

**University of North Texas at Dallas**  
**Fall 2013**  
**SYLLABUS**

|                                                                         |                                                                                                                                                                                                                                                                                              |                    |                           |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------------|
| <b>Math 1680D/1681D Elementary Probability and Statistics (3CR/4CR)</b> |                                                                                                                                                                                                                                                                                              |                    |                           |
| <b>Department of</b>                                                    | Mathematics and Information Sciences                                                                                                                                                                                                                                                         | <b>Division of</b> | Liberal Arts and Sciences |
| <b>Instructor Name:</b>                                                 | Vinod Arya                                                                                                                                                                                                                                                                                   |                    |                           |
| <b>Office Location:</b>                                                 | 2-226                                                                                                                                                                                                                                                                                        |                    |                           |
| <b>Office Phone:</b>                                                    | (972) 338-1375                                                                                                                                                                                                                                                                               |                    |                           |
| <b>Email Address:</b>                                                   | Vinod.arya2@unt.edu                                                                                                                                                                                                                                                                          |                    |                           |
| <b>Office Hours:</b>                                                    | TWR 1:00 pm – 4:00 pm                                                                                                                                                                                                                                                                        |                    |                           |
| <b>Lab Hours:</b>                                                       |                                                                                                                                                                                                                                                                                              |                    |                           |
| <b>Classroom Location:</b>                                              | 2-242                                                                                                                                                                                                                                                                                        |                    |                           |
| <b>Class Meeting Days &amp; Times:</b>                                  | TR 10:00 am - 11:20 am                                                                                                                                                                                                                                                                       |                    |                           |
| <b>Course Catalog Description:</b>                                      | 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.                                                                                  |                    |                           |
| <b>Prerequisites:</b>                                                   | Math 1010D with grade C or better.                                                                                                                                                                                                                                                           |                    |                           |
| <b>Co-requisites:</b>                                                   |                                                                                                                                                                                                                                                                                              |                    |                           |
| <b>Required Text:</b>                                                   | Intro Stats Plus NEW MyStatLab with Pearson eText -- Access Card Package, 4/E<br><b>Richard D. De Veaux, Williams College, Paul F. Velleman, Cornell University, David E. Bock, Cornell University.</b> ISBN-10: 0321891244 • ISBN-13: 9780321891242, 2014 <b>and MyStatLab software.</b>    |                    |                           |
| <b>Recommended Text and References:</b>                                 |                                                                                                                                                                                                                                                                                              |                    |                           |
| <b>Access to Learning Resources:</b>                                    | UNT Dallas Library:<br>phone: (972) 780-3625;<br>web: <a href="http://www.unt.edu/unt-dallas/library.htm">http://www.unt.edu/unt-dallas/library.htm</a><br>UNT Dallas Bookstore:<br>phone: (972) 780-3652;<br>e-mail: <a href="mailto:1012mgr@fhcg.follett.com">1012mgr@fhcg.follett.com</a> |                    |                           |
| <b>Course Goals or Overview:</b>                                        | The goal of this course is to introduce students to the concepts of elementary probability and statistics.                                                                                                                                                                                   |                    |                           |
| <b>Learning Objectives/Outcomes:</b>                                    | 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.

We plan to cover Chapters 1 through 21 of the book.

## 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*

**Assignments:** *written assignments designed to supplement and reinforce course material*

**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 for Math 1680:

| Instrument              | Value (points or percentages) | Total        |
|-------------------------|-------------------------------|--------------|
| Exam 1                  | 25% of Course Grade           | 250          |
| Exam 2                  | 25% of Course Grade           | 250          |
| Final Exam              | 25% of Course Grade           | 250          |
| Quizzes                 | 10% of Course Grade           | 100          |
| Home Works and Projects | 15% of Course Grade           | 150          |
| <b>Total:</b>           |                               | <b>1,000</b> |

### Grading Matrix for Math 1681:

| Instrument              | Value (points or percentages) | Total        |
|-------------------------|-------------------------------|--------------|
| ALEKS                   | 25% of Course Grade           | 300          |
| Exam 1                  | 25% of Course Grade           | 250          |
| Exam 2                  | 25% of Course Grade           | 250          |
| Final Exam              | 25% of Course Grade           | 250          |
| Quizzes                 | 10% of Course Grade           | 100          |
| Home Works and Projects | 15% of Course Grade           | 150          |
| <b>Total:</b>           |                               | <b>1,300</b> |

### Grade

#### Determination:

A: 90.0% or better  
B: 80.0% - 89.9%  
C: 70.0% - 79.9%  
D: 60.0% - 69.9%  
F: 60.0% or less.

## 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.

**Assignment Policy:**

Assignments will be announced in class and also posted in the class website.

**Exam Policy:**

Exams should be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Student Handbook).

**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. Refer to the Student Code of Academic Integrity at [http://www.unt.edu/unt-dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic\\_Integrity.pdf](http://www.unt.edu/unt-dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic_Integrity.pdf) for complete provisions of this code.

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](http://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.

**Optional Policies:**

- Use of WebCT/Blackboard
- Use of Cell Phones & other Electronic Gadgets in the Classroom
- Food & Drink in the Classroom
- Use of Laptops
- Grade of Incomplete, "I"