Department of Mathematics & Statistics  
Math 1314.N01 #20690 College Algebra  
SPRING 2020

A. COURSE INFORMATION

Course Number: MATH 1314.N01  
Class Meetings: MWF 9:00 – 9:50  
Class Location: ONCR 133  
Course Website: www.bb9.tamucc.edu

Instructor: Ms Lola M McClendon  
E-MAIL Address: lola.mcclendon@tamucc.edu  
(to include the course and section in the subject of the email)

Office Address: CI - 367  
Office Hours: MW 2:00 – 3:30 pm; 4:30 – 5:30 pm in CI 367  
Supplemental Instruction: To be determined

B. RATIONALE

The rationale for offering a Co-Requisite College Algebra course comes from research which shows TSI liable high school students can complete College Algebra during their first semester of college with just-in-time support. By studying and understanding the principles of college algebra, students will be better prepared to study higher mathematic principles. At a minimum, students who successfully complete College Algebra will meet the mathematical requirements of some baccalaureate degrees.

C. COURSE DESCRIPTION

College Algebra (3 semester hours). Quadratic Equations, Inequalities, Graphs, Logarithms and Exponents, theory of polynomial equations, systems of equations. Not for Colleges of Liberal Arts or Nursing and Health Sciences; consult advisor for exceptions and approval. Counts as the mathematics component of the University Core Curriculum.

D. CO-REQUISITES

Just-in-time support for this course is provided in MATH 0200. You must be enrolled in Brief Developmental Mathematics, MATH 0200.101. You are strongly encouraged and will earn extra points by attending Supplemental Instruction sessions twice a week.
E. TEXT AND OTHER SUPPLIES REQUIRED

Knewton Access code ($35 for 2 years online, approximately $40 at bookstore), pencils, erasers, dedicated notebook, and a scientific calculator.

College Algebra by OpenSTAX is a free textbook that is embedded into Blackboard. You are expected to read and annotate as needed.

A TI-83/ TI-84 plus or INSPIRE calculator MAY NOT be used at anytime. Cell phones may not be used as calculators.

F. COURSE OBJECTIVES/STUDENT LEARNING OUTCOMES

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.

Student Learning Outcomes

Upon successful completion 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.

Student Performance Outcomes

1. Polynomials.
2. Factoring.
3. Rational expressions.
4. Rational exponents.
5. Radical expressions.
6. Linear Equations.
7. Solve quadratic equation in one variable.
8. Solve problems involving quadratic modeling.
9. Solve equations with rational expressions.
10. Solve equations with radical expressions.
11. Solve polynomial inequalities.
12. Solve rational inequalities.
13. Solve equations with absolute value expressions.
15. Solve applied problems using distance and midpoint formulas.
16. Find radius, center, domain and range of the circle and graph it.
17. Decide whether a relation defines a function.
18. Find domain and range of the function from the graph.
19. Find domain of the function from the equation.
20. Determine values for which a function is increasing, decreasing and constant.
21. Graph linear functions.
22. Find slope given a description of the line.
23. Given an equation, find slope and sketch the graph.
24. Find and interpret rate of change.
25. Solve problems using point-slope form and slope-intercept form of an equation.
26. Graphs of basic functions.
27. Graphing techniques including transformations.
28. Function operations and composition of functions.
29. Graph quadratic functions and solve models about quadratic models.
30. Zero Factorization Theorem.
32. Rational function graphs and asymptotes.
33. Decide whether a function is one-to-one.
34. Determine if functions are inverse of each other.
35. Use graph to find inverse function.
36. Exponential functions and graphs.
37. Logarithmic functions, graphs, and properties.
39. Solve exponential equations.
41. Solve logarithmic equations.
42. Applications and Models of exponential growth and decay.
43. Solve systems of two equations by substitution, elimination, and graphing.

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 Knewton Learning independently to complete learning assignments. At the end of the semester, students will show competency by passing all assignments, tests and the final exam with an overall score of 70% or better.

H. EVALUATION AND GRADE ASSIGNMENT

Student learning outcomes (described in Section F) will be measured via progress on homework, quizzes, exams, and final exam. Every homework problem can be worked multiple times until a correct answer is achieved. Exams will be administered in class, or
in MATH 0200. The final exam is comprehensive and is written by the Mathematics and Statistics Department. All students will take a common final exam. No formula sheets will be provided for any tests, quizzes, or final.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>% of FINAL GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knewton Learning</td>
<td>20%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>15%</td>
</tr>
<tr>
<td>Exam 1, 2, 3, &amp; 4 (Drop low score)</td>
<td>45%</td>
</tr>
<tr>
<td>Final Exam (Comprehensive)</td>
<td>20%</td>
</tr>
<tr>
<td>MATH 0200 (Bonus)</td>
<td>5%</td>
</tr>
</tbody>
</table>

Final Course grades will be assigned as follows:

