MATH 2342: INTRODUCTORY STATISTICS, 43400 and 93409, 3 Credit Hours

INSTRUCTOR: Professor Alla Kelman
EMAIL: allakelman@dcccd.edu
OFFICE: C-210
TELEPHONE: (972) 860-7067

CLASSROOM:
https://blackboard.dcccd.edu/webapps/portal/fra meset.jsp
MEETING TIME: online

OFFICE HOURS*:
MTWTRF: 1:00 -2:00 p.m. online via email. During online office hours, instructor will respond to emails “first come, first serve”. Otherwise, please make an appointment.
E-mail: allakelman@dcccd.edu
For all emails outside of office hours, instructor will reply to emails within 24-48 hours during week days. Not available on weekends.
Complete Instructor Schedule can be found outside instructor’s office C210
*To schedule an appointment contact me via email at least 24 hours in advance.
Refer to the department website for further info: http://www.eastfieldcollege.edu/as/Math/index.asp

CATALOG
Prerequisite: Two years of high school algebra and an appropriate test score or Developmental Mathematics 0093 or Developmental Mathematics 0099.

Course Description:
This course is a study of the presentation and interpretation of data, probability, sampling, correlation and regression, analysis of variance and the use of statistical software. This course is cross-listed as MATH 2442. The student may register for either MATH 2342 or MATH 2442, but may receive credit for only one of the two. (3 Lec.)

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.

**Textbook and Other Course Materials:**
- **Calculator:** Students are required to have access to a graphing calculator for this course. While other models may be acceptable, the TI-83 and TI-84 calculators are strongly preferred. Instructions on how to use technology to apply concepts are at the end of relevant sections under the heading “Technology Step-by-Step.”
- **MyMathLab** - Microsoft Windows 7 and 8 users should use one of the following browsers with MyMathLab courses-- Chrome, Firefox or Internet Explorer 10 and 9. Click [here](#) for other system requirements.

Please note that in this section of MATH 2342, MyMathLab access is required, but the paper text is not required. MyMathLab 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.

**Instructional Methodology:**
This course is taught exclusively online with homework, quizzes, and most tests (with the exception of the final exam) required on internet based computer software. **Website:** [www.coursecompass.com](http://www.coursecompass.com)

**Your Course Name:** 2015SP MATH 2342 43400 AND 93409
**Your Course ID:** kelman30021

**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

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
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

Step 4: Test Review – Helps prepare students for module test
Score NOT included in homework average

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

GRADING POLICY
Grades will be determined as follows:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborate Session:</td>
<td>3%</td>
</tr>
<tr>
<td><strong>May 5th, 2015 at 10:00 p.m.</strong></td>
<td></td>
</tr>
<tr>
<td>It is a live session and cannot be made up</td>
<td></td>
</tr>
<tr>
<td>Homework Average on MyStatLab</td>
<td>11%</td>
</tr>
<tr>
<td>Quiz average using MyStatLab</td>
<td>11%</td>
</tr>
<tr>
<td>Average of two Orientation Quizzes using Ecampus and MyStatLab (due</td>
<td>3%</td>
</tr>
<tr>
<td><strong>January 21st, 2015 by 11:59 p.m.</strong>)</td>
<td></td>
</tr>
<tr>
<td>Submission of your picture via email (due <strong>January 21st, 2015 by 11:59 p.m.</strong>)</td>
<td>1%</td>
</tr>
<tr>
<td>Discussion board introductions (due <strong>January 21st, 2015 by 11:59 p.m.</strong>)</td>
<td>1%</td>
</tr>
<tr>
<td>Average of Module Tests using MyStatLab</td>
<td>30%</td>
</tr>
<tr>
<td>Comprehensive paper and pencil Final Exam at Eastfield College testing</td>
<td>40%</td>
</tr>
<tr>
<td>center or alternative approved location (see checklist and ecampus</td>
<td></td>
</tr>
<tr>
<td>announcement on approval process) on **May 12th, 2015 and must be</td>
<td></td>
</tr>
<tr>
<td>submitted by 5:00 p.m.**</td>
<td></td>
</tr>
</tbody>
</table>

GRADING RATIONALE
A: 90-100%; B: 80-89%; C: 70-79%; D: 60-69%; F: below 60%
FINAL EXAMINATION: A comprehensive, departmental final examination, which will represent 40% of the class grade, will be administered in this class. You will need your photo ID when taking final exam. You may not take the final exam late nor can you make up or retake that assessment.

For example:

A student, Jane Doe, has the following grades at the end of the semester.

