# NORTH LAKE COLLEGE
5001 N. MacArthur Blvd.
Irving, Texas 75038-3899
DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

## COURSE SYLLABUS
Statistics/ Math 1342
Fall 2019

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This course syllabus is intended as a set of guidelines for Statistics. Both North Lake College and your instructor reserve the right to make modifications in content, schedule, and requirements as necessary to promote the best education possible within prevailing conditions affecting this course.

Instructor Information
Instructor’s Name: Yan Avram
Email Address: yavram@dcccd.edu
Office Phone Number: 972-860-3926
Office Location: A-371
Office Hours: Please see e-campus for more details.

Course Information
Course title: Introductory Statistics
Course number: Math 1342
Section number: 77701
Credit hours: Three (3)
Class meeting time: MW, 5:45PM to 7:05PM.

Course description: Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Use of appropriate technology is recommended.

Course prerequisites: This is an entry-level course and is open to any student meeting TSI standards of college readiness (student must have appropriate assessment test score or have successfully completed DMAT 0310).

Required or recommended Textbooks and Materials

1) Graphing calculator TI-83 or TI-84. Use almost every day.

2). Online software is required: ConnectMath, from McGraw-Hill publisher. You can just choose one of the followings.
Pick only 1 of the following 2 choices from e-connect or click the link:

1) Connect Plus for Elem Stats/ALEKS 12-month Access Card
Elementary Statistics: Brief (LLF) (w/Connect ALEKS Access)
ISBN: 9781260487497
Publisher: McGraw-Hill
OR
2. Elem Statistics: Brief (Connect ALEKS Access Card)
ISBN: 9781260387001
Publisher: McGraw-Hill

The paper Textbook is optional for this course: Elementary Statistics: A Brief Version, 8th Edition, by Bluman. (Formulas and tables will be provided for each test).

Course Objectives

The objective of the mathematics component of the core curriculum is to develop a quantitatively literate college graduate. Every college graduate should be able to apply basic mathematical tools in the solution of real-world problems.

Program Level Objectives

Through this Core Curriculum, students will prepare for contemporary challenges by developing and demonstrating the following core objectives:

- **Critical Thinking Skills:** to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information;
- **Communication Skills:** to include effective development, interpretation and expression of ideas through written, oral and visual communication;
- **Empirical and Quantitative Skills:** to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

ACGM Learning Outcomes

Specific Course Learning Outcomes

Upon successful completion of this course, students will:

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.
Means of Assessment of Course Learning Outcomes

Course Learning Outcomes will be assessed by a variety of means.

1. Online and proctored written exams will be given to assess each Learning Outcome.
2. Homework will be assigned and assessed either using the software component or by the instructor.
3. Observation of student’s collaboration will be used to assess all outcomes.
4. Students will complete projects and learning activities that will address specific course learning outcomes.

Course Outline
Please see Appendix B attached to this syllabus for a complete and detailed course outline

Assessment & Evaluation Procedures of Course Learning Outcomes

The learning outcomes will be assessed through homework assignments, quizzes, class attendance with class activities and four tests. The final grade will be based on the following:

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework and SLOs</td>
<td>16</td>
</tr>
<tr>
<td>Attendance and class activities</td>
<td>10</td>
</tr>
<tr>
<td>Unit one test Ch1-Ch3</td>
<td>18</td>
</tr>
<tr>
<td>Unit two test Ch4-Ch5</td>
<td>18</td>
</tr>
<tr>
<td>Unit three test Ch6-Ch7</td>
<td>18</td>
</tr>
<tr>
<td>Final Exam: Ch8 and Ch10 Only</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

- Calculators may be used on all tests, so do formula sheets and tables from the book.
- All tests are multiple choices using Scantron answer sheet (Form No. 882-E).
- Test review questions with answers are posted inside the e-Campus for your references.

