

Course: Elementary & Intermediate Algebra (Math 123A-4477), Fall 2015

This is the first semester of a 3-semester combined Elementary and Intermediate Algebra course. The entry level for 123A is the same as Math 115 or Math 117. The exit level for 123C is the same as Math 125 or Math 128.

Meeting time & Location: TTh 6:45 PM - 8:50 PM, MSA-006

Instructor: Wendy Tu, PhD, EdS

Office Hours: 8:50 – 9:15 PM TTh

e-mail: miaowe@wlab.edu Please include “Math 123A” in the subject field of your message.

We will be using Piazza for class discussion. The system is highly catered to getting you help fast and efficiently from classmates and myself. Rather than emailing questions to me, I encourage you to post your questions on Piazza. If you have any problems or feedback for the developers, email team@piazza.com.

Find our **class page** at: <http://piazza.com/smc/fall2015/math123a/home>

Prerequisite: Completion of Math 110 or Math 112 with a grade of C or better

Course Materials:

Textbook: Lial M.L., Hornsby, J., & McGinnis, T. (2012). *Beginning & Intermediate Algebra, 5th ed.*, Pearson. Textbook is required.

Calculators: Scientific calculators are allowed on tests. Graphing calculators and any electronic devices with built-in calculators are not allowed on tests.

Assessments:

- 10%: Quizzes (including in-class & take-home quizzes)
- 60%: Five tests (One lowest grade will be replaced by the average of all five tests)
 - Test #1: Chap 1
 - Test #2: Chap 2
 - Test #3: Chap 3
 - Test #4: Chap 4 & Appendix C
 - Test #5: Chap 5
- 30%: Comprehensive departmental final exam

Grading:

Percentage cutoff	Grade
89.5%	A
79.5%	B
69.5%	C
59.5%	D
Below 59.5%	F

Important Dates:

- 9/11: Last day to drop to receive enrollment fee and tuition refund
- 9/11: Last day to drop to avoid a “W” on permanent record
- 11/20: Last day to drop to receive a guaranteed “W”

General rules on quizzes/exams:

1. Take-home quizzes are expected to be turned in on time with accurate and complete work. You are encouraged to work on quizzes in groups or online on Piazza.com. Late work will not be accepted.
2. There are **no makeup tests/quizzes for any reason**. No tests will be given prior to the scheduled date either. Lowest test score will be replaced by the average of five test scores if you do not miss any one test. If you have to miss one test, the missing one will be replaced by 80% of your final exam. If you have to miss more than one test, you will be dropped from the class.
3. Tests are closed book and closed-notes. No scratch papers are allowed during the test. Graphing calculators and any other electronic devices are NOT allowed on tests. Cell phone should be turned off (not on vibrate) and stored away.
4. On the test date (including final exam), the test will not be given to a student 15 minutes late or after someone finishing the test, whichever comes first.

Attendance/Participation: Good attendance and active participation are crucial for the success of this class. Please arrange your schedule accordingly prior to enrolling the class. Frequently missing the class is not acceptable. Coming late or leaving early is also unacceptable. You may be dropped from the class for an accumulation of absence (including being tardy/leaving early) of 4 hours. Absence is defined as not showing up in class regardless of the reasons (being sick, attending jury duty, attending funerals, going on business trips, or whatever). However, it is still your responsibility to drop the class if you do not wish to complete. Failure to drop in a timely manner might result in an F on your academic record. Final exam will not be given to a student who misses excessively from the class. In general, you should expect to spend 8-9 hours every week in reviewing the materials covered, completing the homework, and previewing the materials to be covered in the next class meeting.

Students are expected to have all the necessary course-related materials/handouts ready when coming to the class. Cell phones and any electronic devices should be turned off (not on vibrate) and put away. No cell phones and materials unrelated to the class should be visible during the class. All students should participate in discussions and work on practicing sample questions given inside the class. Any disruptive behavior includes but is not limited to talking; listening to any musical instruments, reading materials other than classroom text, and obstruction or disruption of classes may result in the exclusion from the class.

Students are responsible for all the announcements made in the class.

