College Algebra	**Mrs. Elmer, room 219**

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Math 1111, College Algebra **teresa.elmer@raypec.org**
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I. Catalog Description: Continuation of algebra including such topics as linear and quadratic equations, linear and quadratic inequalities, second degree relations and functions, systems of equations and inequalities, and exponential and logarithmic functions.

II. Prerequisite: A "B" average in Algebra II or Advanced Algebra II. In order to take this class for college credit, you must have a 3.0 GPA AND a minimum ACT Math score of 22 or minimum COMPASS score of 66 on the algebra section.

III. Purposes/Objectives of College Algebra
   a.   Unit 1 Equations and Inequalities
         i. Solve and graph linear and quadratic equations
         ii. Solve and graph linear and quadratic inequalities
         iii. Use properties of linear and quadratic equations to solve application problems
   b.   Unit 2 Linear and Quadratic functions
         i.   Find the distance and midpoint between two given points
         ii. Write the equation for a line parallel to/perpendicular to a given line or between two points.
         iii. Compose two or more functions
   c.   Unit 3 Polynomial and Rational Functions
         i. Write the equation for a function from its graph.
         ii. Sketch the graph of a function of any degree
              1.   Using translations
              2.   Find the zeros/intercepts of the function
              3.   Describe the end behavior of the function
              4.   Find the <relative> maxima and minima
         iii. Graph rational functions
              1.   Find the asymptotes
              2.   Find the intercepts.
   d.   Unit 4 Exponential and Logarithmic Functions
         i.   Find the inverse of a given function
         ii. Graph and solve exponential and logarithmic equations
         iii. Use properties of exponential and logarithmic functions to solved application problems.
   e.   Unit 5 Matrices
         i. Solve systems of linear equations
              1. Substitution
              2. Elimination
              3. Cramer's Rule
              4. Inverse of the coefficient matrix
         ii. Solve systems of non-linear equations
         iii. Use properties of matrices to solve application problems

IV. Textbook and Other Required Materials
   a.   *College Algebra, 9th Ed., Lial, Hornsby, and Schneider*
   b.   Scientific Calculator

V. Basis for Student Evaluation
   a.   5 (or 6) Exams – 80% of term grade
   b.   6 (or more) quizzes – 20% of term grade
   c.   Final Exam – 10% of semester grade
   d.   Letter grades will be

A	93 – 100	B+	88-89	C+	78-79	D+	68-69	F	59 and Below
A-	90-92	B	83-87	C	73-77	D	63-67		
		B-	80-82	C-	70-72	D-	60-62		

There are NO retakes

VI. Expectations and Policies
   a.   Attend class and actively participate in classroom activities and discussions.
   b.   Complete homework.
         i.   Homework is assigned every day.
         ii. I am available on Tuesday and Thursday from 2:50 – 3:30 pm for help with homework.
   c.   Quizzes are given at least once per unit.
         i. If you are absent the class prior to the quiz day, you are expected to take the quiz the day immediately

following the quiz day.
    ii. If you are absent the day of the quiz, you are expected to take the quiz the day you come back.
  d. Exams
    i. Exams are given approximately every 2 – 3 weeks.
    ii. Exams are to be taken during the time allotted. Once the second passing bell rings, the student is to turn in his/her exam.
    ii. If you are absent the class prior to the exam day, you are expected to take the exam the day immediately following the exam day.
    iii. If you are absent the day of the exam, you are expected to take the exam the day you come back. You have a maximum of 3 school days after the date of the exam to take the exam. Otherwise you have forfeited your opportunity to take the exam

VII. Academic Honesty

a. Honesty in all endeavors is essential to the functioning of society. Honesty in the classroom among students and between students and faculty is a matter that should concern everyone in the university community. Indeed, academic honesty is one of the most important qualities influencing the character and image of an educational institution. As higher education is challenged to improve the quality of its programs, there is great value in emphasizing academic standards and integrity.

b. A violation against academic honesty committed by a student is any act, which would deceive, cheat, or defraud so as to promote or enhance one's academic standing. Academic dishonesty also includes knowingly or actively assisting any person in the commission of an offense of academic dishonesty. Examples of offenses against academic honesty include, but are not limited to, the following:

    i. Plagiarism - Plagiarism is defined as the borrowing of ideas, opinions, examples, key words, phrases, sentences, paragraphs, or even structure from another person's work, including work written or produced by others without proper acknowledgment. "Work" is defined as theses, drafts, completed essays, examinations, quizzes, projects, assignments, presentations, or any other form of communication, be it on the Internet or in any other medium or media. "Proper acknowledgment" is defined as the use of quotation marks or indenting plus documentation for directly quoted work and specific, clearly articulated citation for paraphrased or otherwise borrowed material.

c. Cheating - Includes, but is not limited to, those activities where a student (either on campus or on-line):
    i. obtains or attempts to obtain pre-knowledge content of an examination;
    ii.copies someone else's work;
    iii works in a group when the student has been told to work individually;
    iv. uses unauthorized reference material in an examination;
    v. has someone else take an examination.
    vi has someone else complete course work and/or an examination using a student's secure log in and pass code.(UCM Faculty Guide)

VIII. Technology
  a. You will need a scientific calculator
  b. You can access your current grade on SIS provided you have a username and password.
  c. No cell phone, iPod, or other electronic device may be used in class without instructor permission.
    i. First use of such item(s) will result in confiscation. The item will be taken to the office. (RayPec Student Handbook p.25)
  d. A list of assignments and copies of handouts as well as notes are available at www. elmermath.webbly.com

IX. Student Conduct
  "Students shall be expected to assume their share of responsibility in maintaining an atmosphere conducive to effective teaching/learning." (RayPec Student handbook p. 32)
  a. Class Rules
    i. Student will assume responsibility for his/her actions.
    ii. Respect others and their property
    iii. Follow directions.
    iv. Be in your seat when the bell rings.
    v. No sleeping will be permitted.
    vi. The teacher reserves the right to add to or amend these rules.
  b. Consequences of misconduct
    i. Verbal Warning
    ii. Move to another seat
    iii. Move to another classroom and conference with teacher

iv. Sent to the Office with a discipline referral
v. Severe/blatant misconduct will result in being sent directly to the office.

X. Classroom procedures
 a. Tardies
  i. You must be in the room when the tardy bell rings
  ii. If you are tardy, you will not be admitted to class without a pass.
 b. Absences
  i. You are expected to make up missed work for each absence.
  ii. It is your responsibility to see that you get any missed work on your return to school.
 **If you miss an exam and fail to make it up, you will receive a score of 0. It is YOUR responsibility to be prepared for and to take the test immediately upon your return.
 c. School Field Trips
  i. You are responsible for getting the assignment done in advance.
  ii. If the field trip is scheduled the day of a test, you are expected to take the test PRIOR to going on the field trip.
 e. Food and Drink
  i. Drinks must be in a container with a seal-able lid. No cans.
  ii. Food must be in individual servings
  iii. Food causing a distraction will not be permitted.
  iv. No seeds (shelled or unshelled)