MATH 1314.010/MATH 1014.010 College Algebra Recital

Fall 2025

Instructor: Dr. Stephen Salako   **E-mail:** ssalako@tamusa.edu

Class meeting: Lecture TR 3:30p.m. – 4:45 p.m.   **Office:** TBA
          Lab   R 2:30p.m.-3:20p.m.

Office: Stephen Salako's Personal Meeting Room:

ZOOM LINK

Meeting ID: 616 806 5665

Office hours:
          By appointment VIA email, right before class in STEM 173 or through ZOOM LINK

Class room: STEM 173

Credit hours: 3 credits MATH

Course Overview: 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 meets the standards for the Mathematics category of courses under the core curriculum. **Prerequisites:** Evidence of math equivalent to High School Algebra II ("C" or higher) or placement; Requires passing TSIA Math score.

Course Materials

REQUIRED: Online access code for *College Algebra* by Robert F. Blitzer (8th edition) with MyMathLab, Pearson Publishing (E-book included with access code).

**Access codes are available in Blackboard, through the Brytewave link. Your course is part of the Inclusive Access and your material will be provided on day one and you will be billed later.

OPTIONAL: Students can purchase a loose-leaf version of text for a low cost if desired (check bookstore).

Notebook for class handouts, notes, etc.

Calculators: A scientific non-graphing, non-programmable calculator is required; **TI-30XS is recommended**.

No cell phone or graphing calculators will be allowed on exams, and online math utilities (e.g., Desmos) are also not allowed.

GRADING POLICY

# of Graded Items	Graded Course Elements	Percentage
Approx. 36	Homework (completed on MyMathLab)	15%
15	Lab Activities	20%
4	Unit Tests	40%
15	Class Participation	10%
1	Final Exam	15%

Grade Scale for MATH 1314: 90 – 100% = A;   80 – 89% = B; 70 – 79% = C; 60 – 69% = D   Below 60% = F

*No late homework will be allowed, and individual make-up exams will be given in rare cases and only with instructor approval. Lowest two H/W will be dropped at the end of the semester.

*The final examination is a comprehensive exam and is required of all students. The final exam may also replace a low or missing test grade.
*The grading policy may be amended during the semester at the instructor's discretion.

Student Learner Objectives
Upon completion of this course, students will:

      1. Demonstrate understanding and 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 and explain related equations.

      3. Interpret and apply graphing techniques.

      4. Evaluate all roots of higher degree polynomial and rational functions.

      5. Recognize, solve, apply and explain systems of linear equations using matrices

MATH 1314 helps students develop critical thinking, communication, and empirical and quantitative skills by focusing on student understanding of key algebraic concepts and appropriate applications related to everyday experience.

List of Topics: Topics to be covered include but are not limited to the following:
1. Solving linear equations and applying models (Sections 1.2~1.3)
2. Complex numbers (Section 1.4)
3. Solving quadratic, rational, and radical equations (Sections 1.2~ 1.5~1.6)
4. Solving linear and compound inequalities (Section 1.7)
5. Solving absolute value equations and inequalities (Sections 1.6~1.7)
6. Distance formula and circles (Section 2.8)
7. Functions and their graphs (Sections 2.1 ~ 2.2)
9. Linear functions and slope (Sections 2.3 ~ 2.4)
10. Transformations of functions and graphing (Section 2.5)
11. Combinations and compositions of functions (Section 2.6)
12. Inverse functions (Section 2.7)
13. Quadratic functions and graphing (Section 3.1)

14. Polynomial functions and graphing (Section 3.2)

15. Zeros of polynomial functions (Sections 3.3 ~ 3.4)

16. Rational functions and graphing (Section 3.5)

17. Introduction to polynomial and rational inequalities (Section 3.6)

18. Direct, inverse, and combined variation (Section 3.7)

19. Exponential and logarithmic functions (Sections 4.1 ~ 4.2)

20. Properties of logarithms: solving exponential and logarithmic equations (Sections 4.3 ~ 4.4)

21. Applications with log and exponential functions (Sections 4.4~ 4.5)

22. Systems of linear and non-linear equations and matrices (Sections 5.1 ~ 5.2, 5.4 and 6.1)

23. More on solutions of systems of linear equations (Sections 6.2 and 6.5)

24. Properties of matrices (Section 6.3)

25. Introduction to sequences and series (Sections 8.1~8.3)

The instructor reserves the right to modify/update the topics as appropriate.