College-wide Student Learning Outcomes:

- **Critical Thinking:** Classroom activities and assignments will require you to use sound reasoning to analyze, solve and interpret problems.
- **Communication:** You are expected to show and explain your work in a clear, well-organized manner in the assignments you turn in.
- **Quantitative Reasoning:** This is the core of your mathematics learning experience and will be demonstrated in all the work you do in this course.
- **Apply self-assessment and reflection strategies** to learn from your mistakes and to seek better methods to solve particular problems.
- **Civic Responsibility:** Students are expected to respect classmates as well as the instructor. This includes refraining from disruptive behavior (coming late, leaving early, wandering in and out of class, eating/drinking during class, side conversations, instant messaging, etc) and practicing positive behaviors (cooperation, civility, helpfulness, constructive engagement in class activity).
- **Technical Competence:** Utilize the appropriate technology – including web-based systems and hand-held graphing calculators – as well as pencil-and-paper methods for “skill drills” and problem solving.
- **Cultural Diversity:** Respect for all classmates and appreciation of the universality of mathematics in diverse cultures.
- **Ethics:** All students will maintain the highest standards of academic honesty. You may NOT give or receive help on tests or quizzes, and you may not turn in someone else’s work as your own.
NOTE: If you are discovered committing any act of academic dishonesty (cheating), you will receive no credit (“zero”) for the test or assignment AND you will be suspended from class AND the case will be referred to the Vice-President for Student Affairs for further disciplinary action. For further information see the WLAC Catalogue and Schedule of Classes.
- **Aesthetics:** Mathematicians often talk about a “beautiful” or “elegant” method of solving a problem.

Math 123A Course Student Learning Outcomes:

- Perform basic operations on rational numbers and polynomials, including correct use of order of operations.
- Use appropriate techniques to solve linear and factorable quadratic equations and linear inequalities.
- Write, graph linear equations in two variables; analyze slope and intercepts.
- Factor polynomials.
- Solve problems using ratio, proportion, and percent.
- Analyze, model, and solve “story” problems (applications).
- Locate and utilize supplemental resources online and in textbooks.

Student achievement of SLOs will be assessed by means of tests as well as informal measures such as class participation, classwork, and student self-assessment.

Tentative Course Calendar

Day	Class Activities	HW Assignments
9/1 (T)	Class Introduction 1.1	1.1: 1-8, 9-89 eoo, 93-114
9/3 (TH)	1.2 & 1.3	1.2: 1-6, 7-49 eoo, 54, 57-81 odds, 70, 72, 74, 76, 85-92, 95-97, 100 1.3: 1-4, 5-8, 9-17 odds, 18-19, 23-35 odds, 36b-37b, 39-54, 55-65 odds, 62, 66-74, 75-80, 83
9/8 (T)	1.4 & 1.5	1.4: 1-27, 28, 32, 34, 35-42, 48-49, 52, 53-75 odds, 74, 77-80 1.5: 1-10, 11-79 eoo, 80-134 all
9/10 (TH)	1.6 & 1.7	1.6: 1-10, 25, 11-123 eoo, 49, 77, 85, 105, 117, 121, 125a-132a 1.7: 1-18, 19-20, 21-41, 43-61 odds, 62-63, 65-87 odds, 86, 89, 91, 93
9/15 (T)	1.8 & 2.1	1.8: 1-34, 35-36, 37-79 odds, 81-90 Mixed Review (p. 82) all 2.1: 1-3, 5-45 odds, 47, 49, 51, 53-67 odds, 69, 71, 75-78 Ch. 1 “Test” (p. 83) all
9/17 (TH)	Test #1 (Chap 1)	
9/22 (T)	2.2 & 2.3	2.2: 1-3, 5-20, 21-51 odds, 53, 55, 57-67 odds, 69, 73-82 2.3: 1-8, 9-75 odd, 77-80, 81-85 odd Ch. 2 Review Exercises (p. 168) 2.1-2.3 Summary Exercises (p. 106) all
9/24 (TH)	2.4	2.4: 1-46, 51-62
9/29 (T)	2.5	2.5: 1-12, 13-45 odds, 20, 22, 28, 38, 42, 46-58, 59-65 odds, 67-83, 84, 85-97 odds, 86, 88, 90 Ch. 2 Review Exercises (p. 169) 2.4-2.5
10/1 (TH)	2.6	2.6: 1-42 all, 43-109 odds, 50, 56, 62, 70, 74, 80, 102, 104, 106
10/6 (T)	2.7	2.7: 1-52 all
10/8 (TH)	2.8	2.8: 1-5, 5-49 odds, 51, 55, 63-77, 79-82, 83-103 odds Ch. 2 Review Exercises (p. 170) 2.6-2.8 Mixed Review (p. 171) all Ch. 2 “Test” (p. 172) 1-19
10/13 (T)	Test # 2 (Chap 2)	Chaps 1-2 Cumulative Review (p. 173) all