She attended BBCollaborate session: 100%
Homework Average (on MyStatLab): 90%
Online quiz Average (on MyStatLab): 73%
Ecampus orientation quiz: 100%
MyStatLab Orientation quiz (on MyStatLab): 100%
She submitted picture on time: 100%
She completed discussion board assignment on time: 100%
Average of Module Tests (on MyMathLab): 86%
Comprehensive Final Exam (at Eastfield College Testing Center): 77%

Here is the formula to be used in this class to determine numerical grade for the course:

\[(\text{BBCollaborate Session} \times 0.03) + (\text{Homework Average} \times 0.11) + (\text{MyStatLab Quiz Average} \times 0.11) + (\text{Average of two Orientation Quizzes using Ecampus and MyStatLab} \times 0.03) + (\text{Picture Submission} \times 0.01) + (\text{Discussion board introductions} \times 0.01) + (\text{Average of Module Tests} \times 0.30) + (\text{Comprehensive Final Exam} \times 0.40)\]

Here is how Jane’s numerical grade will be determined:

\[(100 \times 0.03) + (90 \times 0.11) + (73 \times 0.11) + (100 \times 0.03) + (100 \times 0.01) + (100 \times 0.01) + (86 \times 0.30) + (77 \times 0.40) = 82.53\]

To convert Jane’s numerical grade into the letter grade follow the following distribution:

A: 90-100%; B: 80-89%; C: 70-79%; D: 60-69%; F: below 60%

Since Jane’s numerical grade came to be 82.53 it falls in the interval between 80 and 89, thus her letter grade is a B.

POLICY ON MISSED TESTS AND ASSIGNMENTS

All assignments have strict deadlines. Due dates are non-negotiable and can be viewed in MyMathLab and Course Pacing calendar.

FINAL EXAM

The final exam for this course will be paper and pencil test and must be taken at an Eastfield college testing center or at an approved by your instructor testing location. Comprehensive final exam must be taken on May 12th, 2015 and must be submitted by 5:00 p.m. The Eastfield College Testing(Assessment) Center is located in Building C, Room 114. Please contact Eastfield College testing location for hours of operation. Keep in mind that tests are not issued to students one hour before closing and one hour before test is due. You can contact the testing center at 972-860-7011 for more information.

Students must be present for the final exam. You may not take the final exam late nor can you make up or retake that assessment.
GRADE REPORT
Grade reports are no longer mailed. Convenient access is available online. Just use your student identification number when you log onto e-Connect at http://econnect.dcccd.edu/.

DROP DATE
Last date to drop with a grade of “W” is 4/16/2015.

ATTENDANCE POLICY
Please note that for certification purposes, participation in the course is defined as students registering for the course and accessing course materials on MyMathLab. If you have not logged on to MyMathLab by the certification date, you will not be certified.
You are expected to regularly log in to eConnect and My Stat Lab (MyMathLab) 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”.

Students who are absent from class for the observance of a religious holiday may take an examination or complete an assignment scheduled for that day within a reasonable time after the absence if, not later than the 15th day of the semester, the student notified the instructor(s) that the student would be absent for a religious holiday. Sec. 51.911 TX Educ. Code.

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 4/16/2015. 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. For more information on the 6 drop rule, you may access: https://www1.dcccd.edu/6drop.

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 at: http://www.dcccd.edu/thirdcourseattempt/

STUDENTS WITH LEARNING, MENTAL OR PHYSICAL DISABILITIES:
Students requesting accommodation due to the presence of a disability must identify themselves in a timely fashion and demonstrate/documented need for accommodations through the Disability Services Office (DSO). For information regarding the rights and responsibilities of students with disabilities, contact DSO at (972) 860-8348 voice/TDD or email efcdso@dcccd.edu.

STUDENT E-MAIL: 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 going to http://www.dcccd.edu/netmail/home.html. The account is free.

PRINTING ON CAMPUS: Printing in the Computer Lab (L-108), Library, and Learning Assistance Center will cost 5 cents a page. Students must bring a $1.00, $5.00, $10.00, or $20.00 bill to the lab to create an account. Accounts must be created before attempting to print. No change is made in the lab. Once the money is in the bill acceptor, it cannot be retrieved. Cash refunds are not possible. Accounts stay active as long as the account has value.

STANDARD OF CONDUCT/CLASSROOM CONDUCT: 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.

CLASSROOM ETIQUETTE: As with all communication, be sure that your comments are appropriate and respectful of the diversity of thought that exists in this course. All communication should promote a positive, safe and productive learning environment for all. Follow Rules of Netiquette every time conversing with me or your classmates online.

