MATH 1314.N03 CRN 53776
Department of Mathematics
FALL 2020

A. **COURSE INFORMATION**
   
   **Course number/section:** MATH 1314.N03 CRN 53776  
   **Class meeting time:** Fully online  
   **Class location:** Online  
   **Course Website:** [https://bb9.tamucc.edu/webapps/login/](https://bb9.tamucc.edu/webapps/login/

B. **INSTRUCTOR INFORMATION**
   
   **Instructor:** Dr. Yu Fan  
   **Office location:** CI 313  
   **Office hours:** W 9:00 - 11:00 AM & F 9:30 – 12:30 PM  
   **Telephone:** (850) 591-5641  
   **E-mail:** yu.fan@tamucc.edu  
   **Appointments:** Email for setting up an appointment

C. **COURSE DESCRIPTION**
   
   **Catalog Course Description**  
   **3 sem. hrs. (3:0) TCCNS Equivalent:** MATH 1314  
   Quadratic equations, inequalities, graphs, logarithms and exponentials, theory of polynomial equations, systems of equations. Counts as the mathematics component of the University Core Curriculum. Fall, Spring, Summer

D. **PREREQUISITES AND COREQUISITES**
   
   **Prerequisite:** A TSI score of 335 – 349.  
   **Corequisites**  
   MATH 0200.105/#53776

E. **REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES**
   
   **Required Textbook(s)**  
   College Algebra by OpenSTAX is a free textbook that is embedded into Blackboard. You are expected to read and annotate as needed.

   **Supplies**  
   Knewton Access code ($40 purchased online, approximately $55 at bookstore), **WEBCAM**, Respondus Lockdown Browser, pencils, erasers, dedicated notebook, and a **scientific calculator**.
A TI-83/ TI-84 plus or INSPIRE calculator MAY NOT be used at anytime. Cell phones may not be used as calculators. A TI 30SXII is highly recommended.

Computer, laptop, or tablet and internet access. If you do not have access to these devices, the computer labs on campus or at CASA are available for you to use.

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:

Student Learning Outcomes

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

1. Interpret and simplify integral and rational exponents.
2. Use the properties of exponents to simplify algebraic expressions.
3. Use addition, subtraction, multiplication and division with order of operations to simplify monomials, binomials and polynomials.
4. Use properties to simplify radicals, including rationalizing the denominator.
5. Use property of fractions and factoring to simplify rational expressions.
6. Solve linear equations and inequalities, which include real numbers, parenthesis, multiple-terms with the variable and have conditional, no solution or infinite solutions.
7. Use factoring techniques and the zero principle or the quadratic formula to solve quadratic equations for real or complex solutions.
8. Solve inequalities and report answers as graphs, sets, or intervals.
9. Solve equations that are classified as rational, radical, or absolute value
10. Find the linear, rational, radical, quadratic equations to model or solve application problems including age problems, consecutive numbers, area problems, and motion problems.
11. Represent graphically the solution(s) of equations and inequalities in one and two variables.
12. Solve systems of linear equations in two variables using elimination and substitution methods.
13. Write equations in one or two variable to solve or model application problems including mixture and motion problems.
14. Understand the relationship between the slopes of two equations and the intercepts to determine if lines are parallel, perpendicular, and identity or just intersecting.
15. Write equations for lines that are parallel or perpendicular to a given equation and passing through a specific point using point slope formula.
16. Convert from standard form to slope-intercept form and vice versa.
17. Write equations for lines in slope-intercept, point-slope and standard form given a graph, two points or a slope and point.
18. Given a graph or quadratic equations determine the x- and y-intercepts, vertex.

G. INSTRUCTIONAL METHODS AND ACTIVITIES

The instructional method is a combination of online lectures, completing Knewton Learning, and help sessions during online office hours. Students will use Knewton Learning independently to complete learning assignments. At the end of the semester, students will show competency by passing all assignments, quizzes, tests and the final exam with an overall score of 70% or better.

H. MAJOR COURSE REQUIREMENTS AND GRADING

<table>
<thead>
<tr>
<th>C</th>
<th>% of FINAL GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knewton Learning</td>
<td>15%</td>
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<tr>
<td>WEBEX Active Participation</td>
<td>5%</td>
</tr>
<tr>
<td>Quizzes – on Knewton</td>
<td>10%</td>
</tr>
<tr>
<td>Exams – Monitored by Webcam</td>
<td>50%</td>
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<tr>
<td>Final – Monitored by Webcam</td>
<td>20%</td>
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</table>

I. COURSE CONTENT/SCHEDULE

Please refer to the tentative course timeline

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics Covered</th>
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<tbody>
<tr>
<td>1 - 4</td>
<td>Introduction, Learning in an Online Environment, Pre-requisite Topics</td>
</tr>
<tr>
<td></td>
<td>Linear Equations &amp; Inequalities</td>
</tr>
<tr>
<td></td>
<td>Quadratic Equations &amp; Complex Numbers</td>
</tr>
<tr>
<td></td>
<td>Other Types of Equations</td>
</tr>
<tr>
<td></td>
<td>HOMEWORK DUE &amp; EXAM 1</td>
</tr>
<tr>
<td>5 - 7</td>
<td>Absolute Value Equations and Inequalities</td>
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<tr>
<td></td>
<td>Basic Functions &amp; Function Notation, &amp; Circles</td>
</tr>
<tr>
<td></td>
<td>Domain and Range, and Transformations</td>
</tr>
<tr>
<td></td>
<td>Behavior of Graphs and Rates of Change, Composition of Functions</td>
</tr>
</tbody>
</table>
HOMEWORK DUE & EXAM 2

8 - 11
Inverse Functions, Quadratic Functions & Applications
Power Functions, Polynomial Graphs, Zeros of Polynomial Functions
Rational Functions & Applications
Inverses and Radical Functions

HOMEWORK DUE & EXAM 3 BY MIDNIGHT

12 - 15
Exponential and Logarithmic Functions & their Graphs
Logarithmic Properties
Exponential and Logarithmic Equations
Exponential and Logarithmic Models

HOMEWORK DUE & EXAM 4 BY MIDNIGHT

12 - 15
Exponential and Logarithmic Models
Systems of Equations in 2 variables
Review for Final

HOMEWORK AND FINAL DUE BY MIDNIGHT

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.

