# South Plains College

## Common Course Syllabus: MATH 1314.615 Fall 2023

Meets face to face (f2f) Tuesday & Thursday from 11:00 AM-12:45 PM at the Lubbock Downtown Center in the basement in room B010.

**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, Downtown Center, Plainview 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 (Optional):** College Algebra with Intermediate Algebra: A Blended Course,
Beecher, Penna, Johnson, and Bittinger, 2018, 1<sup>st</sup> Edition, Prentice Hall/Pearson
Education

**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 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:

- 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.

**Student Code of Conduct Policy**: Any successful learning experience requires mutual respect from the student and the instructor. Neither the instructor nor the student should be subject to others' rude, disruptive, intimidating, aggressive, or demeaning behavior. 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.

South Plains College policies concerning diversity, disabilities, non-discrimination, Title IX Pregnancy Accommodations, and Campus Concealed Carry Statements can be found here: https://www.southplainscollege.edu/syllabusstatements/.

South Plains College policies, return to campus plan, and protocols regarding COVID-19 can be found here: <a href="https://www.southplainscollege.edu/emergency/covid19-faq.php">https://www.southplainscollege.edu/emergency/covid19-faq.php</a>.

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.

### COURSE SPECIFIC INFORMATION FOR MATH 1314.615 Tues. and Thurs. 11:00 Am-12:45 PM

**Instructor:** Larry Moffett

Email: <a href="mailto:lmoffett@southplainscollege.edu">lmoffett@southplainscollege.edu</a>

Office: <u>Lubbock Downtown Center: Basement B014</u> Phone: (806)716-2528

Office hours: Office hours will be in my office: B014

Monday	Tuesday	Wednesday	Thursday	Friday
8:30-9:00	10:30-11:00	8:30-9:00	10:30-11:00	
2:45-3:45	2:45-4:45	2:45-3:45	2:45-4:45	

If I am in my office, feel free to stop by without an appointment.

**Email:** All students at South Plains College are assigned an SPC email account. Although personal email addresses will continue to be collected, the assigned SPC email account will be used as the official channel of communication for South Plains College. Students should make it a habit to check their student email account frequently. (Copied from SPC Student Guide.)

Class Structure: All instructional material is on Blackboard. Each unit in Blackboard has homework, lecture notes, and videos to teach the material. You are expected to watch the videos, fill in the notes, and do homework before you come to class each week. The class will meet in person face to face (f2f) from 11:00 to 12:45 on Tuesday and Thursday at the Downtown Center in the basement in room B010. If you must miss class for any reason, the notes and videos are provided for you on Blackboard. Stay current with lecture notes and homework. A three ring binder is required for organizing lecture notes, homework, labs, and tests. Organize the binder by units. Check Blackboard and your SPC email often for any updates.

**Class Attendance**: Attendance and effort are the keys to success in this class. Five absences are allowed for the semester. If you exceed this number, you may be dropped from the course. The unauthorized use of a cell phone, leaving before class has ended, two tardies, or being ten minutes late are considered as absences.

Attending class and doing homework will improve college life.

#### **Assignments & Grading:**

<u>Practice Problems</u>: Practice problems will be used as a study guide for tests. Complete all practice problems to the best of your ability before class each day. Practice problems are on Blackboard with the solutions. Time will be given to ask questions each class day.

<u>Labs</u>: Labs consist of 5 -10 problems for the purpose of self-assessing your understanding of the material. Labs will be completed in class without apps or websites. Scientific calculators, notes, and practice problems may be used. **Always show your work**. Use a **pencil** for math. Questions may be asked about the practice problems before the lab is distributed.

<u>Exams</u>: You may use a scientific calculator on the exams but calculators on cell phones will not be permitted. The <u>TI-30X II S calculator</u> is recommended. Cell phones should be out of sight and not touched during exams. The use of any websites or apps during exams is considered cheating. Make-up exams will not be available. If you miss an exam for any reason, the final exam will take the place of the missed exam. If you miss two exams, you may be dropped from the course. If you know you will need to miss an exam, let me know before the exam so an alternate testing time can be arranged **before** the exam is taken in class.

Hands must be visible during the test.

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.

There will be 4 exams and a comprehensive final exam.

