MATH 1314 – College Algebra INET 2017-2018 Syllabus *
(Fall 2017 – Summer II 2018)
* This Generic Syllabus will be supplemented by your instructor’s Syllabus Addendum. Together, these documents serve as the Course Syllabus.
**THIS COURSE CAN BE COMPLETED ENTIRELY ONLINE; NO CAMPUS VISITS ARE REQUIRED.**

COURSE DESCRIPTION
This course is a study of relations and functions including polynomial, rational, exponential, logarithmic, and special functions. Other topics may include complex numbers, systems of equations and inequalities, theory of equations, progressions, the binomial theorem, matrices and determinants, mathematical reasoning skills, sequences and series, and applications.

COURSE PREREQUISITES
This is an entry-level course and is open to any student meeting TSI standards of college readiness (student must have appropriate assessment test score or have successfully completed DMAT 0310).

REQUIRED / RECOMMENDED MATERIALS
**ALEKS 360 Access Code.** The web address for ALEKS is [www.aleks.com](http://www.aleks.com). This code will provide access to the ALEKS website where all of the work will be done for the course. The ALEKS website includes an electronic copy of the text, video instruction, and many other helpful features.

✓ Students must have an active e-mail account and regular access to a computer with a reliable internet connection to submit work through ALEKS.

* **GRAPHING calculators are recommended in MATH 1314.** You will have free access to a graphing calculator in ALEKS on selected questions.

**ISBN / TEXTBOOK**

<table>
<thead>
<tr>
<th>College Algebra 2nd ed, by Miller/Gerken</th>
<th>McGraw Hill</th>
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<tbody>
<tr>
<td>Optional Textbook</td>
<td>ISBN: 9781259965920</td>
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<tr>
<td>Required ALEKS 360 access code.</td>
<td>ISBN: 9780077841447</td>
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* The textbook is NOT required. An eText is included in ALEKS.

CERTIFICATION POLICY
Students must attend and participate in their on-campus or online course(s) in order to receive federal financial aid. Instructors are required by law to validate attendance in order for students to receive financial aid. In an online class, simply logging in is not sufficient by itself to demonstrate academic attendance. Students must demonstrate they are participating in their online class and are engaged in an academically related activity. **To be certified as attending online mathematics courses, students must do one of the following prior to the certification Date: a) complete the Initial Knowledge Check in ALEKS; or b) complete a Progress Assessment upon transferring previous work.** Students should contact the instructor with any questions regarding what constitutes the Initial Knowledge Check.

WITHDRAWAL INFORMATION
Please consult your instructor before withdrawing from this course, and be sure to read the Withdrawal Policy found later in this document. If you choose to withdraw from this course within 30 days of activating your ALEKS Access Code, please have your ALEKS account put on hold by calling ALEKS Support at 714-619-7090 and explaining that you withdrew from the course. You will then be able to use the remainder of the time left on your ALEKS Access Code when you retake the course. If you withdraw from the course more than 30 days after activating your ALEKS Code, you will need to purchase a new ALEKS Code in order to retake the course.
COURSE OUTLINE
The course consists of 337 topics:
- Algebra and Geometry Review (32 topics)
- Equations and Inequalities (138 topics)
- Graphs and Functions (74 topics)
- Polynomial and Rational Functions (42 topics)
- Exponential and Logarithmic Functions (35 topics)
- Systems of Equations and Matrices (16 topics)

EVALUATION PROCEDURES
Assessment of your performance will be based upon mastery of topics in ALEKS, a final cumulative exam, and weekly time spent working in ALEKS. Please see your instructor’s Syllabus Addendum for due dates and further grading information.

<table>
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<tr>
<th>Evaluation Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Weekly Time Spent Working in ALEKS</td>
<td>10%</td>
</tr>
<tr>
<td>Please see your instructor’s Syllabus Addendum for time requirements</td>
<td></td>
</tr>
<tr>
<td>Pie Mastery -- #Topics Mastered/337</td>
<td>70%</td>
</tr>
<tr>
<td>Cumulative Final Exam</td>
<td>20%</td>
</tr>
<tr>
<td>The Final Exam is cumulative and covers material from the following College Algebra objectives: Graphs and Functions, Polynomial and Rational Functions, Exponential and Logarithmic Functions, Systems of Equations and Matrices. Failure to master all material in those objectives may result in poor performance on the Final Exam. Please see your Instructor’s Syllabus Addendum for specific topics covered on the Final Exam. The Final Exam does not cover material from the following Prerequisite objectives: Algebra and Geometry Review, Equations and Inequalities.</td>
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The instructor reserves the right to require proctored testing at any point during the course.

GRADING SCALE
Grades for the course will be assigned using the following scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>90 – 100%</td>
</tr>
<tr>
<td>B</td>
<td>80 – 89%</td>
</tr>
<tr>
<td>C</td>
<td>70 – 79%</td>
</tr>
<tr>
<td>D</td>
<td>60 – 69%</td>
</tr>
<tr>
<td>F</td>
<td>0 – 59%</td>
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Students who have yet to complete the course and fail to participate after the drop date will receive an F in the course

TEMPORARY ACCESS TO ALEKS
ALEKS provides a Financial Aid Access Code. This code gives students temporary access to ALEKS for a two-week period. Once the code expires, students will be locked out of their ALEKS account until a regular Student Access Code is purchased. It is highly recommended that students purchase the regular Student Access Code BEFORE the two weeks expire to prevent interruptions in their ALEKS account. ALEKS Corporation developed the Financial Aid Access Code to help students receiving financial aid. The availability of this service will depend on its ethical use by instructors and students, and may be discontinued at the discretion of ALEKS at any time. Students completing the entire course using the Financial Aid Access Code will receive a grade of F regardless of course performance. A regular ALEKS Student Access Code must be purchased in order for students to receive a grade based on course performance.
TECHNICAL SUPPORT
It is the responsibility of the student to contact ALEKS Technical Support to resolve any technical issues. Visit http://www.aleks.com/support for assistance.

CVC STUDENT LEARNING OUTCOMES
1. Classify and manipulate functions and their graphs. (THECB #s 1 & 3)
2. Find the factors and zeroes of polynomials with real coefficients. (THECB #s 2 & 4)
3. Solve exponential and logarithmic equations including applications to growth and decay. (THECB #2)
4. Use matrices to solve systems of equations and application problems. (THECB #5)

TEXAS HIGHER EDUCATION COORDINATING BOARD (THECB) LEARNING OUTCOMES
Upon successful completion of this course, students will:
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.

TEXAS CORE OBJECTIVES FOR STUDENT LEARNING
The College defines essential knowledge and skills that students need to develop during their college experience. These general education competencies parallel the Texas Core Objectives for Student Learning. In this course, the following skills are in focus.

1. Critical Thinking Skills - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.
2. Communication Skills - to include effective development, interpretation and expression of ideas through written, oral and visual communication.
3. Empirical and Quantitative Skills - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

MATH 1314 develops Critical Thinking, Communication, and Empirical and Quantitative Skills by requiring students to solve and analyze applications of various functions and systems of equations.

INSTITUTIONAL POLICIES
Institutional policies relating to this course can be accessed from the following link: www.cedarvalleycollege.edu/syllabipolicies