

MATH 1010 INTERMEDIATE ALGEBRA SPRING SEMESTER 2014

INSTRUCTOR: Zeph Smith **OFFICE:** HLDC 212

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INSTRUCTOR WEB SITE: http://mathslcc.weebly.com/

MATH DEPARTMENT WEB SITES: http://active.slcc.edu/math/, https://sites.google.com/site/slccmathdepartment/

SLCC is committed to fostering and assessing the following student learning outcomes in its programs and courses:

Acquiring substantive knowledge in the field of their choice;

Developing quantitative literacy;

Developing the knowledge and skills to be civically engaged;

Thinking critically;

Communicating effectively.

TEXT: Intermediate Algebra 9th ed., by Bittinger/Ellenbogen, Addison Wesley, publisher.

INTRODUCTION: Welcome to Intermediate Algebra. Please read this syllabus carefully. Intermediate Algebra provides the necessary background for: MATH 1030 Quantitative Reasoning, MATH 1040 Statistics, MATH 1050 College Algebra, and MATH 1090 College Algebra for Business Students.

PREREQUISITES: This course is for students who have successfully completed an introductory algebra course, such as Math 0990, with a grade of C or better, or who otherwise qualify by virtue of acceptable CPT or ACT scores achieved within the past year. Students taking Math 1010 need to have a solid foundation in arithmetic, including operations involving fractions, decimals, percent, signed numbers, and positive exponents. Prerequisite algebra skills include a working knowledge of polynomial operations, including factoring, 2D coordinate systems, slope and intercept, absolute value, and square root, and the ability to solve linear equations as well as two equations in two unknowns. Elementary algebra topics will be covered only briefly and in conjunction with new material. Students should review this material independently.

COURSE DESCRIPTION: This course covers in more depth basic algebra concepts introduced in elementary algebra. Topics of study include: linear equations and inequalities; quadratic equations; polynomial and rational expressions; radicals and complex numbers; exponential expressions (negative and rational exponents) and logarithmic expressions; linear systems of equations; introduction to conic sections; introduction to functions. Graphing of functions will be done by hand. Real world applications of algebra will be addressed throughout the course.

COURSE OBJECTIVES: Upon completion of this course students should:

- 1. Have competent algebraic skills for: three by three linear systems with unique solutions; operations with polynomials, radicals, rational expressions, and absolute values; and have competent algebraic and graphic skills for: equations of lines, two by two systems, inequalities, and the quadratic equation.
- 2. Understand how linear equations, quadratics, systems, radicals, and graphs relate to realistic applications.
- **3.** Advance readily to higher-level college mathematics courses.

ATTENDANCE: Class attendance is expected. Regular attendance is essential to achieve satisfactory results. It is the student's responsibility to be aware of all material covered, tests dates, and assignment due dates. Your instructor will outline specific attendance policies.

MATH EMPORIUM TRANSFERS: The Mathematics Department allows students that are performing undesirably in M1010 the option to transfer into the Developmental Math Emporium within the first 6 weeks of the semester. This is solely the choice of each individual student; it is not mandated nor assisted by instructors. If you deem it wise to (re-) complete all the modules of the Emporium before you attempt to retake M1010, follow the instructions on the transfer form linked below. If a student wants to exit M1010 without transferring into the Emporium or exit M1010 after the above deadline, then the student must formally drop or withdraw from the course by the deadlines found in the current academic calendar.

Once you have successfully passed all modules of the Emporium, then you may again re-register for M1010 and attempt to complete the entire course. Any student that thinks they may benefit from becoming more familiar with prerequisite material is encouraged to take advantage of this opportunity to learn and succeed (especially once you have obtained results from your first M1010 exam). Interested students will need to fill-out the transfer form and directly submit it to the Mathematics Chairwoman, Suzanne Mozdy, by the above deadline. The transfer forms are available online at:

$\underline{http://www.slcc.edu/math/transferforms.aspx}$

CALCULATOR POLICY: A scientific calculator is required from time-to-time for approximation of radicals and logarithmic values, and the like. Use of calculator graphing features will not be emphasized on exams. It is a departmental policy in the Math 1010 course that a programmable/graphing calculator will not be allowed on any in class quiz, exam or the final exam. Prohibited calculators include the TI83, TI84, TI86, TI89, TI92, TI-Nspire, HP 48SX, HP 48GX, as well as other models and brands. Students are expected to be able to perform basic calculations, such as addition of fractions or finding exact values, without a calculator. While some homework problems and projects may require the use of a graphing calculator or software package, questions on in-class exams will test basic facts that must be understood. Your performance will be measured primarily on your understanding of the concepts and your competency to perform valid symbolic manipulations rather than your ability to exploit technology to get answers. Full credit will only be awarded on exam questions when answers are justified by a legible and deductively correct argument.

