MATH 2412 – PreCalculus 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.

COURSE DESCRIPTION
This course consists of the study of algebraic and trigonometric topics including polynomial, rational, exponential, logarithmic and trigonometric functions and their graphs. Conic sections, polar coordinates, and other topics of analytic geometry will be included.

COURSE PREREQUISITES
MATH 1316

REQUIRED / RECOMMENDED MATERIALS

ALEKS Access Code. The web address for ALEKS is 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 2412. You will have free access to a graphing calculator in ALEKS on selected questions.

ISBN / TEXTBOOK
Precalculus 1st ed, by Miller/Gerken
McGraw Hill
Optional Textbook
ISBN: 9780078035609
Required ALEKS 360 access code.
ISBN: 9781259723322
* 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 Access Code you will need to purchase a new ALEKS Access Code in order to retake the course.
COURSE OUTLINE
The course consists of 380 topics – 59 Prerequisite topics and 321 goal topics split into 6 objectives:
Objective 1 – Polynomial and Rational Functions (60 topics)
Objective 2 – Exponential and Logarithmic Functions (57 topics)
Objective 3 – Trigonometric Functions (56 topics)
Objective 4 – More Trigonometric Functions and Applications (51 topics)
Objective 5 – Polar Coordinates and Vectors (47 topics)
Objective 6 – Getting Ready for Calculus (52 topics)

EVALUATION PROCEDURES
Assessment of your performance will be based upon mastery of objective topics in ALEKS by their due date, performance on Objective Quizzes, a Midterm Exam, and a Final Exam. Please see your instructor’s Syllabus Addendum for due dates and further grading information.

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<tr>
<th>(Objectives 1 – 3)</th>
<th>Mastery of topics in each Objective by their due date</th>
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<tbody>
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<td>Please see your instructor’s Syllabus Addendum for Objective due dates. On the due date, students will be given a grade based on the number of topics mastered in the current Objective.</td>
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<thead>
<tr>
<th>Midterm Exam (Objectives 1 – 3)</th>
<th>Mastery of topics in each Objective by their due date</th>
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<td>Please see your Instructor’s Syllabus Addendum for the availability and due date of the Midterm Exam. Failure to take the Midterm Exam by the due date will result in a score of 0. The Midterm Exam covers material from Objectives 1, 2, and 3. Failure to master all material in Objectives 1-3 by their respective due dates may result in poor performance on the Midterm Exam. Please visit eCampus for a list of topics covered on the Midterm Exam.</td>
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<tr>
<th>Objectives 4 – 6)</th>
<th>Mastery of topics in each Objective by their due date</th>
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<td>Please see your instructor’s Syllabus Addendum for Objective due dates. On the due date, students will be given a grade based on the number of topics mastered in the current Objective.</td>
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<th>Final Exam (Objectives 4 – 6)</th>
<th>Mastery of topics in each Objective by their due date</th>
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<td>Please see your Instructor’s Syllabus Addendum for the availability and due date of the Final Exam. Failure to take the Final Exam by the due date will result in a score of 0. The Final Exam covers material from the Objectives 4, 5, and 6. Failure to master all material in Objectives 4-6 by their respective due dates may result in poor performance on the Final Exam. Please visit eCampus for a list of topics covered on the Final Exam.</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:

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<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>90 – 100%</td>
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<tr>
<td>B</td>
<td>80 – 89%</td>
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<tr>
<td>C</td>
<td>70 – 79%</td>
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<tr>
<td>D</td>
<td>60 – 69%</td>
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<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.
CVC STUDENT LEARNING OUTCOMES
1. Use algebraic and trigonometric techniques necessary for calculus. (THECB #s 1-6)
2. Use vectors to solve problems, both in 2 dimensions and in 3 dimensions.
3. Find partial fraction decomposition and solve nonlinear systems.
4. Perform operations on complex numbers in rectangular and polar form.
5. Solve problems involving arithmetic or geometric sequences and series.

TEXAS HIGHER EDUCATION COORDINATING BOARD (THECB) LEARNING OUTCOMES
1. Demonstrate and apply knowledge of properties of functions.
2. Recognize and apply algebraic and transcendental functions and solve related equations.
3. Apply graphing techniques to algebraic and transcendental functions.
4. Compute the values of trigonometric functions for key angles in all quadrants of the unit circle measured in degrees and radians.
5. Prove trigonometric identities.
6. Solve right and oblique triangles.

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 2412 develops Critical Thinking, Communication, and Empirical and Quantitative Skills by requiring students to solve and analyze applications of trig functions and their graphs.

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