MATH 010: ARITHMETIC AND ALGEBRA REVIEW
Summer 2008
Monday-Thursday, 9:40-10:30 am, beginning July 14 and ending August 7

Instructor: Carol Avery
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ALEKS log-in website: www.aleks.com

COURSE DESCRIPTION: Math 010 provides an individualized review of arithmetic and algebra topics based on the assessed needs of the student. Sessions will be led by an instructor with interactive computer software used as the primary mode of presentation. May be taken more than once, and is graded “S/U” only.

COURSE OVERVIEW: Math 010 is an intensive review course, covering material from Math 75 – Review Arithmetic; Math 85 – Introduction to Algebra; Math 90 – Beginning Algebra; and Math 99 - Intermediate Algebra. Enrollment is through referrals from the Assessment Office in Bldg. 7; from TCC math instructors; or by successful student petition. The course is designed for students who have been successful in past math classes and who merely need to brush up their skills. Students will take a diagnostic test using the web-based ALEKS computer program, which will identify those lessons that the student needs to review and provide instruction in each area.

LEARNING OBJECTIVES. The abbreviation following each objective refers to the College-Wide Learning Outcomes: COM=Communication; CRT=Critical Thinking; IIT=Information and Information Technology; RSP=Responsibility; LWC= Living and Working Cooperatively

In this course, students will:
1. improve skills on various topics from arithmetic and introductory algebra (CRT)
2. learn to proceed through an algorithm to solve a given problem (CRT)
3. use a scientific calculator or the computer to evaluate mathematical expressions (ITT)

REQUIRED MATERIALS: Students must purchase access rights to ALEKS web-based software program. They may do so at the Bookstore for a cost of about $28.00 for 6 weeks, or online directly from the ALEKS site (www.mhhe.com/aleks) for about $21 for 6 weeks. See the last page of this syllabus for specifics about purchasing access to the software. No text book is required for this course.

Students should have a notebook and plenty of pencils for taking notes as they work through the material. Supplemental materials may be given by the instructor, and so a folder would also be useful.

The ALEKS software provides a calculator for problems for which a calculator is an appropriate tool, and does NOT provide a calculator for other problems for which a calculator is NOT appropriate. Because of this, students will not be allowed to use any calculator other than that provided by the software.

COURSE REQUIREMENTS: Grades will be based upon 1) completion of review topics identified in the original assessment (this will be known as “completing your pie”) and 2) passing a computerized final exam within ALEKS. See below for specifics for each requirement.
1. **Completion of Review topics:**

**Math 010 is an intensive review course.** Students will need to spend time OUTSIDE of class to complete their coursework. Plan to spend at least 1-2 hours OUTSIDE OF CLASS per day working on lessons identified in your ALEKS assessment. As you work through ALEKS, this is what you can anticipate:

1) **INITIAL ASSESSMENT:** This will identify topics that you need to cover in your individualized study plan. You will be given a pie chart that shows the general areas of study and the number of topics in each area you still need to master, as well as the areas ALEKS determines you have already mastered. The initial assessment will consist of approximately 20 to 30 questions.

2) **LEARNING MODE:** In the learning mode, you will choose the areas you wish to study. ALEKS will not let you study material for which you have not yet covered the foundational material. You will usually have a certain level of choice as to which topics you wish to cover at any given time.

3) **PROGRESS ASSESSMENT:** After you have been working on ALEKS for about 10 hours, or have mastered about 10 new topics, you will be given a progress assessment, similar to your initial assessment. With the progress assessment, ALEKS will once again ask you about a variety of topics, some of which you may already have covered, and others that you have not reached yet. THE PROGRESS ASSESSMENT MAY PUT ITEMS BACK INTO YOUR PIE THAT YOU HAVE ALREADY COVERED; MAY PUT NEW ITEMS INTO YOUR PIE; OR MAY FILL IN AREAS THAT HAD PREVIOUSLY NOT BEEN FILLED IN. Always do your best on your progress assessment, since your results will impact the material you will still need to cover. Again, there will be about 20 to 30 questions.

4) **GOAL COMPLETION ASSESSMENT:** Once you have completed your pie chart in the learning mode, you will be given a goal completion assessment. This is very similar to a progress assessment, and may well put topics back into your pie that ALEKS determines you still need to review in order to master the topics. **If you score 100% on a progress assessment, you will not have to do the goal completion assessment.**

You may supplement your work through lessons within PLATO (another web-based program: access is free to all TCC students). Additional materials such as textbooks and review sheets are also available from your instructor. Your instructor is always available during class time and during office hours to answer your questions as well.

