

Syllabus and Calendar for MATH 108, Intermediate Algebra Sections 1-14 and 20 (in Pocatello), Fall 2009

Course objectives and format. MATH 108 includes skills needed to succeed in subsequent math courses, with an emphasis on solving equations and inequalities. The 26 specific objectives are discussed in detail in Course Objectives Discussion within the course website. You will learn these objectives using computer software from Hawkes Learning Systems (HLS), attending class to receive explanation of the mathematical concepts from your instructor and instruction in use of the software. *But*, as in all college math courses, *the bulk of your work is done outside of class*. First, you will learn the material by working through a software lesson or section of the text, and then demonstrate mastery of a lesson by “certifying” in it – the equivalent of completing a homework assignment. Then you will take practice quizzes and exams, using the software. Finally, *you will take your graded quizzes and exams*, delivered by computer, *in the Algebra Testing Center* at a time you have previously scheduled. [Note: The HLS software is installed in all campus computer labs and the Algebra Learning Center, and can be installed at home on any Windows-based computer. ** IF you install it at home on an internet-based system, you will enter the Course ID “ ISUIMA”.]

Success strategies. To succeed, commit yourself to doing these 4 things:

1. Get started in the software immediately and correctly.
2. Schedule a reasonable amount of time for working on this course – a general rule for a 3 credit college course is 9 hours per week including class time. To learn mathematics skills it is best to practice daily.
3. Use all available resources, such as tutoring hours and practice tests.
4. Keep working and do not give up. If you drop out there is no way you can succeed!

Instructor. Section _____, meeting _____ in Rendezvous 332.

Instructor (phone, e-mail):

Office Hours:

Course website. More detailed information is available at www.isu.edu/math/math108 .

Course coordinator. Luther Yost, 328A Physical Sciences, 282-3114, cmath108@isu.edu .

Required materials. *Hawkes Learning Systems Intermediate Algebra* software, Fall 2009 version, and the accompanying text *Intermediate Algebra*, 5th ed., by D. F. Wright, Hawkes Publishing. Students who do not already have an access code from taking this course before must purchase a *new* copy of the textbook/software package; a used copy will not work unless an access code is purchased separately. Students must have an ISU computer account and a scientific calculator.

Prerequisites. MATH 025 or transfer equivalent, sufficient score on the quantitative part of the ACT or SAT exam, or sufficient score on the Compass Placement Exam.

Enrollment. Failure to attend class in the 1st week may result in *disenrollment from the course*.

ADA policy. Our program is committed to all students achieving their potential. If you have a disability or think you have one (physical, learning, hearing, vision, psychiatric) that may need reasonable accommodation, please contact the ADA and Disabilities Center, Room 123 Graveley Hall, 282-3599, as soon as possible.

Testing. Quizzes and exams include *questions that specifically test the objectives* given in the website in Course Objectives Discussion. At least 90% of the questions relate to the objectives for that unit or part and at most 10% relate to previously learned objectives (review material).

A *practice version* of each quiz and exam is available from any software installation with internet access. This *ISU-designed* practice test, called Quiz1Practice or ExamAPractice for example, is very similar to the actual graded test, and will help in the transition from doing individual Hawkes lessons to taking an ISU test covering many lessons.

The graded quizzes and exams are taken in the Algebra Testing Center, Rendezvous 324. Testing sessions during the regular semester begin:

M-Th: 8:00 a.m., 9:15, 10:30, 11:45, 1:00 p.m., 2:15, 3:30, 7:00

Friday: 8:00 a.m., 9:15, 10:30, 11:45, 1:00 p.m., 2:15, 3:30

During finals exam week, they begin:

Monday & Tuesday: 7:30 a.m., 10:00, 12:30 p.m., 3:00, 5:30, 8:00

The Testing Center is closed weekends and holidays.

** Students must *schedule* quizzes and exams *before going* to take them and must arrive in the first 15 minutes of a session to be seated and *must have their Bengal ID card*. **

Refer to Course Activities within the course website for details concerning testing.

Tutoring/help. Additional help is available beyond a student's specific class time.

Note, though, that certifications are to be completed by the student, without substantial help from an instructor, tutor, or other student.

