This course syllabus is intended as a set of guidelines for MATH 2342. 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: Eric Pleasant
Email Address: EricPleasant@dcccd.edu
Office Phone Number: 972-273-3016
Office Location: A365
Office Hours: Posted in Instructor Info in eCampus

Course Information
Course title: Elementary Statistical Methods
Course number: MATH 1342
Section number: 78431
Credit hours: Three (3)
Class meeting time: INET

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 or DMAT 309).
Required or Recommended Textbooks and Materials

- **Online Software**: ConnectMath, McGraw-Hill AND Respondus Lockdown Browser with Webcam
- **Calculator**: Graphing Calculator TI 83 or TI 84 (used almost daily)

Technical Support

Connect support website: www.connectmath.com/support
Technical support for eCampus: 972-669-6402
Technical support for Connect: 1-949-390-2095

Core Curriculum Intellectual Competencies

As developed by the Texas Higher Education Coordinating Board

**Program-Level Outcome 1**: Communication Skills - to include effective development, interpretation and expression of ideas through written, oral and visual communication

1. Written: Process and produce effective written communication adapted to audience, purpose, and time constraints.
2. Visual: Effectively interpret visual images or produce effective visual images.

**Program-Level Outcome 2**: Critical Thinking Skills - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information

**Program-Level Outcome 3**: Empirical and Quantitative Skills - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

Specific Course Learning Outcomes

Upon successful completion of this course, students will:

- Explain the use of data collection and statistics as tools to reach reasonable conclusions.
- Recognize, examine and interpret the basic principles of describing and presenting data.
- Compute and interpret empirical and theoretical probabilities using the rules of probabilities and combinatorics.
- Explain the role of probability in statistics.
- Examine, analyze and compare various sampling distributions for both discrete and continuous random variables.
- Describe and compute confidence intervals.
- Solve linear regression and correlation problems.
- 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 exams will be given to assess each Learning Outcome.
2. Homework will be assigned and assessed using the software component
3. Observation of student’s collaboration will be used to assess all outcomes.
4. Students will complete learning activities that will address specific course learning outcomes.

Evaluation Procedures

Tests
- Unit Tests
  - The Unit tests are the main part of your course grade.
  - There are four unit tests. The unit tests can be taken on any computer by use of the Respondus Lockdown Browser and webcam option
  - There are reviews posted in eCampus for each exam. Exams are multiple choice and MUST BE COMPLETED IN eCampus BY USING RESPONDUS WITH A WEBCAM. Respondus is a free download and instructions are posted in eCampus as to how to use it.

Quizzes
Quizzes will be assigned in ConnectMath and are titled SLO Quizzes.

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.
- I do not accept late homework assignments.

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.
- SLO Quizzes
  Quizzes will be assigned in Connect Math. Please keep up with the due dates as extensions will not be offered

There may be some very short activities assigned through eCampus. Due to this being a mini-mester, extra activities in the class will be limited.

Computing Your Grade:
Written Exams 70%
Homework 20%
Daily Work 10% (Includes quizzes and class activities)

Your course grade will be determined by the following:
A = 90 – 100%
B = 80 – 89%
C = 70 – 79%
D = 60 – 69%
F = 0 – 59%
Grade Alternatives

1 – Incomplete
Incomplete Details
- Only given in EXTREME CIRCUMSTANCES
- Requires instructor permission and consent by the Dean of the department.

Testing Center Information (Room L240)

Testing Policy for Mathematics & Science Division:
- If you need special accommodations you must talk to your instructor and submit a request to the Disability Services Office in person (A414) or by phone at 972-273-3165. Visit http://www.northlakecollege.edu/services-and-resources/advice-and-assistance/Pages/disability-services.aspx for more 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. The testing center is not responsible for lost or stolen items. 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.** You must make arrangements for the care of your children prior to your exam date. The police department will be notified of any unattended children.
- **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. **To do so constitutes Academic Dishonesty.**

Academic Dishonesty

The Dallas County Community District has established procedures and guidelines to protect the security and integrity of all exams. All incidents of academic dishonesty are documented and reported to the instructor, the Director of Testing and the Dean of Student Enrollment. **Questions? Please visit the Testing Center (A425) or call 972-273-3160.**

Testing Center Hours (L240)

- The Testing Center normal hours are Mon – Thurs: 8:30 a.m. to 8 p.m. and Fri and Sat: 8:30 a.m. to 3:30 p.m. Important: hours and days may vary due to holidays or other events, please verify the Testing Center will be open before you arrive.
- Questions? Please visit the Testing Center (A 425) or call 972-273-3160.

