MATH 1342 INET COURSE SYLLABUS  
ELEMENTARY STATISTICAL METHODS  
Spring 2020 (Section 23401)  
INSTRUCTOR: Czarina Reyes, PhD  
MAILING ADDRESS: BROOKHAVEN COLLEGE, MATH/SCIENCE Department  
3939 Valley View Lane, Farmers Branch, Texas 75244  
Office Location: Brookhaven College, K219  
Virtual Office Hours: Tuesday 7:00pm-8:00pm  
Office Phone: 972-860-4338; E-mail Address: CReyes@dcccd.edu

5th Edition by Michael Sullivan III

ISBN: 978-0-134-13353-9

In addition, you can purchase the MyStatLab access code only at http://www.coursecompass.com ) CourseCompass is now MyLab and Mastering.

****IMPORTANT NOTE****
Attendance for certification purposes is having purchased the MML access code, logged into MML and completed the Discussion Board Questions and first homework assignment.

SOFTWARE: MyStatLab, CourseCompass Interactive math software is required for participation in this course. All homework, quizzes, tests, and comprehensive final exam will be given within MyStatLab. http://www.coursecompass.com. You may purchase MyStatLab access code with the e-book online.

COURSE ID: reyes42917

PREREQUISITE: 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).

CATALOG DESCRIPTION: This course is a study of 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)

Student 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.
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.
MATH 1342 is a Tier I course in the Quantitative Reasoning learning category. "Knowledge and skills that are important to your success in other college courses will be introduced and reinforced in Tier I. The Quantitative Reasoning category promotes the application of mathematics to increase your ability to solve “real-world” problems. When you are quantitatively literate, you can use logic and critical thinking in new way.” For more details, visit www.dcccd.edu/core.

MATH 1342 is part of the Mathematics Foundational Component Area 020.

i. Courses in this category focus on quantitative literacy in logic, patterns, and relationships.

ii. Courses involve the understanding of key mathematical concepts and the application of appropriate quantitative tools to everyday experience.

iii. MATH 1342 develops the following Core Objectives:

   Critical Thinking (CT) - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information

   Communication (COMM) - to include effective development, interpretation and expression of ideas through written and visual communication

   Empirical and Quantitative Skills (EQS) - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

MATH 1342 develops Critical Thinking, Communication, and Empirical and Quantitative Skills by requiring students to collect, analyze, present and interpret data and probability.

COURSE MATERIALS

In this course, we will use a software program called MyStatLab that will be assessed via the Internet. You will use this program to practice homework problems, participate on the Discussion Board and take SAMPLE tests.

MyStatLab is an interactive website where you can:

• Self-test to improve your math skills.
• Study more efficiently. Create personalized study plans with exercises that match your textbook.
• Get help when you need it. Includes multimedia learning aids like videos and animations.
• Talk to a live tutor via a toll free number.

SOFTWARE AND SYSTEM REQUIREMENTS

Mozilla Firefox and Google Chrome are the recommended and supported browsers for this course. The course also has the following options for system requirements:

• Windows 7.0 or higher
• Mac OS x 10.8 or higher

Students are encouraged to use the Browser Check on the initial page within the MLP system in order to check and/or update (free download) the following software requirements:

• Adobe Flash Player version 11.9 or higher
• Adobe Reader version XI or higher

If you experience technical problems while using MyMathLab, you may contact Technical Support at (800) 677-6337, Monday – Friday 6am – 7pm CST and Sunday 3pm – 10pm.
COURSE PROCEDURES AND POLICIES:

CONTACTING YOUR INSTRUCTOR
All work for this course is done online. You will use MyStatLab to view section video presentations, participate on the discussion board, practice homework exercises, take quizzes and take SAMPLE tests. Make sure you practice the online homework problems and SAMPLE tests before taking an exam. Your main communication with your instructor will be via email and discussion board. To ensure a prompt response when emailing your instructor you must include your name and write the course for which you are enrolled (MATH 1342) and the section number in the subject line of all email correspondences. I should respond to your email within 24 hours Monday through Thursday. If I don’t respond to your email within 48 hours (Monday – Thursday), then please call my office number and leave a message. Emails sent on Friday, Saturday, or Sunday will be answered by the end of the day on Monday of the following week.