CODE OF STUDENT CONDUCT: Web site address: http://www1.dcccd.edu/cat0506/ss/code.cfm

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 un-administered test.
- The unauthorized transporting or removal, in whole or in part, of the contents of the un-administered 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 un-administered test or information about an un-administered 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.

**CAMPUS POLICE:** In addition to providing general law enforcement on campus, the campus police respond to all emergencies. In any emergency situation, you can get immediate help by any of the following methods:

- call 911 on any campus extension
- use any red phone in the hallways, or any "blue light" call box in the parking lots
- call 972-860-4290 from any off campus extension

**SEXUAL HARASSMENT:** Eastfield College has a zero tolerance policy on sexual harassment. All students shall report complaints of sexual harassment informally to the college Human Resources Director or formally to the Vice Chancellor of Educational Affairs.

**DCCCD EMERGENCY OPERATION PROCEDURES:**
Visit [http://video.dcccd.edu/rtv/DO/emergency_dcccd.wmv](http://video.dcccd.edu/rtv/DO/emergency_dcccd.wmv)

**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 web page [www.eastfieldcollege.com](http://www.eastfieldcollege.com) for the Inclement Weather announcement under News/Features.

**FAMILY EDUCATIONAL RIGHTS 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 (http://www.eastfieldcollege.edu/as/Mathspot/index.asp) 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 in room C-201, 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>5.1-5.6</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>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, course pacing calendar 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.
<table>
<thead>
<tr>
<th>DAY</th>
<th>ASSIGNMENTS</th>
</tr>
</thead>
</table>
| Week 1: January 20 – January 25 | I. Three part orientation:  
  a) Two orientation quizzes (one on ecampus, one on MyMathLab)  
  b) discussion board introductions  
  c) your photo submission  
  Three part orientation is due by January 21, 2015 by 11:59 p.m.  
  II. Video, HW, Quiz §1.1 - 1.3 |
| Week 2: January 26 – February 1 | I. Notification of alternative final exam testing location is due January 27th, 2015 by 5 p.m. via email to professor Kelman. Please see announcement on ecampus for further information.  
  II. Video, HW, Quiz §1.4 – 1.6 |
| Week 3: February 2 – February 8 | I. Video, HW, Quiz §2.1 - 2.2  
  II. Video, HW, Quiz §2.3 - 2.4 |
| Week 4: February 9 – February 15 | I. HW Review for Test 1  
  II. Test 1: Modules 1-2 |
| Week 5: February 16 – February 18 (Short week) | Video, HW, Quiz §3.1 - 3.3 |
| March 9 – March 13 | SPRING BREAK | NO SCHOOL |
| Week 6: February 23 – March 1 | I. Video, HW, Quiz §3.4 - 3.5  
  II. Video, HW, Quiz §4.1 - 4.2 |
| Week 7: March 2 – March 8 | I. Video, HW, Quiz §5.1 - 5.3  
  II. Video, HW, Quiz §5.4 - 5.6 |
| Week 8: March 16 – March 22 | I. HW Review for Test 2  
  II. Test 2: Modules 3-4 |
| Week 9: March 23 – March 29 | I. Video, HW, Quiz §6.1 – 6.2  
  II. Video, HW, Quiz §7.1 - 7.3 |
| Week 10: March 30 – April 2 (Short week) | Video, HW, Quiz §8.1, 9.2 |
| April 3rd HOLIDAY NO SCHOOL | |
| Week 11: April 6 – April 12 | Video, HW, Quiz §9.3 - 9.4 |
| Week 12: April 13 – April 19 | I. HW Review for Test 3  
  II. Test 3: Modules 5-6 |
| Week 13: April 20 – April 26 | I. Video, HW, Quiz §10.1, 10.3  
  II. Video, HW, Quiz §10.4 - 10.5 |
| Week 14: April 27 – May 3 | I. Video, HW, Quiz §13.1-13.2  
  II. Review for Test 4  
  III. Test 4: Module 7 |
| Week 15: May 4 – May 10 | I. FINAL EXAM REVIEW (On MyMathLab)  
  II. BBCollaborate session at 10:00 p.m. on May 5th, 2015. BBCollaborate session is a live session and cannot be made up. |
| Week 16: FINAL EXAM WEEK | Final Exam must be taken at Eastfield College Testing Center or an alternative, approved by your instructor testing location on May 12, 2015 and must be submitted by 5:00 p.m. If you will be taking final exam at an alternative location, please notify your instructor by no later than January 27th, 2015, by 5:00 P.M. Please see announcement on ecampus relating to alternative testing locations and notifications for final exam. |