MATH 1314 INET COURSE SYLLABUS
COLLEGE ALGEBRA
SUMMER 2020 (Section 24401)
INSTRUCTOR: Czarina S. Reyes, Ph.D.
MAILING ADDRESS: Brookhaven College, Math/Science Department
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In addition, you can purchase the MyMathLab 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 code and logged into MML.

SOFTWARE: MyMathLab, CourseCompass Interactive math software is required for participation in this course. All homework, tests, and comprehensive final exam will be given within MyMathLab. http://www.coursecompass.com. You may purchase MyMathLab access code with the e-book online. The course ID is: reyes61568

CATALOG DESCRIPTION: This is a Texas Common Course Number. This is a Core Curriculum course selected by the colleges of DCCCD.
Prerequisite: College level ready in Mathematics algebra-based level.
Course Description: This course is an in-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. This course is cross-listed as MATH 1414. The student may register for either MATH 1314 or MATH 1414 but may receive credit for only one of the two. (3 Lec.)

Student Learning Outcomes:

Upon successful completion of this course, students will:

1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.
2. Recognize and apply polynomial, rational, radical, exponential and logarithmic functions and solve related equations.
3. Apply graphing techniques.
4. Evaluate all roots of higher degree polynomial and rational functions.
5. Recognize, solve and apply systems of linear equations using matrices

MATH 1314 is a Tier 1 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 1. 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 ways. www.dcccd.edu/core
Core Objectives:
MATH 1314 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 1314 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 1314 develops **Critical Thinking, Communication**, and **Empirical and Quantitative Skills** by requiring students to solve and analyze applications of various functions and systems of equations.

CHAPTERS/UNITS COVERED:

Chapter 1: Graphs, Functions, and Models
Chapter 2: More on Functions
Chapter 3: Quadratic Functions and Equations; Inequalities
Chapter 4: Polynomial Functions and Rational Functions
Chapter 5: Exponential Functions and Logarithmic Functions
Chapter 6: Systems of Equations and Matrices

COURSE MATERIALS

In this course, we will use a software program called MyMathLab 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.

MyMathLab 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

5/2/2020
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 MyMathLab to view section video presentations, participate on the discussion board, practice homework exercises, 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 1314) 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.*

5/2/2020
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.

DISCUSSION BOARD/VIRTUAL CLASSROOM

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. 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 MyMathLab. 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. You may take the SAMPLE Test only one time. Your Final Exam can replace your test score earned on Tests 1, 2, or 4 if it is higher. The final exam cannot replace test 3 (the logarithm test).

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 tests. 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.

5/2/2020
TAKING EXAMS
All exams will be taken online on the computer. All exams are timed. You should take the SAMPLE tests before taking the “actual” test. This will help you to get comfortable taking a timed test.

HELP AND AVAILABLE RESOURCES

❖ If you need help navigating through the MyMathLab Interactive website, go to the Announcements page and there you will find a link to Online Student Help.

❖ Don’t forget, MyMathLab 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 a Math Lab that offers free assistance and other resources to students enrolled in this course. The lab 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 lab. You should not depend on the lab entirely to complete work for this course, you should have your own personal computer with the appropriate Internet access. However, the Math Lab 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 Lab is located in K137. Math Lab hours are: Monday through Thursday 9:00AM – 7PM, Friday 10:00AM – 2:00PM, Saturday 12PM – 4PM, Closed Sunday.

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.

EVALUATION PROCEDURES
Tests: 60% of the final grade; Final Exam 20% of the final grade; MML homework 10%; and MML quizzes 10%. Drop the lowest test grade and replace it with the final exam. THE GRADE ON THE LOGARITHM TEST (CHAPTER 5) CANNOT BE REPLACED. There will be no extensions of deadlines without instructor approval.

The scale used to determine the final course grade is:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 to 100</td>
</tr>
<tr>
<td>B</td>
<td>80 to 89</td>
</tr>
<tr>
<td>C</td>
<td>70 to 79</td>
</tr>
<tr>
<td>D</td>
<td>60 to 69</td>
</tr>
<tr>
<td>E</td>
<td>0 to 59</td>
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</tbody>
</table>

Withdrawal W

TI Graphing calculator required. TI-84 PLUS calculator recommended. NO TI-89 OR TI-92 OR TI-Nspire.

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.
<table>
<thead>
<tr>
<th>IMPORTANT DATES</th>
<th>Class Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 15 (Friday)</td>
<td>Classes Begin</td>
</tr>
<tr>
<td>May 25 (Monday)</td>
<td>Memorial Day Holiday</td>
</tr>
<tr>
<td>June 19 (Friday)*</td>
<td>Last Day to Withdraw *</td>
</tr>
<tr>
<td>July 1 (Wednesday)</td>
<td>Final Exams/Summer I Ends</td>
</tr>
<tr>
<td>July 3 (Friday)</td>
<td>Fourth of July Holiday</td>
</tr>
<tr>
<td>July 6 (Monday)</td>
<td>Last Day for faculty to submit grades electronically through eConnect to the Registrar's Office.</td>
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</tbody>
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The following timeline is for Section 24401. Although this is an online course, you are allowed to work somewhat at your own pace. The following is a course calendar which has been created to help you finish the course on time. These deadlines must be followed very closely. This course starts May 15, 2020 and ends July 1, 2020. The last day to drop this course with a “W” is June 19, 2020. Students are strongly encouraged to finish early and may take tests as quickly as they are able until the last two weeks of the course. All exams may be taken on or before the required date as long as the corresponding homework for the tests has been completed. Exams will not be accepted after the given deadline.

