College Algebra MATH 1314.013
Department of Mathematics and Statistics
Spring 2018

A. COURSE INFORMATION
Course number/section: MATH 1314.013
Class meeting time: TR 8:00 – 9:15 am
Class location: CS-114
Class Website: bb9.tamucc.edu
Final Exam Dates: May 4 (Friday), 2018 at 2:00 pm ~ 4:30 pm
Common Final and Make plan to be there

B. INSTRUCTOR INFORMATION
Instructor: Haekyoung Choi
Office location: CI-351
Office hours: T&R 2:30 – 4:30 pm / W 12:30 – 1:30 pm
e-mail: haekyoung.choi@tamucc.edu
Appointments: Email for setting up an appointment

C. COURSE DESCRIPTION
This course covers quadratic equations, inequalities, graphs, logarithms and exponentials, theory of polynomial equations, and systems of equations by using matrix. This course counts as the mathematics component of the University Core Curriculum.

D. PREREQUISITES AND COREQUISITES
A “C” or higher in Math 0300 or placement into Math 1314.

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES
Required Materials
- Person MyLabsPlus Student Access Code
  MyLabsPlus access kit is required for homework and can be purchased either in the university book store or online. I recommend checking both sources before buying. I will discuss how you access and use MyLabsPlus during the first class meeting. Link for online homework is www.tamucc.mylabsplus.com

- TI-83/84
  A graphing calculator is required for the course. TI-83 or TI-84 are supported. NO TI nspire for the class for the entire semester. Cellphones, laptops, or tables are NOT allowed to be used as a calculator during exams.

Optional Textbook(s) or Other References
College Algebra by Lial, Hornsby, Schneider, Daniels, 12th Ed. Publisher: Pearson.
(When you purchase the access code, it includes an electronic version of the textbook. So, it is not required to buy the hardcopy unless you prefer to do so. Also, Mary and Jeff Bell library reserve the required textbook for you to use it.)
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.

By the end of this course, students should be able to:

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**

Methods and activities for instruction include:

- Instructional presentation of new material and concepts,
- Class discussion and problem solving analysis using critical thinking techniques,
- Individual online assignments via MyLabsPlus to enhance understanding of new concepts,
- Discovery method techniques supported by a graphing utility to view the effects of shifting and translation concepts on the functions,

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 until a correct answer is achieved. There is no reason not to obtain a 100 on every homework assignment. 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>ACTIVITY</th>
<th>% of FINAL GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz</td>
<td>10%</td>
</tr>
<tr>
<td>Homework</td>
<td>20%</td>
</tr>
<tr>
<td>Exams (3)</td>
<td>45%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>25%</td>
</tr>
</tbody>
</table>

Common Final Exam on Friday
May 4th from 2:00 pm to 4:30 pm

Attendance MANDATORY

**Quiz (10%)**
Four quizzes will be given throughout the semester. The date will be announced in class. Any missed quizzes will receive a grade of zero (0), and there will be no makeups on quizzes without prior approval.
Homework (20%)  
There will be daily homework assignments given that you must do in order to truly understand the material. All homework assignments will be done online using MyLabsPlus. www.tamucc.mylabsplus.com

Exams (45%)  
There will be 3 exams during the semester, and the date of each will be announced at least one week advance. You will have reviews with solutions provided to study. The exams ARE NOT open note or book. Cheat-sheets will NOT be allowed during any exams. So, make sure to memorize all the formulas. Regardless of the reason, a grade of zero (0) will be recorded for any exam not taken, and there will be no make-ups on exams. Your final exam grade may replace one missed exam grade. If you do not miss an exam, your final exam grade will replace your lowest exam grade only if your final exam grade is higher than the other.

Final Exam (25%)  
The departmental common final exam will be comprehensive and set for all students who are in Math1314 on the same day (Friday, May 4th, 2:00 pm ~ 4:30pm). There will be NO MAKEUP for the final exam. It will be multiple-choice questions. You will need a pencil and a calculator. If your final exam is higher than one of your lowest test grades or a missed one, then the final exam will replace that test grade. The final exam can ONLY replace ONE TEST grade.

