## South Plains College Common Course Syllabus: MATH 1314 Revised August 2020

Department: Mathematics, Engineering, and Computer Science

**Discipline:** Mathematics

Course Number: MATH 1314

Course Title: College Algebra

Available Formats: conventional/flex, internet, and ITV

Campuses: Levelland, Reese, Plainview, Lubbock Center, and Dual Credit

**Course Description:** 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.

**Prerequisite:** Minimum score of 350 on the TSIA, TSI-exempt status, or a successful completion with a grade of 'C' or better in MATH 0320.

Credit: 3 Lecture: 3 Lab: 1

Textbook/Supplies: Please see the instructor's course information sheet for specific supplies.

**This course partially satisfies a Core Curriculum Requirement**: Mathematics Foundational Component Area (020)

Core Curriculum Objectives addressed:

- Communications skills—to include effective written, oral and visual communication
- **Critical thinking skills**—to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- Empirical and quantitative competency skills—to manipulate and analyze numerical data or observable facts resulting in informed conclusions

**Student Learning Outcomes:** Upon completion of this course and receiving a passing grade, the student will 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 Learning Outcomes Assessment:** A pre- and post-test questions will be used to determine the extent of improvement that the students have gained during the semester

**Course Evaluation:** There will be departmental final exam questions given by all instructors.

**Attendance/Student Engagement Policy:** Attendance and effort are the most important activities for success in this course. The instructor maintains records of the student's engagement throughout the semester. The student will be allowed to miss twenty percent (20%) of class assignments for the

semester, *for any reason*. Should this number be exceeded, the instructor has the right to drop the student with a grade of F or an X, depending on the instructor's discretion.

Plagiarism violations include, but are not limited to, the following:

- 1. Turning in a paper that has been purchased, borrowed, or downloaded from another student, an online term paper site, or a mail order term paper mill;
- 2. Cutting and pasting together information from books, articles, other papers, or online sites without providing proper documentation;
- 3. Using direct quotations (three or more words) from a source without showing them to be direct quotations and citing them; or
- 4. Missing in-text citations.

Cheating violations include, but are not limited to, the following:

- 1. Obtaining an examination by stealing or collusion;
- 2. Discovering the content of an examination before it is given;
- 3. Using an unauthorized source of information (notes, textbook, text messaging, internet, apps) during an examination, quiz, or homework assignment;
- 4. Entering an office or building to obtain an unfair advantage;
- 5. Taking an examination for another;
- 6. Altering grade records;
- 7. Copying another's work during an examination or on a homework assignment;
- 8. Rewriting another student's work in Peer Editing so that the writing is no longer the original student's;
- 9. Taking pictures of a test, test answers, or someone else's paper.

**COVID Syllabus Statement:** It is the policy of South Plains College for the Fall 2020 semester that as a condition of on-campus enrollment, all students are required to engage in safe behaviors to avoid the spread of COVID-19 in the SPC community. Such behaviors specifically include the requirement that all students properly wear CDC-compliant face coverings while in SPC buildings including in classrooms, labs, hallways, and restrooms. Failure to comply with this policy may result in dismissal from the current class session. If the student refuses to leave the classroom or lab after being dismissed, the student may be referred to the Dean of Students on the Levelland campus or the Dean/Director of external centers for Student Code of Conduct Violation.

**Student Code of Conduct Policy**: Any successful learning experience requires mutual respect on the part of the student and the instructor. Neither instructor nor student should be subject to others' behavior that is rude, disruptive, intimidating, aggressive, or demeaning. Student conduct that disrupts the learning process or is deemed disrespectful or threatening shall not be tolerated and may lead to disciplinary action and/or removal from class.

**Diversity Statement:** In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

**Disability Statement:** Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland (Student Health & Wellness Office) 806-716-2577, Reese Center (Building 8) 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

**Nondiscrimination Policy:** South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number 806-716-2360.

**Title IX Pregnancy Accommodations Statement:** If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To <u>activate</u> accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Director of Health and Wellness. Once approved, notification will be sent to the student and instructors. It is the student's responsibility to work with the instructor to arrange accommodations. Contact the Director of Health and Wellness at 806-716-2362 or <u>email cgilster@southplainscollege.edu</u> for assistance.

