

COURSE: Math 1040--50, Elementary Statistics, M 5:00 ~ 7:30 PM
Classroom: NIB 135, 3 Cr.

INSTRUCTOR: Dr. Clare Banks, banks@dixie.edu Office: NIB 138 Phone: 652-7982
Office Hours: MTWR 9 ~ 9:50 AM, F 10:00~10:50 AM and by appointment.

REQUIRED : Larson, R. & Farber, B. (2005), *Elementary Statistics* (3rd ed.).
TEXT Dretzke, B., McLaughlin, K. & Wakefield, D. (2006) *Technology Manual for Elementary Statistics* (3rd ed.). NJ: Pearson Prentice Hall.

PREREQUISITES: C or better in Math 1010 or ACT Math score of 23 or higher.

CALCULATOR: A scientific calculator is required. You are not allowed to share calculators during tests or quizzes. 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, December 10th, 5 ~ 7:30 p.m.
The exam will not be cumulative.
- *Homework:* Homework will be assigned and collected regularly. Late homework will receive a 10% late penalty per day, regardless of the reason. The homework may be graded or just checked off. If it receives a check mark, that will indicate full credit. The homework may be graded on a scale from 0-10 (no credit to full credit). Show all work. Neatness is important. Do not hand in incomplete homework. Most of the time, a list of answers is not sufficient, you must show work. Check your answers in the back of the text when possible. Clearly label your homework with chapter and section numbers. Please do not staple more than one section together.
- *Exams:* There will be 3 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:* There will be 4 labs assigned and collected. The labs will use the software program EXCEL.
- *Class activity* – There will be various in-class activities distributed which will be done in groups. These will have various point values. Such activities may **not** be made up.
- *Grading:* Exams – 60%, HW – 10%, Labs – 15%, Class Activity – 15%
- *Attendance:* Attendance is essential and roll will be taken, but will not be counted into your grade. You are responsible for all announcements and materials presented in the class.

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

DISABILITIES: If you are a student with a physical or mental impairment and would like to request accommodations, please contact the Disability Resource Center (652-7516) in Room 201 of the Student Services Center. The Disability Resource Center will determine your eligibility for services based upon complete professional documentation. If you are deemed eligible, the Disability Resource Center will further evaluate the effectiveness of your accommodation requests and will authorize reasonable accommodations that are appropriate for your disability.

COURTESY, ETC: No headphones during class or tests. Cell phones should be off. Please do not come late or leave early.

CHEATING: If it is determined that you cheated, you will receive a zero for that exam. If cheating occurs a second time, you will receive an F for the course.

HELP: I am available during my office hours and by appointment. Browning Resource Center also has tutors available. Group study is highly recommended.

SUCCESS: To be successful in this course, follow these guidelines: 1) read before class, 2) attend all classes, 3) do all homework, 4) study each day – do lots of practice problems, 5) seek help immediately if you are lost, 6) have fun!

OBJECTIVES: All classes in mathematics at Dixie College support the general education goal 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.

The purpose of the course is to introduce the basic principles and theories of statistics to students. As a result of successful completion of this course, a student will be able to:

- Understand descriptive statistics such as mean, median, mode, and standard deviation.
- Use and interpret graphs representing data.
- Identify the properties of normal distribution.
- Construct confidence intervals and determine sample sizes.
- Use statistical techniques to test hypotheses.
- Analyze data using correlation and regression.
- Use EXCEL computer program to perform statistical calculation, organize data, and construct graphs.

Weekly Course Outline:

Aug 27 1-1, 1-3, 2-1
Sep 3 *Labor Day*
Sep 10 2-2, 2-3, 2-4
Sep 17 2-5, 3-1, 3-2
Sep 24 3-3, 3-4
Oct 1 **Exam 1**
Oct 8 4-1, 4-2, 4-3
Oct 15 5-1~5-3

Oct 22 5-4, 6-1
Oct 29 6-2, 6-3, (6-4)
Nov 5 **Exam 2**
Nov 12 7-1, 7-2
Nov 19 7-3, 7-4
Nov 26 9-1~10-4
Dec 3 8-1~ 8-3
Dec 10 **Exam 3**

Homework:

1.1 1~6, 7~21 odds
1.3 1~20 odds

Lab 1

2.1 5~15 odds, 19, 23, 25, 31
2.2 7, 9, 15, 21
2.3 5~8, 13~19 odds, 27, 29, 31, 33, 39, 45
2.4 7, 9, 11, 13, 17, 29, 31
2.5 3, 7, 11, 15, 21 ~ 27 odd

Lab 2

3.1 1, 3, 5, 9, 11, 15, 17, 21, 23
3.2 1, 5, 7, 9, 11, 15, 19
3.3 5, 9, 13, 15, 17
3.4 7, 9, 11, 13, 21, 25

Exam One

4.1 7~29 odd, 33, 35
4.2 3~19 odd

5.1 9, 11, 15, 17, 23, 27, 37
5.2 5, 9, 11, 21~29 odds
5.3 5~29 eoo
5.4 13, 17, 21, 23, 31, 33
5.5 5, 9~16, 21, 23abc

Lab 3

Exam Two

6.1 1, 3, 5, 15, 17, 28, 31, 33, 47, 61
6.2 11~15 odd, 21, 23
6.3 1,3,7,11,13,15,19,23
6.4 1~15 odd

7.1 23~39 odd
7.2 39,41,43
7.3 23~27 odd
7.4 9~13 odd
7.5 16,21,23

Lab 4

Exam Three

8.1 11,15,19
8.2 17,19,21
8.3 19,21,27

9.1 15, 19, 25, 27
9.2 13, 15,19, 25
10.1 9, 11, 13, 15
10.2 13, 15
10-3 17, 19, 21

Exam Four