Course Syllabus
Elementary Statistical Methods- MATH 1342
Fall 2019

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Math, Natural Science & Sports Sciences Learning Center

Division Office: P-330
Phone: 972-273-3500
Hours: Vary by semester so check the posted hours.

This course syllabus is intended as a set of guidelines for MATH 1325. 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: Robert V. McGee
Email: rvmcgee@dcccd.edu
Office Phone: None
Office: None
Office Hours: By Appointment

Course Information

Course Title: Elementary Statistical Methods
Credit Hours: 3 credit hours
Class Meeting Time: 11:am – 1:50 PM Tuesday - Thursday
Class Location: P316

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 necessary DMAT courses).

Required or Recommended Textbooks and Materials
1) The required textbook for the course is A Brief Version Elementary Statistics 8th Edition, Bluman, 9781260387001

(Formulas and tables will be provided by each test. The Data CD is optional). You may use one of the followings
**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 only purchase it from the NLC bookstore. See the following link

[North Lake College Bookstore](https://www.nlc.com)

This software includes the textbook. Therefore if you are ok using an ebook there is no need to buy the textbook.

**Elem Statistics: Brief (Connect ALEKS Access Card 52 wks)**

**OR**

**Elementary Statistics: Brief (LLF)(w/Connect ALEKS Access)**
This is Loose-leaf 3-hole punched w/ CONNECT PLUS
(includes eBook)

**Optional Materials**
Student’s Solution Manual

3) Calculators
You will be allowed to use calculators on all tests. Graphing calculators (such as the TI-83 or TI-84 Plus) are recommended. **Calculators such as the TI 89 & TI 92, which perform algebraic operations, are not allowed.** You may check out a TI-84 calculator for the tests in the testing center.

**Technical Support**
Connect support website: [https://support.pearson.com/getsupport/s/](https://support.pearson.com/getsupport/s/)
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:

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)*

**Course Outline (Calendar)**

Please see Appendix A attached to the end of this syllabus for a complete and detailed Course Outline (Calendar). Pay careful attention to the listed dates.

**Means of Assessment of Course Learning Outcomes**

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

1. 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.

**Evaluation Procedures**

**Tests**

Exams will be administered in the Testing Center, Room A425. The final exam will be comprehensive and taken in the classroom at the scheduled time (see Final Exam schedule). Calculators are allowed on all exams.

TI-83/84 or similar calculators and all scientific calculators are permitted on all exams. Calculators with computer algebra systems (CAS) such as the TI-93 or TI N-spire are not permitted on any exam. Bathroom breaks will not be allowed during any exam. If you have a medical condition that merits exemption from this policy, contact North Lake College’s Disability Services Office.
If you are unable to take the exam by the given deadline, you will be given a zero. **The final exam may be used to replace a low test score, including a zero due to an exam not taken.** If you are absent for more than one exam, you should contact your instructor as soon as possible to discuss your situation.

The due dates for all exams will be given in class and/or posted in eCampus throughout the semester.

**Quizzes**
Quizzes will be given in the first five minutes of class and/or the last five minutes of class. These assignments cannot be “made-up” if the student is absent or late for any reason (excused or unexcused). At the end of the semester, at least 10% of the lowest quiz grades will be dropped.

**Homework**
Homework is the **most important learning tool** in a course.
- It reinforces instruction.
- It provides an immediate and personal measure of your competence in the course.
- Always express the answers to stated problems (word problems) in a sentence which identifies what you have determined to be the answer.
  - An important part of mathematical literacy is good communication skills.
  - First, write the problem or the essential facts.
  - Second, present mathematical sentences showing the progression of your ideas.
  - Third, present a conclusion using a complete sentence.
- More details about what is expected on homework assignments and tests can be found in the eCampus classroom.

Each student is required to purchase the online component that comes with a new book. The homework assignments must be completed in ConectMath. The access code can be bought in a bundle (with the book) or as a stand-alone item. You can retrieve these resources from the bookstore on campus.

When completing a homework assignment in ConectMath, you are given as many attempts as you need to respond to an item correctly. Once you have responded to an item correctly at least once, you are given credit for that item. Also, you get immediate feedback for your homework grades.

You may be required to periodically submit written work. When submitting written work, make sure to include your name, course and section number, and name of the assignment (e.g. Quiz #3 section 11.6) on all pages.