Grading Scale
Your course grade will be determined by the final grade average based on the following:
A = 90 – 100  B = 80 – 89  C = 70 – 79  D = 60 – 69  F = 0 – 59

Optional Project

Students who want to improve their grade can use an optional project to replace one of the lowest test score or get up to 20 extra points added to the lowest test grade.

Discipline/ Course/ Department/Policies

ABSENCES/TARDIES:
Absences are generally detrimental to one’s performance in a course. You are expected to attend class regularly. If you must miss a class, it is your responsibility to make up any missed work. Some of quizzes for extra credits cannot be made up.

**HOMEWORK:** Homework is the most important learning tool in a course. The classroom environment is more favorable for learning when the student has studied the material in the text, has tried to work the problems, and uses the classroom to get supplementary information and assistance that is not available in the text. Each homework assignment is anticipated to require approximately 2 hours in addition to 3 hour of content review for a total of 5 hours.

**Testing:**

Tests will be taken in class according to the class calendar. In the event that we fall behind schedule, tests will then be taken in the testing center. The instructor reserves the right to make test schedule changes. If you are unable to take a test at the scheduled time, please make prior arrangements with the instructor. You may then take the test in the Testing Center on or before the regularly scheduled test day. To take a test in the Testing Center you will need to supply a photo ID (preferably your North Lake College ID), your student ID number, your instructor’s name, and the course number and section.

Formulas and tables are permitted on each test.

**Math Center – Free and no Appointment needed**

Located at the lower level of Library.

**Hours of Operation:**

Mon - Thurs.: 8:00 a.m. - 9:00 p.m.

Friday, 9:00 a.m. - 2:00 p.m.

Saturday, 9:00 a.m. - 2:00 p.m.

Closed Sunday

**INSTITUTIONAL POLICIES**

Institutional Policies relating to this course can be accessed from the following link, or type in [www.northlakecollege.edu/syllabipolicies](http://www.northlakecollege.edu/syllabipolicies).

**Financial Aid Certification of Attendance**

You must attend and participate in your on-campus or online course(s) in order to receive federal financial aid. Your instructor is required by law to validate your attendance in your on-campus or online course in order for you to receive financial aid. You must participate in an academic related activity pertaining to the course such as but not limited to the following examples:

- initiating contact with your instructor to ask a question about the academic subject studied in the course;
- submitting an academic assignment;
- taking an exam;
- completing an interactive tutorial;
- participating in computer-assisted instruction;
• attending a study group that is assigned by the instructor;
• or participating in an online discussion about academic matters relating to the course.

Drop Policy
If you are unable to complete this course, you must officially withdraw by **10/03/2019**. Withdrawing is a formal procedure which you must initiate; your instructor cannot do it for you. All Dallas County Community Colleges charge a higher tuition rate to students registering the third time for a course. This rule applies to the majority of credit and Continuing Education / Workforce Training courses. Developmental Studies and some other courses are not charged a higher tuition rate. Third attempts include courses taken at any DCCCD college since the fall 2002 semester. For further information, [go online to the Third Attempt](#).

STOP BEFORE YOU DROP. It is in your interest to talk to your instructor or an advisor before dropping. There are many alternatives.

For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than 6 courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a “W”. Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges. For more information, you may [access the Course Drop web page](#).

Counseling Service (A311)
Counseling services for personal issues are provided to all students currently enrolled at North Lake College. These services are provided by licensed professionals who are bound by confidentiality (within ethical parameters) at no charge. With the assistance of a counselor, students are able to identify, understand, resolve issues and develop appropriate skills. To make an appointment call 972-273-3333 or visit A311.

