

Course Syllabus

Spring 2012
Math 1040-50 Elementary Statistics
Instructor: Reimer
Office Hours: 6:45 - 7:30 p.m. T/Th
reimer@dixie.edu
(435) 467-1153

This class uses CANVAS. Students will need to access this during the semester.

Textbook: Elementary Statistics; Larson / Farber (5th Edition). **Technology manual** is VERY helpful.

Materials Needed: Text, internet access, graphing calculator (TI-83 or TI-84 preferred)

Calendar: A DSC Calendar that includes all dates relative to the current semester at the college is available at <http://www.dixie.edu/reg/?page=calendar>

OBJECTIVES

All classes in Mathematics at Dixie State support the general education goal of the college. Within the limitations imposed by the nature of mathematics (.i.e. the dependency on prior learning and the need for content fluency), 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.

Upon successful completion of Math 1040, a student will demonstrate the ability to:

- Compute and interpret descriptive statistics, including mean, median, mode, standard deviation, interquartile range, etc.
- Employ and interpret graphical representations of data
- Construct confidence intervals for population parameters of interest
- Determine the sample size required to satisfy a predetermined goal
- Test null hypotheses related to the mean, the proportion, or the variance of a sample
- Test null hypotheses related to the difference in mean or the difference in proportion between two samples
- Interpret the results of null hypothesis tests, including the role of the significance level α
- Interpret bivariate correlations and linear regression models
- Apply various other statistical tests, including goodness-of-fit tests, independence tests, two sample F-tests, and ANOVA

CLASS ATTENDANCE In order to be successful in mathematics, you must choose to attend class on a regular basis. Statistics have shown that grades improve with better attendance. In order to be successful in mathematics, you must choose to attend class on a regular basis. Studies have shown that grades improve with better attendance.

CLASS PARTICIPATION Be willing to be involved in the class as an active participant. Ask questions, contribute toward solutions and be interested in the class activities. In order to be successful, you must be involved as a participant, not on the sidelines as a spectator. Be willing to be involved in the class as an active participant. Ask questions, contribute toward solutions and be interested in the class activities. In order to be successful, you must be involved as a participant, not on the sidelines as a spectator.

MAKING A FRIEND IN CLASS Attempt to make a friend in your class. You may find that studying together helps you learn more, and more easily. Study groups are VERY HELPFUL in this course. Don't try to do it on your own.

GETTING HELP Getting the right help can be important to being successful in math. Even when you have gone to class regularly taken careful notes, read your text carefully, diligently done your homework, and made every effort to learn, you may still find you are having difficulty. If this is the case, seek help. Use the math labs, computer software, a tutoring service, or make an appointment with the instructor.

DISABILITY STATEMENT If you are a student with a medical, psychological or learning disability or think you might have a disability and would like accommodations, contact the Disability Resource Center (652-7516) in the Student Services Center. The Disability Resource Center will determine eligibility of the student requesting special service and determine the appropriate accommodations related to their disability.

CODE OF CONDUCT Honesty is required and cheating in any form will not be tolerated. The Dixie State College policy on academic dishonesty is explained on the school web site.

HOMEWORK ASSIGNMENTS Math is a skill that is learned and mastered by doing it yourself with lots and lots of practice. Set aside time each day for doing homework assignments. Do not attempt to do a whole chapter's assignments at one sitting. That is a disaster! Usually two hours outside class for every hour in class is required for college courses.

The lowest of the five exams will be dropped. The final will not be dropped. A student who does not take the final will receive an F.

There is nothing more frustrating than getting to a point in your life when you can finally work on the assigned work and not having any idea where to start. If all else fails (textbook, notes, etc.) you might consider YouTube (for example, type in confidence interval) or KhanAcademy.org or InteractMath.com. There are many ways to get the information you need, but it might take more work than you had planned! Don't wait until the last minute to do your work. Usually there is not much help that you can get if you wait until the last minute of the last hour.

Date	Day	Details
Jan 10	Tue	Intro, 1-1 12am
Jan 12	Thu	No Class 12am
Jan 17	Tue	1-2 12am Statistics is... due by 11:59pm
Jan 19	Thu	1-3 12am
Jan 24	Tue	2-1, 2-2 12am
Jan 26	Thu	2-3 12am 1-1,1-2,1-3 due by 11:59pm
Jan 31	Tue	3-1, 3-2 12am
Feb 2	Thu	3-3 12am 2-1,2-2,2-3 due by 11:59pm Lab 1 due by 11:59pm
Feb 3	Fri	Exam 1 12am

Date	Day	Details
Feb 4	Sat	Exam 1 12am
Feb 5	Sun	Exam 1 12am
Feb 6	Mon	Exam 1 12am Exam 1 due by 11:59pm
Feb 7	Tue	3-4 12am
Feb 9	Thu	No Class 12am
Feb 14	Tue	4-1, 4-2 12am
Feb 16	Thu	4-3 12am 3-1,3-2,3-3,3-4 due by 11:59pm Data Collection Lab 2 due by 11:59pm
Feb 21	Tue	5-1, 5-2 12am
Feb 23	Thu	5-3, 5-4 12am 4-1,4-2,4-3 due by 11:59pm Data Collection Lab 3 due by 11:59pm
Feb 24	Fri	Exam 2 12am
Feb 25	Sat	Exam 2 12am
Feb 26	Sun	Exam 2 12am
Feb 27	Mon	Exam 2 12am Exam 2 due by 11:59pm
Feb 28	Tue	6-1,6-2,6-3 12am
Mar 1	Thu	6-1,6-2,6-3 12am 5-1,5-2,5-3,5-4 due by 11:59pm Lab 2 due by 11:59pm
Mar 2	Fri	Exam 3 12am
Mar 3	Sat	Exam 3 12am
Mar 4	Sun	Exam 3 12am
Mar 5	Mon	Exam 3 12am Exam 3 due by 11:59pm
Mar 6	Tue	7-1,7-2,7-3 12am Data Collection Lab 4 due by 11:59pm
Mar 8	Thu	7-1,7-2,7-3 12am 6-1,6-2,6-3 due by 11:59pm Lab 3 due by 11:59pm
Mar 20	Tue	7-4 12am
Mar 22	Thu	8-1, 8-2 12am 7-1,7-2,7-3 due by 11:59pm
Mar 27	Tue	8-3 12am

Date	Day	Details
Mar 29	Thu	8-4 12am 7-4,8-1,8-2 due by 11:59pm
Mar 30	Fri	Exam 4 12am
Mar 31	Sat	Exam 4 12am
Apr 1	Sun	Exam 4 12am
Apr 2	Mon	Exam 4 12am Exam 4 due by 11:59pm
Apr 3	Tue	9-1, 9-2 12am
Apr 5	Thu	10-1 12am 8-3,9-4 due by 11:59pm
Apr 10	Tue	10-2 12am
Apr 12	Thu	10-4 12am Lab 4 due by 12am 9-1,9-2,10-1 due by 11:59pm
Apr 13	Fri	Exam 5 12am
Apr 14	Sat	Exam 5 12am
Apr 15	Sun	Exam 5 12am
Apr 16	Mon	Exam 5 12am Exam 5 due by 11:59pm
Apr 17	Tue	No Class 12am Take Home Final 12am
Apr 19	Thu	No Class 12am Take Home Final 12am
Apr 24	Tue	Final Review 12am Take Home Final due by 11:59pm
Apr 26	Thu	Final Review 12am 10-2,10-4 due by 11:59pm Lab 5 due by 11:59pm
May 1	Tue	Final Exam due by 7:30pm