South Plains College Department of Mathematics and Engineering Dual Credit College Algebra ~ MATH-1314 Fall 2022 Course Syllabus

Instructor:Cassidee Wiemers, B.A, M.A.Office:Room 119E-Mail:cwiemers@ropesisd.usOffice Hours:Content of the second secon

	Monday	Tuesday	Wednesday	Thursday	Friday
Tutorials					12:03-12:48
Conference Period (7 th)	2:11-2:56	2:11-2:56	2:11-2:56	2:11-2:56	2:11-2:56

Course Supplies: Required:

- Scientific Calculator (Recommended: TI-30XIIS) GRAPHING CALCULATORS ARE PROHIBITED
- Method to post homework assignments to Google Classroom. (Recommended: Phone or tablet with camera capability)

Suggested:

- 3-ring binder
- Spiral notebook
- Pencils and erasers

Textbook: NO TEXTBOOK IS REQUIRED FOR THIS COURSE!

All resources for the course, including notes, assignments, etc., are available on Google Classroom. There is a free textbook available on Openstax for additional practice and resources.

Google Classroom: All information and resources needed for this course are available on Google Classroom. The syllabus, instructor contact information, and all course resources including notes, assignment documents, and lecture notes are stored there. Assignments due dates and exam dates are posted on the course syllabus I'll be posting your grades in the gradebook on Ascender so that is where you can see what your grade is in the course at any time. You should get into the habit of checking Google Classroom daily for pertinent information.

Important Dates: Class begin on Aug 17th

Other important dates are listed below.

- November 19-23 Thanksgiving Break
- November 15 Last day to drop Fall semester courses
- December 13-14 Final Exam

A tentative course outline is attached at the end of this syllabus. Note, it is up to the instructor's discretion to make adjustments as needed. Any changes will be posted to Google Classroom and announced in class.

Homework Homework will be assigned regularly, and each assignment must be submitted the day it is due by 11:59 via Google Classroom. LATE WORK WILL NOT BE ACCEPTED. NO EXCEPTIONS.

Exams: There will be four unit exams given during the semester and a comprehensive,

departmental final exam given at the end of the semester. There are no exemptions for the final exam. If you are going to miss a unit exam, contact your instructor immediately, preferably prior to the exam. Makeup exams are given only under extremely rare and documented circumstances. Once you begin an exam, you cannot leave the room until the exam is submitted for grading.

- Grading Scheme: Your grade in the course will be comprised of scores from the following categories. This course and its grade will be recorded on your official transcript. Grades will be posted on Ascender throughout the semester.
 - Exams (Each exam will count 15% for a total of 60%). The following exam dates are tentative. Any changes to these dates will be announced in class.
 - o Exam 1 ~ Wednesday, September 14
 - o Exam 2 ~ Friday, October 14
 - o Exam 3 ~ Wednesday, November 9
 - o Exam 4 ~ Thursday, December 8
 - Homework (10%)
 - Quizzes (10%)
 - o At the end of each unit, there will be an opportunity for students to take a comprehensive unit quiz to replace their lowest quiz grade. It is the student's responsibility to schedule this retake with Mrs. Wiemers.
 - Comprehensive Final Exam (20%) ~ Tuesday 12/13 and Wednesday 12/14

Your high school average will be calculated using the grading scheme outlined above. For your South Plains College transcript, the following scale will be used.

90-100	Α
80-89	В
70-79	С
60-69	D
59 or below	F

Where to Get Help: Math can be challenging occasionally. Here are some ways in which you can receive quality assistance.

- As your instructor, I am the best resource for providing assistance. I am available during the listed office hours.
- SPC Tutors ~ Tutoring is <u>FREE</u> for all currently enrolled students. Make an appointment or drop-in for help at any SPC location or online! Visit the link below to learn more about how to book an appointment, view the tutoring schedule, get to know the tutors, and view tutoring locations. http://www.southplainscollege.edu/exploreprograms/artsandsciences/teacheredtutoring.php
- **Tutor.com** ~ You also have <u>180 FREE minutes</u> of tutoring with tutor.com each week, and your hours reset every Monday morning. Log into Blackboard, click on the tutor.com link on the left-hand tool bar, click on the tools option from the left-hand menu bar. Then, click on the Tutor.com link and you will automatically be logged in for free tutoring. You can access tutor.com tutors during the following times:
 - o Monday Thursday: 8pm-8am
 - o 6pm Friday 8am Monday morning

Responsibilities & Expectations:

- 1. Attend class regularly, be on time, and be prepared to learn.
- 2. Be attentive, take notes, and fully participate in class.
 - 3. **DO ALL HOMEWORK.** Fully invest yourself in the homework process so that you can maximize your potential to be successful in the course. Do your own work, show

all work, and complete the homework early enough that you can seek help if needed. <u>Always turn in your homework on time</u>.

- 4. Cell phones and any other electronic devices must be silenced and put away while you're in the classroom.
- 5. Be respectful to others in the classroom and assist in maintaining an optimum learning environment for all.

