MATH 1010—Intermediate Algebra

Section 09, MTRF, 11:00–11:50 am, NIB 150, CRN: 20367
Spring 2009—4 credits

Instructor: Taylor Jensen   **Phone:** 879–4256
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Office Hours: MTR 8:00–9:00 am & 10:00–11:00 am; W 8:00 am–12:00 noon
Additional Help: Browning Learning Resource Center

Required Text: *Intermediate Algebra* (5th edition) by Martin-Gay
Calculator Requirement: You *must* have a scientific calculator, and a graphing
   calculator would be very helpful. The TI–83 (any version) or TI–84 (any version)
   is what I recommend for Math 1010.
Prerequisite: You *must* meet at least one of the following minimum requirements:
   - Passed Math 0930 with a "C" or better
   - Math ACT score of 18 or higher
   - A suitable CPT score (check at the Testing Center)

Course Description

Math 1010 is designed for students who need preparatory work before entering the
courses that fulfill the general education math requirement. Concepts emphasized in this
course include the properties of the real number system, sets, functions, graphs, algebraic
manipulations, linear and quadratic equations, systems of equations, and story problems.
Students will be expected to reason mathematically and solve mathematical problems.
The course is a lecture course and will include homework assignments, tests, and a
comprehensive final exam. Successful completion of the course gives students good
preparation for college-level math courses. The course satisfies prerequisites for
Math 1030, 1040, 1050, and Biology 2400.

Course Objectives

All classes in mathematics at Dixie State College of Utah support the general education
goals of the college. Each mathematics class will:
   - Require students to perform mathematical processes including fractions,
     percentages, decimals, proportions/ratios, algebraic equations, and/or calculus
     techniques
   - Provide students with application problems that use a variety of methods
     including arithmetical, algebraic, and geometric methods
   - Challenge students to make inferences from mathematical models that include
     formulas, graphs, and tables
   - Provide students with real-life applications that use a variety of mathematical
     functions

Upon successful completion of Math 1010, a student will demonstrate the ability to:
- Perform basic mathematical operations on rational numbers with and without a calculator, including fractions, percents, and decimals
- Use algebraic processes to solve algebraic equations in one, two, and three unknowns
- Demonstrate the concept of equivalence including the use of variables to define relationships
- Work with functions that serve as models of real-world problems including polynomial, quadratic, exponential, and logarithmic functions

Course Policies

1. **Your attendance and behavior are expected to reflect your dedication to excellence as a university student.** You are expected to attend class, participate in discussions and group work, and to use class time for Math 1010 activities only.

2. **Exams cannot be made up.** Midterm exams will be administered in the Testing Center, while the Final Exam will be administered in our regular classroom.

3. **Completing all homework problems is required**.

Homework Policies

The goal of your doing homework should be to gain *understanding* of algebra—above and beyond rote memorization and superficial knowledge of formulas and "facts". My homework policies are designed to incite your full engagement when doing homework, so you feel it is of your benefit both to do the homework and to do it well. With that in mind, let me present the policies:

1. Students will turn in both homework problems (mostly odd numbered) *and* quiz problems (all even numbered) on the due dates scheduled. Late quizzes and/or homework will **not** be accepted for **any** reason. If you are involved in extracurricular activities (such as an athletic team), and one of your scheduled events conflicts with a homework due date, it is your responsibility to finish the homework and turn it in *early*.

2. Homework problems will be graded on *completion only*; quiz problems will be graded on *correctness*. Together, each assignment will be worth ten points (five points homework, five points quiz).

Grading

Assignments (10 pts. each)   150 points
Midterms (50 pts. each)   300 points
Final Exam (*comprehensive*) 100 points

There are 550 total points possible. Your grade will be determined according to the percentage of points you earn in this course.

≥ 92.0% A	≥ 89.0% A–	≥ 86.0% B+	≥ 82.0% B
≥ 79.0% B–	≥ 75.0% C+	≥ 70.0% C	≥ 67.0% C–
≥ 64.0% D+	≥ 60.0% D	< 60.0% F	

Disability Resource Center

If you are a student with a documented physical or mental impairment that will substantially limit a major life activity, please contact the Disability Resource Center on the main campus. The Center Coordinator and staff will assist you in analyzing your eligibility for services. If you are deemed eligible, reasonable accommodations that are appropriate for your disability will be assigned. If you have any questions concerning this process, please contact the Center at (435) 652–7516 or go to the Student Services Center, Room 201.

Website Resources

Library	http://library.dixie.edu/
Writing Center	http://new.dixie.edu/english/dsc_writing_center.php
Testing Center	http://new.dixie.edu/testing/
Tutoring	http://dsc.dixie.edu/tutoring/index.htm

Communication Policy

Important class and college information, including syllabus changes for this class, will be sent to your "Dmail" account. This information includes your DSC bill, financial aid/scholarship notices, notification of dropped classes, reminders of important dates and events, and other information critical to your success in this class and at DSC in general. All DSC students are automatically assigned a "Dmail" account. If you don't know your user name and password, go to new.dixie.edu and click on "Dmail" for complete instructions. You will be held responsible for information sent to your "Dmail" account, so please check it often. When trying to get a hold of me, the best option is to call my office phone or email me.