A current example of an acceptable scientific calculator is a TI30. It is the instructor's prerogative to give *regular* exams or portions of *regular* exams that do not allow a scientific calculator.

In addition, a cell phone/PDA or any device capable of connecting to the internet may not be utilized on any in-class quiz, exam, or on the final exam.

CLASS SCHEDULE: On the website is a tentative schedule for the course. This schedule will be followed as closely as possible; however, some modifications may be necessary during the semester. Your instructor will announce all modifications in class.

HOMEWORK: All homework will be submitted and graded on-line using the MyMathLab software that accompanies your text. If your book did not come with this software, you will need to purchase it at the college bookstore or at www.mymathlab.com. The course code is available on your instructor's web page. The assigned exercises are considered the minimum required for sufficient understanding of the material. Students are encouraged to work more exercises than those assigned. Homework will constitute 20% of your grade for this course. Late homework will be docked 10%. On the website you can find the online homework due date calendar. Regular practice is essential for success in mathematics; you should be prepared to spend at least two hours studying outside of class for each hour of class time.

GROUP PROJECTS (Signature Assignments): Instructor has assigned two projects to be completed in groups throughout the semester. These projects can be found at the instructor web site. Further details will be discussed in class at the appropriate time that sufficient material has been covered relevant to completing projects. At least one of these projects will be submitted into your ePortfolio (see below).

TESTS: There will be 5 in-class tests. All tests after the first one will be on a cumulative basis. Unless otherwise indicated by your instructor, all tests will be taken during the scheduled class period. All examinations will be closed book, closed notes. A scientific calculator may be used on tests. However, a graphing/programmable calculator/cell phone/PDA may **NOT** be used on any test. Full credit will be awarded on test problems only if your work can be readily followed and solutions are precise and clearly indicated.

CLASSROOM DEPORTMENT: Each student is responsible for her/his own behavior. Any student who shows a pattern of disrespect for others, or who at any time displays flagrant disrespect for others, will be subject to penalties as per the student code of conduct. All students are expected to follow the SLCC Student Code of Conduct found at:

http://www.slcc.edu/policies/docs/stdtcode.pdf.

GENERAL EDUCATION STATEMENT: This course fulfills the Quantitative Studies (QS) requirement for the General Education Program at Salt Lake Community College. It is designed not only to teach the information and skills required by the discipline, but also to develop vital workplace skills and to teach strategies and skills that can be used for life-long learning. General Education courses teach basic skills as well as broaden a student's knowledge of a wide range of subjects. Education is much more than the acquisition of facts; it is being able to use information in meaningful ways in order to enrich one's life. While the subject of each course is important and useful, we become truly educated through making connections of such varied information with the different methods of organizing human experience that are practiced by different disciplines. Therefore, this course, when combined with other General Education courses, will enable you to develop broader perspectives and deeper understandings of your community and the world, as well as challenge previously held assumptions about the world and its inhabitants.

GENERAL EDUCATION EPORTFOLIO—Each student in General Education courses at SLCC maintains a General Education ePortfolio. Instructors in every Gen Ed course will ask you to put at least one assignment from the course into your ePortfolio, and accompany it with reflective writing. It is a requirement in this class for you to add to your ePortfolio, and this syllabus details the assignments and reflections you are to include. Your ePortfolio will allow you to include your educational goals, describe your extracurricular activities, and post your resume. When you finish your time at SLCC, your ePortfolio will then be a multi-media showcase of your educational experience. For detailed information visit http://www.slcc.edu/gened/eportfolio.

After you have picked an ePortfolio platform, go to the corresponding help site to watch the tutorials and look at the examples so you can get started on your own:

https://sites.google.com/site/slcceport http://slcceportfolio.wordpress.com http://slcceportfolio.weebly.com If you would like to start your ePortfolio in a computer lab with a person there to help you, sign up online for one of the **free workshops** at the Taylorsville-Redwood library: http://libweb.slcc.edu/services/forms/eportfolio. You may also visit an **ePortfolio Lab** (in the Taylorsville-Redwood Library LIB 047 as well as in HTC 102a on the Jordan Campus) during business hours, and staff will help you without an appointment. Finally, questions regarding the ePortfolio can be directed to eportfolio@slcc.edu.

