DEVELOPMENTAL MATHEMATICS Math 0300.540/541
Department of Mathematics and Statistics
FALL 2017

A. COURSE INFORMATION

Course number/section: Math0300.540/541
Class meeting time: MWF 12:00 – 12:50 pm
Class location: CI 223
Course Website: www.aleks.com

B. INSTRUCTOR INFORMATION

Instructor: Haekyoung Choi
Office location: CI 351
Office hours: T&R 3:00 – 5:00 pm / W 1:30 – 2:30 pm
e-mail: haekyoung.choi@tamucc.edu
Appointments: Email for setting up an appointment

C. COURSE DESCRIPTION

Catalog Course Description
The course is designed for students needing an extensive review of mathematics to prepare
them for state & campus standards and/or higher mathematics courses. The course covers
number concepts, computation, various algebra topics, geometry, and mathematical
reasoning. This course does not count towards credit for graduation

D. PREREQUISITES AND COREQUISITES

Prerequisites
There is no prerequisite for this course. Registration for this course will be by placement

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Required Textbook(s)/Materials
• (RETURNING STUDENTS CAN CONTINUE TO USE ALEKS ACCESS AND MATERIALS
  FROM LAST TERM)
  The code is available in the bookstore and may be purchased online while in class.
  The technical support line is 1-714-619-7090.
• You must keep a binder to organize notes. You may provide your own or purchase the
  binder available in the bookstore. You will also need pencils with erasers and loose-
  leaf notebook paper.

Optional
• ALEKS Binder (may be purchased at the bookstore). You will also need pencils with
  erasers and loose-leaf notebook paper.
• *Prealgebra & Introductory Algebra*, by Julie Miller, Molly O’Neill, & Nancy Hyde
  (this can be purchased at a significant discount online once registered in the ALEKS course)

**F. STUDENT LEARNING OUTCOMES AND ASSESSMENT**

Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the course’s student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

After completion of this course, a student should be able to:

1. Perform basic operations with numbers and expressions and understand the properties related to real numbers.
2. Round whole numbers and decimal numbers to a given place-value and convert between decimal numbers, fractions and percent.
3. Evaluate formulas containing numbers and variables using order of operation.
4. Use function notation and identify domain and range given a relation or function.
5. Simplify algebraic expressions containing monomial, binomial, or polynomial expressions, rational and radical expressions and complex fractions.
6. Use properties of exponents to interpret and simplify integral and rational exponents.
7. Convert between scientific and standard notation and use scientific notation in solving word problems.
8. Factor numbers and algebraic expressions (radicals, monomials, binomials and polynomials) includes finding a GCF or LCM.
9. Perform basic operations (add, subtract, multiply and divide) with monomials, binomials, polynomials, and rational & radical expressions including rationalizing denominators.
10. Solve equations and inequalities of various types (linear, absolute value, rational, radical, and quadratic as well as linear systems) and report in various ways including graphs, sets, or interval notation.
11. Translate word problems and write models in the form of equations or inequalities.
12. Solve word problems (percent, consecutive number, work, age, uniform motion, mixture, geometric, and financial) using a variety of techniques.
13. Determine the measure of angles or sides for plane figures and relate parallel line properties and characteristics of plane figures to similar and congruent figures.
14. Convert metric and customary measurement (length, mass and capacity).
15. Read charts and graphs and use the information to solve problems.
16. Name and graph points in a plane or number line and name x- & y-intercepts for linear or nonlinear graphs or equations (including the vertex of a parabola).
17. Recognize, write equations and inequalities for vertical, horizontal and sloped lines and graph.
18. Find the slope of a line given two points, a graph or an equation for the line.
19. Write equations and inequalities given a graph, two points or the slope and a point using point-slope, slope-intercept or standard form.
20. Compare slopes and write equations with parallel or perpendicular lines given an equation and a point or a slope and a point.

