Term: 1st Fall 2019 Term
Course: DMAT-0317-47415
Course Dates: TR 08/26/2019 – 10/16/2019
Class Location: Classes Meet in C312 from 9:30 – 10:50 a.m. and in C314 from 11:00 a.m. – 12:20 p.m.

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Erika Glaser, Ph.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone:</td>
<td>(972)860-7006</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:erikaglaser@dcccd.edu">erikaglaser@dcccd.edu</a></td>
</tr>
<tr>
<td>Office &amp; Office Hours:</td>
<td>C211 Available online live through Collaborate or in C211: Mondays – Thursdays 1:00 – 2:15 p.m.</td>
</tr>
</tbody>
</table>

STEM Division: C-Building, Room 202 | 972-860-7297

Course Drop Date: Thursday, October 3
Certification Date: Saturday, August 31
Disclaimer: The instructor reserves the right to amend this syllabus as necessary.
Institutional Policies: Eastfield College Institutional Policies
(www.eastfieldcollege.edu/syllabipolicies)

Course Description
The course supports students in developing skills, strategies, and reasoning needed to succeed in mathematics, including communication and appropriate use of technology. Topics include the study of numeracy and the real number system; algebraic concepts, notation, and reasoning; quantitative relationships; mathematical models; and problem solving. (3 Lec.)

Prerequisite
An appropriate assessment test score.

Corequisite/Concurrent
This is a corequisite course and requires continuous concurrent enrollment with MATH 1342.

Textbook and Other Course Materials:
- **Concepts in Statistics (Waymaker) and Online Homework Manager (OHM):** Please note that in this corequisite course, a traditional textbook is not utilized. Instead two interactive online software programs incorporating open educational resources will be used. All of the course materials are available through Blackboard. STUDENTS ARE
ONLY REQUIRED TO PURCHASE THE WAYMAKER ACCESS CODE BUT NOT UNTIL THE MATH 1342 COREQUISITE COURSE BEGINS.

- **StatCrunch:** Students are required to have access to StatCrunch. This easy-to-use statistical data analysis package can be accessed online and will be necessary to analyze data throughout the course. The cost for 6-month access to this package is $14.99 and is available through the StatCrunch website.

- **Calculator:** Students may use a calculator in this course. For testing, the testing center at Eastfield College has graphing calculators that can be checked out. Additionally, graphing calculators can be checked out by students at no cost on a daily basis from the library (L200).

**Student Learning Outcomes**

Upon successful completion of this course, students will:

1. Use appropriate symbolic notation and vocabulary to communicate, interpret, and explain mathematical concepts.
2. Define, represent, and perform operations on real numbers, applying numeric reasoning to investigate and describe quantitative relationships and solve real world problems in a variety of contexts.
3. Use algebraic reasoning to solve problems that require ratios, rates, percentages, and proportions in a variety of contexts using multiple representations.
4. Apply algebraic reasoning to manipulate expressions and equations to solve real world problems.
5. Use graphs, tables, and technology to analyze, interpret, and compare data sets.
6. Construct and use mathematical models in verbal, algebraic, graphical, and tabular form to solve problems from a variety of contexts and to make predictions and decisions

**Live Office Hours:**

Students will have the opportunity to engage live with the instructor and other students weekly on Blackboard using Collaborate. Please see office hour schedule above for days and times. During this one hour session, the instructor will be available to answer any questions from students. Participation in the live office hours is strongly encouraged when possible.

**Instructional Components:**

This course is taught in a lecture/lab setting with support from online interactive software. All assignments are completed on Blackboard with the exception of proctored midterm and final exams. Please see exams information below for more details.

This course is divided into modules. Module 0 covers four units of developmental math topics to help you prepare for statistical concepts covered in MATH 1342. Each unit from Module 0 concludes with a quiz. Modules 1 - 3 include pre-recorded video lectures, study plan, and module quiz described below.

**Step 1:** Getting Started

- Why it Matters section introduces the module topics
- Show What You Know is a pre-quiz assignment that sets up the module for tailored questions throughout the study plan
- Can be accessed after due date

**Step 2:** Dive In

- Course objectives are presented through interactive course material
- Questions from the pre-quiz are presented for practice in preparation for the quiz – these questions do not count for a grade
- Can be accessed after due date

**Step 3:** Finish Strong

- Putting It Together section summarizes module topics
- Stat Tutor assignments (available for Modules 2 and 3) are a preview of the mini project assignments
- Quiz Results section shows the quiz grade on both attempts
Step 4: Module Quiz
- Should be attempted after completing Steps 1 – 3 of the study plan
- Must be completed in one sitting
- Two attempts allowed for each quiz with only the best score counting toward overall course grade
- Will not be accepted late under any circumstance (both quiz attempts are due by the due date).

Midterm and Final Exams:
After completing modules 1 - 4, students will be ready to take the midterm exam. The comprehensive final exam will be completed after completing modules 5 – 8. Both exams are required and must be taken in class during the tentative scheduled time noted at the end of the syllabus. Students are required to have a calculator (no cell phone calculators allowed) to take their exams. Students must be present for the midterm and final exams. Students may not take the midterm or final exams late nor can they make up or retake these assessments. If an emergency situation prevents a student from being present in class on the exam day then it is the student’s responsibility to notify the instructor no later than by the end of the regularly scheduled exam class period for consideration of a make-up exam.

