MATH 1 3 1 4 INET 16-Week Syllabus
Cedar Valley College

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Instructor Information
Instructor Information will be available on the first day of class.
Name: TBA
DCCCD Email: TBA
Office Phone: TBA
Office Location: TBA
Office Hours: TBA
Division Office and Phone: STEM Division, M217, 972-860-5211

Course Information
Course Title: College Algebra
Course Number: MATH 1314
Section Number: TBA
Semester/Year: Spring 2020
Credit Hours: 3
Class Meeting Time/Location: This course can be completed entirely online; no campus visits are required.
Certification Date: February 3, 2020
Last Day to Withdraw: April 16, 2020

Course Prerequisites
College level ready in Mathematics algebra-based level.
Course Description
This course is an in-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. This course is cross-listed as MATH 1 4 1 4. The student may register for either MATH 1 3 1 4 or MATH 1 4 1 4 but may receive credit for only one of the two.

Required Course Materials

ALEKS 3 60 Access Code
All work for the course is completed in ALEKS. The ALEKS 3 60 Access Code will provide access to ALEKS, which includes an electronic copy of the text, video instruction, and many other helpful features.
ISBN: 9781259739323

Temporary Access to ALEKS
ALEKS provides students temporary access to ALEKS for a two-week period. Once the temporary access 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. The availability of temporary access 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 temporary access will receive a grade of F regardless of course performance. An ALEKS 3 60 Access Code must be purchased in order for students to receive a grade based on course performance.

Note: A student of this institution is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Technology Requirements
Students must have an active e-mail account and regular access to a computer, other than a Chromebook, with a reliable internet connection and an integrated or USB connected Webcam. Students with a Chromebook will need to make arrangements to take Comprehensive Knowledge Checks on campus in the Math Resource Center or Collaborative Learning Center during their hours of operation, or use another computer with a reliable internet connection and a webcam.
Optional Course Materials

Calculator

Graphing calculators (TI-83/84) are recommended in MATH 13 14. You will have free access to a graphing calculator in ALEKS on selected questions.

Textbook

An eText is included with the ALEKS 3 60 Access Code. Students also have the option of purchasing a loose leaf copy of the text through the Menu in ALEKS. Students wishing to purchase a hard copy of the text should refer to the following information:

Author: Miller/Gerken
Title: College Algebra
Edition: 2nd Ed.
Publication Year: 2016
Publisher: McGraw-Hill
ISBN: 9780078035623

Course Outline

The course begins with an Initial Knowledge Check (IKC). ALEKS uses this information to award you credit for topics you already know, and determine what you are most “Ready-to-Learn.”

Once you have completed your Initial Knowledge Check, ALEKS will present your ALEKS Pie. The number in the center of your Pie represents the number of course topics for which you earned credit on the IKC.

The course consists of 260 Topics:

- Algebra and Geometry Review (17 topics)
- Equations and Inequalities (32 topics)
- Graphs and Functions (90 topics)
- Polynomial and Rational Functions (51 topics)
- Exponential and Logarithmic Functions (44 topics)
- Systems of Equations and Matrices (26)

Each week you will learn new topics to add to your Pie. There are five Pie Progress Goals in the course that will help you stay on track.

As you progress through the course, you will encounter a Progress Knowledge Check each time you have worked in ALEKS for 5 hours and learned 20 topics. Progress
Knowledge Checks are used to confirm understanding of recently learned material. Progress Knowledge Checks are not graded, however, your performance can impact the number of topics in your Pie.

**Graded Work**

The tables below provide a summary of the graded work in this course and an explanation of how your final course grade will be calculated. The student enrolled in the course must be the person completing course work.

Students should expect to spend a minimum of 6 hours each week working in the course.