**Campus Concealed Carry**: Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations and Frequently Asked Questions, please refer to the Campus Carry page

at: http://www.southplainscollege.edu/campuscarry.php

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

**SPC Bookstore Price Match Guarantee Policy:** If you find a lower price on a textbook, the South Plains College bookstore will match that price. The difference will be given to the student on a bookstore gift certificate! The gift certificate can be spent on anything in the store.

If students have already purchased textbooks and then find a better price later, the South Plains College bookstore will price match through the first week of the semester. The student must have a copy of the receipt and the book has to be in stock at the competition at the time of the price match.

The South Plains College bookstore will happily price match BN.com & books on Amazon noted as *ships from and sold by Amazon.com*. Online marketplaces such as *Other Sellers* on Amazon, Amazon's Warehouse Deals, *fulfilled by* Amazon, BN.com Marketplace, and peer-to-peer pricing are not eligible. They will price match the exact textbook, in the same edition and format, including all accompanying materials, like workbooks and CDs.

A textbook is only eligible for price match if it is in stock on a competitor's website at time of the price match request. Additional membership discounts and offers cannot be applied to the student's refund. Price matching is only available on in-store purchases. Digital books, access codes sold via publisher sites, rentals and special orders are not eligible. Only one price match per title per customer is allowed.

Note: The instructor reserves the right to modify the course syllabus and policies, as well as notify students of any changes, at any point during the semester.

### **Texas Tech University** Attendance Statements

If Texas Tech University campus operations are required to change because of health concerns related to the COVID-19 pandemic, it is possible that this course will move to a fully online delivery format. Should that be necessary, students will need to have access to a webcam and microphone for remote delivery of the class. Additionally, students will need to download and use Proctorio for online test monitoring.

### Policy on absences resulting from illness (see Attachment A.).

## Requesting accommodations as a result of personal health concerns (see Attachment B.).

### Attachment A: Illness-Based Absence Policy

If at any time during this semester you feel ill, in the interest of your own health and safety as well as the health and safety of your instructors and classmates, you are encouraged not to attend face-to-face class meetings or events. Please review the steps outlined below that you should follow to ensure your absence for illness will be excused. These steps also apply to not participating in synchronous online class meetings if you feel too ill to do so and missing specified assignment due dates in asynchronous online classes because of illness.

1. If you are ill and think the symptoms might be COVID-19-related:

a. Call Student Health Services at 806.743.2848 or your health care provider. After hours and on weekends contact TTU COVID-19 Helpline at [TBA].

b. Self-report as soon as possible using the Dean of Students COVID-19 webpage. This website has specific directions about how to upload documentation from a medical provider and what will happen if your illness renders you unable to participate in classes for more than one week.

c. If your illness is determined to be COVID-19-related, all remaining documentation and communication will be handled through the Office of the Dean of Students, including notification of your instructors of the period of time you may be absent from and may return to classes.

d. If your illness is determined not to be COVID-19-related, please follow steps 2.a-d below. 2. If you are ill and can attribute your symptoms to something other than COVID-19:

a. If your illness renders you unable to attend face-to-face classes, participate in synchronous online classes, or miss specified assignment due dates in asynchronous online classes, you are encouraged to visit with either Student Health Services at 806.743.2848 or your health care provider. Note that Student Health Services and your own and other health care providers may arrange virtual visits.

b. During the health provider visit, request a "return to school" note;

c. E-mail the instructor a picture of that note;

d. Return to class by the next class period after the date indicated on your note.

Following the steps outlined above helps to keep your instructors informed about your absences and ensures your absence or missing an assignment due date because of illness will be marked excused. You will still be responsible to complete within a week of returning to class any assignments, quizzes, or exams you miss because of illness.