Mini Projects:
Five mini projects are required for Modules 2, 3, 4, 7, and 8. These assignments give students the opportunity to analyze real data sets using StatCrunch and provide a written summary of the analysis results. Students are expected to complete these assignments following the rubric posted on Blackboard by the dates indicated in the course calendar at the end of the syllabus. Mini projects are not accepted late under any circumstance.

Grading Policy:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini Projects</td>
<td>10%</td>
</tr>
<tr>
<td>Module Quizzes</td>
<td>40%</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
< 70 ...............F

ADDITIONAL RESOURCES
The Math Spot (https://www.eastfieldcollege.edu/services/academic-support/tutoring/pages/default.aspx) 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 L200, and the phone number is 972-860-7174. Visit the link above for more information on tutors, hours of operation and policies.
<table>
<thead>
<tr>
<th>Module</th>
<th>Topics</th>
</tr>
</thead>
</table>
| 0      | Unit 1: Integers and Algebraic Expressions  
1: Whole Numbers and Decimals  
2: Operations with Integers  
3: Order of Operations  
4: Algebraic Expressions  
Unit 2: Fractions  
1: Prime Factorization  
2: Reduce Fractions  
3: Multiply and Divide Fractions  
4: Least Common Multiple  
5: Add and Subtract Fractions  
6: Order of Operations with Fractions  
7: Mixed Numbers  
Unit 3: Linear Equations and Inequalities  
1: One Step Equations  
2: Two Step Equations  
3: General Linear Equations  
4: Equations with Decimals and Fractions  
5: Inequalities  
Unit 4: Graphing Linear Equations  
1: Slope  
2: Equations of Lines  
3: Parallel and Perpendicular Lines |
| 1      | Types of Statistical Studies and Producing Data  
Dive in Topics:  
- Types of Statistical Studies  
- Sampling  
- Conducting Experiments |
| 2      | Summarizing Data Graphically and Numerically  
Dive in Topics:  
- Categorical vs. Quantitative Data  
- Dotplots  
- Histograms  
- Measures of Center  
- Measures of Spread  
- Describing a Distribution |
| 3      | Examining Relationships  
Dive in Topics:  
- Scatterplots  
- Linear Relationships  
- Association vs Causation  
- Linear Regression  
- Assessing the Fit of a Line |
<table>
<thead>
<tr>
<th>Meeting Dates</th>
<th>In-Class Topics</th>
<th>Lab Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tues. Aug. 27</td>
<td>- Syllabus</td>
<td>- Research Consent Form</td>
</tr>
<tr>
<td></td>
<td>- Blackboard Orientation</td>
<td>- Study Plan: Module 0, Unit 1</td>
</tr>
<tr>
<td></td>
<td>- Course Expectations</td>
<td></td>
</tr>
<tr>
<td>Thurs. Aug. 29</td>
<td>- Module 0, Unit 1 Review</td>
<td>* Module 0, Unit 1 Quiz</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Module 0, Unit 2 Study Plan</td>
</tr>
<tr>
<td>Tues. Sept. 3</td>
<td>- Module 0, Unit 2 Review</td>
<td>* Module 0, Unit 2 Quiz</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Module 1 Study Plan</td>
</tr>
<tr>
<td>Thurs. Sept. 5</td>
<td>- Module 1 Review</td>
<td>* Module 1 Quiz</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Module 2 Study Plan</td>
</tr>
<tr>
<td>Tues. Sept. 10</td>
<td>- Module 2 Review</td>
<td>* Module 2 Quiz</td>
</tr>
<tr>
<td></td>
<td>- Mini Projects</td>
<td></td>
</tr>
<tr>
<td>Thurs. Sept. 12</td>
<td>- Module 2 Mini Project Discussion</td>
<td>* Module 2 Mini Project</td>
</tr>
<tr>
<td>Tues. Sept. 17</td>
<td>- Midterm Exam Review</td>
<td>- Midterm Exam Review</td>
</tr>
<tr>
<td>Thurs. Sept. 19</td>
<td>- Midterm Exam</td>
<td>- Module 0, Unit 3 Study Plan</td>
</tr>
<tr>
<td>Tues. Sept. 24</td>
<td>- Module 0, Unit 3 Review</td>
<td>* Module 0, Unit 3 Quiz</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Module 0, Unit 4 Study Plan</td>
</tr>
<tr>
<td>Thurs. Sept. 26</td>
<td>- Module 0, Unit 4 Review</td>
<td>* Module 0, Unit 4 Quiz</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Module 3 Study Plan</td>
</tr>
<tr>
<td>Tues. Oct. 1</td>
<td>- Module 3 Review</td>
<td>* Module 3 Quiz</td>
</tr>
<tr>
<td>Thurs. Oct. 3</td>
<td>- Module 3 Mini Project Discussion</td>
<td>* Module 3 Mini Project</td>
</tr>
<tr>
<td>Tues. Oct. 8</td>
<td>- Final Exam Review</td>
<td>- Final Exam Review</td>
</tr>
<tr>
<td>Thurs. Oct. 10</td>
<td>- Final Exam Review</td>
<td>- Final Exam Review</td>
</tr>
<tr>
<td>Tues. Oct. 15</td>
<td>- Final Exam</td>
<td></td>
</tr>
</tbody>
</table>

Revised: 08/20/19