South Plains College Common Course Syllabus: MATH 1314 Revised August 2021

Department: Mathematics, Engineering, and Computer Science

Discipline: Mathematics

Course Number: MATH 1314

Course Title: College Algebra

Available Formats: conventional, hybrid, 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 TSIA1, minimum score of 950 on the TSIA2, a diagnostic score of 6 on the TSIA2, TSI-exempt status, a successful completion with a grade of 'C' or better in MATH 0320, or successful completion of NCBM-0114.

Credit: 3 Lecture: 3 Lab: 1

Textbook: College Algebra with Intermediate Algebra: A Blended Course, Beecher, Penna, Johnson, and Bittinger, 2018, 1^{st} Edition, Prentice Hall/Pearson Education \rightarrow Please note, this textbook is NOT REQUIRED for this course!! However, you have the option of purchasing this textbook as an additional resource for the course if you'd like to have one.

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.

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

Attendance/Student Engagement Policy: Attendance and engagement are the most critical activities for success in this course. The instructor maintains records of the student's attendance and submission of assignments throughout the semester. The student is expected to attend at least eighty percent (80%) of the **total** class meetings **and** submit at least eighty percent (80%) of the **total** class assignments to have the best chance of success. If the student fails to meet these minimum requirements, the instructor <u>may</u> remove the student from the class with an X, upon their discretion, to help the student from harming their GPA. If the student can not receive an X, the instructor will assign an F.

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

- 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.

If you are experiencing any of the following symptoms, please do not attend class and either seek medical attention or test for COVID-19.

- Cough, shortness of breath, difficulty breathing
- Fever or chills
- Muscles or body aches
- Vomiting or diarrhea
- New loss of taste and smell

Please also notify DeEtte Edens, BSN, RN, Associate Director of Health & Wellness, at

dedens@southplainscollege.edu or 806-716-2376. Proof of a positive test is required. A home test is sufficient but students must submit a photo of the positive result. The date of test must be written on the test result and an ID included in the photo. If tested elsewhere (clinic, pharmacy, etc.), please submit a copy of the doctor's note or email notification. Results may be emailed to DeEtte Edens, BSN, RN at dedens@southplainscollege.edu.

A student is clear to return to class without further assessment from DeEtte Edens, BSN, RN if they have completed the 5-day isolation period, symptoms have improved, and they are without fever for 24 hours without the use of fever-reducing medication.

Students must communicate with DeEtte Edens, BSN, RN prior to their return date if still symptomatic at the end of the 5-day isolation.

4.1 Course Syllabi

The syllabus for each course should be reviewed annually and revised as appropriate by the faculty. Instructors are encouraged to think and plan course and units of instruction, i.e., content, methods of presentation, teaching aids, student roles and tests in terms of student behavioral objectives. Student participation in planning, where practical, and their orientation about course plans tend to enhance course relevancy. Copies of syllabi should be filed with the department chairperson and the appropriate dean.

4.1.1 Syllabus Statements

Each syllabus should include the following Diversity Statement, Disabilities Statement, Non-Discrimination Statement and Title IX Pregnancy Accommodations Statement appropriate to the location of the course.

4.1.1.1. Diversity Statement

In this class, the teacher will establish and support an environment that values and nurtures individual and group difference 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.

4.1.1.2. Disabilities 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, Lubbock Centers (located at the Lubbock Downtown Center) 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

4.1.1.3 Non-Discrimination Statement

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.

4.1.1.4 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 activate accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Health and Wellness Center. 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 Health and Wellness Center at 806-716-2529 or email dburleson@southplainscollege.edu for assistance.

4.1.1.5 OPTIONAL STATEMENT - Campus Concealed Carry Statement

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: <u>http://www.southplainscollege.edu/campuscarry.php</u>

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.

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.