# Attachment B: Addressing Accommodation Requests from High-Risk Students Returning to Campus

Texas Tech University is taking considerable measures to provide effective social distancing and sanitation protocols as we prepare to return to campus in the Fall. We need to be mindful that, because of underlying health conditions, some students will be at higher risk for COVID-19. Other students, although healthy themselves, might live with someone who has compromising health conditions. Students in one or both of these two categories might request accommodations or alternatives to fulfill course requirements to avoid potential exposure to the virus.

The Office of the Provost authorizes instructors of record (IoRs), in coordination with their department chairs, academic advisors, and academic associate deans, with the flexibility necessary to make instructional accommodations for students to avoid exposure to COVID-19. Accommodations might include, as examples, alternatives to face-to-face group assignments, remote learning such as online instruction or off-site activities, changing to an online section of the same course or to an independent study with the same learning objectives as the original course, or approval of a substitute course that is offered online and can fulfill the same degree requirements of the original course.

Keep in mind the following criteria when considering making an accommodation for a student: (1) whether the requested accommodation would make a substantive alteration of the course material or objectives; (2) whether the accommodation provides an equally effective alternative to the original objectives or activities of the class; and (3) whether the accommodation can be uniformly applied should more than one student request it. If the IoR can satisfactorily address these three requirements for accommodation, and is comfortable providing it, then it is appropriate to do so. If the IOR feels unable to provide accommodation that satisfies these three criteria or is unsure how the requested accommodation can be provided, the IoR is encouraged to contact their academic associate dean's office for guidance. Students should also be advised to follow the steps for reporting illness-related absences outlined on the Dean of Students COVID-19 webpage.

If a high-risk student asks for a substantial alteration to the essential elements of the class, then the loR,

advisor, or associate dean should suggest that the student work with SDS to provide a Letter of Accommodation (LOA).

## College Algebra Math 1314.C252 MWF 9:00 – 9:50 Holden 130 Math 1314.C251 MWF 11:00 – 11:50 Holden 38 Instructor Information – Fall 2020

Instructor:	Gina Becker, BSE	, M Ed	Phone:	806.716.4	4684
Email:	gbecker@southpla	ainscollege.edu	Office:	Reese 22	23D
Office Hours Monday*	-	Wednesday*	Thursd	av*	Friday*
8:30 - 9:00	•	8:30 – 9:00	7:40 – 8	•	8:30 - 9:00
9:50 – 11:0	0 10:50 - 12:00	9:50 - 11:00	10:50 – 1	2:00	9:50 - 11:00
			*0	or by appoir	ntment

**Textbook:** A textbook is not required for this course.

**Required Materials:** Computer access, printer, webcam, pencils, paper, straightedge, and graph paper (available to print from Blackboard). A scientific or graphing calculator may be used in this course, with the exception of these calculators: TI-Nspire, TI-89, and TI-92.

**Blackboard:** Blackboard is an online course management system. For technical support, call 806.716.2180 or email <u>blackboard@southplainscollege.edu</u>

**Attendance Policy:** Attendance is monitored through completion of assignments. Eight (8) missing assignments, for any reason, are allotted to each student for the semester. Students exceeding this number of missing assignments may be dropped from the class with a grade of F or an X.

**Course Expectations:** Attend class, be on time (missing part of class counts as  $\frac{1}{2}$  of an absence), watch the assigned lectures before class, and be prepared to participate. Turn off and put away all electronic devices when you enter the classroom and keep off for the duration of the class.

**Communication:** Any questions or comments should be sent using Blackboard email. The instructor will do her best to respond to your email within 24 hours of receipt.

### Assignments and Grading:

Homework assignments will be assigned on Wednesday and will be due on the following Wednesday at class time. You will scan and upload your completed homework into Gradescope on or before the due date. Each homework assignment is worth 0.3 points.