**Attendance**
Absences are generally detrimental to one’s performance in a course. You are expected to attend regularly in order that you may increase your chances for a successful semester in this course.

Tardies are strongly discouraged as they are disruptive to the class and thus the students who are on time. However, it is better to come late than not at all, as long as tardiness does not become a habit with one particular individual. If you anticipate a particular problem, please discuss it with me before or after class.

**Attendance is necessary to pass this class.**
Roll will be taken every class period.

**Special Note: A total 9 absences will result in a grade of F for the course.**
A total of 3 tardies of more than 20 minutes will be marked as one absence.
If a student must leave class early more than three times one absence will be recorded. Your instructor
Grading Scale
The learning outcomes will be assessed through Individual and Group Work (activities/projects), Homework, and Exams. The final grade will be based on the following:

- Homework/Quizzes: 15%
- Written Tests & Projects: 65%
- Final Exam: 20%

Total: 100%

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

*the instructor will not round more than 0.05 percentage points when calculating final weighted average

Grade Alternatives
I – Incomplete
Incomplete Details
• Only given in EXTREME CIRCUMSTANCES Requires instructor permission and consent by the Dean of the department.

Testing Center Information (Room A425)
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**
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.

**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 1325)
- 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
- Approved Calculator

**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**

**Math Center – FREE tutors**
The Math Center (MC) in L-137 and L-138 provides assistance and resources free to students enrolled in mathematics and developmental mathematics classes at North Lake College. The MC 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 math courses that have an Internet component such as homework systems (i.e., MyLabsPlus, ConnectMath)
- Graphing calculators, textbooks, and headphones for use in the center
- Graph stamps so students can make their own graph paper
- A quiet area to study (L-137)
- Opportunity for students to make up class absences
- Whiteboards and table space for study groups
• Content workshops covering how to use graphing calculators, course topics, review sessions, and study skills

Contact the Math Center Manager or Coordinator in L-137 for questions regarding the services offered.

Hours of Operation (Fall/Spring)
Monday – Thursday: 8 a.m. – 8 p.m.
Friday & Saturday: 10 a.m. – 2 p.m.
Center Phone: 972-273-3381
Coordinator: Camrun Beck, L-137

**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 - The link below has updated info on the items listed below:**

- North Lake College Syllabus Policy
  - **Student Success**
    - Academic Advising and Degree Planning
    - Tutoring
    - Students With Disabilities
    - Cheating, Plagiarism and Collusion
    - Student Survey of Instruction
    - Religious and Ethnic Holiday Observance
    - Harassment, Discrimination and Sexual Misconduct
  - **Students Receiving Financial Aid**
    - Attendance and Participation
Academic Dishonesty

- Cheating on a test includes:
  - Copying from another student’s test paper;
  - Using, during a test, materials not authorized by the person giving the test;
  - Collaborating with another student during a test without permission to do so;
  - Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of an un-administered test;
  - Substituting for another student, or permitting another student to substitute for you to take a test;
  - Bribing another person to obtain an un-administered test or information about an administered test.

- “Plagiarism” means the appropriation of another’s work (ideas and/or words) and the unacknowledged incorporation of that work in one’s written work offered for credit. Quotes not identified as quotes constitute a form of plagiarism even if the borrowed ideas are documented.

- “Collusion” means an unauthorized collaboration with another person in preparing written work offered for credit.

**PENALTY for Academic Dishonesty** 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.
**Drop Policy**

- If you are unable to complete this course, you must officially withdraw by **Nov. 11, 2019** (Second 8 Weeks Course). Withdrawing is a formal procedure which **you must initiate**; your instructor cannot do it for you. See link within Institutional Policies p. 11.

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

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**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.

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**Food and Drink in the Classroom**

The college policy restricts food and drink in the classroom.