MATH-1314-007 College Algebra Schedule of Topics ~ Fall 2022

Week	Date	Lecture Topic	HW Due Dates 11:59 p.m. C.T. via Google Classroom
1	Wed 8/17	Martin Luther King Holiday ~ No Class	Syllabus Received
	Thurs 8/18	Topic 1.1 ~ Solving Linear Equations & Applications	
	Fri 8/19	u n	HW 1.1 due Tues, 8/23
2	Mon 8/22	Topic 1.2 ~ Solving Inequalities & Applications/Interval Notation	
	Tues 8/23	u n	HW 1.2 due Thurs, 8/25
	Wed 8/24	Topic 1.3 ~ Functions & Graphs/Finding Domain & Range	
	Thurs 8/25	<i>"</i> "	HW 1.3 due Mon, 8/29
3	Mon 8/29	Quiz 1 (Topics 1.1-1.3) Topic 1.4 ~ The Algebra of Functions/Graphing Linear Equations	
	Tues 8/30	<i>u n</i>	HW 1.4 due Thurs, 9/1
	Wed 8/31	Topic 1.5 ~ Solving Systems of Equations	
	Thurs 9/1	<i>и п</i>	HW 1.5 due Tues, 9/6
4	Tues 9/6	Quiz 2 (Topics 1.4-1.5)	
	Wed 9/7	Topic 1.6 ~ Matrices, Determinants, & Cramer's Rule	
	Thurs 9/8	<i>u</i> "	HW 1.6 Mon, 9/12
5	Mon 9/12	Exam 1 Review	
	Tues 9/13	<i>"</i> "	Unit 1 Review due Wed, 9/14
	Wed 9/14	Exam 1	
	Thurs 9/15	Topic 2.0 ~ Factoring Review	
	Friday 9/16	<i>и п</i>	HW 2.0 due Tues, 9/20
6	Mon 9/19	Topic 2.1 ~ Solving Rational Equations	
	Tues 9/20	<i>"</i> "	HW 2.1 due Thurs, 9/22
	Wed 9/21	Topic 2.2 ~ Solving Radical Equations	
	Thurs 9/22	<i>и</i> "	HW 2.2 due Tues, 9/27
7	Tues 9/27	Quiz 3 (Topics 2.1-2.2)	
	Wed 9/28	Topic 2.3 ~ Increasing, Decreasing, Piecewise Functions, and Applications	
	Thurs 9/29	<i>u n</i>	HW 2.3 due Mon, 3/7

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8	Mon 10/3	Topic 2.4 ~ Symmetry and Transformations	
	Tues 10/4	""	HW 2.4 due Thurs, 10/6
	Wed 10/5	Topic 2.5 \sim Complex Numbers and Quadratic Equations/Functions	
	Thurs 10/6	u	HW 2.5 due Mon, 10/10
9	Mon 10/10	Quiz 4 (Topics 2.3-2.5) Topic 2.6 ~ Analyzing Graphs of Quadratic Functions	
	Tues 10/11	u n	HW 2.6 due Wed, 10/12
	Wed 10/12	Exam 2 Review	HW 3.2 due Wed, 3/23
	Thurs 10/13	<i>a n</i>	Unit 2 Review due Fri, 10/28
	Fri 10/14	Exam 2	
10	Mon 10/17	Topic 3.1 ~ Polynomial Functions and Models	
	Tues 10/18	u n	HW 3.1 due Thurs, 10/20
	Wed 10/19	Topic 3.2 ~ Graphing Polynomial Functions	
	Thurs 10/20	<i>u</i> »	HW 3.2 due Mon, 10/24
11	Mon 10/24	Topic 3.3 \sim Polynomial Division, The Remainder Theorem, and The Factor Theorem	
	Tues 10/25	u n	HW 3.3 due Thurs, 10/27
	Wed 10/26	Topic 3.4 \sim Theorems About Zeros of Polynomial Functions	
	Thurs 10/27	<i>u</i> "	HW 3.4 due Mon, 10/31
12	Mon 10/31	Quiz 5 (Topics 3.1-3.4) Topic 3.5 ~ Rational Functions	
	Tues 11/1	<i>u</i> "	HW 3.5 due Thurs, 11/3
	Wed 11/2	Topic 3.6 \sim Polynomial Inequalities and Rational Inequalities	
	Thurs 11/3	u n	HW 3.6 due Tues, 11/8
	Fri 11/4	Exam 3 Review	
13	Tues 11/8	<i>a n</i>	Unit 3 Review due Wed, 11/9
	Wed 11/9	Exam 3	
	Thurs 11/10	Topic 4.1 \sim Composition of Functions and Inverse Functions	
	Fri 11/11	<i>a n</i>	HW 4.1 due Tues, 11/15
14	Mon 11/14	Topic 4.2 ~ Exponential Functions and Graphs	
	Tues 11/15	*Last Day to Drop*	HW 4.2 due Wed, 11/16
	Wed 11/16	Topic 4.3 ~ Logarithmic Functions and Graphs	
	Thurs 11/17	и »	HW 4.3 Fri, 11/18
	Fri 11/18	<i>u</i> "	
	11/21-11/25	Thanksgiving Break	
15	Mon 11/28	Topic 4.4 ~ Properties of Logarithmic Functions	
	Tues 11/29	Quiz 6 (Topics 4.1-4.3)	HW 4.4 Thurs, 12/1
	Wed 11/30	Topic 4.5 ~ Solving Exponential and Logarithmic Equations	

	Thurs 12/1	<i>и</i> "	HW 4.5 due Mon, 12/5
16	Mon 12/5	Topic 4.6 ~ Applications and Models: Growth and Decay; Compound Interest	
	Tues 12/6	и »	
	Wed 12/7	Exam 4 Review	
	Thurs 12/8	Exam 4	
	Fri 12/9	Final Exam Review	
17	Mon 12/12	<i>u</i> "	
	Tues 12/13	Final Exam Part 1	
	Wed 12/14	Final Exam Part 2	