Elementary Statistical Methods INET
Syllabus
North Lake College

Instructor Information
Name: Danny Dinh
DCCCD Email: VietVDinh@dcccd.edu
Office Phone: 972-273-3500 – Best to email.
Office Location: A266
Office Hours: MW 11am – 2pm
T Th 7am – 7:25am, 11am-2pm, and 4:30pm-5:30pm
Other times by appointment.
Math & Science Division Office and Phone number: P330, 972-273-3500

Course Information
Course Title: Elementary Statistics
Course Number: Math 1342
Section Number: 70201
Semester/Year: Spring 2020
Credit Hours: 3
Class Meeting Time/Location: INET/CET
Certification Date: 04/03/2020
Last Day to Withdraw: 05/04/2020

Course Prerequisites
College level ready in Mathematics at the non-algebra or algebra levels.

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.
**Student 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. *(Empirical and Quantitative)*
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. *(Communication)*
8. Perform hypothesis testing using statistical methods *(Critical Thinking)*

**Texas Core Objectives**
The College defines essential knowledge and skills that students need to develop during their college experience. These general education competencies parallel the Texas Core Objectives for Student Learning. In this course, the activities you engage in will give you the opportunity to practice two or more of the following core competencies:

1. **Critical Thinking Skills** - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
2. **Communication Skills** - to include effective development, interpretation, and expression of ideas through written, oral, and visual communication
3. **Empirical and Quantitative Skills** - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
4. **Teamwork** - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
5. **Personal Responsibility** - to include the ability to connect choices, actions, and consequences to ethical decision-making
6. **Social Responsibility** - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities

**Required Course Materials:**

**Textbook:** A Brief Version Elementary Statistics, 8th Edition, by Bluman  
**Online Software:** ConnectMath, McGraw-Hill  
**Calculator:** Graphing Calculator TI 83 or TI 84
Web Access to ConnectMath: McGraw-Hill's ConnectMath is a complete online homework system for mathematics and statistics with a powerful student assessment diagnostic tool. You can purchase it from the NLC bookstore. This software includes the textbook. Therefore if you are ok using an ebook there is no need to buy the textbook.

Note: A student of this institution is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Technical Support
Connect support website: ConnectMath Support
Technical support for eCampus: 972-669-6402
Technical support for Connect: 1-949-390-2095

Summary of Graded Work

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit I Test</td>
<td>10%</td>
</tr>
<tr>
<td>Unit II Test</td>
<td>10%</td>
</tr>
<tr>
<td>Unit III Test</td>
<td>10%</td>
</tr>
<tr>
<td>Unit IV Test</td>
<td>10%</td>
</tr>
<tr>
<td>SLO Quizzes</td>
<td>20%</td>
</tr>
<tr>
<td>Homework</td>
<td>40%</td>
</tr>
</tbody>
</table>

**TOTAL: 100%**

Final Grade

<table>
<thead>
<tr>
<th>Percentages</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100%</td>
<td>A</td>
</tr>
<tr>
<td>80-89%</td>
<td>B</td>
</tr>
<tr>
<td>70-79%</td>
<td>C</td>
</tr>
<tr>
<td>60-69%</td>
<td>D</td>
</tr>
<tr>
<td>0-59%</td>
<td>F</td>
</tr>
</tbody>
</table>

Homework

Homework and SLO quizzes must be completed on Connect Math.

Tests
- There are 4 Unit Tests.
- The Unit Tests are the main part of your course grade.
- The unit tests can be taken on any computer.
- There are reviews posted in eCampus for each exam.
Quizzes
Quizzes will be assigned in ConnectMath. The quizzes will be labels SLO Quizzes in ConnectMath.

Homework
Homework is the most important learning tool in a course.
- It reinforces classroom instruction.
- It provides an immediate and personal measure of your competence in the course.
- Your instructor does not accept late homework assignments.

The instructor’s role of facilitating learning is greatly enhanced for the student who has completed the homework. The classroom environment is more favorable for learning when the student has studied the material in the text/software site, has tried to work the problems, and uses the classroom to get supplementary information and assistance that is not available in the text/software site.

Attendance: This is online course.

Daily Work
The purpose of daily work is to reinforce topics covered and give opportunities for guided practice of concepts. Daily work assignments will not be accepted late. There may be some very short activities assigned through eCampus.

STEM/Math Center
There will be online STEM/Math Center, information will be posted on eCampus and also will be mailed to you.

