STEM Division

MATH 2342-43440 3 Credit Hours
Elementary Statistical Methods
Spring 2017 – 2nd 8 weeks

Classes Meet Online using My Stat Lab Online Software

Instructor:
Erika Glaser, Ph.D.

Contact Information:
Office: C211
Office Hours: Mondays & Wednesdays 11:00 a.m. – 12:30 p.m. and Tuesdays & Thursdays 12:30 – 1:30 p.m.
Phone: (972)860-7006 – please follow up phone calls with an email.
Email Address: erikaglaser@dcccd.edu – this is my preferred method of contact. You can usually expect a response from me within 24 hours on weekdays.

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. (3 Lec.)

Prerequisite:
Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 0310.

Textbook and Other Course Materials:

- **My Stat Lab** - Please note that in this section of MATH 2342, My Stat Lab access is required. My Stat Lab access grants you access to the electronic version of the textbook. The paper text is **not required** but can be purchased if that is the student’s preference. My Stat Lab access is not included with the purchase of a used book, and may not be included with the purchase of a new book. Therefore, use caution when purchasing your textbook.
  **Microsoft Windows 7 and 8 users should use one of the following browsers with My Stat Lab courses-- Chrome, Firefox or Internet Explorer 10 and 9. Click [here](#) for other system requirements.**

  ISBN: 9780134136783

- **Calculator**: Students are required to have access to a TI-83 or TI-84 calculator. Instructions on how to use technology to apply concepts are at the end of relevant sections in the textbook under the heading “Technology Step-by-Step.”
Instructional Methodology:
This course is taught exclusively online using video lectures. Most assignments including all homework, quizzes, and tests are completed on My Stat Lab. A midterm and comprehensive final exam is required and must be taken at an approved testing facility, preferably the Eastfield College testing center.

Discussion Board Posts: A series of discussion board topics will be presented. The discussion board is located in My Stat Lab. Students are expected to contribute to these discussion board topics by the dates indicated in the course calendar at the end of the syllabus. Please note that discussion board posts are not accepted late.

Instructional Components: This course is divided into modules. The components of each module are described below.

   Step 1: Video – Video lecture introduces each section of module
   - Must be accessed before each homework assignment
   - Grade omitted from course average
   - Can be accessed after due date

   Step 2: Homework – Consists of problems from each section
   - Problem can be repeated until mastered – select “Similar Exercise” after each 3rd incorrect attempt
   - All “Help” buttons available
   - Can be accessed after due date
   - Late problems penalized 10%
   - Must be in “Homework,” not “Review” mode to save progress
   - Problems saved individually

   Step 3: Quiz – Consists of problems that summarize multiple sections
   - Must be completed immediately following the homework for the relevant sections
   - Have a time limit of 60 minutes
   - Must complete the quiz in one sitting
   - Two attempts allowed for each quiz with only the best score taken into account
   - Can’t be accessed after due date
   - Will not be accepted late under any circumstance

   Step 4: Test Review – Helps prepare students for module test
   - Score NOT included in homework average
   - Can be accessed after due date

   Step 5: Test – Assesses student understanding of module
   - Must be in lockdown browser mode
   - Must be completed within 120 minutes
   - Reviewed by student only immediately after submission
   - Late submission not allowed under any circumstance

* *Note that the lowest module test score will be dropped**

Midterm and Final Exams:
After completing modules 1 and 2, you will be ready to take the midterm exam. The midterm exam will be administered at the Eastfield College testing center. A comprehensive, departmental final examination will also be administered at the Eastfield College testing center. The testing center is located in Building C, Room 316. You will need a photo id, a writing utensil, and your graphing calculator to take the test. For testing center hours and additional information about the testing center, visit their website. Keep in mind that tests are not issued to students one hour before closing. Please refer to the course calendar at the end of the syllabus for testing dates. Students must be present for the midterm and final exams. You may not take the midterm or final exam late nor can you make up or retake either assessment.
Grading Policy:

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion Board Posts</td>
<td>5%</td>
</tr>
<tr>
<td>Homework</td>
<td>10%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>15%</td>
</tr>
<tr>
<td>Tests</td>
<td>20%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>25%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>25%</td>
</tr>
</tbody>
</table>

Grading Rationale:

90 – 100........A  
80 – 89 ...........B  
70 – 79 ...........C  
60 – 69 ...........D  
< 59 .................F

Student Learning Outcomes:
After completing this course, the student should 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.