Quizzes will be given weekly on non-exam weeks and no makeup quizzes will be offered. To receive credit, all work for each problem must be shown. Each quiz is worth 5 points. Missing a quiz will result in 0 points for that quiz. A grade of 80 or higher on a quiz will exempt you from meeting in class on Friday. You will scan and upload your quiz into Gradescope before the deadline.

Exams will cover material from previous sections. Four exams and the comprehensive final exam will be worth 10 points each. You will scan and upload your completed exam into Gradescope before the deadline.

Your final point value will determine your letter grade for this class and will be determined by the following scale:

al				from TTAP
	F - 0-59	Total	100 points	
	D - 60-69	Final Exam	10	
	C - 70-79	Exams	40	
	B - 80-89	Quizzes	40	
	A - 90-100	Homework	10	

## Dismissal

**Program:** If a student is dismissed from the TTAP program, the student may complete the course as an SPC student. Student must meet assignment completion criterion to remain in the class. Exceeding the number of allowed missing assignments may result in the student being dropped from the class with a grade of F or X.

SPC COVID 19 Response: http://www.southplainscollege.edu/emergency/covid19-faq.php

## **Tentative Course Schedule**

Week	Monday	Wednesday	Friday		
1	August 24 August 26   Syllabus 1.1 Review Real Numbers, Order of Operations   Order of Operations Quiz 1		August 28 1.3 Linear Equations		
2	August 31 1.4 Solve Linear Inequalities	September 2 Exam 1	September 4 1.5 Absolute Value Equations and Inequalities		
3	September 7 September 9   HOLIDAY 12th Class Day   2.1 Summary of Factoring   Quiz 2		September 11 2.2 Roots and Complex Numbers		
4	September 14 2.3 Radical Expressions	September 16 2.4 Solve Quadratic Equations Quiz 3	September 18 2.5 Solve Rational Equations		
5	September 21 2.6 Solve Radical Equations	September 23 3.1 Basics of Functions, Analyzing Graphs Quiz 4	September 25 3.2 Evaluating Functions, Symmetry		
6	September 28 3.3 Functions: Increasing and Decreasing, Piecewise Functions	September 30 Exam 2	<b>October 2</b> 3.4 Functions: Graphs and Transformations		
7	October 5 4.1 Functions: Operations	October 7 4.2 Functions: Compositions Quiz 5	October 9 4.3 Functions: Inverses		
8	<b>October 12</b> 5.1 Linear Functions: Slope, Parallel and Perpendicular Lines	October 14 5.2 Graphing Linear Functions	October 16 Fall Break		
9	<b>October 19</b> 6.1 Graph Quadratic Functions	October 21 6.2 Synthetic Division, Solve Polynomial Equations Quiz 6	October 23 6.3 Graphing Polynomial Functions		
10	<b>October 26</b> 6.4 Graphing Rational Functions	October 28 Exam 3	<b>October 30</b> 7.1 Exponential Functions and Graphs		
11	<b>November 2</b> 7.2 Logarithmic Functions and Graphs	November 4 7.3 Properties of Logarithmic Functions Quiz 7	<b>November 6</b> 7.4 Solve Exponential Equations		
12	<b>November 9</b> 7.5 Solve Logarithmic Equations	November 11 November 12 Last Day to Withdraw 8.1 Solving Systems of Linear Equations and Linear Inequalities Quiz 8	<b>November 13</b> 8.2 Systems of Linear Equations in Three Variables		
13	<b>November 16</b> 8.3 Inequalities - Rational and Quadratic	November 18 Exam 4	<b>November 20</b> 9.1 Finding Determinants, Matrices and Gaussian Elimination		
14	November 23 9.2 Solving Systems with Cramer's Rule Quiz 9	November 25 Thanksgiving	November 27		
15	November 30 Special Topics	December 2 <i>TTU Last Class Day</i> Review	<b>December 4</b> Final Exam Math 1314.C251 1:30 – 4:00 pm		
	<b>December 7</b> Final Exam Math 1314.C252 7:30 – 10:00 am				