<table>
<thead>
<tr>
<th>WEIGHTED AVERAGE in %</th>
<th>LETTER GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 – 100</td>
<td>A</td>
</tr>
<tr>
<td>80 – 89.99</td>
<td>B</td>
</tr>
<tr>
<td>70 – 79.99</td>
<td>C</td>
</tr>
<tr>
<td>60 – 69.99</td>
<td>D</td>
</tr>
<tr>
<td>Less than 60</td>
<td>F</td>
</tr>
</tbody>
</table>

I. TENTATIVE SCHEDULE FOR MATH-1314

<table>
<thead>
<tr>
<th>WEEK</th>
<th>MONDAY</th>
<th>WEDNESDAY</th>
<th>FRIDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week 1:</strong></td>
<td></td>
<td></td>
<td><strong>Rational Expressions &amp; Rational Exponents</strong></td>
</tr>
<tr>
<td>Jan 21 – Jan 24</td>
<td>SYLLABUS Polynomials</td>
<td>Factoring</td>
<td></td>
</tr>
<tr>
<td>Week</td>
<td>Dates</td>
<td>Radical Expressions</td>
<td>Linear Equations and Applications</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------</td>
<td>---------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Week 2</td>
<td>Jan 27 – Jan 31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 3</td>
<td>Feb 3 – Feb 7</td>
<td>Quadratic Equations</td>
<td>Quadratic Applications</td>
</tr>
<tr>
<td>Week 4</td>
<td>Feb 10 – Feb 14</td>
<td>Inequalities</td>
<td>Inequalities</td>
</tr>
<tr>
<td>Week 5</td>
<td>Feb 17 – Feb 21</td>
<td>Absolute Value Equations and Inequalities</td>
<td>Rectangular Coordinates and Graphs</td>
</tr>
<tr>
<td>Week 6</td>
<td>Feb 24 – Feb 28</td>
<td>Functions</td>
<td>Linear Functions</td>
</tr>
<tr>
<td>Week 7</td>
<td>Mar 2 – Mar 6</td>
<td>Graphs of Basic Functions</td>
<td>Graphing Techniques</td>
</tr>
<tr>
<td>Week 8</td>
<td>Mar 16 – Mar 20</td>
<td>EXAM 2</td>
<td>Functions Operations</td>
</tr>
<tr>
<td>Week 9</td>
<td>Mar 23 – Mar 27</td>
<td>Inverse Functions</td>
<td>Exponential Functions</td>
</tr>
<tr>
<td>Week 10: Mar 30 – Apr 3</td>
<td>Evaluating Logarithms &amp; Change of Base</td>
<td>Exponential and Log Equations</td>
<td>Applications of Exponential Growth &amp; Decay</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------------------------------------</td>
<td>------------------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>Week 11: Apr 6– Apr 10</td>
<td>Applications of Exponential Growth &amp; Decay</td>
<td>EXAM 3</td>
<td>Systems of Linear Equations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WITHDRAWAL DEADLINE Apr 10</td>
</tr>
<tr>
<td>Week 12: Apr 13 – Apr 17</td>
<td>Gauss Jordan Method</td>
<td>Quadratic Functions and Models</td>
<td>Quadratic Functions and Models</td>
</tr>
<tr>
<td>Week 13: Apr 20 – Apr 24</td>
<td>Rational Zeros of Polynomial Functions</td>
<td>Polynomial Functions: Graphs</td>
<td>Polynomial Functions: Applications</td>
</tr>
<tr>
<td>Week 14: Apr 27 – May 1</td>
<td>Rational Functions</td>
<td>Rational Functions</td>
<td>EXAM 4</td>
</tr>
<tr>
<td>Week 15: May 4 - May 6</td>
<td>REVIEW for final</td>
<td>REVIEW for Final</td>
<td></td>
</tr>
</tbody>
</table>

**FINAL EXAM**

*Saturday*

*May 9 at 12 – 2:30 pm*

**J. CLASS POLICIES**

**Attendance/Tardiness**
Attendance will be taken each class. Talking during class time and tardiness are often disruptive to the whole class and are not appreciated. If you are delayed and arrive late please do so.
quietly. Excessive tardiness, disruptive talking, disruptive behavior or performing activities not related to the class will be counted as absences. The instructor is NOT responsible for informing absent students what was covered in previous classes, homework or any other announcements.

**Extra Credit**
Your MATH 0200 grade counts up to 5% extra credit for this class.

**Cell Phone Use**
Use of cell phone is prohibited in all circumstances. Students using their cell phones in class will be asked to leave the class and will be counted as absent for that day.

**Laptop/Tablet Use**
Students are allowed to use their laptops/tablets in class only if it is intended for learning purposes like logging into the class blackboard page.

**Missed Exam**
There will be **no makeup for a missed semester exam**, unless for special circumstances. **NO late homework** will be accepted.
There will be **no makeup** for a missed **final exam**. Final exam **must be taken** per schedule.

**Participation**
Students **are required** to participate in class discussions and problem solving. Students who **are absent will not** receive credit for participation.

**Other Class Policies**
1. Students are expected to print the class notes in Blackboard, view videos and other multimedia available, and work assignments before the due dates.

2. Knewton Learning is assigned online regularly through Blackboard, and is due as specified. If you have problems accessing the system you have to let me know as soon as possible.