Core Objectives:
MATH 2342 develops the following Core Objectives:

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

Core Objective Development Statements: MATH 2342 develops Critical Thinking, Communication, and Empirical and Quantitative Skills by requiring students to collect, analyze, present and interpret data and probability.
Attendance Policy:
You are expected to regularly attend all classes in which you are enrolled. Students have the responsibility to attend class and to consult with the instructor when an absence occurs. Please note that for certification purposes, participation in this course is defined as students registering for the course and accessing course materials on My Stat Lab. If you have not logged on to My Stat Lab by the certification date, you will not be certified. You are expected to regularly log in to My Stat Lab to complete work for the course in which you are enrolled. Students have the responsibility to consult with the instructor when a deadline cannot be met.

If a student is unable to complete a course (or courses) in which he/she is registered, it is the responsibility of the student to withdraw from the course by the appropriate date. (The date is published in the academic calendar each year and in each semester’s class schedule). If a student does not withdraw, he/she will receive a performance grade, usually a grade of “F”.

Religious Holidays:
Absences for observance of a religious holy day are excused. Notification of the absence must be given to the instructor in writing at least two weeks prior to the date of the holy day. A student whose absence is excused to observe a religious holy day is allowed to contract with the instructor to take a make-up examination or complete an assignment within a mutually agreed upon time after the absence.

Obtaining Final Course Grades Using eConnect:
Final grade reports are no longer mailed. Convenient access is available online. Use your student identification number when you log into eConnect, an online system developed by the DCCCD to provide you with timely information regarding your college record. Your grades will also be printed on your Students Advising Report, which is available in the Admissions Office.

Drop Date:
Last date to drop with a grade of “W” is Saturday, April 29.

Drop Policy:
To drop a class or withdraw from the college, students must follow the prescribed procedure. It is the student’s responsibility to drop or withdraw. Failure to do so will result in receiving a performance grade, usually grade of “F”. No drop or withdrawal requests are accepted by telephone. Students who drop a class or withdraw from the College before the semester deadline receive a “W” (Withdraw) in each class dropped. The deadline for receiving a “W” is indicated on the academic calendar and the current class schedule. If you are unable to complete this course, you must withdraw from it by the date indicated above. For more information, contact the Admissions/Registrar’s Office at 972-860-7167 (Room C 119.)

STOP BEFORE YOU DROP
Six Drop Rule: 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.

Financial Aid:
If you are receiving Financial Aid grants or loans, you must begin attendance in all classes to be certified as attending class. In a Distance Learning Class, you must show participation in the class prior to the certification date by either e-mailing your instructor or logging on to eCampus. Do not drop or stop attending any class without consulting the Financial Aid Office. Changes in your enrollment level and failing grades may require that you repay financial aid funds. Failure to contact the instructor will result in your name being submitted to the Financial Aid Office as a “non-attendee”. Student who fail to attend or participate after the drop date are also subject to this policy.
Repeating This Course:
Effective for Fall Semester 2005, the Dallas County Community Colleges will charge additional tuition to students registering the third or subsequent time for a course. All third and subsequent attempts of the majority of credit and Continuing Education/Workforce Training courses will result in additional tuition to be charged. Developmental Studies and some other courses will not be charged a higher tuition rate. Third attempts include courses taken at any of the Dallas County Community Colleges since the Fall 2002 Semester. See Third Attempt to Enroll in a Course rules on the DCCCD website.

Student Email:
Legal privacy issues prevent your instructor from discussing your work or your grades on commercial e-mail accounts. If you wish to send your papers as attachments to an e-mail (and the instructor permits it), or if you have a question about your grade, you must open a student e-mail account. You may set up your account by clicking on this link. The account is free.

Standard of Conduct/Classroom Etiquette:
No food, drinks or tobacco products are allowed in Eastfield College classrooms. However; if your class is in a non-lab classroom your instructor may allow for food or drink.