2. **Final Exam.**

In order to take the final exam, you must have done two things:

1) Complete your pie in learning mode, based on PROGRESS assessment information.

2) Take the GOAL COMPLETION Assessment, and then complete the pie again (unless you score 100% on your first Goal Completion Assessment).

After completing the above two requirements, students will take a computerized final exam in ALEKS at a time and place specified by the instructor. Students must pass the Final with a minimum grade of 70%. One retake of the final is allowed. The final will have 20 questions. The Final Exam must be completed in the classroom, or arrangements must be made for it to be taken in the MARC during the testing hours. No book/notes may be used for the final, and only the ALEKS-provided calculator may be used. Your instructor will provide a list of topics that will be covered on the final.
GRADING:

Students who complete the review topics identified by ALEKS and who pass the final exam with a grade of 70% or better will receive a grade of “S” and will fulfill the math prerequisite for the following course in the TCC math sequence. Students who do not complete their review topics or who do not receive a passing grade of 70% or better on the final exam after two attempts will receive a grade of “U” in the course. Students who spend a minimum of 40 hours during the 4 weeks of Math 10 working on ALEKS but who do not complete their pie or do not pass the final with a 70% or better will receive a WI grade. The WI grade will not impact their GPA, and it will not qualify the student to go on to the next course in the TCC math sequence.

CLASSROOM AND ATTENDANCE POLICIES:

- The class will last the full 50 minutes, from 10:30 until 11:20 a.m. Students are expected to attend class at least 3 times a week. In addition, students must spend 1-2 hours a day outside of class time working on ALEKS. Because this is such a short course (only 4 weeks), regular absences and failure to work on material outside of class time create serious obstacles for completion of the course. Because of the flexibility with Math 10 pacing, students may complete the course early.
- Less regular attendance is an option for students who are making steady progress through their “pie” and are completing sufficient hours on ALEKS on their own. You must talk with the instructor about this option if you plan to use it.
- Since the course takes place in a computer lab, food is not allowed. Beverages in tightly covered containers will be allowed if care is taken to prevent spills.
- No children will be allowed in class for any reason. Please make necessary childcare arrangements before class begins.
- All cell phones and pagers are to be turned off during class time.

STUDENT ACCESS: All students are responsible for all requirements of the class, but the way they meet these requirements may vary. If you need specific auxiliary aids or services due to a disability, please contact the Access Services Office in Building 7 (253-566-5328). They will require you to present formal, written documentation of your disability from an appropriate professional. When this step has been completed, arrangements will be made for you to receive reasonable auxiliary aids or services. Documentation should occur within the first 3 days of class. Requests for accommodations without necessary documentation will generally be denied.

The information in this syllabus is subject to change. Any changes may be made via class announcements.
Accessing ALEKS for
Math 010 – Arithmetic and Algebra Review

Math 010 is a computer-mediated course that uses a web-based program called ALEKS. All Math 010 students must purchase a Student Access Code BEFORE the first day of class, and ON the first day of class they will register with ALEKS.

STEP 1: Before class Purchase a Student Access Code.

Option 1:
Purchase an ALEKS User Guide at the TCC Bookstore.
Cost: Approximately $30.00 (price subject to change)
At the back of the User Guide you will find an individual Student Access Code, good for 6 weeks after registering with ALEKS (see below).

Option 2:
Purchase access directly from ALEKS using a credit or debit card.
Cost: Approximately $21.25 for 6 weeks (price subject to change)
  • Log onto <http://www.mhhe.com/aleks>.
  • In the box labeled “ALEKS for Science, Engineering and Math,” next to Students, choose “Click Here to Purchase Access.”
  • Under Mathematics select ALEKS Math (6 weeks) $21.25. (You may purchase more time if you so choose.)
  • Continue to provide information as prompted. When you are asked to select a school, choose “Tacoma Community College-6501 S. 19th Street.”
  • When finished, you will be given a Student Access Code. Write it down and keep it in a safe place. Be sure to have it with you on the first day of class.
  • Notice that there is a “User Guide” pdf file that can be downloaded from the website. You are encouraged to print this guide and keep it handy as you become familiar with ALEKS.

STEP 2: On the first day of class Register with ALEKS.

On the first day of class you will register with ALEKS by logging onto <http://www.aleks.com>. (Note: this is a different site than the purchase site listed above.) Click on the “Sign Up Now” link at the top left corner of the page and supply your Student Access Code and other information when prompted. You will also have to enter a Course Code that your instructor will give you on the first day of class.