#### **Determining Grades:**

Exam 1	20 %
Exam 2	20 %
Exam 3	20 %
Exam 4`	20 %
Final Exam	<u>20 %</u>
Total	100 %

#### The letter grade is determined by the following scale:

Accumulated points	<u>Final Grad</u>
90 and above	A
80-89	В
70-79	С
60-69	D
59 and below	F

#### To maximize potential for successfully completing this course:

- Attend class prepared to work.
- Print and complete notes provided on Blackboard prior to class.
- Complete all practice problems to the best of your ability prior to class.
- Ask questions on any problems that you had difficulties with.
- Rework the practice problems until you have mastered them.
- Organize all class material by units in a 3-ring binder (required).
- Read objectives from each lesson and determine if you have mastered the topic to prepare for the exams.

#### Supplies:

- The **textbook** is **optional**. Notes with video links are provided on Blackboard. Practice problems with solutions are on Blackboard.
- scientific calculator (The **TI-30X** is a good and inexpensive option.)
- pencils, notebook paper, 3-ring binder
- Computer or cell phone that you can use to check Blackboard and emails.

**Supplementary Course Information & Tutoring:** Blackboard is the online course management system that will be utilized for this course. This course syllabus, as well as any class handouts and assignments can be accessed through Blackboard. Login at <a href="http://southplainscollege.blackboard.com">http://southplainscollege.blackboard.com</a>. The user name and password should be the same as the MySPC and SPC email.

User name: first initial, last name, and last 4 digits of the Student ID

Password: Original CampusConnect Pin Number (found on SPC acceptance letter)

Questions regarding Blackboard support may be emailed to <u>blackboard@southplainscollege.edu</u> or by telephone 806-716-2180.

# Tentative Course Schedule (F23): Math 1314.615 T/Th 11-12:45 PM

Week	Monday	Tuesday	Wednesday	Thursday
1		Aug 29 2023 (Syl) 1 Linear & Rational Equations		31st 2 Linear Applications
2		Sept 5 <sup>th</sup> 2023 3 Complex Numbers & Quadratic Equations		7 <sup>th</sup> 4 Quadratic Equations Cont.
3		12 <sup>th</sup> 5 Other Types of Equations		14 <sup>th</sup> 6 Linear & Absolute Value Inequalities with Review
4		19 <sup>th</sup> EXAM 1		21st 7 Functions & Their Graphs
5		26 <sup>th</sup> 8 Linear Functions		28 <sup>th</sup> 9 Distance, Midpoint & Circles
6		Oct 3 2023 10 Composition and Inverse Functions		5 <sup>th</sup> 11 Quadratic Functions
7		10 <sup>th</sup> 11 Synthetic division & the rational root theorem		12 <sup>th</sup> Exam 2
8		17 <sup>th</sup> 12 Polynomial & Rational Inequalities		19 <sup>th</sup> 13 Polynomial Functions and their Graphs

Week	Mon.	Tues.	Wed.	Thurs
9		24 <sup>th</sup> 14 Rational Functions and Their Graphs		26 <sup>th</sup> 15 Exponential and Logarithmic Functions
10		31st 16 Properties of Logs		Nov 2 2023 17 Exponential and Logarithmic Equations
11		7 <sup>th</sup> 18 Review		9th Exam 3
12		14 <sup>th</sup> 19 2x2 and 3x3 Systems		16 <sup>th</sup> 20 Matrix Solutions
13		21st 21 Cramer's Rule 22 Nonlinear Systems and Systems of Inequalities	Nov 22-24 Thanksgiving Break	23 <sup>rd</sup> Thanksgiving
14		28 <sup>th</sup> Review		30 <sup>th</sup> Exam 4 Last Day to Drop
15		Dec 5 2023 Review for Final: Correct All Exams		7 <sup>th</sup> Review for Final
FINALS	Dec 11th 2023	12 <sup>th</sup> Math 1314.615 Final: 10:15AM-12:15PM	13 <sup>th</sup>	14 <sup>th</sup>

## Note

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#### **SPC Tutors**

Tutoring is FREE 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 180 FREE minutes 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 and grab a session with a tutor. You can access tutor.com tutors during the following times:

Monday – Thursday: 8pm-8am 6pm Friday – 8am Monday morning

For questions regarding tutoring, please email tutoring@southplainscollege.edu or call 806-716-2538.

# **Persevere**

The following is from McGuffey's Reader:

The fisher who draws in his net too soon,
Want have any fish to sell;
The child who shuts up his book too soon,
Want learn any lessons well.

If you would have your learning stay, Be patient – don't learn too fast; The man who travels a mile a day, May get round the world at last.