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**Appendix A.1**

**Weekly TENTATIVE Math 1342 Course Calendar**

*2nd 8 Weeks - Fall 2019*

<table>
<thead>
<tr>
<th>Week</th>
<th>Subjects and Objectives</th>
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<tbody>
<tr>
<td>1</td>
<td><strong>Ch. 1: Statistics</strong></td>
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<tr>
<td></td>
<td>- Descriptive and Inferential Statistics</td>
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<td></td>
<td>- Variables and Type of Data</td>
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<td></td>
<td>- Data Collections and Sampling Techniques</td>
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<td></td>
<td>- Observational and Experimental Studies</td>
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<td></td>
<td>- SLO 1 (Section 1.1)</td>
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<td></td>
<td><strong>Ch. 2: Frequency Distributions and Graphs</strong></td>
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<td></td>
<td>- Organizing Data</td>
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<td>- Histograms, Frequency Polygons, and Ogives</td>
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<tr>
<td>Week 2</td>
<td><strong>10/29 – 10/31</strong></td>
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<td></td>
<td>- Other Types of Graphs</td>
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<td>- Paired Data and Scatter Plots</td>
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<td></td>
<td>- SLO 2 (Section 2.2)</td>
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<td></td>
<td><strong>Ch. 3: Data Description</strong></td>
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<td></td>
<td>- Measure of Central Tendency</td>
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<td>- Measure of Variation</td>
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<td>- Measure of Position</td>
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<td></td>
<td>- Exploratory Data Analysis</td>
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<td></td>
<td><strong>Unit One Test (Ch. 1, 2 &amp; 3)</strong></td>
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<td>Week 3</td>
<td><strong>11/05 – 11/07</strong></td>
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<td><strong>Ch. 4: Probability and Counting Rules</strong></td>
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<td></td>
<td>- Sample Space and Probability</td>
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<td>- Addition and Multiplication Rules for Probability</td>
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<td>- Conditional Probability</td>
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<td></td>
<td>- Counting Rules</td>
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<td></td>
<td>- Probability and Counting Rules</td>
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<td></td>
<td>- SLO 3 (Section 4.1)</td>
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<td>- SLO 4 (Section 4.5)</td>
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<td>Week</td>
<td>Subjects and Objectives</td>
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<tr>
<td>Week 4</td>
<td>Ch. 5: Discrete Probability Distributions</td>
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<tr>
<td>11/12 – 11/14</td>
<td>• Probability Distributions</td>
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<td></td>
<td>• Mean, Variance, Standard Deviation, and Expectations.</td>
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<td></td>
<td>• The Binomial Distribution</td>
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<td>• SLO 5 (Section 5.3)</td>
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<td><strong>Unit Two Test (Ch. 4 &amp; 5)</strong></td>
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<tr>
<td>Week 5</td>
<td>Ch. 6: The Normal Distribution</td>
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<tr>
<td>11/19 – 11/21</td>
<td>• Properties of Normal distribution</td>
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<td>• The Standard Normal distribution</td>
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<td>• Applications of Normal distribution</td>
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<td>• The Central Limit Theorem</td>
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<td>• The Normal Approximation to the Binomial Distribution.</td>
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<td>• SLO 6 (Section 6.3)</td>
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<td>Week 6</td>
<td>Ch. 7: Confidence Interval and Sample Size</td>
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<tr>
<td>11/26 – 11/28</td>
<td>• Confidence Intervals for the Mean</td>
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<td>• Confidence Intervals and sample size for Proportions</td>
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<td>• Confidence Interval when n &lt; 30 and σ is unknown</td>
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<td>• Confidence Intervals for Variances and Standard Deviations</td>
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<td>• SLO 7 (Section 7.1)</td>
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<td><strong>May 3rd - Last Day to Withdraw with grade of W</strong></td>
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<td><strong>Unit Three Test (Ch. 6 &amp; 7)</strong></td>
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<tr>
<td>Week 7</td>
<td>Ch. 8: Hypothesis Testing</td>
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<tr>
<td>12/03 = 12/05</td>
<td>• Steps in Hypothesis Testing</td>
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<td>• z Test for a Mean</td>
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<td>• t Test for a Mean</td>
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<td>• z Test for a Proportion</td>
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<td>• Confidence Interval and Hypothesis Testing</td>
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<td>• SLO 8 (Section 8.3)</td>
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<tr>
<td>Week 8</td>
<td>Ch. 10: Correlation and Regression</td>
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<tr>
<td>12/10 – 12/16</td>
<td>• Correlation and Correlation Coefficient as it applies to linear regression.</td>
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<td>• Linear regression only. Line of Best Fit and its Equation by using technology.</td>
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<td>• SLO 9 (Section 10.2)</td>
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<td>• Final Exam</td>
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<td><strong>Unit Four Test (Ch. 8 &amp; 10)</strong></td>
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