Course Requirements and Expectations

Class Attendance: Students are expected to attend lectures and labs. Be aware of what has been covered in every class and any announcements and course policy changes made in class. Announcements and changes will also be communicated through Blackboard. You are welcome to ask questions during my office hours; however, it is your responsibility to learn the material. Weekly attendance grades will be assigned, based either on attending live lectures OR class participation (see below). Office hours will be before class starts in our classroom HALL 207.

Participation tasks: Each week you will have an attendance/participation grade, which is based on you coming to class and engaging in lecture. Participation tasks may include but are not limited to the following: MML HW, and/or tests; other assigned tasks.

Lab Activities: During the recitation Labs in STEM 173 we will often be working on concepts related to the material covered in lecture with activity sheets. Many will be application problems to deepen understanding of concept taught in class. Sometimes the activities will just be working on more examples from a section. There will be group work activities involved in the Labs.

Homework: All homework will be completed online in MyMathLab (MML). You will need an access code that can be but this will be provided to you through blackboard. Read the announcements in Blackboard for all instructions. All due dates are listed in MML. You can complete the assignments until **11:59 pm** of the due date listed. The homework may be attempted multiple times to increase your homework grade. No late assignments will be accepted nor make-ups allowed unless I am notified.

Tests: Four unit tests are scheduled during the semester and a comprehensive final exam. Test will be taken in class and will run for 75 minutes. Students will be allowed to use a non-graphing calculator on the tests. In case you miss an exam or find out that you will miss an exam, you should contact me either in person or by e-mail, at least one week in advance of the exam for non-emergency cases or within 24-hrs of the scheduled exam date for emergency cases. Any missed exam counts as a 0 unless the student has a valid documented excuse and contacts me as soon as possible after the excuse for missing the test arises. Examples of valid documented excuses are sickness documented with a doctor's note, death in the family documented with a copy of the death notice, attending university-sponsored events with a Dean's excuse, etc. Minor headaches or attending sports events (without Dean's excuse) are not examples of emergency situations. Other than described above, no make-up exams will be given, but the final exam can replace your lowest test grade. Test dates are listed below. Please contact me ASAP if you have concerns about the testing dates. You can retake **ONE** of the tests, you decide which one.

Final Exam: To pass this class students <u>must</u> take a comprehensive final exam scheduled during Finals Week. Final exams cannot be rescheduled or missed (for dire and unforeseen medical or family emergencies, students must consult with me). The final exam may be used to replace your lowest regular exam grade.

Gradebook: I will NOT review HW answers because you have unlimited attempts for each problem, do not settle for a C on any assignment.

CLASS RULES
1. **Regular participation and attendance is VERY IMPORTANT in this class!** Expect to work on your Math work very frequently. Waiting to work on one day at the end of the week would be disastrous for this class. Failure to complete work in each unit will result in a lower participation grade.
2. ALL assignments will close on Sunday night at **11:59p.m.** on MyMathlab.
3. You must log in and complete required assignments to receive the maximum grade each week.
4. If you need additional help, please ask! I am available to help, and students also have access to free online tutoring through Jaguar Tutoring in the ALC. I will be available online every day, Mon - Fri. The best way to contact me is via email, ssalako@tamusa.edu.

IMPORTANT POLICIES AND RESOURCES

<u>University Email Policy and Course Communications:</u> All correspondence between professors and students must occur via University email accounts. You must have your Jaguar email account ready and working. If it is not working, contact the help desk at helpdesk@tamusa.edu or at 210-784-HELP (4357). If you don't hear back within 48 hours, contact them again. They have many requests during the first part of the semester, so you may need to follow up with them.