J. COURSE POLICIES

COVID-19
Face Coverings—Face coverings (cloth face covering, surgical mask, etc.) must be properly worn in all non-private spaces including classrooms, teaching laboratories, common spaces such as lobbies and hallways, public study spaces, libraries, academic resource and support offices, and outdoor spaces where 6 feet of physical distancing is difficult to reliably maintain. Extra masks will be made available if needed.

Attendance
Attendance will be taken each class by you participating each day. The instructor is NOT responsible for informing absent students what was covered in previous classes, homework or any other announcements.

Cell Phone Use
Use of cell phone is prohibited in all circumstances. Please mute your phone during the online sessions. Feedback from too many devices create disruption in the audio feed. Students who use phones during class will be asked to leave the class and counted as absent.

Laptop/Tablet Use
Typing math symbols, expressions and equations is time consuming and not productive to learning the material. Students are expected to take notes by hand during lecture. Laptops should remain closed during class. Students violating this policy will be asked to leave the class and counted as absent.

**Missed Exam**
There will be **no makeup for a missed exam**. If you have a verified emergency, the final exam score will replace one missed test. All other missed tests will receive a grade of 0. **NO late homework** will be accepted.
There will be **no makeup** for a missed **final exam**. Final exam **must be taken** per schedule.

**Participation**
You are expected to participate in the online lectures and seek help during the online office hours. Online tutoring is available by appointment only from CASA. Please see their website to request help.

**Other Class Policies**
1. Students are expected to read the required material, print the class notes in Blackboard, view videos and other multimedia available, and work assignments before the due dates.
2. Grades are posted on Blackboard and you are able to view your progress at all times.
3. Knewton Learning is assigned online regularly through Blackboard, and is due as specified. If you have problems accessing the system you must notify your instructor by the beginning of the 2nd week of the semester. **NO LATE ASSIGNMENTS ACCEPTED**
4. Four semester exams will be administered during the semester. The dates are shown on the timeline. Cell phones cannot be used as calculators. If you use your cell phone during an exam, your test will be immediately turned in.
5. The final exam will be comprehensive covering all material covered during the semester.

**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.C0.03, 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 required 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.C0.03, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at [http://academicaffairs.tamucc.edu/rules_procedures/assets/13.02.99.c0.03_student_grade_appeals.pdf](http://academicaffairs.tamucc.edu/rules_procedures/assets/13.02.99.c0.03_student_grade_appeals.pdf). 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/](http://disabilityservices.tamucc.edu/)

- **Civil Rights Complaints**
Texas A&M University-Corpus Christi is committed to fostering a culture of caring and respect that is free from discrimination, relationship violence and sexual misconduct, and ensuring that all affected students have access to services. For information on reporting Civil Rights complaints, options and support resources (including pregnancy support accommodations) or university policies and procedures, please contact the University Title IX Coordinator, Sam Ramirez (Samuel.ramirez@tamucc.edu) or Deputy Title IX Coordinator, Rosie Ruiz (Rosie.Ruiz@tamucc.edu) x5826, or visit website at Title IX/Sexual Assault/Pregnancy.

**Limits to Confidentiality.** Essays, journals, and other materials submitted for this class are generally considered confidential pursuant to the University's student record policies. However, students should be aware that University employees, including instructors, are not able to maintain confidentiality when it conflicts with their responsibility to report alleged or suspected civil rights discrimination that is observed by or made known to an employee in the course and scope of their employment. As the instructor, I must report allegations of civil rights discrimination, including sexual assault, relationship violence, stalking, or sexual harassment to the Title IX Coordinator if you share it with me.

These reports will trigger contact with you from the Civil Rights/Title IX Compliance office who will inform you of your options and resources regarding the incident that you have shared. If you would like to talk about these incidents in a confidential setting, you are encouraged to make an appointment with counselors in the University Counseling Center.

- **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.

FALL 2020 Important Dates:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 19</td>
<td>Classes begin Regular Fall &amp; 1st 7-week session</td>
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<tr>
<td>August 26</td>
<td>Last day to late register or add a class</td>
</tr>
<tr>
<td>September 7</td>
<td>Labor Day Holiday – Campus Closed</td>
</tr>
<tr>
<td>October 14 – 28</td>
<td>Midterm Grading</td>
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<tr>
<td>November 5</td>
<td>Last day to drop a class in the full term</td>
</tr>
<tr>
<td>November 12</td>
<td>Last day to apply for December graduation</td>
</tr>
<tr>
<td>November 24</td>
<td>Last day of classes Regular Fall session</td>
</tr>
<tr>
<td>November 25</td>
<td>Reading Day – No Class</td>
</tr>
<tr>
<td>November 26 – 27</td>
<td>Thanksgiving Holiday – Campus Closed</td>
</tr>
<tr>
<td>November 30</td>
<td>Reading Day – No Class</td>
</tr>
<tr>
<td>December 7</td>
<td>Final Examinations from 8:00 – 10:30 am</td>
</tr>
</tbody>
</table>

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._