

University of North Texas at Dallas

Spring 2016

SYLLABUS

Math 1680-001 Elementary Probability and Statistics (3CR)			
Department of	Mathematics and Information Sciences	Division of	Liberal Arts and Sciences
Instructor Name:	Dr. Johnny M. Moore		
Office Location:	Adjunct Office		
Office Phone:			
Email Address:	Johnny.Moore@untdallas.edu		
Office Hours:	Mon. & Wed. 1:30 pm – 2:30pm		
Math Lab Hours:	Mon & Wed 1:00 pm – 7 pm; T/Thu 9:00 am – 7 pm		
Classroom Location:	DAL2 - 240		
Class Meeting Days & Times:	Mon. & Wed. 5:30pm – 6:50pm		
Course Catalog Description:	An introductory statistics course to serve students of any field who want to apply statistical inference. Descriptive statistics, elementary probability, estimation, hypothesis testing and small samples.		
Prerequisites:	Math 1010D with grade C or better, or the placement test result appropriate for this course.		
Co-requisites:			
Required Text:	Web Assign (http://www.webassign.net) Class Key: unt 3055 1424		
Recommended Text and References:	Elementary Statistics, by R. Johnson and P. Kuby, 11 th edition, Cengage Learning, (2011), ISBN-13: 978-0538733502.		
Access to Learning Resources:	UNT Dallas Library: phone: (972) 780-3625; web: http://www.unt.edu/unt-dallas/library.htm UNT Dallas Bookstore: phone: (972) 780-3652; e-mail: 1012mgr@fhcg.follett.com		
Course Goals or Overview:	The goal of this course is to introduce students to the concepts of elementary probability and statistics.		
Learning Objectives/Outcomes:	At the end of this course, the student will be able to		
1	Explain the use of data collection and statistics as tools to reach reasonable conclusions.		
2	Recognize, examine and interpret the basic principles of describing and presenting data.		
3	Compute and interpret empirical and theoretical probabilities using the rules of probabilities and combinatorics		
4	Explain the role of probability in statistics.		
5	Examine, analyze and compare various sampling distributions for both discrete and continuous random variables.		
6	Describe and compute confidence intervals.		
7	Solve linear regression and correlation problems.		
8	Perform hypothesis testing using statistical methods.		

Course Outline

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated by the class website.

	Monday	Wednesday
Week 1	1. Statistics	2. Descriptive Statistics of Single-Variable Data
Week 2	2. Descriptive Statistics of Single Variable	3. Descriptive Statistics of Bivariate Data
Week 3	3. Descriptive Statistics of Bivariate Data	4. Probability
Week 4	4. Probability	5. Probability Distribution
Week 5	5. Probability Distribution	6. Normal Distribution
Week 6	6. Normal Distribution	7. Sample Variability
Week 7	7. Sample Variability	Review
Week 8	Midterm Exam	8. Introduction to Statistical Inference
Week 9	8. Introduction to Statistical Inference	9. Inferences Involving One Population
Week 10	Spring Break	Spring Break
Week 11	10. Inferences Involving Two Populations	11. Applications of Chi-Square
Week 12	11. Applications of Chi-Square	12. Analysis of Variance
Week 13	12. Analysis of Variance	13. Linear Correlation and Regression Analysis
Week 14	13. Linear Correlation and Regression Analysis	Exam #2
Week 15	14. Elements of Nonparametric Statistics	14. Elements of Nonparametric Statistics
Week 16	Class Project	Project Presentation
Final		Final Exam TBA

Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Exams: *written tests designed to measure knowledge of presented course material*

Home Works: *written assignments designed to supplement and reinforce course material*

Project: *a large scale written assignment that concerns more toward the application*

Quizzes: *small-scale written tests designed provide more frequent feedbacks on the students' understanding*

Class Participation: *daily attendance and participation in class discussions*

Grading Matrix:

Instrument	Value (points or percentages)	Total
Exam # 1	20% of Course Grade	200
Exam # 2	20% of Course Grade	200
Final Exam (Comprehensive)	40% of Course Grade	400
Home Works (hand-written)	5% of Course Grade	50
Home Works (computerized)	5% of Course Grade	50
Project and Presentation	10% of Course Grade	100
Total:		1,000

Grading Determination:

- A: (total score) $\geq 90\%$.
- B: $80\% \leq$ (total score) $< 90\%$.
- C: $70\% \leq$ (total score) $< 80\%$.
- D: $60\% \leq$ (total score) $< 70\%$.
- F: (total score) $< 60\%$.

Instructor Specific Policies and Procedures

Exam Policy:

The midterm and the final exams must be taken in person as scheduled, except for documented emergencies approved by the instructor in individual bases.

Assignment Policy:

The projects and the assignments must be submitted electronically through the course website. Late submission will be accepted with the late penalty of 10% per day, and the final submission must be done before the final week begins.

University Policies and Procedures

Students with Disabilities (ADA Compliance):

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students' with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. Grades assigned before an accommodation is provided will not be changed as accommodations are not retroactive. For more information, you may visit the Student Life Office, Suite 200, Building 2 or call Laura Smith at 972-780-3632.

Student Evaluation of Teaching Effectiveness Policy:

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class.

Academic Integrity:

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. In addition, all academic work submitted for this class, including exams, papers, and written assignments should include the following statement:

On my honor, I have not given, nor received, nor witnessed any unauthorized assistance that violates the UNTD Academic Integrity Policy.

Bad Weather Policy:

On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website www.unt.edu/dallas. Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.

Attendance and Participation Policy:

The University attendance policy is in effect for this course. Class attendance and participation is expected because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent.

Diversity/Tolerance Policy:

Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Office of Student Life as the instructor deems appropriate.