3. Five semester exams will be administered during class times, or in MATH 0200. The dates will be announced in class. These dates may be changed with due notice announced during class time. Bring your own calculators. Calculators cannot be shared. Cell phones cannot be used as calculators.

4. The final exam will be comprehensive covering all material covered during the semester.

**K. RESPONSIBILITES**

1. You are responsible for the information contained in the university ACADEMIC CALENDAR – 2020. In particular, you are responsible for dropping the class if needed. Friday, April 10, 2020 is the last day to drop the class.
2. You are responsible for contacting me, if you encounter problems or have concerns about this class.
3. You are responsible for seeking help from the Center for Academic Student Achievement, a private tutor, coming to my office hours, or attending a student study group; if you have difficulty with a skill and/or concept.
4. You are expected to comply with the rules in the Student Handbook and Student Code of Conduct, as well as the processes in the latter, which are administered by the Office of Student Affairs. The Student Handbook and Student Code of Conduct are accessible at http://judicialaffairs.tamucc.edu/studentcofc.html.

L. COLLEGE AND UNIVERSITY POLICIES

1. 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.

2. 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.

3. Student 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.

4. Deadline for Dropping a Course with a Grade of W (University)

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 for the last day to drop a course. 
http://www.tamucc.edu/academics/calendar/).

5. 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://studentaffairs.tamucc.edu/student_grade_appeal_procedure.pdf, 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.

6. 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 thing, 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. https://disabilityservices.tamucc.edu/

7. **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.

**M. 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.

**N. GENERAL DISCLAIMER**

The instructor reserves the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. The instructor will announce such changes in a timely manner during regularly scheduled lecture periods.

**O. FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)**

Under FERPA, a student has the right to:

1. Inspect and review their education records
   Students can inspect and review their education records within 45 days of the day the University receives a request for access. A student should submit to the registrar, dean, head of the academic department, or other appropriate official, a written request that identifies the record(s) they wish to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the University official to whom
the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

2. Request to amend their education records
Students can request to amend any of their education records that they believe are inaccurate, misleading, or otherwise in violation of the student’s privacy rights under FERPA. A student who wishes to ask the University to amend a record should write the University official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it should be changed. If the University decides not to amend the record as requested, the University will notify the student in writing of the decision and the student’s right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. Some control over the disclosure of their education records
Students have the right to provide written consent before the University discloses personally identifiable information from their education records, except to the extent that FERPA authorizes disclosure without consent. The University discloses education records without a student’s prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisory, academics or research, or support staff position (including law enforcement unit personnel and health staff).

A person or company with whom the University has contracted as its agent to provide a service instead of using University employees or officials (such as an attorney, auditor, or collection agent).

A person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the University.

Upon request, the University also discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

4. File a complaint if they feel any of these rights have been violated
Students can file a complaint with the U.S. Department of Education concerning alleged failures by the University to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

Family Policy Compliance Office
P. STARFISH EARLY ALERT

The Center for Academic Student Achievement is hosting Starfish, an Early Alert software program for identifying undergraduate students who need assistance from academic support services at Texas A&M University Corpus Christi. The Early Alert program offers convenient early warning identification capabilities and connects students to a collaborative “Success Network” of faculty, advisors, and specialized support staff to address students’ needs and inquiries in real time.

The Early Alert program allows faculty and staff to identify the academic needs of TAMUCC’s undergraduate students at any point during the academic term. Starfish provides early alerts, or “flags”, when raised by faculty or staff; generate emails notifying the student, and members of the student’s “Success Network” of course progress and academic concerns needing to be addressed.

Students can actively engage with members of their “Success Network” at any time. Early Alerts raised for students, however, will elicit an Early Alert response originating from CASA, supplemented by Academic Advising, and may include additional support from campus programs including Student Engagement and Success, Enrollment Management, PASS, and other academic support programs from TAMUCC.

Starting Spring 2014, all Pre-1000, 1000, and 2000 level courses at TAMUCC will be supported by the Early Alert program through the implementation of progress reports. Progress report will help to identify students’ academic needs, including:

- Poor class attendance
- Low class participation
- Low test or quiz scores
- Missing or incomplete work
- Midterm grade below a C
- In danger of Failing

Starfish Connect facilitates meaningful contact between students and their instructors, advisors, and mentors. The system encourages students to engage more deeply in their academic lives by connecting students to the people and resources in place to help student succeed. Students can access Starfish by logging into Blackboard (bb9.tamucc.edu), and selecting the Starfish Button within Blackboard’s Tools.

Q. IMPORTANT DATES

Spring 2020 Important Deadlines/Holidays:
Important dates:
January 21    First Day of Classes
January 28    Last day to late register or add a class
March 4 – 25  Midterm Grading
March 9 – 13  Spring Break
April 10      Last day to drop a class
May 7         Reading Day No Class
May 5         Last Day to withdraw from the University
May 6         Last Day of Classes
May 7         Reading Day
May 9         Final

This syllabus and schedule may be changed at any time by verbal announcement. Attend class every day to be aware of any changes.