Tentative Course Calendar (cont'd)

Day	Class Activities	HW Assignments
10/15 (TH)	3.1 & 3.2	3.1: 1-10, 11-45 odds, 59-64, 65-77 odds, 66, 70, 74, 76 3.2: 1-29 odds, 30, 31-65 odds, 36, 42, 48, 64, 67-74 all
10/20 (T)	3.3	3.3: 1-8, 9-20, 21-63 odds, 22, 24, 26, 40, 48, 52, 65-71, Ch. 3 Review Exercises (p. 227) 3.1-3.2
10/22 (TH)	3.4	3.4: 1-14, 15-63 odds, 36, 42, 62,70,74, 65-77 odds, 78, 79-84 all Summary Exercises (p. 222) 1-19 odds, 20, 21-31 odds Ch. 3 "Test" (p. 229)
10/27 (T)	Test #3 (Chap 3)	Chaps 1-3 Cumulative Review (p. 230) all
10/29 (TH)	4.1 & 4.2	4.1: 1-95 odds, 76, 78, 82, 86, 90, 94 4.2: 1-77 odds, 34, 56, 72, 78, 86 Summary exercises (p. 247) 1-39 odds, 40
11/3 (T)	4.3 & 4.4	4.3: 1-61 odds, 20, 22, 36, 40, 50, 58 4.4: 1-16, 17-95 odds, 36, 42, 48, 54, 70, 86, 97-100 Ch. 4 Review Exercises (p. 288) 4.1-4.3
11/5 (TH)	4.5 & 4.6	4.5: 1-67 odds, 26,34,58, 69-97 every other odd, 68, 84, 98 4.6: 3-59 odds, 20, 36, 56, 61-66, 77-83 odds, 80 Ch. 4 Review Exercises (p. 289) 4.4-4.5
11/10 (T)	4.6 & 4.7	4.7: 1-6, 7-83 every other odd, 16, 36, 46, 56, 66, 76 Ch. 4 Review Exercises (p. 288) 4.6-4.7 Mixed Review (p. 291)
11/12 (TH)	Appendix C	Appendix C: 1-15 odds, 6, 16 Ch. 4 "Test" (p. 291) all
11/17 (T)	Test #4 (Chap 4 & Appendix C)	Chaps 1-4 Cumulative Review (p. 293) all
11/19 (TH)	5.1 & 5.2	5.1: 1-89 every other odd, 52, 58, 72, 78 5.2: 1-24, 25-65 every other odd, 36, 48, 56, 62
11/24 (T)	5.3 & 5.4	5.3: 1-85 every other odd, 28, 40, 54, 70, 84 5.4: 1-6, 7-31 every other odd, 24, 30, 35-95 every other odd, 36, 50, 65, 82
11/26 (TH)	No Class Today!	Ch. 5 Review Exercises (p. 350) 5.1-5.4 Summary Exercises (p. 325) 1-10, 11-89 odds
12/1 (T)	5.5	5.5: 1-10, 11-79 every other odd, 36, 50, 56, 60, 68, 80
12/3 (TH)	5.6	5.6: 3-33 odds, 12, 16, 20, 28, 34-37, 36, 38 Ch. 5 Review Exercises (p. 350) 5.5-5.6 Mixed Review (p. 352) all Ch. 5 "Test" (p.353) all
12/8 (T)	Test #5 (Chap 5)	Chaps 1-5 Cumulative Review (p. 354) all
12/10 (TH)	Course wrap-up/Final Review	
12/15 (T)	Final Review	
12/17 (TH)	Final Exam	