MATH 1314 – COLLEGE ALGEBRA  
DEPARTMENT OF MATHEMATICS & STATISTICS  
SPRING 2020

A. COURSE INFORMATION
Course number/section: MATH – 1314.006
Class meeting time: TR 5:30 – 6:45 PM
Class location: CI - 106
Course Website: www.bb9.tamucc.edu

B. INSTRUCTOR INFORMATION
Instructor: Dr. Abdullah Abu-Rqayiq
Office location: CI - 356
Office hours: W 11:00 - 1:00 & TR 9:30 – 11:00
E-mail: Abdullah.aburqayiq@tamucc.edu
Appointments: To schedule an appointment, please email me in advance.

C. COURSE DESCRIPTION
The course continues the development of algebra from MATH 0399, Intermediate Algebra. A review of properties of numbers and linear equations and inequalities is included. Topics include quadratic equations, inequalities, graphs, logarithms and exponential functions, polynomial equations, system of equations, and matrices.

D. PREREQUISITES AND COREQUISITES
Prerequisites
Intermediate Algebra (Math 0399) or placement into College Algebra.
Corequisites  None

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES
Required Textbook/Software:
Knewton Access code is required. (More info will be given the first day of class) College Algebra by OpenSTAX is a free textbook that is embedded into Blackboard. You are expected to read and annotate as needed.

Optional Textbook(s) or Other References

Supplies
A scientific calculator is required for this class. Other calculators will not be supported by the instructor. The homework & Quizzes are accessed by logging into BlackBoard https://bb9.tamucc.edu/.
F. STUDENT LEARNING OUTCOMES AND ASSESSMENT
Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the course’s student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning. 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.

G. INSTRUCTIONAL METHODS AND ACTIVITIES
The instructional method is a combination of lectures and students’ activities. Students will be shown models of solutions and will work independently or in groups to demonstrate mastery. Students will use MyLabsPlus independently to complete homework assignments. At the end of the semester, students will show competency by passing all assignments, quizzes, tests and the final exam with a score of 60% or better.

H. MAJOR COURSE REQUIREMENTS AND GRADING
The student learning outcomes described in Section F will be measured via progress on homework, quizzes, tests and the final exam. Every problem in the homework can be worked multiple times. There is no reason not to obtain a good grade on every homework assignment. Doing so will strengthen your performance on quizzes and tests. The homework will be open all semester. It is strongly recommended that you complete the homework for a section or chapter prior to the quiz and the exams. The final exam is comprehensive and is written by the Mathematics Department. All students will take a common final exam. I do expect you to remember all concepts that I teach as noted on this syllabus.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Three Midterm Exams</td>
<td>45%</td>
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<tr>
<td>Quizzes</td>
<td>15%</td>
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<tr>
<td>Homeworks</td>
<td>15%</td>
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<tr>
<td>Final Comprehensive Exam</td>
<td>25%</td>
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Grades will be assigned according to the following scale:
A – 90%-100%  B - 80%-89.99%  C – 70%-79.99%  D – 60%-69.99%  F - below 60
<table>
<thead>
<tr>
<th>DATE (BY WEEK)</th>
<th>CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Syllabus discussion&lt;br&gt;R. Section R3-R7&lt;br&gt;1.1 Linear Equations</td>
</tr>
<tr>
<td>2</td>
<td>1.2 Applications &amp; Modeling with Linear Equations&lt;br&gt;1.4 Quadratic Equations</td>
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<tr>
<td>3</td>
<td>1.5 Applications &amp; Modeling with Quadratic Equations&lt;br&gt;1.6 Other Types of Equations &amp; Applications</td>
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<td>4</td>
<td>1.7 Inequalities&lt;br&gt;<em>EXAM 1</em></td>
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<td>5</td>
<td>1.8 Absolute Value Equations &amp; Inequalities&lt;br&gt;5.1 Systems of Linear Equations&lt;br&gt;5.2 Matrix Solution of Linear Systems</td>
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<td>6</td>
<td>2.1 Rectangular Coordinates &amp; Graphs&lt;br&gt;2.2 Circles&lt;br&gt;2.3 Functions</td>
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<td>7</td>
<td>2.4 Linear Functions&lt;br&gt;2.5 Equations of Lines &amp; Linear Models</td>
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<tr>
<td>8</td>
<td>2.8 Function Operations &amp; Composition&lt;br&gt;<strong>EXAM 2</strong></td>
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<tr>
<td>9</td>
<td>4.1 Inverse Functions&lt;br&gt;4.2 Exponential Functions</td>
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<td>10</td>
<td>4.3 Logarithmic Functions&lt;br&gt;4.4 Evaluating Logarithms &amp; Change-of-Base Theorem&lt;br&gt;4.5 Exponential &amp; Logarithmic Equations</td>
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<tr>
<td>11</td>
<td>4.6 Applications &amp; Models of Exponential Growth &amp; Decay&lt;br&gt;<em><strong>EXAM 3</strong></em></td>
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<td>12</td>
<td>2.6 Graphs of Basic Functions&lt;br&gt;2.7 Graphing Techniques</td>
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<tr>
<td>13</td>
<td>3.1 Quadratic Functions &amp; Models</td>
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<tr>
<td>14</td>
<td>3.4 Polynomial Functions: Graphs, Applications, &amp; Models&lt;br&gt;3.5 Rational Functions: Graphs, Applications, &amp; Models</td>
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<tr>
<td>15,16</td>
<td>Review and Final Exam</td>
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**Notes:** Knewton Homework & Quizzes are due on a weekly basis. Check the system for all the specific due dates. Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes.
J. COURSE POLICIES