Reflection instructions and grading of the ePortfolio is discussed on the instructor's website here:

FINAL EXAMINATION: The final exam will be taken on the date specified below. Your instructor will announce the exact location. Students should make arrangements with employers <u>now</u> to be free at the appointed time:

Monday, May 5, 3:40-5:40 p.m.

A scientific calculator may be used on the final exam. A graphing/programmable calculator/cell phone/PDA may NOT be used on the final exam. All students must take the final exam.

The final will be a standardized department examination emphasizing topics listed under the course objectives. It is an SLCC Math Department policy that students attaining a score of less than 60% on the final shall receive a grade no higher than "D" for the course.

It is highly recommended that students study for the final exam by working as many problems as possible from the final review packet. There are past final exam packets available for students to purchase at the bookstore or download at the instructor's website.

PERMANENT FOLDER: In case of human or computer error, it is recommended that you keep all homework, labs, and exams in a folder until you have received a grade for the course.

CHEATING POLICY: If a student is caught cheating, the math department will follow the policy and procedure of the student code of conduct. Please refer to pages 38 and 39 of http://www.slcc.edu/policies/docs/Student Code of Conduct.pdf

WITHDRAWAL POLICY: Students may drop from the course through February 3, 2014. Students may withdraw from the course through March 24, 2014. **No withdrawals will be approved after that date**.

GRADING: Grades will be awarded as follows:

Assignment	Percent of final grade	
Tests	45%	
Homework/Quizzes	20%	
Projects/ePortfolio	10%	
Final Exam	25%	

Α	100-93%	С	76-73%
A-	92-90%	C-	72-70%
B+	89-87%	D+	69-67%
В	86-83%	D	66-63%
B-	82-80%	D-	62-60%
C+	79-77%	Е	Below 60%

EXAM CREDIT BACK ASSIGNMENTS: For each of the in-class exams, you will be able to complete a credit back assignment and take a live quiz for up to 50% of your missed points on the exam, added back to your test. More information can be found on the instructor's website, <u>here:</u>

EXTRA CREDIT: Up to 3% can be earned by successfully completing online tests. These are found at the bottom of the online quizzes in MML. Each test consists of 5 problems, and there are 25 tests total. Each live class test has 5 extra credit online tests associated with it. If you get a score of 100% on an online test, you earn 1/25th of the 3% extra credit. You can take them in any order and have an infinite number of attempts. The due date for all online tests is the end of the semester.

ACCOMMODATIONS: Students with medical, psychological, learning or other disabilities desiring accommodations or services under ADA must contact the Disability Resource Center (DRC). The DRC determines eligibility for and authorizes the provision of these accommodations and services for the college." Please contact the DRC at the Student Center, Suite 244, Redwood Campus, 4600 South Redwood Rd, 84123. Phone: (801) 957-4659, TTY: 957-4646, Fax: 957-4947 or by email: linda.bennett@slcc.edu

MATH 1015 WORKSHOP CLASS: The Mathematics Department offers a supplemental workshop to accompany this course. MATH 1015 Intermediate Algebra Workshop is a 1 credit hour course that provides a 2 hour opportunity per week for registered students to ask questions on any topic in MATH 1010 and gain additional practice solving problems through collaborative learning with other students. See the current class schedule for course offerings this semester and MyPage to register for the course.

EXTRA HELP: The methods for success in Intermediate Algebra are trite: read the text, participate in class, take good notes and read them, and keep up on assignments (practice, practice, practice). Many students find that forming study groups with other students is also an effective way to help them learn, but take heed, working in study groups does <u>not</u> substitute for independent study; it is merely a catalyst. Registering and attending the Math 1010 Workshop (above), i.e., **Math 1015**, may also prove helpful. If you need extra help, free tutoring is available in the **Math Lab and Learning Center**, which are located in the basement of the Library at Redwood Campus, South Campus 3-174, Sandy Campus Bldg. B, and Jordan Campus Room 102. A list of private tutors that may be hired is also typically available in the Learning Centers.

Finally, read and be aware of the regulations set forth in the current Class Schedule and the SLCC college catalog. Please see your instructor ASAP about any problems that are affecting your work in this class.