The STEM Center (SC) located in L-137 and L-139 provides assistance and resources free to students enrolled in mathematics and developmental mathematics classes at North Lake College. The SC is a great place to bring a study group, study quietly, get help with math classes, and use the center’s various resources.
Hours: Monday – Thursday 9am – 8pm; Friday – Saturday 9am – 2pm
Manager: Camrunn Beck, Room L135, camrunn.beck@dcccd.edu

Financial Aid Certification of Attendance
To be certified as attending, a student must complete the following assignments:
- Watch 6 videos on ConnectMath
- Homework Chapter 1 on ConnectMath
and earning at least a score of 70% by Friday April 03, 2020 at 11:00am.
PENALTY for Academic Dishonesty

Please see Cheating, Plagiarism and Collusion under Institutional Policies

Academic dishonesty may result in the following sanctions, including, but not limited to:

1. A grade of zero or a lowered grade on the assignment or course.
2. A reprimand.
3. Suspension from the college.

Cheating is a serious crime in higher education and can have a grave effect on your academic reputation and your career after graduation. By not taking the time to learn material or create your own work, you are depriving yourself of valuable knowledge and putting yourself at risk of facing severe punishment. Enrolling in college means you’re investing your time, money, and effort toward a more successful future – don’t let all that go to waste by making the mistake of being academically dishonest!

Some examples of what is considered to be cheating:

- Copying from another student’s homework, classwork, or exam
- Allowing another student to copy your homework, classwork, or exam
- Using prohibited sources on a take home exam
- Conversing with another student while taking exam
- Not reporting other students who you know are cheating

Drop Policy

If you are unable to complete this course, you much officially withdraw before or on Monday May 04, 2020. Withdrawing is a formal procedure which you must initiate; your instructor cannot do it for you. See link within Institutional Policies p. 7

STOP BEFORE YOU DROP - Do NOT drop until you speak with your instructor.

Counseling Services (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.
**Institutional Policies**

Institutional Policies relating to this course can be accessed using the link below. These policies include information about tutoring, Disabilities Services, class drop and repeat options, Title IX, and more.

[North Lake Institutional Policies](http://www.northlakecollege.edu/syllabipolicies)

**MATH 1342 INET Calendar (7 wk)**

<table>
<thead>
<tr>
<th>Week</th>
<th>Sections Covered and Activities</th>
</tr>
</thead>
</table>
| 1    | • Chapter 1  
|      |   • SLO 1 (Section 1.1)  
|      |   • 2-1 Organizing Data  
|      |   • 2-2 Histograms, Frequency Polygons, and Ogives  
|      |   • 2-3 Other Types of Graphs  
|      |   • SLO 2 (Section 2.2)  
| 2    | • 2-4 Paired Data and Scatter Plots  
|      |   • 10-1 Correlation and Correlation Coefficient  
|      |   • 10-2 Regression  
|      |   • SLO 9 (Section 10.2)  
|      | **UNIT 1 TEST: Chapter 1, 2 & 10**  
|      |   • 3-1 Measure of Central Tendency  
|      |   • 3-2 Measure of Variation  
| 3    | • 3-3 Measure of Position  
|      |   • 3-4 Exploratory Data Analysis  
|      |   • 4-1 Sample Space and Probability  
|      |   • 4-2 Addition and Multiplication Rules for Probability  
| 4    | • 4-3 Conditional Probability  
|      |   • 4-4 Counting Rules  
|      |   • 4-5 Probability and Counting Rules  
|      |   • SLO 3 (Section 4.1)  
|      |   • SLO 4 (Section 4.5)  
|      | **UNIT 2 TEST, Chapter 3 & 4**  
|      |   • 5-1 Probability Distributions  
|      |   • 5-2 Mean, Variance, Standard Deviation, and Expectations  
| 5    | • 5-3 The Binomial Distribution  
|      |   • SLO 5 (Section 5.3)  
|      |   • 6-1 Properties of Normal distribution  
|      |   • 6-2 Applications of Normal distribution  
|      |   • 6-3 The Central Limit Theorem  
|      |   • SLO 6 (Section 6.3)  
|      |   • 6-4 The Normal Approximation to the Binomial Distribution  

<table>
<thead>
<tr>
<th>Week</th>
<th>Sections Covered and Activities</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td><strong>UNIT 3 TEST:</strong> Chapter 5 &amp; 6 Deadline: Sun. May 03</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 7-1 Confidence Intervals for the Mean When $\sigma$ is Known</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 7-2 Confidence Intervals for the Mean When $\sigma$ is Unknown</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 7-3 Confidence Intervals and sample size for Proportions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 7-4 Confidence Intervals for Variances and Standard Deviations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• <strong>SLO 7 (Section 7.1)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 8-1 Steps in Hypothesis Testing</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>• 8-2 $z$ Test for a Mean</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Final Project Part 5 Due</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 8-3 $t$ Test for a Mean</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 8-4 $z$ Test for a Proportion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 8-5 $F$ Test for a Variance or Standard Deviation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 8-6 Confidence Interval and Hypothesis Testing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• <strong>SLO 8 (Section 8.3)</strong></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td><strong>UNIT 4 TEST:</strong> Chapter 7 &amp; 8 Deadline: Wed. May 13</td>
<td></td>
</tr>
</tbody>
</table>