Algebra Learning Center. 332 Rendezvous. When classes are not meeting, the classroom is open for individual tutoring. It is available for tutoring these hours during the regular semester (except for Thanksgiving Break):

Monday through Thursday: 4:00 p.m. – 7:00 p.m.

Friday: 9:30 a.m. – 3:30 p.m.

It is closed weekends, holidays, and final exams week.

Math Center. 327 Rendezvous. General help for mathematics, including Math 108, is available Sept 8 through Dec 4 (except for Thanksgiving Break) during these hours:

Monday-Thursday: 9:00 a.m. – 7:00 p.m., Friday: 9:00 a.m. – 2:00 p.m.

Certificates. In each unit, students complete certificates from the software and register them electronically in the course gradebook. Completing all of the unit's certificates and registering them by their deadline earns the replacement bonus for that unit. To get the bonus, *all* of the unit's certificates must be registered by 11:59 pm. of the *night before the unit quiz deadline*.

It is best to do the certifications at a software installation with internet access.

This is the case at all campus computer labs and at home if the student has constant internet access and enters the Course ID "ISUIMA" when first installing the software.

Doing the certifications at an installation with internet access will enable a student to do the streamlined certifications specified by ISU and have the certificates registered automatically.

Details concerning certifying are in Course Activities within the course website.

The required certificates are as follows:

(the order shown is the suggested order of completion)

Math 108 Assigned Software Lessons for Fall 2009

Unit 1. Linear Equations and Inequalities (certificate deadline Thur 9/10, quiz deadline Fri 9/11):

- 1.4b Evaluating Formulas
- 2.2 Graphing Linear Equations in Slope-Intercept Form
- 2.3a Graphing Linear Equations in Point-Slope Form
- 2.3b Finding the Equation of a Line
- 1.3c Solving Absolute Value Equations
- 1.6b Solving Absolute Value Inequalities

Unit 2. Systems of Linear Equations and Applications (certif d-line Tues 9/22, quiz d-line Wed 9/23):

- 2.5 Graphing Linear Inequalities
- 3.1a Solving Systems of Linear Equations by Graphing
- 3.1b Solving Systems of Linear Equations by Substitution
- 3.1c Solving Systems of Linear Equations by Addition
- 3.2 Applications (Systems of Equations)

----- Part A Exam deadline is Friday September 25 -----

Unit 3. Polynomial and Rational Equations (certif d-line Mon 10/12, quiz d-line Tues 10/13):

- 4.4b Special Factorizations—Squares
- Ch4R Review of Factoring (from 4.4abcd and 4.5ab)
- 4.6 Solving Equations by Factoring
- 5.1a Defining Rational Expressions
- 5.4a Solving Equations Involving Rational Expressions
- 5.4b Solving Inequalities with Rational Expressions
- 5.5 Applications Involving Rational Expressions

Unit 4. Radical Expressions and Rational Exponents (certif d-line Mon 10/26, quiz d-line Tues 10/27):

- 6.1b Simplifying Radicals
- 6.1c Division of Radicals
- 1.8a Simplifying Integer Exponents II
- 6.2 Rational Exponents (* including converting to and from radicals *)
- 6.3a Addition and Subtraction of Radicals
- 6.3b Multiplication of Radicals

----- Part B Exam deadline is Thursday October 29 -----

[Note that the last day to withdraw from the course with a W grade is Friday October 30.]

Unit 5. Quadratic Equations and Their Applications (certif d-line Thur 11/12, quiz d-line Fri 11/13):

- 7.1a Quadratic Equations: The Square Root Method
- 7.1b Quadratic Equations: Completing the Square
- 7.2 Quadratic Equations: The Quadratic Formula
- 7.3 Applications (Quadratic)
- 7.4 Solving Radical Equations
- 7.5 Equations in Quadratic Form

Unit 6. Parabolas, Quadratic Inequalities, Distance, Circles (cert d-line Tues 12/1, quiz d-line Wed 12/2):

- 8.1 Graphing Parabolas (* including x-intercepts *)
- 8.2 Solving Quadratic Inequalities
- 8.5 Distance Formula and Circles

----- Part C Exam deadline is Friday December 4 -----

***** Comprehensive Final Exam deadline is Tuesday December 15 *****