INSTITUTIONAL POLICIES
Institutional Policies of Brookhaven College may be found at the following link: https://www.Brookhavencollege.edu/syllabusaddendum

The institutional policies covered are:
- Drop/Withdrawal Policy
- Six Drop Rule
- Repeating this Course
- Financial Aid Statement
- Financial Aid Certification of Attendance
- International Students
- Religious Holidays
- ADA Statement
- Academic Integrity
- Grade Reports
- Family Educational Rights and Privacy Act (FERPA)
- Institutional Equity
- Instructors Right to Modify

We, the Math Department of BHC, take issues of dishonesty very seriously. If a student is caught violating any policy of the Testing Center, or an instructor’s own policy for their particular class, the following consequences will be enforced: The minimum penalty a student will receive is a zero for the assignment/exam and the maximum penalty will be to receive an F for the course and/or academic suspension.

As with any online course, you are expected to do your own work. By starting the work in this course you are agreeing to follow the honor system. Any indication that you are being dishonest will result in taking your tests at the Brookhaven College Testing Center, receiving an F for the course and/or academic suspension. This is at the instructor’s discretion.

ONLINE EXPECTATIONS
The theme of this online class is respect. I will email you with respect and I expect the same treatment from you. In addition, I ask that you also be respectful to classmates when communicating via email or discussion board. The curriculum of this course has been carefully chosen to help students develop conceptual understanding by supporting them in making
connections between concepts and applying previously learned material to new contexts. In order to aid in maximizing the learning process, students are expected to actively do statistics, analyze data, construct and test hypotheses, solve problems, reflect on their work, and make connections. In order to successfully complete this course, completion of all assignments stated on the syllabus is important.

The course is also intended to prepare each student for success in future courses, gain skills for the workplace, and to participate as a well-informed, productive citizen in our society.

**DISCUSSION BOARD**

**Discussion Forums:**
Under the “Discussion Board” tab you will be able to introduce yourself. In addition, this is where you post questions and your classmates can help you. I will be reading these discussions and communicate via the discussion board. The Discussion Board should contain questions over the material that is covered for the week and you will have a chance to discuss homework problems with other students in the course. This will also help you to prepare for the upcoming Test. This allows you to illustrate your understanding of the material and to help other students in the course. You will be able to learn from other students in the class, which may also help you to understand the material better.

**GOING TO CLASS**

For the purposes of “Going to Class” we will use the following format:

1. **GO TO CLASS.** Before you begin a section, you must first watch the lesson video for that section. Under the Course Menu, you will find a tab entitled, “Homework.” You should start here. You will find a link to the lesson videos, the multimedia textbook, the homework, and any other assignments that you may need to complete for the week. Before you view the lesson videos, I suggest that you read through the multimedia textbook. The multimedia textbook will have several icons available to you. There is an “Audio” icon, a “You Try It,” and an “Animation” icon. The Audio icon will read that portion of the textbook to you, the “You Try It” icon will allow you to work corresponding problems as you move along and the Animation icon will present that portion of the lesson in animated form. It is strongly suggested that you use the “You Try It,” and “Animation” icons regularly. They will help you to get a good understanding of the material before you attempt the homework.

2. **PRACTICE HOMEWORK PROBLEMS COVERED IN THE SECTION.** Click on the “Homework” tab which is located on the left side of the screen in MML. I highly recommend that you achieve a score of 70% or better on each homework assignment before you move on to the next assignment. Achieving this score will ensure that you have mastered enough of the material to understand and do well on the next section. Each homework assignment is a prerequisite of the other.

3. **DISCUSSION BOARD TO ASK/ANSWER STUDENT QUESTIONS.**

4. **TAKE SAMPLE TEST.** Once you have practiced all of the homework that the test will cover (see course calendar on pages to follow) you should take the SAMPLE Test. The SAMPLE Tests are designed to give you an idea as to how you will perform on the actual test. If you score a 28% on the SAMPLE Test you will probably make somewhat of the same score on the actual exam.
5. **STUDY PLAN.** Once you take the sample test, a study plan will automatically be generated. The Study Plan is located under the Lessons menu as well. Complete all items in the study plan.

6. **TAKE THE TEST.** Make sure you read the syllabus and know the date to take each test. All tests are timed. Please make sure that you make arrangements with your schedule so you can take all tests by the deadline. No makeup exams will be given unless absence is excused by the instructor.

