

University of North Texas at Dallas

Spring 2016

SYLLABUS

MATH 1355 Probability and Statistics for Teachers 3 credit hours

Division: Liberal Arts and Life Sciences

Department: Mathematics and Information Sciences

Instructor: Dr. Gwendolyn Johnson

Office: Founders Hall (Bldg 2) Room 232

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Office hours:

Mondays & Wednesdays 11:30 to 1:00 and 2:30 to 3:30 (I can stay later if needed.)

Tuesdays & Thursdays 3:00 to 5:30

Because I often have meetings on campus, I might not be in my office during these hours. Please email me to make sure I will be available before you visit.

Class Times: Thursdays 5:30 to 6:50 and online

Course Catalog Description: Elementary probability, tree diagrams, counting techniques, basic set theory, statistical techniques for organizing, summarizing, displaying, and interpreting data, sampling techniques, descriptive statistics, normal distribution, discussions of children's learning of statistics and probability.

Required Materials:

There is no textbook for this class, but you will need to bring a graphing calculator to class.

Learning Objectives:

1. Students will answer questions and solve problems related to data analysis including bar graphs, line plots, pictographs, stem-and-leaf plots, and Venn diagrams.
2. Students will answer questions and solve problems related to probability including counting combinations, set theory, and tree diagrams.
3. Students will answer questions and solve problems related to statistics including sampling techniques, mean, median, mode, normal distribution, range, and correlation.
4. Students will answer questions related to teaching financial literacy.

INTASC and NCATE Standards:

InTASC Standard #4 Content Knowledge: The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline meaningful for learners to ensure mastery of the content.

InTASC Standard #5 Application of Content The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.

NCATE Standard 1: Candidate Knowledge, Skills, and Professional Dispositions

Learning Resources:

UNT Dallas Math Lab is located in Bldg 1 room 336.

UNT Dallas Writing Center can be found at www.unt.edu/wc

Academic Advising and Student Support is located in Bldg 1, third floor. 972-338-1645

Grading Matrix:

Tests and Quiz	600 points
Final Exam	200 points
Homework	130 points
Attendance	35 points
Group Activities	<u>35 points</u>
	1,000 points total

Course Outline

Date	Thursday	On Your Own
Jan. 21	PowerPoint 1A: Pictographs, bar graphs, histograms, and line plots	Practice 1A
Jan. 28	PowerPoint 1B: Circle graphs, line graphs, deciding which graph to use	Practice 1B
February 3 is the last day to drop the class without receiving a W.		
Feb. 4	PowerPoint 1C: Stem-and-leaf plots, Venn diagrams, financial literacy	Complete HW #1
Feb. 11 HW 1 due	Test #1	Fraction Review
Feb. 18	PowerPoint 2A: Combinations and fraction review	Practice 2A
Feb. 25	PowerPoint 2B: Probability Part 1	Practice 2B
March 3	PowerPoint 2C: Probability Part 2	Complete HW #2
March 10 HW 2 due	Test #2	Measures of Center
Spring Break is March 14-18 Midterm grades will be available March 19.		
March 24	PowerPoint 3A: Measures of Center: mean, median, mode	Practice 3A
March 31 Quiz	PowerPoint 3B: range and standard dev Group Activity: Range	Practice 3B
April 7	PowerPoint 3C: Sampling techniques, the normal curve, and percentiles	Practice 3C
April 8 is the last day to drop the class with a W. Instructor's written approval is required.		
April 14	PowerPoint 3D: Correlation and scatterplots	Practice 3D
April 21	PowerPoint 3E: Interquartile range and boxplots	Test Review
April 28	Test #3	Begin Exam Review and Discussion
May 5	Class online: Continue Exam Review and Discussion	Finish Exam Review and Discussion
Finals Week	Final Exam	

Course Policies and Procedures

Attendance

Missing class for any reason will affect your attendance grade. There is no such thing as an “excused” absence. You do NOT need to bring doctor’s notes. Arriving late or leaving early will affect your attendance grade. If you will be arriving late or leaving early on a regular basis, please let the instructor know the reason.