Testing Center Procedures

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 2342)
- 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 & Eraser
- A Test Request Form initialed by your instructor must be completed before entering the Testing center.
- Only battery operated 4-function calculator is allowed (if permitted by instructor).
- Money for coin-return lockers (quarter). Please do not share lockers.
**Important:** Government- or school-issued photo identification is required & enforced.

**Availability of Course Materials**

Access to coursework on ConnectMath is dependent upon the beginning and ending of the semester. Students may not be able to access their coursework except under instructor supervision and during their enrolled semester.

**Discipline/Course/Department/Policies**

**STEM Center**
The STEM Center, located in L137 and L139 provides assistance and resources free to students enrolled in mathematics and developmental mathematics classes at North Lake College.

This is a great place to bring a study group, study quietly, get help with math classes, and use the center’s various resources.

Services offered:
- Tutorial services in all math courses taught at North Lake College
- Computers for use by students enrolled in courses that have an Internet component such as homework systems (i.e., MyLabsPlus, ConnectMath)
- Graphing calculators for use in the center
- Textbooks for use in the center
- A quiet area to study (Just ask one of the tutors)
- Opportunity for students to make up class absences
- Whiteboards space for study groups
- Content workshops covering how to use graphing calculators, course topics, review sessions, and study skills

Contact the STEM Center Manager (Math)

**Hours of Operation**

Monday – Thursday: 9 a.m. – 6 p.m.
Friday & Saturday: 9 a.m. – 2 p.m.

Manager: Camrunn Beck, Room L135, camrunn.beck@dccc.edu

**The Academic Skills Center (A311)**
The Academic Skills Center (ASC) is designed to provide assistance to students in the following areas: Labs for students enrolled in foreign language, Developmental Reading, and ESOL courses. One-on-one tutoring is available.

- The Writing Center can help students clarify writing tasks, understand instructors’ requirements, develop and organize papers, explore revision options, detect grammar and punctuation errors, and properly use and document sources. Rather than merely editing or “fixing” papers, tutors focus on helping students develop and improve their writing skills.
- The Online Writing Lab (OWL) allows students to submit papers to our writing tutors electronically and get feedback within 24-72 hours. The OWL can be accessed through eCampus. After logging on to eCampus, click on the Community Tab at the top. Type “Owl” in the search field and click “Go.” Next, click on the double drop-down arrows next to “NLC-OWL2,” and then click on “Enroll.” Once enrolled, students can receive services from the OWL.

For more information or to schedule a tutoring appointment, come by A-332 or call 972-273-3089.
Cell Phone Use
The use of cell phones or other similar devices is prohibited during class time. You are expected to turn OFF and put away all such devices BEFORE entering the classroom. Students caught with a cell phone in their possession while taking a test will be given a zero (0) for that test and may face disciplinary action.

Disruptive Behavior
Distractive talking will not be tolerated. A warning will be given and if not heeded, the student will be asked to leave.

Institutional Policies
Institutional Policies relating to this course can be accessed from the following link: www.northlakecollege.edu/syllabipolicies

Drop Policy
If you are unable to complete this course, you must officially withdraw by Thursday, October 3rd, 2019. Withdrawing is a formal procedure which you must initiate; your instructor cannot do it for you.

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 A 430.

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The Academic Skills Center (ASC) is designed to provide assistance to students in the following areas:

• Labs for students enrolled in foreign language, Developmental Reading, and ESOL courses. One-on-one tutoring is available.
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• The Online Writing Lab (OWL) allows students to submit papers to our writing tutors electronically and get feedback within 24-72 hours. The OWL can be accessed through eCampus. After logging on to eCampus, click on the Community Tab at the top. Type “Owl” in the search field and click “Go.” Next, click on the double drop-down arrows next to “NLC-OWL2,” and then click on “Enroll.” Once enrolled, students can receive services from the OWL.

For more information or to schedule a tutoring appointment, come by A-332 or call 972-273-3089.

