TEXAS A&M UNIVERSITY-Corpus Christi
Department of Mathematics and Statistics

MATH 1314.W01 College Algebra   Summer I, 2013

I. COURSE INFORMATION

- Meeting Time & Place: Internet Web Instruction
- Professor: Gordon Dean Haley
- Office Phone: 361-825-3754
- Office Address: CI 301
- E-MAIL Address: ghaley@islander.tamucc.edu
- Web Page Address: TBA
- Office Hours: TBA
- Virtual Office Hours: Anytime via E-mail.

II. COURSE DESCRIPTION

The course continues the development of algebra from MATH 0399, Intermediate Algebra. A review of properties of numbers and linear equations and inequalities is included. Topics are quadratic equations and inequalities, graphs, logarithms, and exponentials, solutions of polynomial equations and systems of equations. This course counts as the mathematics component of the University Core Curriculum.

III. PREREQUISITES for the COURSE

MATH 0399, Intermediate Algebra, or placement into College Algebra

IV. TEXT and OTHER SUPPLIES REQUIRED

- A TI-Nspire Graphing Calculator (Other models may be used but will not be supported by the instructor).
- MyMathLab access is required (The access key is included with the purchase of the required text book above).
- Internet access
- PC System Configuration - Certain computer programs are required to complete the online assignments in this course. Please utilize the browser check, once you are logged in, to verify that all of the necessary programs and plug-ins are properly installed on your system before attempting an assignment. There are labs on the TAMU-CC campus which are properly configured to use with this delivery method, however not every computer on campus will be compatible.
V. COURSE OBJECTIVES

On successful completion of this course you should be able to do the following [corresponding text book section numbers in brackets]:

1. Solve linear equations in one variable.
2. Solve formulas for indicated variables.
3. Solve applications of linear equations and problems involving linear modeling.
4. Solve equations using the quadratic formula.
5. Solve problems involving quadratic modeling.
6. Solve equations with rational expressions.
7. Solve equations with radical expressions.
8. Solve equations with absolute value expressions.
10. Solve rational inequalities.
11. Solve absolute value inequalities.
12. Find radius, center, domain and range of the circle and graph it.
13. Solve applied problems using distance and midpoint formulas.
15. Find domain and range of the function from the graph.
16. Find domain of the function from the equation.
17. Determine values for which a function is increasing, decreasing and/or constant.
18. Graph linear functions.
19. Find slope given a description of the line.
20. Given an equation, find slope and sketch the graph.
21. Find and interpret rate of change.
22. Find composition of functions.
23. Analyze graphs of functions using transformations.
24. Graphs quadratic functions and find vertex (min/max), axis of symmetry, domain and range.
25. Solve problems about quadratic models.
26. Decide whether a function is one-to-one.
27. Determine whether functions are inverses of each other.
28. Use graph to find inverse function values.
29. Use the change-of-base theorem.
30. Use the product, quotient and power properties of logarithms.
31. Solve exponential equations.
32. Solve logarithmic equations.
33. Use exponential expressions and functions to model and solve real world situations.
34. Use logarithmic expressions and functions to model and solve real world situations.
35. Set up and solve systems of two equations by substitution, elimination, graphing and Cramer's rule.
36. Set up and solve systems of three equations by various methods.

VI. INSTRUCTIONAL METHODS AND ACTIVITIES

The instructional method is a via internet delivery for instructions and activity based problems. Students are expected to participate through virtual class online activities, discussion boards, handwritten & online homework, quizzes, and exams.
VII. EVALUATION AND GRADE ASSIGNMENT

Course grades will be based on homework (10%), group/daily work (10%), qualitative assessments (30%), 1 Midterm Exam 25%, 1 Final exam (25%). NOTE: To receive a passing grade for this course, the Midterm and Final exams must average to a passing grade in addition to having an overall passing average for all work.

- **Homework** will be assigned online prior to the beginning of each week. It will be due one week from the date assigned. It will be scored based on percentage correct. It is important to keep your work in a binder for review, although the answers and problems are submitted online.
- **Daily Work** will be based on virtual class attendance. Daily work also includes preparation for class through specific reading assignments, power point reviews, as well as guided practice reviews. Discussion board assignments are not optional and will be used as extra credit towards the midterm or final exam (up to 10%).
- **Qualitative Assessments** (Quizzes) will be made for each Chapter. They will be timed test and will require you to work independently to solve the problems.
- The **Midterm Exam** – Time and Location TBA.
- The **Final Exam** – Time and Location TBA.

Grading Scale:

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<thead>
<tr>
<th>Grade</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>90-100%</td>
<td>80-90%</td>
<td>70-80%</td>
<td>60-70%</td>
<td>Below 60%</td>
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VIII. TENTATIVE COURSE SCHEDULE

Attached

IX. CLASS POLICIES

- This class is run for the mathematical development of all participants. All students must accept responsibility for participating and consequences of not participating.
- You are the only person responsible for your registration. No one will drop you for not attending class. Please make sure that you drop the class yourself if you are not able to continue coming to class. Please note that the last day to drop the class with a grade of "W" is ___________
- Please turn off phones and beepers before coming to class.
- Your online attendance is expected. Please notify by phone or email if you cannot login to your account for an extended period of time. If a sudden emergency keeps you from an assignment or test, please notify me when you are able.
- All absences from assessments and exams will be considered unexcused unless they are documented in advance as excusable with the instructor or as soon as possible in the case of emergencies. No credit will be awarded for unexcused absences from assessments.
- Help is available from the Tutoring and Learning Center on the second floor of the Bell Library, your classmates, CASA, MyMathLab, as well as my office hours. Wherever you get it, please do not wait until the last minute.
- This class takes place during hurricane season. Announcements will be posted for the online class on the entry page of your class. Keep in mind the following as found on the university’s website:
  - Listen to radio/TV for announcements of when to return to campus, or contact the University via the Public Information Hotline, (361) 825-0000.
  - Note: Radio Station KEYS (AM 1440) KZFM (95.5), KNCN (101.3), are the Emergency Alert Systems (EAS) stations for the Corpus Christi area, NOAA Weather Radio (Corpus Christi 162.44 MHZ).
  - # Students that are calling from out of the Corpus Christi area can call the Public Information Hotline at: 1-361-825-0000 or Toll Free 1-888-234-4887.

X. ACADEMIC HONESTY

**Academic Honesty:** university students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, forgery or plagiarism.

XI. DISABILITY SERVICES

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Disability Services Office at (361) 825-5816 or go to the office at Driftwood 101.

XII. GRADE APPEALS PROCESS

As stated in University Rule 13.02.99.C2, Student Grade Appeals, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at [http://www.tamucc.edu/provost/university_rules/index.html](http://www.tamucc.edu/provost/university_rules/index.html). For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.