Blackboard

You are expected to use Blackboard to check announcements, participate in discussions, check your grades, download documents, and upload your homework. If you need help using Blackboard, please ask the instructor or call the Helpdesk at 972-338-5580.

Grades on Tests and Homework

Tests are usually graded within two business days. Homework is generally graded within one week. You can monitor your progress in the class by checking “My Grades” in Blackboard.

Homework

Homework must be submitted to Blackboard in the form of a Microsoft Word document unless other instructions are given. PDFs and Pages documents will NOT be accepted.

Late Homework

A late penalty will be assessed for work turned in after the due date. No work will be accepted after the final exam. Work will not be accepted more than two weeks after the due date.

Make-up Tests

If you must miss a test, please let the instructor know ahead of time. You must take a make-up test within one week of the original test date. The make-up test must be taken in one sitting. (You can’t leave and come back to finish later.)

Netiquette

In electronic communication (Discussions and Email), please use complete sentences and explain your thoughts clearly and completely. If I do not respond to an email, it could be that I did not understand what you wrote in the email.

PowerPoints

Information in the PowerPoints is generally accurate, but small mistakes are possible. Please let the instructor know if you find any mistakes or have any questions about the material in the PowerPoints. If we do not get through all of the material in a PowerPoint in class, it is your responsibility to finish going through the PowerPoint on your own.

University Policies and Procedures

Bad Weather:

On days that present severe weather and dangerous driving conditions, a decision may be made to close the campus. Please sign up for the JagAlert Emergency Notification system.

<http://www.untDallas.edu/police/resources/jagalert>

If you have already signed up, make sure your information is up-to-date.

Children on Campus:

University policy does NOT allow you to bring your children to class. The university policy states, "UNT Dallas students may not bring children to campus and leave them unattended. UNT Dallas students may not bring children to campus and take them to class."

Class Attendance:

You are expected to attend class! The university policy states that UNT Dallas "recognizes that student success is promoted by the expectation of regular attendance and participation in class. Regular and punctual attendance at all scheduled classes is expected."

Course Drop

Courses dropped prior to the census date will not appear on the student's transcript. If a course is dropped after the census date but prior to the end of the sixth week, the faculty member will assign a grade of W. No student will be allowed more than six grades of W other than the exceptions on the university's website.

Inclement Weather and Online Participation

Online classes may or may not be effected by campus closures due to inclement weather. Unless otherwise notified by your instructor via e-mail, online messaging, or online announcement, students should assume that assignments are due as scheduled.

Netiquette

In any social interaction, certain rules of etiquette are expected and contribute to more enjoyable and productive communication. Emails, Discussion Board messages and/or any other forms of written communication in the online environment should use proper "netiquette" (i.e., no writing in all caps (usually denotes yelling), no curse words, and no "flaming" messages (angry, personal attacks)).

Racial, ethnic, or gender slurs will not be tolerated, nor will pornography of any kind.

Any violation of online netiquette may result in a loss of points or removal from the course and referral to the Dean of Students, including warnings and other sanctions in accordance with the University's policies and procedures. Refer to the Student Code of Student Rights Responsibilities and Conduct at <http://www.untDallas.edu/osa/policies>. Respect is a given principle in all online communication. Therefore, please be sure to proofread all of your written communication prior to submission.

Online Attendance and Participation

The University attendance policy is in effect for this course. Class attendance in the Blackboard classroom 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 the discussion board. Online presence and participation in all class discussions is essential to the integration of course material and your ability to demonstrate proficiency.

Attendance for this online or hybrid course is considered when you are logged in and active in Blackboard, i.e., posting assignments, taking quizzes, or completing Discussion Boards. To maintain financial aid award eligibility, activity must occur before the census date of the session or term of the course. Refer to <http://www.untDallas.edu/registrar> for specific dates. If you are absent/not active in the course shell, it is YOUR responsibility to let the instructor know immediately, upon your return, the reason for your absence if it is to be excused. All instructors must follow university policy 7.005 covering excused absences; however, it is the instructor's discretion, as outlined in the course syllabus, of how unexcused absences may or may not count against successful completion of the course

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 Section 504 Coordinator, Cynthia Suarez at 972-338-1777 or email Cynthia.suarez@untDallas.edu