

# Math 108: Intermediate Algebra Fall 2014

## Instructor

Your instructor will email you with his/her contact information.

If you have further questions, please contact: Dr. Gary Hagerty, Director of the Math Learning Center  
garyhagerty@boisestate.edu

## Text

ALEKS (One semester 18-week stand-alone access code). This is available at the BSU bookstore and also online. Course Codes can be found at the MLC website.

The course is based on the following text but it is an optional purchase. *Intermediate Algebra*, Second Edition; Miller, O'Neill and Hyde.

## Calculators

Calculators are allowed in this course and will be helpful. Since this is optional, we only recommend that if you are buying a calculator and you are planning to enroll in Math 143 or 144, that you purchase a TI-84 as this is required in Math 143-144.

## Tutoring

Free tutoring is available in the Math Learning Center. For hours of operation visit:  
<https://math.boisestate.edu/math-learning-center/hours/>

## Grading Scheme

Weekly Topic Goal 18% of total grade

Weekly Time Goal 8% of total grade

Attendance and Group Activities 7% of total grade

In-Class Exams (two at 16.5% of total grade each) 33% of total grade

Final Exam 30% of total grade

Notebooks 4% of total grade

A+ - 98%    B+ - 88%    C+ - 78%    D+ - 68%

A - 92%    B - 82%    C - 72%    D - 62%

A- - 90%    B- - 80%    C- - 70%    D- - 60%

Any final grade lower than 60% will be recorded as an F. To use Math 108 to meet a prerequisite in another course, then the student must earn a grade of C- or better to move to the next course.

The MLC staff members have access to all students' ALEKS and Blackboard account information. The MLC staff members are here to promote student success. If you are struggling, then it is likely that MLC staff will reach out to you, and you are encouraged to seek help with all concerns regarding your course.

## Homework

Homework will be completed using ALEKS. This is a software based approach. You will be asked to complete virtually the same set of problems as if you were assigned problems out of a textbook. The advantages to ALEKS as an online homework system include:

- 1) Improved assistance when you need it.
- 2) The opportunity to work at your pace and complete the work necessary for you to be successful.
- 3) An opportunity to develop a complete understanding before moving ahead. This means that you will not be asked to perform work that for which you are not ready (as would happen in a traditional environment where everybody does the same thing).

Grading of Homework is based on your commitment to success. It has been found that once a student has been properly placed in a curriculum, their success is based on their willingness to put forth time and effort into the class. The grading of the homework will be based on time and effort as follows:

- 1) Time: Time: 6 hours on ALEKS learning math each week. If you spend 4.5 hours on ALEKS, then you would receive a 75% on that assignment. If you plan on trying to complete two courses in one semester, then you should expect to work 12 hours per week on ALEKS.
- 2) Effort: After the first week, you are expected to complete the number of objectives needed necessary each week in order to complete all of the topics by the end of the semester. (This will be explained frequently throughout the course and your instructor will give you your assignment on an individual basis.) The two lowest weeks' time scores and the two lowest weeks' topic scores will be dropped from the weighted grade column on BlackBoard at the end of the semester.

### **Attendance and Group Activities**

Class attendance will be taken daily and computed into your grade. One of the strongest indicators of student success is attendance. Attendance has the strongest correlation of any indicator when considering student success. Thus, we have placed attendance at a high level of importance in this class. One meeting per week will be focused on Group Activities found on the MLC web page. You will be responsible for printing each week's activity and bringing it to class. These will be counted as part of your attendance score for the week. The two lowest weeks' attendance scores will be dropped from this category in the weighted grade column on BlackBoard at the end of the semester. Please see an explanation of the Attendance Policy at the end of the syllabus.

### **Notebooks**

Success in math (as well as all other endeavors) is greatly improved by following steps prescribed by the instructor. This implies keeping careful notes and writing step-by-step solutions. We are asking that you keep these notes and the problems you work in a notebook, using correct mathematical notation. You will find that this greatly enhances your ALEKS experience and your success in future courses. This notebook will be graded based on organization and completion/content. There is a rubric to help you included at end of this syllabus. If you need additional help setting up your notebook, then talk to your instructor.

### **Exams**

There will be two in-class exams. These will be given in the weeks of Sept 21<sup>st</sup> and Nov 9<sup>th</sup>. Your instructor will provide more information as to the exact dates. You may be required to present valid BSU ID at each exam. Late tests can be made up in the M121 on the Friday directly following the missed test. Tests can begin as early as 12pm and must begin no later than 4pm. The Final exam will be comprehensive and given at the specified time, during finals week. Make sure you obtain the exact location, date, and time from your instructor. If you finish your pie before the 12<sup>th</sup> week, then you may speak to Dr. Hagerty about taking the final early.