**HELP AND AVAILABLE RESOURCES:**

- If you need help navigating through the MyStatLab Interactive website, go to the Announcements page and there you will find a link to Online Student Help.
- Don’t forget, MyStatLab includes FREE access to the AW Tutor Center. Just call toll free (888) 777-0463, Sunday to Thursday 4PM – 11PM.
- A link to the Student Solutions Manual to accompany the textbook is available under “Chapter Contents” menu and under Course Information. Look at the top for the tab “Tools for Success.” Here you will also find TI Graphing Calculator Tutorials. The solutions manual contains worked out solutions to the odd-numbered problems in your textbook. You may find this to be very helpful when completing the review exercises assigned from your textbook before going to take the tests.
- Brookhaven College has the Hub Center that offers free assistance and other resources to students enrolled in this course. The Hub is equipped with computers with appropriate plug-ins and Internet access so that video lectures can be viewed and homework can be done in the Hub. You should not depend on the Hub entirely to complete work for this course, you should have your own personal computer with the appropriate Internet access. However, the Hub Center is available if you experience temporary technical problems with your personal computer, or you are on campus and would like to get some of your work done. The Hub is located in S251. Hours are located outside the Hub location.

If you experience technical problems while using MyStatLab, you may contact Technical Support at (800) 677-6337, Monday – Friday 6am – 7pm CST and Sunday 3pm – 10pm.

**EVALUATION PROCEDURES**

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four Unit Exams</td>
<td>60%</td>
</tr>
<tr>
<td>Homework</td>
<td>10%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>Departmental Final Exam</td>
<td>20%</td>
</tr>
</tbody>
</table>

The scale used to determine your final performance grade is:

- 90 to 100 A
- 80 to 89 B
- 70 to 79 C
- 60 to 69 D
- 0 to 59 F
- Withdrawal W

**TI-84 Plus is required the 1st day of class.** The TI-89, TI-92 or TI-Nspire will not be allowed to use on any test.
Final grades are posted on eConnect at the end of the semester. You may obtain your final grades in any DCCCD course online at https://econnect.dcccd.edu/. From the student menu, select “My Grades” under “My Personal Information.” If you are not already logged in, you will be prompted to do so. Select the grade type you wish to review. Press the submit button and all grades for the selected grade type will be displayed.

Incomplete grades are given when an unforeseen emergency prevents a student from completing the work in a course. The division Dean must approve all “I” grades.

**Instructor Right to Modify:** The instructor has the right to add, delete, or revise segments of this course syllabus.

**IMPORTANT DATES:**

**Spring Academic Semester 2020**

**Dates for 16-Week Spring Semester**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2 (Thursday)</td>
<td>College buildings and offices open</td>
</tr>
<tr>
<td>January 13 (Monday)</td>
<td>Faculty Reports</td>
</tr>
<tr>
<td>January 20 (Monday)</td>
<td>Dr. Martin Luther King, Jr. Day - Holiday</td>
</tr>
<tr>
<td>January 21 (Tuesday)</td>
<td>Classes Begin</td>
</tr>
<tr>
<td>February 3 (Monday)</td>
<td>12th Class Day (Certification Date)</td>
</tr>
<tr>
<td>February 27 - 28 (Thursday thru Friday)</td>
<td>Professional Development Days -- Thursday and Friday day classes will not meet. Friday evening, Saturday and Sunday classes will meet.</td>
</tr>
<tr>
<td>March 2 (Monday)</td>
<td>Classes Resume</td>
</tr>
<tr>
<td>March 16-20 (Monday thru Friday)</td>
<td>Spring Break - College buildings and offices will be closed for the week.</td>
</tr>
<tr>
<td>March 23 (Monday)</td>
<td>Classes Resume</td>
</tr>
<tr>
<td>April 10 (Friday)</td>
<td>Holiday</td>
</tr>
<tr>
<td>April 13 (Monday)</td>
<td>Classes Resume</td>
</tr>
<tr>
<td><strong>April 16 (Thursday)</strong></td>
<td><strong>Last Day to Withdraw</strong>*</td>
</tr>
<tr>
<td>May 11-14 (Monday thru Thursday)</td>
<td>Final Exams</td>
</tr>
<tr>
<td>May 14 (Thursday)</td>
<td>Semester Ends</td>
</tr>
<tr>
<td>May 18 (Monday)</td>
<td>Last Day for faculty to submit grades electronically through eConnect to the Registrar’s Office.</td>
</tr>
<tr>
<td>May Graduation</td>
<td>Ceremony dates may vary at the colleges depending on space available.</td>
</tr>
</tbody>
</table>

May Graduation Ceremony dates may vary at the colleges depending on space available.
# MATH 1342 - COURSE SCHEDULE