<u>Academic Accommodations for Individuals with Disabilities:</u> Texas A&M University-San Antonio is committed to providing all students with reasonable access to learning opportunities and accommodations in accordance with The Americans with Disabilities Act, as amended, and Section 504 of the Rehabilitation Act. If you experience barriers to your education due to a disability or think you may have a disability, Disability Support Services is located in the Central Academic Building, Suite 210. You can also contact us via phone at (210) 784-1335, visit us at the website or email us at **dss@tamusa.edu**. Disabilities may include, but are not limited to, attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability-related needs with Disability Support Services and their instructors as soon as possible.

<u>Academic Learning Center:</u> All currently enrolled students at Texas A&M University-San Antonio can utilize the Academic Learning Center for subject-area tutoring. The Academic Learning Center provides free course-based tutoring to all currently enrolled students at Texas A&M University-San Antonio. Students wishing to work with a tutor can make appointments through the Brainfuse online tutoring platform. Brainfuse can be accessed in the *Tools* section of Blackboard. You can contact the Academic Learning Center by emailing tutoring@tamusa.edu, calling (210) 784-1307, or visiting the Central Academic Building, room 202. Online tutoring is also available for after hours and weekend assistance.

While tutoring hours may change based on tutor schedules and availability, the current tutoring hours for MATH in the ALC are as follows:

	Appointments available	Walk in Tutoring – No appointment needed
MONDAY	8 am – 6 pm	9 am – 5 pm
TUESDAY	8 am – 6 pm	9 am – 5 pm
WEDNESDAY	8 am – 6 pm	9 am – 5 pm
THURSDAY	8 am – 6 pm	9 am – 5 pm
FRIDAY	8 am – 5 pm	11 am – 4 pm

Counseling/Mental Health Resources: As a college student, there may be times when personal stressors interfere with your academic performance and negatively impact your daily functioning. If you are experiencing emotional difficulties or mental health concerns, support is available to you through the Student Counseling Center (SCC). To schedule an appointment, call 210-784-1331 or visit Madla 120 between the hours of 8:00 AM and 5:00 PM.

All mental health services provided by the SCC are free and confidential (as the law allows) and are not part of a student's academic or university record. The Student Counseling Center provides brief individual and group therapy, crisis intervention, consultation, case management, and prevention services. For more information on SCC services visit the website. *Crisis support is available 24/7 by calling the SCC at 210-784-1331 (after-hours select option '2').* The National Suicide Prevention hotline also offers a 24/7/365 hotline at 1-800-273-8255.

Additionally, the TELUS Student Support App provides a variety of mental health resources to including support for in the moment distress, an anonymous peer-to-peer support network, mental health screenings, podcasts, and articles to improve your mental wellbeing.
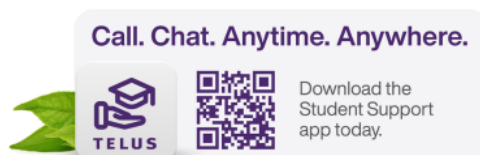
Emergency Preparedness: JagE Alert is Texas A&M University-San Antonio's mass notification system. In the event of an emergency, such as inclement weather, students, staff and faculty, who are registered, will have the option to receive a text message, email with instructions and updates. To register or update your information visit: https://tamusa.bbcportal.com/. More information about Emergency Operations Plan and the Emergency Action Plan can be found here. Download the SafeZone App (https://safezoneapp.com/) for emergencies or call (210) 784-1911. Non-Emergency (210) 784-1900.

Financial Aid and Verification of Attendance: According to the following federal regulation, 34 CFR 668.21: U.S. Department of Education (DoE) Title IV regulation, a student can only receive Title IV funds based on Title IV eligibility criteria which include class attendance. If Title IV funds are disbursed to ineligible students (including students who fail to begin attendance), the institution must return these funds to the U.S. DoE within 30 days of becoming aware that the student will not or has not begun attendance. Faculty will provide the Office of Financial Aid with an electronic notification if a student has not attended by the published Census Date (the first week of class). Any student receiving federal financial aid who does not attend prior to the published Census Date (the first week of class) will have their aid

terminated and returned to the DoE. Please note that any student who stops attending at any time during the semester may also need to return a portion of their federal aid.

