South Plains College Department of Mathematics Math 1314.008 - College Algebra Syllabus

Fall 2019

Instructor: Leah Chenault Office: M106 **Telephone:** (806)716-2740

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Office Hours: As listed below or by appointment

Monday	Tuesday	Wednesday	Thursday	Friday
NA	9:30 am-10:45 am	2:30 pm-5:00 pm	9:30 am-10:45 am	9:00 am-12:00 pm

Disclaimer: The instructor reserves the right to alter any class policies/dates as deemed necessary by the instructor. If there are any changes, they will be announced in class.

Course Description: MATH 1314 - College Algebra (3:3:1) A standard course in college algebra. Quadratic equations; ratio and proportion; variation, binomial theorem; progressions; inequalities; complex numbers; theory of equations; determinants and matrices; linear programming; mathematical induction; permutations and combinations. Semester Hours: 3, Lecture Hours: 3, Lab Hours: 1. Prerequisite: Two units of high school algebra and TSI compliance or MATH 0320.

Learning Outcomes: Successful completion of this course should reflect mastery of the following objectives.

- 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.

Showing Work: To receive full credit on an assignment, you must show all work that leads to your answer(s). The work must be legible, make sense and be easy to follow.

Course Supplies:

- Required: Scientific Calculator (with log and ln). Suggested TI-30XIIS. They are inexpensive and user friendly. Graphing calculators are not allowed. There may be some assignments where you are not allowed to use any calculator.
- Required: Large 3-ring binder, dividers, notebook paper, graph, hole punch, pencils, and erasers.
- Printed Notes: No book is required, but a blank copy of the notes will be posted on Blackboard and you will be expected to print them and have them in class. You are expected to fill them out during class. If you miss class for any reason, you will need to get a copy of someone else's filled out notes. Your completed notes will be a requirement in the binder check.
- Warning: Do not expect your instructor to have supplies for you to borrow.

Homework/Quizzes:

- Homework will be assigned at each class. Work the problems early enough to seek help if
- Homework is due at the beginning of the next class. Late homework will not be accepted. Absence = 0.
- Quizzes will be given most days. Make-up quizzes will not be given. Absence = 0.
- Each daily assignment grade will consist of 50% homework and 50% quiz.
- On all assignments, you are expected to write your full name at the top, give the assignment a title (page number etc) and clearly number the questions on your work.

Binder:

- At the end of the semester the lowest 4 grades (homework/quiz/binder) will be dropped.
- All students will keep a binder which will be used as a reference and study guide.
- The binder will be graded randomly by the instructor during the semester.

Binder organization:

- Section 1: Syllabus
- Section 2: Unit 1: By section Notes, Assignment, and Quiz (corrected on a separate sheet of paper behind the quiz). At the end of the unit you will have a review and an Exam.
- Section 3: Unit 2
- Section 4: Unit 3
- Section 5: Unit 4
- Section 5: Post Unit 4 material and Comprehensive Review These pages will be kept in chronological order.

Note: Being absent does not excuse you from notes, homework or quizzes. Everything is available on Blackboard and should be printed and completed even if you are not in class.

Exams:

- 4 Unit Exams
- Leaving the class during an exam is not permitted.
- Final Exam is comprehensive and departmental.
- There are no exemptions for the final.
- If you are going to miss an exam, contact your instructor immediately (preferably prior to the exam). Make up exams are very rare and only provided under extreme, documented circumstances.
- If your grade on your final exam is higher than one of the unit tests, I will replace that unit test grade with your final exam grade.
- All electronic communication devices (phones, smart watches etc) must be put away during exams. Failure to do so will result in a grade of zero on the exam.

Grading Formula:

Enrollment in this course does not guarantee advancement to the next course level. The final responsibility for learning lies with the student. The final letter grade for this course will be based on the following:

- 4 Unit Tests 15% each60%
- Homework/Quizzes/Binder......15%
- Final Exam......25%

Final Grade Determination: A 90-100 B 80-89 C 70-79 D 60-69 F 59 or below

Attendance Policy: Class attendance is expected, not optional. Class attendance may be taken at any time during the class period, so please do not be late or leave early. Leaving early and/or being tardy will be considered $\frac{1}{2}$ absence. You may be dropped from this course with a grade of X or F if you are absent four consecutive classes or if you exceed five absences (for any reason).

