# South Plains College College Algebra – Math 1314 ITV

Course Syllabus Summer 2017

**Instructor:** Morgan Groves

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Textbook: Blitzer, R. (2013). College Algebra, 6th Edition. New Jersey: Pearson Prentice Hall.

ISBN: 0321782283. You will need the book!!

**Supplies:** You will need pencils, paper, and class notes. Calculators with exponential and logarithmic functions are required. Graphing Calculators are permitted but not required (NOTE: the TI-89, TI-nspire and above are not permitted). Calculators on cell phones or other electronic devices will not be allowed in this class.

**Core Curriculum:** This course satisfies the following Core Objectives: Communication Skills:

- Develop, interpret, and express ideas through written communication
- Develop, interpret, and express ideas through oral communication
- Develop, interpret, and express ideas through visual communication

## Critical Thinking:

- Generate and communicate ideas by combining, changing, and reapplying existing information
- Gather and assess information relevant to a question
- Analyze, evaluate, and synthesize information Empirical and Quantitative

# Competency Skills:

- Manipulate and analyze numerical data and arrive at an informed conclusion
- Manipulate and analyze observable facts and arrive at an informed conclusion

**Expected Learning Outcomes:** At the end of this course, students should be able to competently perform the following:

- 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.

Grading:		Grading Scale:	Α	90-100
Homework/Quizzes:	20%	_	В	80-89
Exams (3):	60%		С	70-79
Final Exam:	20%		D	60-69
			F	0-59

A grade of C (70%) or better is required to advance to the next course. This course and its grade will be recorded on your official transcript for SPC.

<sup>\*\*\*</sup>Note: Students must justify answers or show work on all problems to receive full credit.

Class Attendance: Students are expected to be in class and prepared for the day's lesson. Students are responsible for the material covered in this course, even if they are not in class for any reason. Students that are planning to be absent due to doctor's appointments, school related activities, or other such events must contact me before the absence, with documentation of the coming event to arrange any necessary make-up work. Students that are absent without notice due to illness or other emergency must contact me by email as soon as possible or talk to me in person before classes begin on the next day back to school to arrange any make-up work. Students that do not contact me regarding their absences forfeit their opportunity to make up any work.

**Late work:** Late work is not accepted. If you do not turn in an assignment on time, you will receive a zero.

**Homework:** Homework is expected to be done daily. Your work should be collegiate quality. Late work is not accepted, and there are no extensions. I will drop approximately 3 homework grades at the end of the term.

**Quizzes:** There are no predefined quizzes for this class. However, I reserve the right to quiz whenever I feel it is necessary. Pop quizzes are possible in this class. Quiz grades will count as part of your homework average. **No quiz grades (if there are any) will be dropped.** 

**Exams:** There will be 3 exams and one comprehensive final exam. Tentative dates for the exams are given on the course outline. These dates are subject to change. If for any reason you are unable to take an exam at the designated time, you must contact me *prior* to class time. If this is not possible, then you must contact me as soon as possible to make arrangements to make-up the exam. Make-up exams will be given at the discretion of the instructor. No exam grades will be dropped. However, **if your final exam grade is higher than your lowest test grade, then it will replace your lowest test grade (as well as count for the final exam).** All exams are expected to be completed in the allotted class time. Exams must be taken in one sitting. Once you leave the room on an exam day, your exam is considered completed and will not be handed back until it is graded.

**Extra Credit:** Occasionally, bonus questions will be asked on exams. These problems will be approximately the same difficulty level as the rest of the exam's problems, and are offered as an opportunity to pad your exam score. They are not required. There will also be a drawing for bonus points on each exam in exchange for keeping your cell phones silent and out of sight during each class. These bonus points can be taken away from individual students or the entire class at the discretion of the instructor.

**Tutoring:** Digital versions of tutorial videos can be viewed on your personal computer on Blackboard, <a href="http://spc.blackboard.com">http://spc.blackboard.com</a>. Login using "mvideos" and password "mvideos". Click on Math-Math Videos and locate the appropriate course and topic in which you are interested.

### **Class Rules:**

- Be courteous and respectful at all times.
- Be on time and ready to learn.
- Keep your hands and feet to yourself.
- Use only pencil for all assignments.
- Wait to be dismissed before leaving class. The bell does not dismiss you!!
- No food or drinks in class other than bottled water.
- Students are not permitted to use electronic devices, other than a calculator, in class.
- Adhere to the requirements of the Student Code of Conduct.

**Academic Integrity:** Academic dishonesty will not be tolerated. 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 this course. If this policy is violated the student will receive an F for the assignment and will be dropped with an F. For more details on what is considered cheating, see the South Plains College catalog.

**Student Conduct:** You are expected to be respectful to others in the classroom. Please assist in maintaining a classroom environment conducive to learning. Any student disrupting the learning environment will be asked to leave and may be dropped from the course.

**Disability:** Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Special 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 Special Services Coordinator. For more information, call or visit the Special Services Office in the Student Services building, 894-9611 ext. 2529.

**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.

**Diversity:** 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.

#### **Disclaimer**

The instructor reserves the right to alter any class policies as deemed necessary by the instructor or South Plains College, and will announce any changes in class. If a student has any questions about a change in policy ask the instructor for clarification.

College Algebra – Summer II 2017 Tentative Calendar				
Day	Date	Topic	Section	
R	July 13	Syllabus/REVIEW	P.1-1.2	
М	July 17	Models and Applications/Complex Numbers/Quadratic Equations	1.3 – 1.5	
Т	July 18	Other Basic Equations/Inequalities/Absolute Value	1.6 – 1.7	
W	July 19	Function Basics/More on functions and Their Graphs	2.1-2.2	
R	July 20	Linear Functions and Slope /Transformations	2.3 – 2.5	
М	July 24	Combination of Functions;	2.6	
Т	July 25	Composite Functions/Function Inverse/Circles	2.7-2.8	
W	July 26	Exam 1	Ch. 1 – 2	
R	July 27	Quadratic and Polynomial Functions/Dividing Polynomials	3.1–3.3	
М	July 31	Zeros of Polynomials	3.4	
Т	Aug 1	Rational Functions/Inequalities	3.5 - 3.6	
W	Aug 2	Exponential and Logarithmic Functions	4.1 – 4.3	
R	Aug 3	Solving Exponential and Logarithmic Equations/Models	4.4 – 4.5	
M	Aug 7	Exam 2	Ch. 3 – 4	
Т	Aug 8	Systems of Linear Equations	5.1 – 5.2	
W	Aug 9	Systems of Linear Equations (augmented matrices)	6.1 – 6.2	
R	Aug 10	Determinants/Cramer's Rule	6.5	
М	Aug 14	Nonlinear Systems/Systems of Inequalities	5.4 – 5.5	
T	Aug 15	Exam 3	Ch. 5 – 6	
W	Aug 16	Review		
R	Aug 17	Final Exam	Ch. 1 - 6	