Jaguar Writing, Language, and Digital Composing Center (WLDCC): The Jaguar Writing Center provides writing support to graduate and undergraduate students in all three colleges as well as faculty and staff. Writing tutors work with students to develop reading skills, prepare oral presentations, and plan, draft, and revise their written assignments. Our language tutors support students enrolled in Spanish courses and students composing in Spanish for any assignment. Our digital studio tutors support students working on digital projects such as eportfolios, class presentations, or other digital multimedia projects. The Writing Center offers face-to-face, synchronous online, and asynchronous digital appointments. Students can schedule appointments with the Writing Center in JagWire under the Student Services tab. Click on "Writing, Language, and Digital Composing Center" to make your appointment. Students wanting to work in real time with a tutor can schedule an "Online Appointment." Students wishing to receive asynchronous, written feedback from a tutor can schedule an "eTutoring" appointment. More information about what services we offer, how to make an appointment, and how to access your appointment can be found on our website . The Writing Center can also be reached by emailing writingcenter@tamusa.edu.

Meeting Basic Needs: Any student who has difficulty affording groceries or accessing sufficient food to eat every day or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to submit a CARE report for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to direct you to available resources. A food pantry is available on campus; click here for hours and contact information.

Military Affairs: Veterans and active-duty military personnel are welcomed and encouraged to visit the Office of Military Affairs for any question involving federal or state VA Education Benefits. Visit the Patriots' Casa building, room 202, or to contact the Office of Military Affairs with any questions at military.va@tamusa.edu or (210)784-1397.

Religious Observances: Texas A&M University-San Antonio recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or course work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes for regular session classes.

The Six-Drop Rule: Students are subject to the requirements of Senate Bill (SB) 1231 passed by the Texas Legislature in 2007. SB 1231 limits students to a maximum of six (6) non-punitive course drops (i.e., courses a student chooses to drop) during their undergraduate careers. A non-punitive drop does not affect the student's GPA. However, course drops that exceed the maximum allowed by SB 1231 will be treated as "F" grades and will impact the student's GPA.

Statement of Harassment and Discrimination: Texas A&M University-San Antonio is committed to the fundamental principles of academic freedom, equal opportunity, and human dignity. To fulfill its multiple missions as an institution of higher learning, A&M-San Antonio encourages a climate that values and nurtures collegiality and the uniqueness of the individual on our campus and within our state, nation, and world. All decisions and actions involving students and employees should be based on applicable law and individual merit. Texas A&M University-San Antonio, in accordance with applicable federal and state law, prohibits discrimination, including harassment, on the basis of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation, or pregnancy/parenting status. Individuals who believe they have experienced harassment or discrimination prohibited by this statement are encouraged to contact the University's Civil Rights Officer at 210-784-2061 or titleix@tamusa.edu.

Texas A&M University-San Antonio faculty are committed to providing a safe learning environment for all students and for the university as a whole. If you have experienced any form of sex- or gender-based discrimination or

harassment, including sexual assault, sexual harassment, domestic or dating violence, or stalking based on sex, know that help and support are available. A&M-San Antonio's Title IX Coordinator can support those impacted by such conduct in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, and more. The university strongly encourages all students to report any such incidents to the Title IX Coordinator. Please be aware that all A&M-San Antonio employees (other than those designated as confidential resources such as counselors and trained victim advocates) are required to report information about such discrimination and harassment to the university. This means that if you tell a faculty member about a situation of sexual harassment, sexual violence, or other related sex-based misconduct, the faculty member must share that information with the university's Title IX Coordinator (titleix@tamusa.edu, 210-784-2061, CAB 439K). If you wish to speak to a confidential employee who does not have this reporting requirement, you can contact the Student Counseling Center at (210) 784-1331 or visit them in Madla 120.

