

Math 001: Introductory Algebra

Fall 2008, MRC 316, MWRF 9:00-9:50 a.m., 4 Credits

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Office Hours: MWF 10-11, MWR 1-2

Final Exam: Tuesday, 9 Dec 2008, 3:00-5:00 p.m.

Course Description: Real number system, order of operations. Algebraic problem solving, solving linear equations. Cartesian coordinate system, graphs of equations. Exponents and radicals. Factoring polynomials, solving equations by factoring. Credits not applicable toward graduation. A grade of C or higher is required to take Math 110, 130, or 155. (Note: as a “not-for-graduation” course, this course does not fulfill part of your general education requirement.)

Text: We will not be using a printed textbook for this course; instead we will be using a web-based learning package called “ALEKS”, but the program will be integrated with the text *Introductory Algebra: A Real World Approach, 3rd Edition*, by Ignacio Bello. Published by McGraw-Hill, 2008.

Course Goals:

1. Students will demonstrate their readiness for learning algebra.
 - (a) Students will take ALEKS assessment.
 - (b) Students will work through pre-algebra ALEKS modules indicated as necessary.
2. Students will improve their mastery of algebraic skills.
 - (a) Students will take ALEKS assessment of algebra knowledge and skills.
 - (b) Students will work through the ALEKS modules indicated as necessary.
 - (c) Students will take indicated quizzes and exams to demonstrate their learning.
3. Students will develop their ability to apply algebraic thinking and procedures to problem solving.
 - (a) Students will work through the ALEKS modules that focus on problem solving.

Course Procedures:

ALEKS: ALEKS (Assessment and Learning in Knowledge Spaces) is a web-based program designed to carefully assess what students know and what they are ready to learn, and then to methodically tutor them in the given material, in this case Introductory Algebra.

An advantage to using ALEKS is that since it is web-based you can work on your course at your convenience. ALEKS will remember where you left off and will always make sure that you have shown readiness before presenting new material.

You will have to go through an “assessment” every so often to determine your mastery of the material. You will sometimes find that ALEKS requires you to go through a certain topic again because you were unable to demonstrate mastery of the topic in your assessment. Once in a while you may find this frustrating, but ALEKS is designed around the idea that you need to have a solid foundation in the material before you are ready to move on to the next topic.

I will be blending my use of ALEKS with a more traditional classroom system. Because this course is a pre-requisite for further courses, and because virtually all of you are using this course to prepare for some subsequent course (generally 110, 130, or 155) it is important that we cover an adequate amount of material. One way to use ALEKS would be to simply allow you to each work “at your own speed”, but that approach could easily mean that some of you would not get through enough material to succeed on the final exam or to be ready for that next course. Consequently, I am planning to try to move the class along at a pace which will allow us to cover the desired material. I will be using ALEKS as a “structured homework” system.

By the way, even though you will be expected to do a considerable amount of ALEKS work on your own time, it is very important to understand that it is important to DO YOUR OWN WORK! If you get someone else to do the work you will only be frustrated when ALEKS thinks you know more than you do and starts asking questions you are not ready for. Also the exams must be taken on your own so having someone work through the online material for you will not help your performance on those exams, and hence on your grade for the course.

College level courses typically expect students to put in about twice the number of hours outside of class for each hour in the classroom. This is a 4-credit course, and thus it is reasonable to expect you to put in something like 12 hours per week. I have built in the assumption that you should spend 100 hours logged onto ALEKS to earn all 50 “ALEKS time” points. In fact this is quite a bit less than 12 hours per week, but I do expect that you will have to put in some additional study time, and we will also lose a few days to written exams. Let me sum this up by stating that while some students in the past seem to think it’s enough to attend class and work on ALEKS there, this is simply not adequate! The only exception is that if you actually do a 100% assessment, then you will earn those 50 points regardless of the time you have logged. Even in this case, however, you still need to take all the quizzes and exams, and I would suggest that you take advantage of the worksheet and review sections of ALEKS so that you keep your algebra skills sharp leading to the final exam.

Grading System:

During the semester, points will be amassed from the following items:

Attendance:	50	(1 point subtracted for each absence)
ALEKS time:	50	(your score is your ALEKS hours divided by 2)
		Note: you need to log 100 hours to earn all 50 points
ALEKS quizzes:	120	(a 15-point quiz at the end of chapters R, 1, 2, 4, 5, 7, 8, 9)
Exams:	200	(two 100-point paper & pencil exams, after chapters 3 and 6)
Final Exam:	<u>150</u>	(2-hour paper & pencil exam)
Total:	575	(approximate – may change a bit)

So I expect there will be approximately 575 points possible during the semester. I generally use a scale of 90% for an “A”, 80% for a “B”, 70% for a “C” and 60% for a “D”. You should notice that the credit for attendance and for the time spent logged into ALEKS are entirely within your control; I would suggest that you plan to earn these points.

I am occasionally asked if there is something students can do to earn “extra credit”. Apparently this occurs sometimes in high school, but generally you will not find it done in college. Your grade should be an indication of how well you mastered the material covered in the class, not whether you did some unrelated additional assignment. So, no, there will be no “extra credit” available.

The key to success in any mathematics course is to put in the effort. You need to make sure you spend adequate time in ALEKS and you need to make sure you understand how to do the problems.

Americans with Disabilities Act (ADA):

If you have a diagnosed disability and require services or accommodations for this class, please inform me and Jane Eddy, the disabilities (ADA) coordinator (MRC 332; 796-3194) within 10 days to discuss your needs.

MATH 001 Schedule, Fall 2008

- Chapter “R” (Review): Quiz #1, due 9/8
- Chapter 1: Quiz #2, due 9/20
- Chapter 2: Quiz #3, due 9/30
- Chapter 3: **EXAM #1**, 10/10 [covering chapters R-3]
- Chapter 4: Quiz #4, due 10/21
- Chapter 5: Quiz #5, due 10/31
- Chapter 6: **EXAM #2**, 11/10 [covering chapters R-6]
- Chapter 7: Quiz #6, due 11/18
- Chapter 8: Quiz #7, due 11/24
- Chapter 9: Quiz #8, due 12/5
- FINAL EXAM:** Tuesday, 12/9, 3:00-5:00 p.m. [covering chapters R-9]

Note: the “chapter” reference is to the content in the Bello textbook, but ALEKS will take care of this matter for you; the ALEKS course has been integrated with this text, which provides a built-in course outline.