<table>
<thead>
<tr>
<th>WEEK</th>
<th>SECTIONS</th>
<th>DEADLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>Register in CourseCompass, Answer Discussion Board Questions</td>
<td>Complete by 5/20</td>
</tr>
<tr>
<td>5/15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Day 1    | 1.1: Introduction to Graphing  
1.2: Functions and Graphs | 1.1 Homework due 5/20  
1.2 Homework due 5/20 |
| 5/15     |                                               |                                 |
| Week 1   | 1.3: Linear Functions, Slope and Applications  
1.4: Equations of Lines and Modeling  
1.5: Linear Equations, Functions, Zeros, and Applications | 1.3-1.5 Homework due 5/23  
Quiz #1 due by: 5/24 |
| 5/18     |                                               |                                 |
| Week 2   | 2.1: Increasing, Decreasing, and Piecewise Functions; Applications  
2.2: The Algebra of Functions | 2.1 Homework due 5/27  
2.2 Homework due 5/27 |
| 5/25     |                                               |                                 |
| Week 2   | 2.3: The Composition of Functions  
2.4: Symmetry  
2.5: Transformations | 2.3 Homework due 5/30  
2.4 Homework due 5/30  
2.5 Homework due 5/30  
Quiz #2 due by: 5/31 |
| 5/25     | Take SAMPLE Test for Chapters 1 & 2 | Test #1 Due: 6/1 by 11:59 pm |
| Week 3   | JIT: Classification of Numbers (p.595, 596)  
3.1: The Complex Numbers  
3.2: Quadratic Equations, Functions, Zeros, and Models  
3.3: Analyzing Graphs of Quadratic Functions | 3.1 Homework due 6/3  
3.2 Homework due 6/3  
3.3 Homework due 6/3  
Quiz #3 due by: 6/4 |
| 6/1      |                                               |                                 |
| Week 3   | 3.4: Solving Rational Equations and Radical Equations | 3.4 Homework due 6/6  
Quiz #4 due by: 6/7 |
| 6/1      | Take SAMPLE test for Chapter 3 | Test #2 Due: 6/8 by 11:59 pm |
| Week 4   | 4.1: Polynomial Functions and Models  
4.2: Graphing Polynomial Functions  
4.3: Polynomial Division; The Remainder Theorem and the Factor Theorem | 4.1 Homework due 6/10  
4.2 Homework due 6/10  
4.3 Homework due 6/10  
Quiz #5 due by: 6/11 |
| 6/8      |                                               |                                 |
| Week 4   | 4.4: Theorems about Zeros of Polynomial Functions | 4.4 Homework due 6/13  
4.5 Homework due 6/13 |
<p>| 6/8      |                                               |                                 |</p>
<table>
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<tr>
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<th>SECTIONS</th>
<th>DEADLINE</th>
</tr>
</thead>
</table>
| 4.5: Rational Functions | Quiz #6 due by: 6/14  
Take SAMPLE Test for Chapter 4 | Test #3 Due: 6/15 by 11:59 pm                 |
| Week 5  | 5.1: Inverse Functions  
5.2: Exponential Functions and Graphs | 5.1 Homework due 6/17  
5.2 Homework due 6/17 |
| 6/15     |                                              |                                               |
| Week 5  | 5.3: Logarithmic Functions and Graphs  
5.4: Properties of Logarithmic Functions | 5.3 Homework due 6/20  
5.4 Homework due 6/20  
Quiz #7 due by: 6/21 |
| 6/15     |                                              |                                               |
| Week 6  | 5.5: Solving Exponential and Logarithmic Equations  
5.6: Applications and Models: Growth and Decay; Compound Interest | 5.5 Homework due 6/24  
5.6 Homework due 6/24  
Quiz #8 due by: 6/25  
Test #4 Due: 6/26 by 11:59 pm |
| 6/22     |                                              |                                               |
| Week 6  | 6.1: Systems of Equations in Two Variables | 6.1 Homework due 6/27 |
| 6/22     |                                              |                                               |
| Week 7  | 6.2: Systems of Equations in Three Variables | 6.2 Homework due 6/28 |
| 6/29     |                                              |                                               |
| Week 7  | 6.3: Matrices and Systems of Equations  
Take SAMPLE Test for Chapters 6 | 6.3 Homework due 6/29  
Quiz #9 due by: 6/30  
Test #5 Due: 6/30 by 11:59 pm |
| 6/29     |                                              |                                               |
| Last Day | Review for Final Exam/ Final Exam | Final Exam Online due by 7/1 11:59pm |
| 7/1      |                                              |                                               |