Pregnant/Parenting Students: Texas A&M-San Antonio does not require a pregnant or parenting student, solely because of that status or issues related to that status, to (1) take a leave of absence or withdraw from their degree or certificate program; (2) limit the student's studies; (3) participate in an alternative program; (4) change the student's major, degree, or certificate program; or (5) refrain from joining or cease participating in any course, activity, or program at the University. The university will provide such reasonable accommodations to pregnant students as would be provided to a student with a temporary medical condition that are related to the health and safety of the student and the student's unborn child. These could include maintaining a safe distance from substances, areas, and activities known to be hazardous to pregnant individuals and their unborn child; excused absences because of illness or medical appointments; modified due dates for assignments; rescheduled tests/exams; taking a leave of absence; and being provided access to instructional materials and video recordings of lectures for excused absences, if these would be provided to any other student with an excused absence. Pregnant/parenting students are encouraged to contact the Title IX Coordinator with any questions or concerns related to their status (titleix@tamusa.edu; 210-784-2061; CAB 439K).

Texas A&M-San Antonio has also designated the Title IX Coordinator as the liaison officer for current or incoming students who are the parent or guardian of a child younger than 18 years of age. The Title IX Coordinator can provide students with information regarding support services and other resources. Young Jaguars can support parenting students with daycare if students meet this criteria: (1) must be enrolled in classes at TAMUSA in the current semester, (2) must be Pell eligible or a single parent, (3) child(ren) must be aged 3 to 12-years-old, and (4) child(ren) must be enrolled in Pre-K-3 through 6th grade. For more information, please contact Young Jaguars at youngjaguars@tamusa.edu or call (210) 784-2636.

Students' Rights and Responsibilities: The following statement of students' rights and responsibilities is intended to reflect the philosophical base upon which University Student Rules are built. This philosophy acknowledges the existence of both rights and responsibilities, which is inherent to an individual not only as a student at Texas A&M University-San Antonio but also as a citizen of this country.

Students' Rights

1. A student shall have the right to participate in a free exchange of ideas, and there shall be no University rule or administrative rule that in any way abridges the rights of freedom of speech, expression, petition and peaceful assembly as set forth in the U.S. Constitution.
2. Each student shall have the right to participate in all areas and activities of the University, free from any form of discrimination, including harassment, on the basis of race, color, national or ethnic origin, religion, sex, disability, age, sexual orientation, gender identity, gender expression, and pregnancy/parenting or veteran status in accordance with applicable federal and state laws.
3. A student has the right to personal privacy except as otherwise provided by law, and this will be observed by students and University authorities alike.
4. Each student subject to disciplinary action arising from violations of university student rules shall be assured a fundamentally fair process.

Students' Responsibilities

1. A student has the responsibility to respect the rights and property of others, including other students, the faculty, and administration.
2. A student has the responsibility to be fully acquainted with the published University Student Rules found in the Student Handbook, Student Code of Conduct, on our website, and University Catalog, and to comply with them, as well as with federal, state, and local laws.
3. A student has the responsibility to recognize that student actions reflect upon the individuals involved and upon the entire University community.
4. A student has the responsibility to recognize the University's obligation to provide a safe environment for learning.
5. A student has the responsibility to check their university email for any updates or official university notifications.

We expect that students 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. Conduct that infringes on the rights of another individual will not be tolerated.

Students are expected to exhibit a high level of honesty and integrity in their pursuit of higher education. Students engaging in an act that violates the standards of academic integrity will find themselves facing academic and/or disciplinary sanctions. Academic misconduct is any act, or attempt, which gives an unfair advantage to the student. Additionally, any behavior specifically prohibited by a faculty member in the course syllabus or class discussion may be considered as academic misconduct. For more information on academic misconduct policies and procedures please review the Student Code of Conduct or visit the resources available in the OSRR website

Important Dates:

August 25	First day of class
September 1	Labor Day Holiday
September 2	Last day to register
September 10	Census date
October 6 - 17	Midterm grading period
November 14	Last day to drop with an automatic "W"
November 25	Last day to drop a course or withdraw from the University
November 26	Study Day – No classes
November 27-29	Thanksgiving Holiday – No classes
December 4	Last day of classes
December 5	Study Day – No classes
December 6-12	Final exams
December 16	Commencement

The complete [academic calendar](#) is available online.