Children on Campus:
The institution strives to protect an environment most conducive to teaching and learning for all enrolled students. Children who are taking part in organized scheduled activities or who are enrolled in specific classes are welcomed. Minor children, however, should not be brought to the institution unless closely supervised by their parent. Minor children should not be brought into classrooms, laboratories or other facilities of the college. This practice is disruptive to the learning process. In the case of an emergency where the student-parent has no alternative but to bring the child to campus, classroom faculty or the administrative heads of other units have full discretion as to whether a child may be allowed to quietly stay in the location. These individuals may require that children be removed by the student-parent from the setting if, in their opinion, the presence of the child is deemed to be disruptive to the learning process. For reasons of security and child welfare the institution will not permit unattended children to be left anywhere on the premises. Parents who have problems with childcare should visit the Counseling and/or Advisement Center to receive referrals to childcare services in the area.

CODE OF STUDENT CONDUCT: The Code of Student Conduct can be reviewed by clicking on this link.

Responsibility
Each student shall be charged with notice and knowledge of the contents and provisions of the District’s policies, procedures, and regulations concerning student conduct. All students shall obey the law, show respect for property constituted authority, and observe correct standards of conduct. In addition to activities prohibited by law, the following types of behavior shall be prohibited.

Scholastic dishonesty shall constitute a violation of these rules and regulations and is punishable as prescribed by college policies. Scholastic dishonesty shall include, but not limited to, cheating on a test, plagiarism, and collusion.

“Cheating on a test” shall include:

- Copying from another student’s test paper
- Using test materials not authorized by the person administering the test.
- All forms of academic dishonesty, including cheating, fabrication, facilitating academic dishonesty, plagiarism, and collusion.
- Collaborating with or seeking aid from another student during a test without permission from the test administrator.
- Knowingly using, buying, selling, stealing, or soliciting, in whole or in part, the contents of an unadministered test.
- The unauthorized transporting or removal, in whole or in part, of the contents of the unadministered test.
- Substituting for another student, or permitting another student to substitute for one's self, to take a test.
- Bribing another person to obtain an unadministered test or information about an unadministered test.

"Plagiarism" shall be defined as the appropriating, buying, receiving as a gift, or obtaining by any means another's work and the unacknowledged submission or incorporation of it in one's own written work.

"Collusion" shall be defined as the unauthorized collaboration with another person in preparing written work for fulfillment of course requirements.

Students should be aware of disciplinary actions for all forms of academic dishonesty, including cheating, fabrication, facilitating academic dishonesty, plagiarism, and collusion. Your College Catalog and the DCCCD Catalog contain the entire Student Code of Conduct. In this course, you will receive a grade of “0” on that particular assignment or test if you are guilty of cheating on assignments, tests, or plagiarism. Please do not put yourself in a situation that would result in such action, Academic dishonesty is a serious offense in college.

THE OFFICE OF INSTITUTIONAL EQUITY
In coordination with DCCCD colleges, has the primary responsibility for reviewing, updating and carrying out compliance policies and procedures. The institutional equity and compliance officer and the Office of Institutional Equity make sure that college district policies and federal and state laws related to sexual assault, Title IX, Title II (Americans With Disabilities Act) and the Military Veterans Full Employment Act are followed to support diversity and inclusion.

STUDENTS WITH DISABILITIES
If you are a student with a disability and/or special needs, or if you think you may have a disability, please contact the college Disability Services Office (DSO). Please note that all communication with DSO is confidential. If you are eligible for accommodations, please inform DSO to forward your accommodation request to your instructor as soon as possible, preferably at the start of the semester or program. For more information about the College Disability Services Office, please visit the Student Services website: dcccd.edu/DSOffices or contact the DCCCD Office of Institutional Equity at 214-378-1633.

College Disability Services Offices

Eastfield 972-860-8348

A Note on Harassment, Discrimination and Sexual Misconduct
We are committed to assure all community members learn and work in a welcoming and inclusive environment. Title VII, Title IX and DCCCD policy prohibit harassment, discrimination and sexual misconduct. If you encounter harassment, sexual misconduct (sexual harassment, sexual assault, stalking, relationship violence) or retaliation or discrimination based on race, color, religion, age, national origin, disability, sex, sexual orientation, gender identity and/or gender expression, please contact your college Title IX coordinator or the Office of Institutional Equity. We treat this information with the greatest degree of confidentiality possible while also ensuring student welfare and college safety.