### **Cheating**

Exams must be taken in class or in an approved proctored administration area. All other test scores will be discarded. Visiting websites other than ALEKS during a test will result in the score being discarded. Scratch paper must be turned into the instructor or proctor immediately after the test has been submitted without additional notes being made, otherwise partial credit will not be given on the test. All devices which allow access to the internet such as cellphones, ipods, etc. must be turned off prior to taking any test.

### **Partial Credit**

You will be given scratch paper for your test. The only way to earn partial credit on a test for answers you wish to challenge is to have the work supporting your answers on your scratch paper neat and organized, based on mathematically approached standards. Your notebooks should reflect these standards as well.

## **Course Description**

MATH 108 INTERMEDIATE ALGEBRA (4-0-4). Radicals, negative and rational exponents, completing the square, quadratic formula. Linear and quadratic inequalities (including absolute value); simple systems of equations and inequalities. Multiplication of polynomials; basic factorization techniques. Manipulation of rational expressions, compound fractions, rationalization of denominator (or numerator). Introduction to the concept of function, graphs of functions and equations. Introduction to exponential and logarithmic expressions. Math 108 is NOT a Core course, and cannot be taken for credit after any MATH course numbered MATH 143 or higher. PREREQ: MATH 25 or satisfactory placement score.

## **General comments regarding classroom etiquette and expectations:**

**Classroom Technology Etiquette:** Technology is becoming prevalent in the classroom. As the access to technology grows, we must ensure that a quality educational environment is maintained. Students must understand that visiting electronic sites that do not pertain to the purpose of the classroom is at some level a distraction to the student and often to the class as a whole. While it is understood that visiting sites such as Facebook and YouTube and activities such as texting are a distraction, we must also point out that visiting homework pages for the math classes at times when working on homework is not the focus of the class is also a distraction. In order to maintain a proper distraction free environment, it is the obligation of the instructor to ensure that students only visit electronic sites pertaining to the task at hand. The instructor may do this on an individual basis or ask the entire class to put away all electronic devices. This decision needs to be respected. If you have any concerns with this policy, then please discuss your concerns with Dr. Hagerty, Director of the Math Learning Center.

**Attendance Policy:** Attendance points are earned at the discretion of the instructor. Students receiving full attendance points are attending class for the full amount of time and remaining on task during that time. The instructor has the right to deny attendance points to any student who does not attend the full amount of time or to a student who does not participate. Using technology in an inappropriate form is considered non-participation. If you have any concerns with this policy, then please discuss your concerns with Dr. Hagerty, Director of the Math Learning Center.

Success means putting forth the time, effort, and energy required to complete this course. Based on the past several years of analyzing student success, we have found that appropriate work completion and attendance are the biggest keys to success. Following these simple guidelines should ensure success:

- 1) Homework completion. More than 95% of the students who complete 80% or more of the homework pass the course. Aim to complete your work at 100%.
- 2) Make sure you are learning. When you obtain help, make sure that you are learning and able to do the work without help.
- 3) Review for every test. The biggest difference we see in test scores is between students who review and those who don't.
- 4) Put forth the effort to attend every class. This may be one of the best signals we have to a student being successful.

**Students who spend at least 12 hours working on ALEKS in the first two weeks are significantly more likely to pass the course than students who spend less than 6 hours in the first two weeks.**

If you are doing all of the above and struggling, make an appointment with Dr. Hagerty, Director of the Math Learning Center. He will work with you to find the best possible path to creating your success.

## Notebook Rubric

	Unacceptable	Novice	Competent	Proficient
Regular use	Does not have a dedicated notebook.	Often absent from class or doesn't bring notebook. Lots of work missing from notebook.	Sometimes absent from class or doesn't bring notebook. Dates are missing or inconsistent.	Always brings notebook to class. All ALEKS work is in notebook. Dates are clearly and consistently labeled.
Topic formatting	Looks like "chicken scratch".	No obvious organization.	Obvious where one topic stops and another starts.	Each topic is labeled with topic name and pie slice.
Problem formatting within each topic	Does not contain at least one: problem, explanation or example.	Can't tell where one problem stops and another starts.	Obvious where one problem stops and another starts.	Obvious where one problem stops and another starts. Answer is easy to find and marked correct or incorrect.
Mathematical notation	Non-sequential work. Instructor struggles to follow logic.	Works math horizontally. "Loses" pieces of the problem.	Mixed horizontal and vertical math. Doesn't appear to be losing parts of the problems.	Using vertical math almost exclusively. No obvious notation errors.
	0 points each	15 points each	20 points each	25 points each