Tentative Weekly Schedule

MATH 1314.010/MATH1014.010 COLLEGE ALGEBRA

Week	Date	Topic	Assignments
1	T Aug 26	Introduction; 1.1 Coordinate Plane, Graphing, x and y intercepts 1.2 Solving Linear Equations	
	R Aug 28	1.3 Models and Applications	
2	T Sept 2	1.4 Complex Numbers	
	R Sept 4	1.5 Solving quadratic equations by factoring, square root property, completing the square, quadratic formula	
3	T Sept 9	1.6 Solving Rational and Radical Equations	
	R Sept 11	1.7 Absolute value equations and inequalities	
4	T Sept 16	2.1 Basics of Functions and graphs	

		2.2 More on Functions – increasing, decreasing, odd/even, symmetry, piecewise (evaluating)+ 2.2 Difference Quotient+ 2.2 Graphing Piecewise functions	
	R Sept 18	2.3 Linear Functions and Slope 2.4 More on Slope – Parallel and Perpendicular Lines	
5	T Sept 23	2.5 Parent Functions, transformations Review	
	R Sept 25	**TEST #1: Chapters 1 & 2 (2.1-2.5)**	
6	T Sept 30	2.6 Operations on Functions, composite Functions	
	R Oct 2	2.7 Inverse Functions	
7	T Oct 7	3.1 Quadratic functions; graphing 3.2 Polynomial Graphs	
	R Oct 9	3.3 Synthetic division; remainder and factor theorems 3.4 Zeros of polynomials	

8	T Oct 14	3.5 Rational Graphs	
	R Oct 16	3.6 Polynomial and Rational Inequalities	
9	T Oct 21	**TEST #2: Chapter 3 (3.1-3.6)**	
	R Oct 23	4.1 Exponential Functions 4.2 Logarithmic Functions	
10	T OCT 28	4.3 Properties of Logs, change of base rule +4.4 Exponential and Logarithmic Equations Review	
	R Oct 30	**TEST #3: Chapter 4 (4.1-4.4)**	
11	T Nov 4	4.5 Applications with Logs and Exponential Functions	
	R Nov 6	5.1 Linear Systems in 2 Variables	
12	T Nov 11	5.2 Solving systems with 3 Variables	
	R Nov 13	6.1, 6.2 Solving systems with matrices *Last Day to Drop with an Automatic "W" is Monday, November 14*	

13	T Nov 18	6.5 Determinants and Cramer's Rule *2x2* Review	
	R Nov 20	**TEST #4: Chapters 5, 6, (5.1, 5.2, 5.4, 6.1, 6.2, 6.5)**	
14	T Nov 25	Review for Final Exam *Last Day to Withdraw from the University is Tuesday, November 25*	
	R Nov 27	*NO CLASS - THANKSGIVING HOLIDAY*	
15	T Dec 2	Review for Final Exam	
	R Dec 4	Review for Final Exam *Last Day of Classes Thurs, December 4* STUDY DAY DEC 5 **Final Exams Scheduled Dec 11, Thursday from 2p.m.-3:50p.m.**	

This schedule is tentative and will most likely change as the semester progresses. It is provided so that you have a general idea of the order and speed with which we will be covering the material.

No Use of Generative AI Permitted

[Insert Course Number] assumes that all work submitted by students will be generated by the students themselves, working individually or in groups. Students should not have another person/entity do the writing of any portion of an assignment for them, which includes hiring a person or a company to write assignments and/or using artificial intelligence (AI) tools like ChatGPT. Use of any AI-generated content in this course qualifies as academic dishonesty and violates Texas A&M-San Antonio's standards of academic integrity.

NOTE: Guidance for how to cite AI-generators, like ChatGPT, can be found here https://apastyle.apa.org/blog/how-to-cite-chatgpt