Academic Honesty: You are expected to uphold the ideas of academic honesty. All work that is graded must be your own. This policy applies to all work attempted in the course. If this policy is violated, the student will receive a zero for the assignment and will be dropped with an F. For more details on what is considered cheating, see the South Plains College catalog.

Classroom Etiquette:

- Preparation for class (including homework) is to be completed before not during the lecture.
- Chronic tardiness is unacceptable. We will begin promptly at the scheduled time for the class. A tardy counts as half an absence.
- Students are expected to be respectful of their fellow classmates and maintain a classroom environment that is conducive to learning. Refrain from using offensive language, talking loudly or off-topic, working on outside assignments, or otherwise being disruptive in class.
- NO tobacco use of any form is allowed in the classroom.
- Discussion of course material among students is encouraged during class, but habitually disruptive students will be asked to leave.
- All electronic communication devices are to be silenced and put away during class unless you are specifically told otherwise by your instructor. You will be given one verbal warning, after which you will be asked to leave.
- If I have to ask you to leave class for any reason (class disruption, cell phone usage etc), you will receive a zero for the day's assignment.
- Food and/or drinks are NOT allowed in the classroom.
- All electronic communication with the instructor should take place via your SPC email account.

Resources:

- Blackboard! The course syllabus, calendar, gradebook, notes, homework, quiz keys, and reviews will be available on Blackboard. Be sure to check Blackboard regularly. There may also be times where I post videos that may supplement/reinforce what we have done in class.
- Free tutoring is available in M116 on the Levelland campus. You will need your student ID to check in for tutoring.
- I am available to help you! Feel free to come by during my office hours or email me at lchenault@southplainscollege.edu.
- Free tutorial videos are available at the following sites: http://patrickjmt.com/, http://www.mathtv.com/, and http://www.khanacademy.org/.

Succeeding in a Math Class:

- Attend class every class period.
- Be mentally present! Take notes, pay attention and ask questions during class.
- Do all homework when it is assigned. Work on it early enough so that you can seek help if you need it.
- For every hour spent in class, you should expect to spend 2-3 hours outside of class working on this course. This includes time spent on homework and studying for quizzes and exams.
- Get to know at least one other person in class and exchange contact information. Study groups are encouraged.
- Get help as soon as you feel yourself falling behind! Don't wait!
- I have found that the best way for a student to study for a math exam is to practice working problems over and over.
- Everyone learns and studies differently. I encourage you to seek out and find what works best for you.

Withdrawal Policy: As required by Texas Education Code Section 51.907, all new students who enroll in a Texas public institution of higher education for the first time beginning with the 2007 fall semester and thereafter, are limited to six course drops throughout their entire undergraduate career. All course drops, including those initiated by students or faculty and any course a transfer student has dropped at another institution, automatically count toward the limit. After six grades of W are received, students must receive grades of A, B, C, D, or F in all courses. There are other exemptions from the six-drop limit and students should consult with a Counselor/Educational Planner before they drop courses to determine these exemptions. Students receiving financial aid must get in touch with the Financial Aid Office before withdrawing from a course. It is the student's responsibility to drop. Excessive absences (4 consecutive or 5 total) will result in an administrative withdrawal with a Grade of X or F. If you plan to withdraw, please consult with the instructor immediately. Note: The last day to drop with a grade of W is Thursday, November 14, 2019.

Equal Opportunity: South Plains College strives to accommodate the individual needs of all students in order to enhance their opportunities for success in the context of a comprehensive community college setting. It is the policy of South Plains College to offer all educational and employment opportunities without regard to race, color, national origin, religion, gender, disability, or age.

Core Objectives:

- **1. Communication Skills:** effective development, interpretation, and expression of ideas through written, oral, and visual communication.
 - Develop, interpret, and express ideas through written communication
 - Develop, interpret, and express ideas through oral communication
 - Develop, interpret, and express ideas through visual communication
- **2. Critical Thinking:** creative thinking, innovation, inquiry, analysis, evaluation, and synthesis of information.
 - Generate and communicate ideas by combining, changing, and reapplying existing information
 - Gather and assess information relevant to a question
 - Analyze, evaluate, and synthesize information
- **3. Empirical and Quantitative Competency Skills:** the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.
 - Manipulate and analyze numerical data and arrive at an informed conclusion
 - Manipulate and analyze observable facts and arrive at an informed conclusion

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 Center 806-716-2577, Reese Center (also covers ATC) Building 8: 806-716-4675, Plainview Center Main Office: 806-716- 4302 or 806-296-9611, or the Health and Wellness main number at 806-716-2529.