G. INSTRUCTIONAL METHODS AND ACTIVITIES

1. This course is an individually-paced developmental math course designed to use computer assisted instruction through the ALEKS interactive software program in conjunction with Miller, O’Neill, & Hyde’s Prealgebra & Introductory Algebra textbook integration to remediate math deficiencies for students who lack college readiness skills.
2. Students will work to complete 10 objectives, each consisting of between 16 and 55 topics for a total of 309 topics. Students new to the course will begin the semester by taking an initial assessment. Returning students will pick up where they left off at the end of the previous semester. Based upon the number of Mastered or Needs to be Mastered topics, students will progress through the topics, completing each topic as it becomes available to work on. Your Aleks work is 25% of your total grade.
3. Students are encouraged to watch any assigned media and work with the tutors and instructor during and outside of class to remediate problem areas. Students will use their ALEKS Binders to document their worked problems and for objective organization. The organized binder will count 10% of your grade.
4. Participation in class is expected. You are to work on the assigned Aleks topics, complete daily quizzes, actively ask participate in small group lectures and work individually with tutors. Participation is 15% of your grade in this class. Your participation will be recorded for each class meeting.
5. Methods and activities for instruction include some one-to-one individual or small group instruction and student individually-paced completion of each course Objective. The Initial Assessment, a Midterm, and a Final Exam will all be completed in the classroom as proctored exams. Periodically throughout the course, additional Knowledge Checks will be assigned and must also be completed without assistance. The final exam is 50% of your total grade.

H. MAJOR COURSE REQUIREMENTS AND GRADING

Students will be assessed by performance on the mastery of course topics and the corresponding Assessments in ALEKS.
<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>% of FINAL GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALEKS</td>
<td>25%</td>
</tr>
<tr>
<td>Aleks Binders</td>
<td>10%</td>
</tr>
<tr>
<td>Participation</td>
<td>15%</td>
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<tr>
<td>Final Exam</td>
<td>50%</td>
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Students not attending will receive a grade of DNA. Students who stop attending without completing all 10 objectives and the Exit Assessment will receive a grade of DSA. These grades will be converted to DF.

Students who work through the semester but do not complete the 10th Objective AND pass the Exit Assessment with a score of 70% will be assigned a grade of DIP.

Grading scale (Applies only to students who complete the 10th Objective and score 70% or greater on the Exit Assessment): DA = 90% or more; DB = 80% - 89%; DC = 70% - 79%.

(The D in front of the grade stands for Developmental A, B or C.)

I. COURSE CONTENT/SCHEDULE

<table>
<thead>
<tr>
<th>DATE (BY DAY OR WEEK)</th>
<th>TOPIC</th>
<th>TOPICS</th>
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</thead>
<tbody>
<tr>
<td>Weeks 1-3</td>
<td>Syllabus, Initial Assessment, &amp; Complete 6% Objective Mastery</td>
<td>Topic 1 - 2</td>
</tr>
<tr>
<td>Weeks 4</td>
<td>Complete 20% Objective Mastery</td>
<td>Topic 3</td>
</tr>
<tr>
<td>Weeks 5-7</td>
<td>Complete 34% Objective Mastery</td>
<td>Topic 4 - 5</td>
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<tr>
<td>Weeks 7-8</td>
<td>Complete 48% Objective Mastery &amp; Midterm Assessment</td>
<td>Topic 6</td>
</tr>
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<td>Weeks 8-9</td>
<td>Complete 62% Objective Mastery</td>
<td>Topic 7</td>
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<td>Weeks 10-13</td>
<td>Complete 76%+ Objective Mastery</td>
<td>Topic 8 - 9</td>
</tr>
<tr>
<td>Weeks 13-14</td>
<td>Complete 90+ Objective Mastery &amp; Final Assessment</td>
<td>Topic 10</td>
</tr>
<tr>
<td>Per University Final Exam</td>
<td>Last Day to Take Final Assessment for this course</td>
<td>TBA</td>
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Spring 2017 Important Deadlines/Holidays:

<table>
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<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>September 5</td>
<td>First day of classes</td>
</tr>
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<td>September 12</td>
<td>Last day to late register or add a class</td>
</tr>
<tr>
<td>November 22</td>
<td>Reading Day – No class</td>
</tr>
<tr>
<td>November 23-24</td>
<td>Thanksgiving - No class</td>
</tr>
<tr>
<td>November 27</td>
<td>Last day to drop a class</td>
</tr>
<tr>
<td>December 6</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>December 7</td>
<td>Reading Day – No class</td>
</tr>
<tr>
<td>December 8-14</td>
<td>Final Exams</td>
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**Students taking Math 0300, in most cases, WILL NOT be permitted to drop this course. Consult your advisor, the financial aid office and the TSI office in CASA if you believe it is necessary to drop this class.**

*Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.*

**J. COURSE POLICIES**

**Attendance/Tardiness**
1. I expect each student to attend all classes. Attendance is mandatory. Please save absences for emergencies and illness.
2. If you are more than 5 minutes tardy or if you leave more than 5 minutes before the end of class you are considered absent.
3. All absences are considered unexcused unless a written excuse or documentation is made available to me in a timely manner and accepted.
4. If you must leave early inform me prior to the beginning of class or if you must be absent please email me through my university email stated at the top of this syllabus.