My Teaching Philosophy

I believe every dedicated student, including **you,** can learn the material taught in this course. I am confident that learning this material will make a **vital** difference in your ability to reason quantitatively about the everyday world. Learning about mathematics should be **fun!** If we're not having fun while we learn, we're not really learning! ☺

The "Fine Print" from DSC

Academic Behavior Policies
As members of Dixie State College's academic community, students shall:

1. Maintain academic standards including institutional, school/departmental/program, and individual course standards.

2. Display appropriate conduct in classroom situations that will enhance the learning environment.

3. Meet faculty members' classroom standards of behavior and attendance requirements or make contact with faculty members when unable to do so.

4. Maintain academic ethics and honesty; to this end, prohibited activities include, but are not limited to, the following:
- Cheating, which includes, but is not limited to, copying from another student's test papers, or plagiarism.
- Using materials during a test not authorized by the person giving the test.
- Collaborating with any other person during a test without authority.
- Knowingly obtaining, using, buying, selling, transporting, or soliciting in whole or in part the contents of any test, without authorization of the appropriate official.
- Bribing any other person to obtain any test.
- Soliciting or receiving unauthorized information about any test.
- Substituting for another student or permitting any other person to substitute for oneself to take a test or complete an assignment.
- Plagiarism, which is the unacknowledged (uncited) use of any other person or group's ideas or work. This includes purchased or borrowed papers.
- Collusion, which is the unauthorized collaboration with another person in preparing work offered for credit.
- Falsification, which is the intentional and unauthorized altering or inventing of any information or citation in an academic exercise, activity, or record-keeping process.
- Giving, selling, or receiving unauthorized course or test information.
- Using any unauthorized resource or aid in the preparation or completion of any course work, exercise or activity.
- Infringing on the copyright law of the United States which prohibits the making or reproduction of copyrighted material except under certain specified conditions.
- Not obtaining the instructor's permission before recording lectures.
- Not notifying instructors in advance of any planned absence for participation in college-approved or requested group activities.
- Unethical and inappropriate use of any computer system, library, or other campus resource, and interference with the productivity of other users.

Lecture Schedule
MATH 1010—Spring 2009

DATE	LESSON	DATE	LESSON
1/5	Intro & 2.1	3/2	6.5
1/6	2.2	3/3	6.6
1/8	2.3	3/5	6.7
1/9	2.4	3/6	Review (Midterm 4)
1/12	2.5	3/9	7.1 & 7.2
1/13	2.6	3/10	7.3
1/15	2.7	3/12	7.4
1/16	Review (Midterm 1)	3/13	7.5
1/19	**Martin Luther King Day**	3/16 to 3/20	**Spring Break**
1/20	3.1		
1/22	3.2	3/23	7.6
1/23	3.3 & 3.4	3/24	7.7
		3/26	8.1
1/26	3.5	3/27	8.2
1/27*	3.6		
1/29	3.7	3/30	8.3
1/30	4.1	3/31	Review (Midterm 5)
		4/2	8.4
2/2	4.2 (using 4.4 techniques)	4/3	8.5
2/3	4.3		
2/5	Review (Midterm 2)	4/6	9.1
2/6	5.1 & 5.2	4/7	9.2
		4/9	9.3 & 9.4
2/9	5.3	4/10	9.4
2/10	5.4		
2/12	5.5	4/13	9.5
2/13	5.6	4/14	9.6
		4/16	9.7
2/16	**President's Day**	4/17	Review (Midterm 6)
2/17	5.7		
2/19	5.8	4/20	Review (Final Exam)
2/20	Review (Midterm 3)	4/21	Review (Final Exam)
		4/23	Review (Final Exam)
2/23	6.1		
2/24	6.2		
2/26	6.3		
2/27*	6.4		

The **Final Exam** will be at 10:00 am on Monday, April 27th, in our regular classroom (NIB 150).

* The last day you may drop the class is without a "W" appearing on your transcript is Tuesday, January 27th. The last day you may drop the class is Friday, February 27th.

