

COURSE: Math 3400--01, Probability and Statistics, Monday, 5:15 ~ 7:45 PM
Classroom: NIB 135, 3 Cr. CNR: 23153

INSTRUCTOR: Dr. Clare Banks, banks@dixie.edu Office: NIB 138 Phone: 652-7982
Office Hours: MWF 10 ~ 10:50 AM, 4 ~ 4:50 PM, TR 9~9:50 AM and by appointment.

REQUIRED TEXT: Hogg, R., & Tanis, E.(2006) *Probability and Statistical Inference*.
NJ: Pearson/Prentice Hall

PREREQUISITES: C or better in Math 2210.

CALCULATOR: A scientific calculator is required. The model TI-83 Plus will be used in class and is highly recommended.

COURSE WORK: The student's final grade will be determined by her/his performance on homework, exams, class activities, final project/report, & labs.

- *Final Exam:* Monday, April 30th, 5 ~ 7:30 p.m.
The exam will not be cumulative.
- *Homework:* Homework will be assigned and collected regularly. Late homework will not be accepted without a signed medical excuse. The homework may be graded or just checked off. If it receives a check mark, that will indicate full credit.
- *Exams:* There will be 4 exams. Each exam will be worth 100 points. No makeup exams will be given except in the case of a documented illness. One page of notes (8.5 x 11 both sides) will be allowed for each exam. You are allowed to put down the formulas on the paper, **examples are not allowed.**
- *Labs:* Throughout the course, you will receive various lab exercises, which can be done using the software program EXCEL. The labs are due one week after being distributed.
- *Attendance/Participation:* Students are expected to be in attendance whenever we meet and actively participate in class discussions. This section also includes in-class activities. Missed in-class work and activities cannot be made up.
- *Grading:* Exams – 60%, HW – 15%, Labs – 10%, Class Activities – 15%.

GRADES: Grades will be based on the percentage of total possible points that you earn during the semester. Grades will be assigned as follows:

Percent	Grade	Percent	Grade	Percent	Grade
94-100	A	80-82	B-	60-64	D+
90-93	A-	75-79	C+	55-59	D
87-89	B+	70-74	C	50-54	D
83-86	B	65-69	C-	<50	F

IMPORTANT DATES: Please see <http://new.dixie.edu/reg/?page=spring2009> for important dates.

ACADEMIC DISCIPLINE If cheating or disruptive behavior occurs the instructor will follow academic discipline procedures 34.1 & 34.2 , as explained at <http://www.dixie.edu/humanres/policy/sec3/334.html>

DISABILITIES: If you are a student with a medical, psychological or a learning difference and requesting reasonable academic accommodations due to this disability, you must provide an official request of accommodation to your Professor(s) from the Disability Resource Center within the first two weeks of the beginning of classes. Students are to contact the Center on the main campus to follow through with, and receive assistance in the documentation process to determine the appropriate accommodations related to their disability. You may call (435) 652-7516 for an appointment and further information regarding the Americans with Disabilities Act (ADA) of 1990 per Section 504 of the Rehabilitation Act of 1973.

OBJECTIVES: All classes in mathematics at Dixie College support the general education goals of the college. Each class will:

- Require students to perform mathematical processes including fractions, percentages, decimals, proportions/ratios, algebraic equations and/or calculus techniques.
- Provide students with application problems that use a variety of methods including arithmetical, algebraic and geometric methods.
- Challenge students to make inferences from mathematical models that include formulas, graphs and tables.
- Provide students with real-life applications that use a variety of mathematical functions.

Objectives for Math 3400:

- Students will learn how to collect and analyze data in the presence of uncertainty and variation.
- Students will learn how to interpret probabilities and apply the probability rules to particular events.
- Students will study probability models for a single random variable as well as several random variables.
- Students will be able to use probability results to study sampling distributions.
- Students will master basic estimation techniques.
- Students will be able to use various techniques to make inferences of hypothesis testing.

Lecture Schedule (Tentative)

1/5	1-1, 1-2, 1-3	3/16	Spring Break, no school
1/12	1-4, 1-5, 1-6	3/23	4-6, 5-2, 5-3
1/19	No School	3/30	5-4, 5-5, 5-6
1/26	2-1, 2-2, 2-3		EXAM III
2/2	2-4, 2-5, 2-6	4/6	6-2, 6-4
	EXAM I	4/13	6-5, 6-7, 6-8
2/9	3-1, 3-2, 3-3	4/20	8-1, 8-2, 8-3
2/16	No School	4/27	EXAM IV
2/23	3-4, 3-5, 4-1		
3/2	4-2, 4-3, 4-5		
3/9	EXAM II		

**The instructor reserves the right to change any of the information on the syllabus.
Have a great semester!**