**Extra Credit**
There is no extra credit in this course.

**Cell Phone Use**
Cell phones are prohibited in class. They should be stored in backpacks or purses during class and not in pockets.

**Laptop Use**
You will not need your laptop during class; the class is held in a computer lab.
Food in Class
Do not bring food or drinks into this class; it is a computer lab.

Participation
1. Participation is required in completing course Objectives. This includes notes taken from power points or videos and other work online. Student will keep a progress grid & spend 9 or more hours per week outside of class, including class time.
2. Students found to be working on material other than mathematics during class will be given a zero for that day’s participation. This will include those using class time for personal business like emails or texting. Cell phones will be turned off and put away during class. Use of your phone will result in a 0 for the day’s participation.
3. Staying on task & completing an appropriate amount of work will be noted each day by the instructor and/or tutors.

Expectations
• Students are expected to attend each class meeting.
• New students are expected to purchase the ALEKS 360 Access Card (student access code) before the temporary access expires.
• Students are expected to report difficulties purchasing or accessing ALEKS promptly.
• Students are expected to work on course Objectives outside of class.
• Students are expected to keep all worked problems in the ALEKS Binder or notebook in an organized format.
• Students will complete the Initial Assessment and Knowledge Checks without notes, instructional materials, or assistance from instructor or tutors. The Midterm and Final Exam will be completed in class without instructional materials or assistance from the instructor or MPLA’s.
• Students may receive help with the course Objective problems (not Assessment problems) from both the instructor and MPLA’s.

Responsibility
1. You are responsible for obtaining the required supplies and bringing them to class. This will include the ALEKS 360 Access Card (student access code) and ALEKS Binder required to begin work. The ALEKS 360 Access Card (student access code) will be active for 52 weeks; students should expect to work on course Objectives at a pace to complete this course in a minimum of one semester or in a maximum of two semesters to avoid having to purchase an additional student access code.
2. You are responsible for organizing your time so that you can study at least 1 hour each day outside of class and completing an appropriate amount of work during class. The total number of hours should be at least 9 hours/week. Some students will require more to finish the material.
3. You are responsible for any homework assigned, completing assessments, watching and taking notes from videos and power points and working on course Objectives. These can all be done outside of class as your schedule allows.
4. You are responsible for your own learning, therefore, you should come prepared with questions you need answered. Keep up with what you need to do and set appropriate goals for yourself. Our goal is for you to be an independent learner by the end of the semester and have completed the course requirements.

K. COLLEGE AND UNIVERSITY POLICIES

- **Academic Integrity (University)**
  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, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a failing grade.

- **Classroom/Professional Behavior**
  Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

- **Statement of Civility**
  Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

- **Deadline for Dropping a Course with a Grade of W (University)**
  I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. *Please consult with your academic advisor, the Financial Aid Office, and me, before you decide to drop this course.* Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Please consult the Academic
Calendar (http://www.tamucc.edu/academics/calendar/) for the last day to drop a course.

- **Grade Appeals (College of Science and Engineering)**
  As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, 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 Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at http://www.tamucc.edu/provost/university_rules/index.html, and the College of Science and Engineering Grade Appeals webpage at http://sci.tamucc.edu/students/GradeAppeal.html. For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

- **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 for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call (361) 825-5816 or visit Disability Services in Corpus Christi Hall 116.

  If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

  http://disabilityservices.tamucc.edu/

- **Statement of Academic Continuity**
  In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.
L. OTHER INFORMATION

- **Academic Advising**
  The College of Science & Engineering requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. Meetings are by appointment only; advisors do not take walk-ins. Please call or stop by the Advising Center to check availability and schedule an appointment. The College’s Academic Advising Center is located in Center for Instruction 350 or can be reached at (361) 825-3928.

- **CASA**
  The Center for Academic Student Achievement is your best free resource on campus. It provides free academic support through tutoring, counseling, and helps you navigated through higher education. The CASA website is:
  http://casa.tamucc.edu/

**GENERAL DISCLAIMER**

*I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.*