Homework / Test Dates
MATH 1010—Spring 2009

DATE	HOMEWORK DUE	QUIZ / TEST DUE
1/9	2.1: 1–33 every other odd (e.o.o.), 35, 37–65 e.o.o., 67–72 all, 81	2.1: 32, 42, 48
	2.2: 1–21 e.o.o., 23, 24, 25–41 e.o.o., 43, 45–65 e.o.o., 80	2.2: 10, 46
1/16	2.3: 1–29 e.o.o., 31, 33, 37, 51, 53	2.3: 34
	2.4: 1–73 e.o.o., 74, 75, 81–84 all	2.4: 32, 86
	2.5: 1–65 e.o.o., 81–83 all, 85	2.5: 32
	2.6: 1–65 e.o.o., 75, 76, 77	2.6: 48
1/21 (Wednesday)	———	**Midterm 1 closes**
1/26	2.7: 1–73 e.o.o.	2.7: 24, 44
	3.1: 1–16 all, 17–61 e.o.o., 65–72 all, 77–80 all	3.1: 26
	3.2: 1–39 odd, 55, 57–69 e.o.o., 71–81 odd, 85, 95	3.2: 10, 96
1/30	3.3: 9–12 all, 13–29 e.o.o., 31, 33–57 e.o.o., 73, 75, 77	3.3: 20, 74(c)
	3.4: 1–33 e.o.o., 35–41 odd, 45–61 e.o.o., 67, 75, 78	3.4: 30
	3.5: 1–37 e.o.o., 39–49 odd, 53–57 odd, 61–73 e.o.o., 75, 77, 81	3.5: 50
	3.6: 9–45 e.o.o.	3.6: 40
2/6	3.7: 1–11 odd, 15–21 odd, 47–50 all	3.7: 34
	4.1: 1–61 e.o.o., 73–82 all	4.1: 22, 62
	4.2: 1–25 odd, 39	4.2: 20
	4.3: 1, 5–9 odd, 13, 17, 20, 21–33 e.o.o., 55	4.3: 26
2/11 (Wednesday)	———	**Midterm 2 closes**
2/13	5.1: 1–93 e.o.o., 95, 111, 113, 135	5.1: 82
	5.2: 1–17 e.o.o., 19, 21–37 e.o.o., 47, 57, 69, 73	5.2: 74
	5.3: 1–65 e.o.o., 75, 81, 85, 89–92 all, 111, 113, 119	5.3: 56, 120
	5.4: 1–73 e.o.o., 81, 83	5.4: 52
2/20	5.5: 1–65 e.o.o.	5.5: 8, 64
	5.6: 1–65 e.o.o., 67, 69–77 e.o.o.	5.6: 34, 42
	5.7: 1–53 e.o.o., 83–87 odd	5.7: 28
2/25 (Wednesday)	———	**Midterm 3 closes**
2/27	5.8: 1–53 e.o.o., 71–75 odd, 81, 87	5.8: 78
	6.1: 1–73 e.o.o.	6.1: 30, 74
	6.2: 1–65 e.o.o., 75, 77	6.2: 46, 66

DATE	HOMEWORK DUE	QUIZ / TEST DUE
3/6	6.3: 1–41 e.o.o.	6.3: 32
	6.4: 1–17 odd, 29, 30	6.4: 18
	6.5: 1–29 e.o.o., 31, 33–45 e.o.o.	6.5: 16, 36
	6.6: 1–29 e.o.o., 31, 33–61 e.o.o.	6.6: 20
3/11 (Wednesday)	———	**Midterm 4 closes**
3/13	6.7: 1–21 e.o.o., 23, 25, 29, 31, 33–45 e.o.o., 47–53 odd	6.7: 10, 42
	7.1: 1–81 e.o.o., 109	7.1: 28
	7.2: 1–85 e.o.o., 86	7.2: 72
	7.3: 1–89 e.o.o.	7.3: 80
3/27	7.4: 1–73 e.o.o.	7.4: 68
	7.5: 1–65 e.o.o.	7.5: 32, 78
	7.6: 1–49 e.o.o., 51–57 odd, 61, 64, 66, 69	7.6: 48
	7.7: 1–49 e.o.o., 51, 65, 73–77 odd	7.7: 60
4/3	8.1: 1–61 e.o.o., 75, 77, 81, 83	8.1: 42, 66
	8.2: 1–33 e.o.o., 51, 55, 63, 64	8.2: 32
	8.3: 1–37 e.o.o.	8.3: 12, 38
4/5 (Sunday)	———	**Midterm 5 closes**
4/10	8.4: 1–23 odd	8.4: 8, 24
	8.5: 1–29 e.o.o., 67–69 all, 71	8.5: 24
	9.1: 1–25 e.o.o., 27–33 odd, 43, 45	9.1: 24
	9.2: 1–13 e.o.o., 15, 17–49 e.o.o.	9.2: 38
4/17	9.3: 1–45 e.o.o., 47, 49	9.3: 42
	9.4: 1–29 e.o.o., 31, 33–41 e.o.o., 43, 45–73 e.o.o.	9.4: 16, 68
	9.5: 1–33 e.o.o., 35, 37, 41–45 odd, 49, 53–61 odd	9.5: 38, 50
4/22 (Wednesday)	———	**Midterm 6 closes**
4/23	9.6: 1–45 e.o.o., 47–53 odd, 57–65 e.o.o., 67	9.6: 42, 68
	9.7: 1–45 e.o.o., 47, 49, 53	9.7: 40, 48, 50

The **Final Exam** will be at 10:00 am on Monday, April 27th, in NIB 150.