# Math 102: Intermediate Algebra

# **Course Prefix/Number/Title:**

Math 102/Intermediate Algebra

## **Course Description**

Properties of the real number systems, factoring, linear and quadratic functions, polynomial and rational expressions, inequalities, systems of equations, exponents and radicals.

Credits: 4 Semester Credits

Prerequisit(s): None

Delivery Method: In class

### **Course Objectives/Student Outcomes**

The students will

- Analyze and solve various types of intermediate algebra problems
- Utilize a hand-held calculator for solving algebra problems
- Use ALEKS as a tutoring application
- Be prepared for college Algebra, Math 103

**Instructor:** Connie Blair **Office:** Admin RM 159

Office Hours: MWThF 10:00-11:00am, T 9:00-11:00am

Email: connie.blair@minotstateu.edu

Class Schedule: 9:00-9:50am MWThF

Textbook: Miller, O'Neill, Hyde, Intermediate Algebra, 2nd Ed – E-text with ALEKS; ISBN

007709744

# **Course Requirements**

Learning algebra is an *investment of time*. Algebra is learned best by practicing, reflecting, and practicing some more. While understanding examples provided by the instructor and textbook is a good first step, to truly master the material you should be able to look at a problem, know how to proceed and be able to carry out the steps **WITHOUT ASSISTANCE**. The independent practice in the ALEKS learning system provides opportunities for you to get to that point. Passing grades on assessments demonstrate that you have indeed mastered the skills taught.

#### **Evaluation**

**Homework—5%**You can find the listed homework in the course calendar on ALEKS. You may work

ahead, but each homework assignment must be completed before or by the due date

listed.

Objectives—5% The modules listed in the course outline below are the scheduled objectives. You must

complete these modules in your MyPie by the date listed on the course calendar.

**External Assignments—10%** A participation grade based on the amount of time you spend in ALEKS. You are

expected to work in ALEKS for 4-6 hours per week in order to receive full credit.

Assessments—20% Made up of weekly Progress Checks that will occur when you log into your ALEKS

account. This is scheduled for Wednesdays.

Tests—60% You have two tests, the Mid-Term on October 12 during normal class time and the Final

Exam on Monday, December 12 at 8:00 am. Please arrange to be in class for both of

these dates. There will be no make-ups.

Letter grades are assigned using the following scale

A 90-100%

B 80-89%

C 70-79%

D 60-69%

F 59% or lower

## **Course Outline (subject to change)**

Module Topics are located at the end of the Course Syllabus

Module 1: S 1.1—1.2 Due 08/30/11 Module 2: S 1.3—1.5 Due 09/06/11 Module 3: S 1.6—1.7 Due 09/13/11 Module 4: S 1.8 Due 09/20/11

Module 5: S 2.1—2.3 Due 09/27/11

Midterm Review Due 10/11/11

Module 6: S 4.1—4.3 Due 10/18/11 Module 7: S 4.4—4.5 Due 10/25/11

Module 8: S 4.6—4.8 Due 11/01/11

Module 9: \$ 5.1—5.3 Due 11/08/11

Module 10: S 5.4—5.6 Due 11/15/11

Module 11: S 6.1—6.3 Due 11/22/11 Module 12: S 8.1—8.4 Due 11/29/11

Final Review Due 12/09/11

# **General Education Goals/Objectives**

Goal 3: Demonstrates the ability to convert, calculate, and analyze a variety of mathematical problems

#### Objective 1: Utilizes mathematical equations to solve problems

Skill 1: Solves equations and problems using the appropriate method

#### Objective 2: Applies practical application of mathematics to everday life

Skill 2: Defines and demonstrates the use of decimals, percentages, and fractions

Skill 3: Solves word problems

### **Relationship to Campus Theme**

The student will begin to see applications of algebra in nature, business, health, construction, etc. As they use the calculator, they can solve real life problems with large numbers. These problems will require critical thinking and interaction with other students.

#### **Classroom Policies**

• **CLASS ATTENDANCE:** The sequential nature of mathematics deems it necessary for students to attend class and *participate* on a regular basis, therefore one of the course requirements is <u>regular attendance</u>.

- **ASSIGNMENTS:** Students may work ahead; however, each assignment must be completed on or before the due date. The midterm and final Exams will be taken during class.
- <u>ELECTRONIC DEVICES:</u> Turn off or <u>mute</u> (not vibrate) cell phones, pagers, and other electronic devices. There is absolutely <u>no cell phone or iPod use</u> during class.

# **Academic Integrity**

The academic community is operated on the basis of honesty, integrity and fair play. It is the expectation that all students, as members of the college community, adhere to the highest levels of academic integrity. This means that

- Students are responsible for submitting their own work. Student work must not be plagiarized.
- Students must not cooperate on oral or written examinations or work together on evaluated assignments without authorization

Violations of academic principles such as cheating, plagiarism or other academic improprieties will be handled using the guidelines outlined in the Student Handbook.

## **Disabilities and Special Needs**

If you have a disability for which you need accommodation, please see me immediately. If you have already met with Student Developmental personnel, please provide me with the information regarding your needs so that I can make the appropriate accommodations.