**Summary of Graded Work**

<table>
<thead>
<tr>
<th>Course Requirement</th>
<th>Percentage of Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly Topics</td>
<td>10%</td>
</tr>
<tr>
<td>Progress Goals</td>
<td>45%</td>
</tr>
<tr>
<td>Comprehensive Knowledge Checks</td>
<td>45%</td>
</tr>
</tbody>
</table>

**TOTAL: 100%**
Throughout the course, your current grade can be found in your ALEKS Gradebook. The overall average represents your current average, however, any items completed prior to their due date will not be included in your current average until the due date occurs.

**Final Grade**

<table>
<thead>
<tr>
<th>Percentages</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100%</td>
<td>A</td>
</tr>
<tr>
<td>80-89.9%</td>
<td>B</td>
</tr>
<tr>
<td>70-79.9%</td>
<td>C</td>
</tr>
<tr>
<td>60-69.9%</td>
<td>D</td>
</tr>
<tr>
<td>0-59.9%</td>
<td>F</td>
</tr>
</tbody>
</table>

**Description of Graded Work**
**Weekly Topics**

Students are required to learn a minimum of 10 new topics each week. Each week begins at 12am on Monday and ends at 11:59pm the following Sunday. On Sunday night at 11:59pm, you will receive a grade based on the number of new topics learned that week out of 10. For example, if you learned 7 new topics in Week 2, your grade for that week would be $\frac{7}{10}=70\%$.

It is important to note that learning 10 new topics each week is a minimum pace and in most cases will not be sufficient for successful completion of the course.

**Pie Progress Goals**

Every three weeks there is a Pie Progress Goal in the course, at which time you are expected to have a specific number of topics in your Pie. Your grade for each Pie Progress Goal is based on the number of topics in your Pie out of the number of topics due. For example, the first Pie Progress Goal is to have a total of 91 topics. If you had 70 topics in your Pie at the due date, your grade for the first Pie Progress Goal would be $\frac{70}{91}=77\%$. Students who exceed the number of topics due for a Pie Progress Goal will earn a 100%. Please see the [Course Calendar](#) for more information.

**Comprehensive Knowledge Checks**

A Comprehensive Knowledge Check (CKC) is designed to assess your retention of topics learned in the course. This assessment will begin with your most recently learned topics, then branch out to determine the number of topics you have mastered in the entire course. You will be asked no more than 30 questions and you may use your notes. There is no time limit on a CKC, but CKCs must be completed by their due date.

Comprehensive Knowledge Checks are taken in ALEKS. Students must download the ALEKS Lockdown Browser and have a government or school-issued photo ID and a webcam. Students without a clear photo ID or not visible in the webcam during the entirety of the assessment will receive a score of zero. Extensions will not be granted for technical difficulties.

Comprehensive Knowledge Checks may be taken on campus in the [Math Resource Center](#) or [Collaborative Learning Center](#) during their hours of operation if you do not have access to a computer with the necessary [Technology Requirements](#).

All Comprehensive Knowledge Checks should be completed without outside assistance – this includes apps, websites, or other people. Students committing/guilty of academic dishonesty – having others complete course work or using apps, online sites, or help from others – will receive a failing grade in the course.

The instructor reserves the right to require on-site testing at any time during the course.

**ALEKS Lockdown Browser Information**

Please download the [ALEKS Lockdown Browser](#) (LDB) prior to beginning a CKC.
After downloading the LDB, please check the LDB and your webcam. For technical issues, consult these Troubleshooting Tips or contact ALEKS Customer Support.

**CKC Grading Information**

<table>
<thead>
<tr>
<th>CKC</th>
<th>Grading Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>CKC1</td>
<td>Students showing mastery of 91 topics or more on CKC1 will receive a grade of 100 for CKC1. The grade for all others will be the number of topics mastered on CKC1 out of 91.</td>
</tr>
<tr>
<td>CKC2</td>
<td>Students showing mastery of 143 topics or more on CKC2 will receive a grade of 100 for CKC2. The grade for all others will be the number of topics mastered on CKC2 out of 143.</td>
</tr>
<tr>
<td>CKC3</td>
<td>Students showing mastery of 195 topics or more on CKC3 will receive a grade of 100 for CKC3. The grade for all others will be the number of topics mastered on CKC3 out of 195.</td>
</tr>
<tr>
<td>CKC4</td>
<td>Students showing mastery of 260 topics on CKC4 will receive a grade of 100 for CKC4. The grade for all others will be the number of topics mastered on CKC4 out of 260.</td>
</tr>
</tbody>
</table>

**Course Calendar**

All students are expected to adhere to course deadlines and due dates; extensions will not be granted.