We are concerned about the well-being and development of our students and are available to discuss any concerns. There are both confidential and non-confidential resources and reporting options available to you. If you wish to keep the information confidential, please contact college Counseling or student Health Services. As required by DCCCD policy, incidents of discrimination and/or sexual misconduct shared with faculty will be reported to the college Title IX coordinator or district Title IX coordinator. The Title IX coordinator will contact you and determine if further investigation is needed. For more information about policies, resources or reporting options, please contact your college Title IX coordinator or visit dcccd.edu/TitleIX.
College Title IX Coordinators

Eastfield  Rachel Wolf  TitleIX-EFC@dcccd.edu  972-860-7325

District Title IX Coordinator

Office of Institutional Equity  LaShawn Grant  TitleIX-District@dcccd.edu  214-378-1633

DCCCD Emergency Operation Procedures: Click on this link for further information.

Emergency & Inclement Weather Procedures:
In case of emergency (which may include power or air conditioning outages, fires, etc.) or inclement weather conditions, Eastfield students should listen to KEOM-FM Radio Station (88.5) as the primary media source. In partnership with the Mesquite Independent School District, Eastfield College Administration will notify KEOM immediately after a decision is made to cancel classes on any given day of inclement weather or for emergency purposes. Students may also monitor other local radio and television stations. The earliest an announcement may be broadcast on KEOM Radio is 6 a.m. Students may also refer to the Eastfield College website for the Inclement Weather announcement under News/Features.

Family Educational Right and Privacy Act of 1974 (FERPA):
In compliance with the Family Educational Rights and Privacy Act of 1974 (FERPA), the College may release information classified as “directory information” to the general public without the written consent of the student. Directory information includes: (1) student name, (2) student address, (3) telephone numbers, (4) date and place of birth, (5) weight and height of members of athletic teams, (6) participation in officially recognized activities and sports, (7) dates of attendance, (8) educational institution most recently attended, and (9) other similar information, including major field of student and degrees and awards received. Students may protect their directory information at any time during the academic year. If no request is filed, directory information is released upon written inquiry. No telephone inquiries are acknowledged. No transcript or academic record is released without written consent from the student, except as specified by law.

ADDITIONAL RESOURCES
The Math Spot provides tutoring in Mathematics and Developmental Mathematics. Students are encouraged to take advantage of this service for additional help in their course work. The Math Spot is located inside the library (second floor of L building), and the phone number is 972-860-7062. Visit the link above for more information on tutors, hours of operation and policies.

COURSE COVERAGE:

<table>
<thead>
<tr>
<th>Sections</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 – 1.6</td>
<td>Practices of statistics, Observational and experimental studies, Sampling, The design of an experiment</td>
</tr>
<tr>
<td>2.1 – 2.4</td>
<td>Qualitative and quantitative data, Additional displays, Misrepresentation of data</td>
</tr>
<tr>
<td>3.1 – 3.5, 4.1-4.2</td>
<td>Measures of central tendency, Measures of dispersion, Grouped data, Measures of position, Outliers</td>
</tr>
<tr>
<td>5.1-5.5</td>
<td>Scatter diagrams, Correlation, Regression line, Probability rules, Addition and complement rules, Independence and multiplication rules</td>
</tr>
<tr>
<td>6.1-6.2; 7.1-7.3</td>
<td>Random variables, Binomial probability distribution, Normal distribution, Standard normal distribution, Applications, Assessing normality, Normal approximation to the binomial probability distribution</td>
</tr>
<tr>
<td>8.1; 9.2-9.4</td>
<td>Distribution of the sample mean, Confidence interval for the mean when the population standard deviation is known and unknown, Confidence interval for the standard deviation, Putting it all together</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10.1, 10.3-10.5, 13.1-13.2</td>
<td>Language of hypothesis testing, Hypothesis testing for the mean and the standard deviation, Putting it all together, ANOVA, Post Hoc ANOVA</td>
</tr>
</tbody>
</table>

SYLLABUS REVISION:
The guideline in this syllabus may be changed, deleted, or amended any time by the instructor. The attached course outline is intended as an aid in helping you know your responsibilities for the semester. It is possible that some changes in the course outline or class policies will be made during the semester. Any changes that are made to the class policies or course outline will be announced in class.

