89%	= B
	70% - 79%	= C
	60% - 69%	= D
	<60%	= F

Instructor keeps the right to lower the scale if necessary.

Regular attendance is expected, but it is not counted in your grade. There will be four one-hour tests and the lowest grade among them will be dropped. Exam dates will always be announced at least two class sessions ahead of time. The last in-class exam may be given during the last week of classes. There will be at least one quiz every week. No make-up will be given for these quizzes unless prior arrangements are made with the instructor, but the lowest score from the quizzes will be dropped. Daily homework assignments will be made. Homework will be collected on the due date and all the problems will be graded. Late homework will not be accepted. At the end, quizzes and homework will be scaled to 100 points each. No tests will be made up except for absences due to official university activities or health problems with a Dr.'s excuse. If you have a special need addressed by the **American with Disabilities Act**, please notify me immediately so that appropriate accommodations can be provided.

Homework:

- 1.2** 3, 4, 5, 6, 8
- 1.3** 6, 7, 10, 11, 12
- 1.4** 2, 4, 5, 11, 14
- 1.5** 1, 2, 3, 7, 8
- 1.6** 2, 4, 5, 6, 7
- 2.1** 3 (a)-(e) Just find the value of c, 10
- 2.2** 4, 6, 8, 14
- 2.3** 1, 3, 4, 15, 16
- 2.4** 4
- 2.5** 2
- 2.5** 4, 9, 10, 12, 19 (All the 2.5 problems are due the same day.)
- 2.6** 4, 5, 8, 20, 24
- 3.2** 2 (a), 4 (a), 6, 10 (c), 18
- 3.3** 1, 6 (a)-(c), 9, 11, 19
- 3.5** 1, 2, 3, 10, 11
- 4.5** 1, 2, 3, 4, 9
- 4.6** 2, 4, 5, 6, 9
- 5.2** 1 (a)-(e), 2 (g), 3, 5 (a) (b), 6, 7 (a) & (e), 9 (b)
- 5.3** 3, 5, 6, 10, 11
- 5.4** 3, 4, 6, 8, 9

Final exam preparation:

1.2-6, 1.2-7, 1.2-8, 1.3-7, 1.3-11, 1.4-4, 1.4-5, 1.4-12, 1.5-1, 1.5-2, 1.5-3, 1.6-2,
2.1-3, 2.1-10, 2.2-4, 2.3-1, 2.3-3, 2.4-4, 2.5-2, 2.5-4, 2.5-10, 2.6-4, 2.6-5,
3.2-2 (a), 3.2-4, 3.2-10 (c), 3.2-18, 3.3-6 (a)-(c), 3.5-2, 3.5-10, 4.5-2, 4.5-4, 4.6-2, 4.6-4,
4.6-5, 5.2-8, 5.2-9, 5.3-3, 5.3-6 (a), 5.4-4

There will be no theorem-proofs in the final but some derivations.

Instructor's Time-table

	Monday	Tuesday	Wednesday	Thursday	Friday
8.00-8.50 MWF 8.00-9.00 TTH	Math 143-01 (WL) YH 215	Office	Math 143-01 (WL) YH 215	Office	Math 143-01 (WL) YH 215
9:30-10.45 TH	Office	Math 749 Yates 216	Coffee	Math 749 Yates 216	Office
10.00-10.50 MWF	Math 543 YH 106		Math 543 YH 106		Math 543 YH 106
11.00-12.00 TH	Office	Office	Office	Office	Office
12.00-12.50 MWF	Math 143-04 (WL) YH 215	Lunch	Math 143-04 (WL) YH 215	Lunch	Math 143-04 (WL) YH 215
1.00-2.00	Lunch		Lunch		Lunch
2.00-3.00					

* Note that from 2.00 p.m. to 4.00 p.m. there are other commitments such as independent studies, departmental meetings, departmental colloquia etc. You are encouraged to use the office hours allocated before 2.00 p.m. If my office hours conflict with your other classes please let me know.

Other Issues

Please take clear notes.

Please let me know if I am going faster than your pace.

Please participate in class activities.

Please ask questions in class, after the class or in my office.

Please answer my questions and participate in class.

Please make friends in class and share notes, study together etc.

Please use my office hours anytime you need help. I care about you and your success.

I am open to your reasonable suggestions.