I. COURSE CONTENT/SCHEDULE (Tentative)

<table>
<thead>
<tr>
<th>DATE (BY WEEK)</th>
<th>SECTION</th>
<th>TOPIC</th>
<th>DUE DATE for HW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (1/16)</td>
<td>Review 1.4</td>
<td>Syllabus / Introduction to the class / Review Quadratic Equations</td>
<td></td>
</tr>
<tr>
<td>2 (1/23)</td>
<td>1.5 1.6</td>
<td>Applications and Modeling with Quadratic Equations Other Types of Equations and Applications</td>
<td>MyLabsPlus: Sec 1.4 - 1.8 : 2/14 by 11 pm</td>
</tr>
<tr>
<td>3 (1/30)</td>
<td>1.6 1.7</td>
<td>Other Types of Equations and Applications Inequalities (solving and graphs)</td>
<td></td>
</tr>
<tr>
<td>4 (2/6)</td>
<td>1.8 2.1</td>
<td>Absolute Value Equations and Inequalities Rectangular Coordinates and Graphs</td>
<td></td>
</tr>
<tr>
<td>5 (2/13)</td>
<td>Review Exam 1</td>
<td>Exam 1 Review Exam 1 on February 15th (Sec 1.4 – 1.8)</td>
<td></td>
</tr>
<tr>
<td>6 (2/20)</td>
<td>2.2 2.3 2.4</td>
<td>Circles Functions Linear Functions</td>
<td>MyLabsPlus: Sec 2.1 - 2.8 : 3/28 by 11 pm</td>
</tr>
<tr>
<td>7 (2/27)</td>
<td>2.4 2.5</td>
<td>Linear Functions Equations of Lines; Curve Fitting</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Week</td>
<td>Topic</td>
<td>MyLabsPlus</td>
</tr>
<tr>
<td>----------</td>
<td>------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>8 (3/6)</td>
<td></td>
<td>2.6 Graphs of Basic Functions 2.7 Graphing Techniques/Transformation 2.8 Function Operations and Composition</td>
<td></td>
</tr>
<tr>
<td>9 (3/13)</td>
<td></td>
<td>Spring Break</td>
<td></td>
</tr>
<tr>
<td>10 (3/20)</td>
<td>2.8</td>
<td>Function Operations and Composition 3.1 Quadratic Functions and Models</td>
<td></td>
</tr>
<tr>
<td>11 (3/27)</td>
<td></td>
<td>Review Exam 2</td>
<td>Exam 2 Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Exam 2 on March 29th (Sec 2.1 – 2.8)</td>
</tr>
<tr>
<td>12 (4/3)</td>
<td>4.1</td>
<td>Inverse Functions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.2</td>
<td>Exponential Functions</td>
<td></td>
</tr>
<tr>
<td>13 (4/10)</td>
<td>4.3</td>
<td>Logarithmic Functions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.4</td>
<td>Evaluating Logarithms and the Change-of-Base Theorem</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.5</td>
<td>Exponential and Logarithmic Equations</td>
<td></td>
</tr>
<tr>
<td>14 (4/17)</td>
<td>4.6</td>
<td>Applications and Models of Exponential Growth/ Decay</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.2</td>
<td>Synthetic Division, Zeros of Polynomial Functions, etc</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 (4/24)</td>
<td></td>
<td>Review Exam 3</td>
<td>Exam 3 Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Exam 3 on April 26th (Sec 3.1 &amp; 4.1 – 4.6)</td>
</tr>
<tr>
<td>16 (5/1)</td>
<td>5.1</td>
<td>Systems of Linear Equations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.2</td>
<td>Matrix Solution of Linear Systems</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Review</td>
<td>Final Exam Review</td>
</tr>
<tr>
<td>17 (5/4)</td>
<td></td>
<td></td>
<td>Final Exam on 5/04/2018 (2:00 – 4:30 pm) / Room: TBA</td>
</tr>
</tbody>
</table>

Note: 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 described in Section F.

**IMPORTANT DATES**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 16</td>
<td>First day of classes</td>
<td>May 1</td>
<td>Last day to withdraw from the University</td>
</tr>
<tr>
<td>March 12-16</td>
<td>Spring Break</td>
<td>May 2</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>April 6</td>
<td>Last day to drop a class</td>
<td>May 4</td>
<td>Common Final</td>
</tr>
</tbody>
</table>
J. **COURE POLICIES**

**Attendance/Tardiness**
Attendance is mandatory by Texas A&M University. Everyday a new topic is covered, and any material that is missed could affect your progress. If you have to miss, please make sure that you get the notes from someone. Also, you are responsible for what is due that week when you are absent. Assignments are available 24 hours per day for the entire week it is due. There will be no excuses for missing assignments unless it is an absolute emergency with documentation.

**Late arrival to exams**
If you arrive at any exam after the first person has completed the exam and left the room, you will not be allowed to take the exam.

**Missed Exam**
Makeup exams will generally NOT be administered. Final exam can replace one missed exam. The exception can be made only with written evidence of an official University excused absence. For an absence to be considered excused, the student must notify his or her instructor in writing (acknowledged e-mail message is acceptable) prior to the date of absence if such notification is feasible. In cases where advance notification is not feasible (e.g. accident or emergency) the student must provide notification by the end of the second working day after the absence. In the case of illness or injury, students are required to obtain a confirmation note from a health care professional affirming date and time of a medical office visit regarding the illness or injury.

**Make-up Quizzes**
NO MAKEUPS will be given for quizzes. You will receive a zero for any missed quizzes.

**Extra Credit**
I do not offer extra credit.

**Use of electronic devices in class/during exams**
Other than a calculator, any use of an electronic device that could disrupt the class must be TURNED OFF or SILENCED. Also, NO SOUND or VIDEO recording may be used during lecture or lab without the instructor’s prior approval. These electronic devices include: cellphones, laptops, tablets, and WEB access devices, etc. Any use of such device during an exam will result in a ZERO on that exam.

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/](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](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](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.

- **CASA**
  The Center for Academic Student Achievement is your best free resource on campus. It provides free academic support through tutoring, counseling, and helps you navigated through higher education. The CASA website is:  [http://casa.tamucc.edu/](http://casa.tamucc.edu/)

**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.