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 (per the SPC faculty handbook).

Sexual Misconduct Statement: As a faculty member, I am deeply invested in the well-being of each student I teach. I am here to assist you with your work in this course. If you come to me with other non-course-related concerns, I will do my best to help. It is important for you to know that all faculty members are mandated reporters of any incidents of sexual misconduct. That means that I cannot keep information about sexual misconduct confidential if you share that information with me. The Director of Health & Wellness, can advise you confidentially as can any counselor in the Health & Wellness Center. They can also help you access other resources on campus and in the local community. You can get more information at 716-2563 or go by the Health and Wellness Center. You can schedule an appointment with a counselor by calling 716-2529.

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, please refer to the SPC policy at: (http://www.southplainscollege.edu/human_resources/policy_procedure/hhc.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

College Algebra Tentative Course Outline – Fall 2019 Math 1314.008 (T/Th 7:50 a.m. – 9:20 a.m.)

Week	Date	Day	Lesson/Assignment	
1	Aug 27 th	Tues	Introduction	
			Assignment 1: Linear & Rational Equations including Pre-skills	
			Review	
	Aug 29 th	Thurs	Skills Assessment, Assignment 2: Linear Applications	
2	Sept 3 rd	Tues	Assignment 3: Complex Numbers; Quadratic Equations Part 1	
	Sept 5 th	Thurs	Assignment 4: Quadratic Equations Part 2, Radical Equations	
3	Sept 10 th	Tues	Assignment 5: Other Types of Equations; Linear and Absolute Value	
	•		Inequalities	
	Sept 12 th	Thurs	Unit 1 Review	
4	Sept 17 th	Tues	Unit 1 Exam (15%), Binder Check	
	Sept 19 th	Thurs	Assignment 7: Function Notation and Graphs	
5	Sept 24 th	Tues	Assignment 8: Linear Functions and Slope	
	Sept 26 th	Thurs	Assignment 9: Distance, Midpoint, & Circles, Combinations of	
	•		Functions, Composite Functions	
6	Oct 1st	Tues	Assignment 10: Inverse Functions, Quadratic Functions	
	Oct 3 rd	Thurs	Assignment 11: Long Division, Synthetic Division, Roots of	
			Polynomials	
7	Oct 8th	Tues	Unit 2 Review	
	Oct 10 th	Thurs	Unit 2 Exam (15%)	
8	Oct 15 th	Tues	Assignment 12: Polynomial Functions & Their Graphs	
	Oct 17 th	Thurs	Assignment 13: Rational Functions & Their Graphs	
9	Oct 22 nd	Tues	Assignment 14: Polynomial & Rational Inequalities, Compound	
			Interest	
	Oct 24 th	Thurs	Assignment 15: Exponential Functions; Logarithmic Functions	
10	Oct 29 th	Tues	Assignment 16: Properties of Logarithms, Solving Exponential	
			Equations Part 1	
	Oct 31st	Thurs	Assignment 17: Solving Exponential Equations Part 2, Solving	
			Logarithmic Equations	
11	Nov 5 th	Tues	Unit 3 Review	
	Nov 7 th	Thurs	Unit 3 Exam (15%)	
12	Nov 12 th	Tues	Assignment 19: 2x2 Systems; 3x3 Systems	
	Nov 14 th	Thurs	Assignment 20: Nonlinear Systems; Graphing Inequalities & Systems	
			of Inequalities, Graphing Nonlinear Systems of Inequalities	
13	Nov 19 th	Tues	Assignment 21: Solving Systems of Equations by Gauss Jordan	
			Elimination	
	Nov 21st	Thurs	Assignment 22: Solving Systems of Equations by Determinants &	
			Cramer's Rule	
14	Nov 26th	Tues	Unit 4 Exam (15%)	
	Nov 28th	Thurs	No Class - Thanksgiving Holiday	
15	Dec 3 rd	Tues	Comprehensive Review	
	Dec 5 th	Thurs	Comprehensive Review	
16	Dec 10 th	Tues	Math 1314.008 Final Exam 8:00 a.m. – 10:00 a.m.	

Note: This schedule is tentative and may be altered as deemed necessary by the instructor. If there are any changes, they will be announced **in class.**