Appendix A: Course Outline and Content Weekly Calendar

<table>
<thead>
<tr>
<th>Important Dates</th>
<th>Important Dates for the semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/26/19 (Monday)</td>
<td>Classes Begin</td>
</tr>
<tr>
<td>08/31/2019</td>
<td>Census date (Certification Date)</td>
</tr>
<tr>
<td>09/02/19 (Monday)</td>
<td>Labor day. College closes.</td>
</tr>
<tr>
<td>10/03/19</td>
<td>Last Day to Withdraw with grade of W</td>
</tr>
<tr>
<td>10/16/19 (Wednesday)</td>
<td>Last day to take Final Exam in class.</td>
</tr>
</tbody>
</table>

<p>| Week | Chapter | Subjects                  | Content                                                        |
|------|---------|---------------------------|                                                               |
| 1    | 8/26-9/01| Probability and Statistics| Descriptive and Inferential Statistics                         |
|      |         |                           | Variables and Type of Data                                      |
|      |         |                           | Data Collections and Sampling Techniques                       |
|      |         |                           | Observational and Experimental Studies                         |</p>
<table>
<thead>
<tr>
<th>Week</th>
<th>Chapter</th>
<th>Subjects</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>Frequency Distributions and Graphs</td>
<td>Organizing Data, Histograms, Frequency Polygons, and Ogives, Other Types of Graphs, Paired Data and Scatter Plots (regression and the line of best fit from chapter 10)</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>Data Description</td>
<td>Measure of Central Tendency, Measure of Variation, Measure of Position, Exploratory Data Analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Unit One Test (CH. 1 to 3)</strong></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>Discrete Probability Distributions</td>
<td>Probability Distributions, Mean, Variance, Standard Deviation, and Expectations, The Binomial Distribution</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Unit Two Test (CH. 4 and 5)</strong></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>Confidence Interval and Sample Size</td>
<td>Confidence Intervals for the Mean, Confidence Intervals and sample size for Proportions, Confidence Intervals for Variances and Standard Deviations</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Unit Three Test</strong></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>Hypothesis Testing</td>
<td>Steps in Hypothesis Testing, z Test for a Mean, t Test for a Mean, z Test for a Proportion, Confidence Interval and Hypothesis Testing</td>
</tr>
<tr>
<td>7</td>
<td>10.1 and 10.2 only</td>
<td>Correlation and Regression</td>
<td>Correlation and Correlation Coefficient as it applies to linear regression, Linear regression only, Line of Best Fit and its Equation by using technology</td>
</tr>
<tr>
<td>8</td>
<td>Review</td>
<td>Final Exam (ch8 and 10 only)</td>
<td>Chapter 10 only requires 2 sections: 10.1 and 10.2.</td>
</tr>
</tbody>
</table>
Appendix B: NLC Testing Center Information

- You may not bring personal items into the Test Center. This includes bags, cell phones and pagers. Coin-reimbursable (quarter) lockers are available for student use. **Please do not share lockers.**

- Please show courteous and cooperative behavior while using the services provided by the Testing Center.

- Do not bring children to the testing center.

- **Do not** take any testing materials with you when you leave the Testing Center. This includes the test, answers, charts, scratch paper. These items will be attached to your test.

Questions? Please visit the Testing Center (A425) or call 972-273-3160.

**Monday – Thursday:** 8:30 a.m. – 8:00 p.m.
No tests will be issued after 7:00 p.m. Other cut-off times may be in effect for specific exams by the instructor's direction. All exams collected at 8:00 p.m.

**Friday - Saturday:** 8:30 a.m. – 3:30 p.m.
Other cut-off times may be in effect for specific exams by the instructor's direction. No tests will be issued after 2:30 p.m. All exams collected at 3:30 p.m.

**Sunday: CLOSED**

If your instructor requires you to complete an exam in the Testing Center, be sure to have the following information when you request your test.

- Instructor’s name
- Subject and course number (Math-1342)
- Exam number (1st, 2nd, 3rd, etc.)
- Exam deadline (Get this information from your instructor. The testing staff cannot “look up” this information on computers.)

You should also bring the following supplies.

- Pencil
- Scantron answer sheet (Form No. **882-E**).
- Eraser
- TI83/TI 84 calculator are allowed.
- Money for coin-return lockers (**quarter**). Please do not share lockers.

Important: Government- or school-issued photo identification is required.