Revised: 03/10/2017
## Course Pacing Calendar

<table>
<thead>
<tr>
<th>Due Date</th>
<th>ASSIGNMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wednesday, March 22</td>
<td>Orientation Assignment on My Stat Lab Introduction Post on Discussion Board on My Stat Lab</td>
</tr>
<tr>
<td>Sunday, March 26</td>
<td>Video, HW, Quiz §1.1 - 1.3</td>
</tr>
<tr>
<td></td>
<td>Video, HW, Quiz §1.4 - 1.6</td>
</tr>
<tr>
<td>Wednesday, March 29</td>
<td>Video, HW, Quiz §2.1 - 2.2</td>
</tr>
<tr>
<td></td>
<td>Video, HW, Quiz §2.3 - 2.4</td>
</tr>
<tr>
<td>Sunday, April 2</td>
<td>HW Review for Test 1 (optional)</td>
</tr>
<tr>
<td></td>
<td><strong>Test 1</strong></td>
</tr>
<tr>
<td>Wednesday, April 5</td>
<td>Video, HW, Quiz §3.1 - 3.3</td>
</tr>
<tr>
<td></td>
<td>Video, HW, Quiz §3.4 - 3.5</td>
</tr>
<tr>
<td>Sunday, April 9</td>
<td>Video, HW, Quiz §4.1 - 4.2</td>
</tr>
<tr>
<td></td>
<td>Post on Discussion Board on My Stat Lab</td>
</tr>
<tr>
<td>Wednesday, April 12</td>
<td>Video, HW, Quiz §5.1 - 5.3</td>
</tr>
<tr>
<td></td>
<td>Video, HW, Quiz §5.4 - 5.5</td>
</tr>
<tr>
<td>Sunday, April 16</td>
<td>HW Review for Test 2 (optional)</td>
</tr>
<tr>
<td></td>
<td><strong>Test 2</strong></td>
</tr>
<tr>
<td>Monday, April 17</td>
<td><strong>HW Midterm Exam Review</strong></td>
</tr>
<tr>
<td></td>
<td>The midterm exam will cover everything that was covered in modules 1 and 2. The midterm exam must be taken by the end of business day on this date. Please see the testing center’s website for hours of operation, policies, etc.</td>
</tr>
<tr>
<td>Wednesday, April 19</td>
<td>Video, HW, Quiz §6.1 - 6.2</td>
</tr>
<tr>
<td></td>
<td>Video, HW, Quiz §7.1 - 7.3</td>
</tr>
<tr>
<td>Sunday, April 23</td>
<td>Video, HW, Quiz §8.1, 9.2</td>
</tr>
<tr>
<td></td>
<td>Video, HW, Quiz §9.3 - 9.4</td>
</tr>
<tr>
<td>Wednesday, April 26</td>
<td>HW Review for Test 3 (optional)</td>
</tr>
<tr>
<td></td>
<td><strong>Test 3</strong></td>
</tr>
<tr>
<td>Sunday, April 30</td>
<td>Video, HW, Quiz §10.1, 10.3</td>
</tr>
<tr>
<td></td>
<td>Video, HW, Quiz §10.4 - 10.5</td>
</tr>
<tr>
<td>Wednesday, May 3</td>
<td>Video, HW, Quiz §13.1-13.2</td>
</tr>
<tr>
<td></td>
<td>Post on Discussion Board on My Stat Lab</td>
</tr>
<tr>
<td>Sunday, May 7</td>
<td>HW Review for Test 4 (optional)</td>
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<tr>
<td></td>
<td><strong>Test 4</strong></td>
</tr>
<tr>
<td>Monday, May 8</td>
<td><strong>HW Final Exam Review</strong></td>
</tr>
<tr>
<td></td>
<td>The comprehensive final exam will cover everything that was covered in the semester. The comprehensive final exam must be taken by the end of business day on this date. Please see the testing center’s website for hours of operation, policies, etc.</td>
</tr>
</tbody>
</table>

Note: All past due homework is due by 11:59 p.m. on Thursday, May 11.