Food and Drink in the Classroom
The college policy restricts food and drink in the classroom.
# Appendix A.1

## Fall 1 2019

### MATH 1342 Weekly Course Calendar

<table>
<thead>
<tr>
<th>Week Number</th>
<th>Sections Covered and Activities Due</th>
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| Week 1 8/26 – 9/01 | Orientation  
1-1 Descriptive and Inferential Statistics  
1-2 Variables and Type of Data  
1-3 Data Collections and Sampling Techniques  
1-4 Observational and Experimental Studies  
2-1 Organizing Data |
| Week 2 9/02 – 9/08 | 2-2 Histograms, Frequency Polygons, and Ogives  
2-3 Other Types of Graphs  
2-4 Paired Data and Scatter Plots  
10-1 Correlation and Correlation Coefficient  
10-2 Regression  
Chapter 1 & 2: Test 1 |
| Week 3 9/09 – 9/15 | 3-1 Measure of Central Tendency  
3-2 Measure of Variation  
3-3 Measure of Position  
3-4 Exploratory Data Analysis  
4-1 Sample Space and Probability  
4-2 Addition Rules for Probability  
4-3 Multiplication Rules and Conditional Probability |
| Week 4 9/16 – 9/22 | 4-4 Counting Rules  
4-5 Probability and Counting Rules  
Chapter 3 & 4: Test 2  
5-1 Probability Distributions  
5-2 Mean, Variance, Standard Deviation, and Expectations  
5-3 The Binomial Distribution |
| Week 5 9/23 – 9/29 | 6-1 Normal Distributions  
6-2 Applications of Normal Distribution  
6-3 The Central Limit Theorem  
6-4 The Normal Approximation to the Binomial Distribution  
Chapter 5 & 6: Test 3 |
| Week 6 9/30 – 10/06 | 7-1 Confidence Intervals  
7-2 Confidence Intervals for the Mean When \( \sigma \) is Known  
7-3 Confidence Intervals for the Mean When \( \sigma \) is Unknown  
7-4 Confidence Intervals and Sample Size for Proportions  
7-5 Confidence Intervals for Variances and Standard Deviations |
| Week 7 10/07 – 10/13 | 8-1 Steps in Hypothesis Testing  
8-2 \( z \) Test for a Mean  
8-3 \( t \) Test for a Mean  
8-4 \( z \) Test for a Proportion  
8-5 Chi Square Test for a Variance or Standard Deviation |
| Week 8 10/14 – 10/16 | 8-6 Confidence Interval and Hypothesis Testing  
Chapter 7 & 8: Test 4 |
Appendix A.2  List of Course Objectives

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.
Appendix A.3

Student Guidelines for Written Assignments

Writing mathematics is a lot like writing a composition paper. There is an introduction (the problem), body (work/steps), and a conclusion (the answer). Your work must flow in a clear, precise and logical order. You must use the proper notation and use the properties, theorems, and rules correctly.

Listed below are the expectations and guidelines for every assignment. Your grade will be based upon how well you follow these guidelines. The goal of these guidelines is to help you become a better thinker and presenter which will be beneficial for any career you choose.

Expectations for all written assignments:
1. If you use a spiral notebook and tear out the pages, you need to trim off the “shards” before turning in the assignment. Loose-leaf paper is preferred.

2. Your name, course number, and chapter and section from the text (if applicable) should be written in the upper right-hand corner of the first page. Each assignment should be stapled in the upper left-hand corner of the page.

3. The problem number or name of the assignment should be written down for each problem assigned. Next include a summary of the problem and directions. Be sure to include all the given information in your summary and a picture of the problem if necessary.

4. If the problem requires you to introduce variables in order to solve it, you must clearly define the variables. Variables must represent numerical quantities, not objects. Be sure to include the units of the variables (for example, feet, pounds, minutes, etc).

5. For word problems you will need to set up the equation(s) that model(s) the problem using the defined variables.

6. Write the steps of the problem down the left-hand side of the paper with each step directly under the previous one. Show every step. Don’t skip a step even if you may think it is easy. The steps should be clear and follow a logical order. If numeric computations are necessary, do them neatly on the right-hand side of the paper.

7. Make sure that every statement you write is a true statement and uses the correct notation.

8. Check your answer to make sure it is reasonable/correct with respect to the problem.

9. State your final answer using a complete sentence and include the correct unit of measure (i.e. inches, feet, minutes, square feet, etc).

10. Skip at least 1 line between each problem.