Instructor: Betsy Murphy
E-mail: bmurphy@centralmethodist.edu
Phone: (573) 239-1132
Office Hours: By Appointment

Math 106
Elementary Statistics
Spring 2019

Mission
Central Methodist University prepares students to make a difference in the world by emphasizing academic and professional excellence, ethical leadership, and social responsibility.

Central Methodist University's Creed, Values, and Educational Goals can be found on pages 6-8 of the 2007-2008 Catalog. The University's policy on students with disabilities can be found on pages 27-28.

OVERVIEW

This course introduces students to basic concepts of statistics. Topics include one and two variable statistics, binomial distributions, normal distributions, confidence intervals, hypothesis testing, linear regression, and Chi-Square testing

OBJECTIVES
Upon successful completion of this course the student will be able to:

- Find the statistics of one and two variable data
- Find the probability of a binomial experiment
- Approximate a binomial distribution with a normal distribution
- Find the area under the normal curve
- Find the confidence interval for the mean
- Use hypothesis testing to prove or disprove a hypothesis
- Perform a linear regression on 2-variable data
- Use the Chi-Square method to test if two variables are dependent or independent

TEXT
The following text is required:
Understanding Statistics 7th edition, Brase and Brase

ATTENDANCE AND GRADING

Students are expected to attend all class meetings. If you must miss a class, it is your responsibility to get class notes from another student and contact the instructor about any announcements.

Your grade will be based on homework assignments, quizzes given during class periods, and exams given at the end of each unit and the comprehensive final:

Homework	20%
Exams	80%

Homework will be assigned in class and will be posted on myCMU. Late homework will be accepted

with 10% deducted if it is received within a week of the due date – there is no credit for late homework after one week.

Final exam will be mildly cumulative: 60% will cover the material since the third exam and the remaining 40% will cover material covered in the first three exams

Attendance is not specifically counted in the grade calculation, but your grade will be reduced by one letter grade if you miss more than three (6) classes.

A Word About Absences:

As college students you are considered adults capable of allocating your time among the different demands placed upon you by school, work, family, friends, and organizations. No one category of absence is any 'better' than another as they all result in you missing class and getting less of what you're in college to get. How you allocate your time is a good indication of what you consider most important to you, but keep in mind that if you're going into debt to finance your education you will be paying for the classes you take for a long time. If you're one of the 1 in 3 students who don't graduate within five years (see collegeresults.org), you'll be stuck with your student loan debt until you pay it or die.

ACADEMIC HONESTY

All college and departmental policies on academic honest will be strictly enforced. All cases will be reported to the Academic Dean of the university and to the Division Chair. In plain English, academic honest means that any work you submit for a grade (quizzes, exams, papers, reviews, etc.) will be you own work and that when you quote someone else's work, thoughts, or statements, that you give them the credit they are entitled to receive.

DISABILITY SERVICES

The Center for Learning and Teaching (CLT) at Central Methodist University is committed to ensuring nondiscrimination and equal access to all programs, services, and activities for qualified students with a disability. Students requesting disability services must apply for accommodations through the CLT. Registration notification with the CLT is required for each semester or term that a student plans to use academic accommodations.

Please contact Teresa Argent, targent@centralmethodist.edu or by phone at 660-248-6287 for more details.

Math 106
Tentative Schedule
Fall 2013

Week of:	Material:	Class Events:
Jan. 7	Chapters 1 Experimental Design; Organizing Data	
Jan. 14	Chapters 2-3: Visual Displays of Data; Averages and Variations	
Jan. 21	Ch. 3: Mean and Standard Deviation applications	
Jan. 28	Chapter 4: Probability Theory, Dependent and Independent Events, Permutations and Combinations	
Feb. 4	Chapter 4: Probability Theory, Dependent and Independent Events, Permutations and Combinations	**Exam 1 over chapters 1-4**
Feb. 11	Chapter 5: The Binomial Distribution	
Feb. 18	Chapter 5 and Chapter 6: Normal Distribution	
Feb. 25	Chapter 6: The Normal Distribution continued	
Mar. 4	Chapter 7: Sampling Distributions	
Mar. 11	Chapter 8: Estimation	**Exam 2 over chapters 5-7**
Mar. 18	Ch. 8 Estimation	
Mar. 25	Chapter 9: Hypothesis Testing	
Apr. 1	Chapter 9: Hypothesis Testing	
Apr. 8	Chapter 10: Regression and Correlation	**Exam 3 over chapters 8-9**
Apr. 15	Chapter 11: Chi Square and F distributions	
Apr. 22	Chapter 11: Chi Square and F distributions	
Apr. 29		
May 6	**FINAL EXAMS**	**Final Exam**