<table>
<thead>
<tr>
<th>Graded Work</th>
<th>Description of Graded Work</th>
<th>Due Date</th>
<th>Final Grade Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly Topics</td>
<td>10 Topics each week, Week 1 – Week 15</td>
<td>Sundays at 11:59pm</td>
<td>10%</td>
</tr>
<tr>
<td>Pie Progress Goal 1</td>
<td>91 Topics</td>
<td>Sun., Feb. 9</td>
<td>5%</td>
</tr>
<tr>
<td>CKC1</td>
<td>91 Topics = 100%, open Sat., Feb. 8</td>
<td>Tues., Feb. 11</td>
<td>5%</td>
</tr>
<tr>
<td>Pie Progress Goal 2</td>
<td>130 Topics</td>
<td>Sun., March 1</td>
<td>5%</td>
</tr>
<tr>
<td>CKC2</td>
<td>143 Topics = 100%, open Sat., March 7</td>
<td>Tues., March 10</td>
<td>10%</td>
</tr>
<tr>
<td>Pie Progress Goal 3</td>
<td>169 Topics</td>
<td>Sun., March 29</td>
<td>10%</td>
</tr>
<tr>
<td>CKC3</td>
<td>195 Topics = 100%, open Sat., April 11</td>
<td>Tues., April 14</td>
<td>10%</td>
</tr>
<tr>
<td>Pie Progress Goal 4</td>
<td>208 Topics</td>
<td>Sun., April 19</td>
<td>10%</td>
</tr>
<tr>
<td>Pie Progress Goal 5</td>
<td>260 Topics</td>
<td>Sun., May 10</td>
<td>15%</td>
</tr>
<tr>
<td>CKC4</td>
<td>260 Topics = 100%, open Mon., May 11</td>
<td>Thurs., May 15</td>
<td>20%</td>
</tr>
</tbody>
</table>
Attendance and Your Final Grade
This course can be completed entirely online; no campus visits are required.

Late Work Policy
All students are expected to adhere to course deadlines and due dates; late work is not accepted.

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.

To be certified as attending on campus mathematics courses, students must attend class AND do one of the following prior to the Certification Date: a) complete the Initial Knowledge Check in ALEKS; or b) complete the Instructor Assigned Knowledge Check upon transferring previous work. Students should contact the instructor with any questions regarding what constitutes the Initial Knowledge Check or Instructor Assigned Knowledge Check.

Failure to show proof of attendance in the course prior to the Certification Date can affect Financial Aid.

Withdrawal Policy
Please consult your instructor before withdrawing from this course, visit the Dropping or Withdrawing From Classes webpage.

Instructor Policies
If a student experiences a situation during the course which prevents the student from working or negatively affects the student's performance, it is the responsibility of the student to contact the instructor immediately for guidance. Notifying the instructor of such a situation at the end of the semester is not sufficient and will not result in an extension.
Institutional Policies
Institutional Policies relating to this course can be accessed using the link below. These policies include information about tutoring, Disabilities Services, class drop and repeat options, Title IX, and more.

Cedar Valley Institutional Policies

Student Learning Outcomes
Texas Higher Education Coordinating Board (THECB) Student 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.

Cedar Valley 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 Core Objectives

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 activities you engage in will give you the opportunity to practice two or more of the following core competencies:

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
4. **Teamwork** - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
5. **Personal Responsibility** - to include the ability to connect choices, actions, and consequences to ethical decision-making
6. **Social Responsibility** - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities

MATH 13 14 develops Critical Thinking, Communication, and Empirical and Quantitative Skills by requiring students to solve and analyze applications of various functions and systems of equations.