Attendance/Tardiness
Attendance will be taken each class. For most students attending class is a faster way of learning the material than trying to catch up on missed material solely from the book. Tardiness is often disruptive to the whole class and is not appreciated. If you are delayed and arrive late for class, please do so quietly. Usually the topic/technique of the day is introduced in the first few minutes of class; missing that part usually means that you will be lost all class. The instructor is NOT responsible for informing absent students what was covered in previous classes, homework or any other announcements.

Late Work and Make-up Exams
Homework & Quizzes are assigned through Knewton (via Blackboard) is due as specified. Homework are available before every section we covered in class. You can take them anytime before the due date (usually every Saturday night by 11:59 PM) and you have multiple attempts (only the highest grade will be counted). The weekly quizzes are given online every Sunday. You can take them anytime between midnight and midnight of the day of the quiz and you have certain number of attempts (see mylabsplus) to do each quiz. The quizzes are like the homework but with no help options available. Of course, you may not get any help with the quizzes. Missed quizzes cannot be made up, but the lowest two quizzes get dropped. The lowest three homework grades get dropped.

Missed Exams: If you must miss an exam, it is your responsibility to contact me no later than the day of the exam. Failure to contact me on or before the exam day results in a grade of zero points for the exam. This also applies to the final exam. For missed final exams due to an acceptable excuse the university rules about I (Incomplete) grades apply and the make-up is at the instructor’s convenience early in the next long semester. Only extreme emergencies or official university business are acceptable reasons to miss exams and documentation will be required. Car trouble, routine doctor’s appointments, family reunions or graduations of siblings etc. are not valid reasons to miss exams. If your reason to miss the exam is not a valid one, your exam score is 0 points. Be sure to check before missing an exam whether your reason is acceptable.

Extra Credit
There is no extra credit in this class.

Laptop Use
You may use a laptop to take notes during lecture. Distracting other students by surfing the web is not acceptable behavior.

Others
- Students are expected to read the PowerPoints materials in Blackboard, view videos and other multimedia available and work assignments before the due dates.
- If you have problems to access the system you have to let me know as soon as possible. Office hours are a great opportunity to ask more questions about homework.
- On-campus free tutoring in the CASA is another way of getting help with the homework.
- The final exam is a departmental exam that is part multiple-choice and part short answer. Absolutely no early final examination, so make travel arrangements accordingly.

Participation
Participation is not part of the grade, but you learn more by interacting than by watching passively.
K. COLLEGE AND UNIVERSITY POLICIES

• **Academic Integrity (University)**

University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.)

In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a failing grade.

• **Classroom/Professional Behavior**

Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct.

Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

• **Statement of Civility**

Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high-quality educational experience that is free from repression.

You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

• **Deadline for Dropping a Course with a Grade of W (University)**

I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. **Please consult with your academic advisor, the Financial Aid Office, and me, before you decide to drop this course.** Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Please consult the Academic Calendar (http://www.tamucc.edu/academics/calendar/) for the last day to drop a course.

• **Grade Appeals (College of Science and Engineering)**

As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible
through the University Rules website at http://www.tamucc.edu/provost/university_rules/index.html, and the College of Science and Engineering Grade Appeals webpage at http://sci.tamucc.edu/students/GradeAppeal.html. For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

• Disability Services
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call (361) 825-5816 or visit Disability Services in Corpus Christi Hall 116. If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.
http://disabilityservices.tamucc.edu/

• Statement of Academic Continuity
In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.

L. OTHER INFORMATION
• Academic Advising
The College of Science & Engineering requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. Meetings are by appointment only; advisors do not take walk-ins. Please call or stop by the Advising Center to check availability and schedule an appointment. The College’s Academic Advising Center is located in Center for Instruction 350 or can be reached at (361) 825-3928.

• GENERAL DISCLAIMER
I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.