5th Edition by Michael Sullivan III

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Student Activity Workbook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 1/21</td>
<td>Introduction to the Course &amp; MyStatLab, Answer Discussion Board Questions 1.1 Introduction to the Practice of Statistics 1.2 Observational Studies versus Designed Experiments</td>
<td>Introducing Statistics through Quotes p3 Complete by 1/25 1.1-1.2 Due 1/26</td>
</tr>
<tr>
<td>Week 2 1/27</td>
<td>1.3 Simple Random Sampling 1.4 Other Effective Sampling Methods <em>Only cover Convenience Sampling</em> 1.5 Bias in Sampling</td>
<td>1.3-1.5 Due 2/2 Quiz #1 Due 2/3</td>
</tr>
<tr>
<td>Week 3 2/3</td>
<td>2.1 Organizing Qualitative Data 2.2 Organizing Quantitative Data: The Popular Displays 2.4 Graphical Misrepresentations of Data</td>
<td>Predicting Distribution Shape p21 2.1-2.4 Due 2/9 Quiz #2 Due 2/10</td>
</tr>
<tr>
<td>Week 4 2/10</td>
<td><strong>Test #1</strong> (Recommended Complete SAMPLE Test)</td>
<td><strong>Test #1 Due 2/16</strong></td>
</tr>
<tr>
<td>Week 5 2/17</td>
<td>3.1 Measures of Central Tendency 3.2 Measures of Dispersion 3.4 Measures of Position and Outliers 3.5 The Five-Number Summary and Boxplots</td>
<td>3.1-3.5 Due 2/23 Quiz #3 Due 2/24</td>
</tr>
<tr>
<td>Week 6 2/24</td>
<td>4.1 Scatter Diagrams and Correlation 4.2 Least-Squares Regression 4.3 Diagnostics on the Least-Squares Regression Line</td>
<td>Examining the Relationship between Arm Length and Height p51 4.1-4.3 Due 3/1 Quiz #4 Due 3/2</td>
</tr>
<tr>
<td>Week 7 3/2</td>
<td>5.1 Probability Rules 5.2 The Addition Rule and Complements 5.3 Independence and the Multiplication Rule</td>
<td>5.1-5.3 Due 3/8</td>
</tr>
<tr>
<td>Week 8 3/9</td>
<td>5.4 Conditional Probability and the General Multiplication Rule 5.6 Putting It Together: Which Method Do I Use? <em>Only cover Probability</em></td>
<td>Interpreting Conditional Probabilities p65 5.4-5.6 Due 3/15 Quiz #5 Due 3/16</td>
</tr>
<tr>
<td>Week 9 3/23</td>
<td><strong>Test #2</strong> (Recommended Complete SAMPLE Test)</td>
<td><strong>Test #2 Due 3/29</strong></td>
</tr>
<tr>
<td>Week 10 3/30</td>
<td>7.1 Properties of the Normal Distribution 7.2 Applications of the Normal Distribution</td>
<td>7.1-7.2 Due 4/5 Quiz #7 Due 4/6</td>
</tr>
<tr>
<td>Week 11 4/6</td>
<td>8.1 Distribution of the Sample Mean 8.2 Distribution of the Sample Proportion</td>
<td>Analyzing the Variability in Sample Means p99 8.1-8.2 Due 4/12 Quiz #8 4/13</td>
</tr>
<tr>
<td>Week 12 4/13</td>
<td><strong>Test #3</strong> (Recommended Complete SAMPLE Test)</td>
<td><strong>Test #3 Due 4/19</strong></td>
</tr>
<tr>
<td>Week 14 4/27</td>
<td>10.1 The Language of Hypothesis Testing 10.2 Hypothesis Tests for a Population Proportion <em>Exclude Binomial Distribution</em> 10.3 Hypothesis Tests for a Population Mean</td>
<td>Testing a Claim with Skittles I p135 10.1-10.5 Due 5/3 Quiz #10 Due 5/4</td>
</tr>
</tbody>
</table>

Last revised on January 2020
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Student Activity Workbook</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10.5 Putting It Together: Which Method Do I Use? Exclude Chi-Square</td>
<td>Test #4 Due 5/5</td>
</tr>
<tr>
<td></td>
<td>Test #4 (Recommended Complete SAMPLE Test)</td>
<td></td>
</tr>
<tr>
<td>Week 15 5/4</td>
<td>11.1 Inference about Two Population Proportions 11.2 Inference about Two Means: Dependent Samples 11.3 Inference about Two Means: Independent Samples 11.5 Putting It Together: Which Method Do I Use? Exclude $\sigma$ and $\sigma^2$</td>
<td>11.1-11.5 Due 5/10 Quiz #11 Due 5/11</td>
</tr>
<tr>
<td>Week 16 5/11</td>
<td>Comprehensive Final Exam (Recommended Complete Review for Final Exam)</td>
<td>FINAL EXAM DUE: 5/13</td>
</tr>
</tbody>
</table>