MTH 103 College Algebra, Fall 2013 Course Syllabus

Instructor:	Robert Bell
Lectures:	MWF 1:50-2:40 p.m. in C-103 Holmes Hall
Instructor's Office:	W-32 Holmes Hall (basement of West Holmes Hall)
Instructor's Office Hours:	Tu 7:30 - 8:30 a.m., Th noon-2 p.m., and by appointment
Instructor's e-mail:	rbell@math.msu.edu
Recitation:	T 4:10-5:00 p.m. in 138 AKR and T 5:30-6:20 p.m. in 133 AKR
Learning Assistants (LA)	Sarah Garcia & Kevin Adams
LAs' Office:	math help lounge on the 2nd floor of East Holmes Hall
LAs' Office Hours:	Tu 9:00 - 10:00 p.m. & Th 6:00 - 7:00 p.m.
LAs' e-mail:	adamske9@msu.edu & garci220@msu.edu
Course Web Page:	`http://www.math.msu.edu/~robertbe/MTH103FA13.html`

Required Course Materials

- Textbook: *C*ollege Algebra, 11th edition (custom Michigan State Edition) by Gustafson/Hughes, Cengage Learning, 2013. This text is available from the MSU bookstore. The Michigan State Edition includes sample exams.

- Calculator: A graphing calculator (the TI-83 or TI-84 is recommended) which does NOT have a computer algebra system (CAS) is required. You may NOT use calculators such as the TI-89/92/92+/NSPIRE, Voyage 200, HP49G/49G+/50G, Casio algebf2.0/algefx2.9pls, nor may you use a cell phone, tablet, ipad, or other internet capable device.

- WeBWork: Registration and payment for a WeBWork online homework account is required. An account will be prepared for you and payment information will be sent to your MSU ID e-mail address. You will need to pay a $70 fee to use WeBWork. Payment is made online.

- Online Resources: Course notes and additional exercises are available online, free of charge. You will find links on the course web page listed above.

Topics

The topics of MTH 103 include linear & quadratic equations & inequalities, complex numbers, equations with radicals, absolute value, graphing linear and quadratic equations, transformations of graphs, polynomials, functions, polynomial and rational functions, exponentials, logarithms, and, most importantly, applications of these topics to solving problems outside of mathematics.

Pre-requisites

This course is open to student is proficients in intermediate algebra (e.g. axioms of arithmetic, fractions, integer exponents, radicals, the concept of a variable, solving linear and quadratic equations, factoring, and scientific notation). Please make an appointment to meet with the instructor or an advisor if you have concerns.

Evaluation

Your course grade will be determined by the following table:

Graded Components			**Grading Scale**	
Midterm Exams (4)	400 points		4.0	$90 - 100\%$
WeBWork assignments	100 points		3.5	$85 - 90\%$
Quizzes	100 points		3.0	$79 - 85\%$
Final Exam	200 points		2.5	$73 - 79\%$
			2.0	$65 - 73\%$
			1.5	$60 - 65\%$
			1.0	$55 - 60\%$
			0.0	$0 - 55\%\%$

Exams

There will be four 50 minute midterm exams during the semester and a comprehensive 120 minute final exam on the date scheduled by the university.

Midterm Exam I	Wednesday, September 18
Midterm Exam II	Wednesday October 09
Midterm III	Wednesday, October 30
Midterm IV	Wednesday, November 20
Final Exam	Monday, December 09 at 10:00 a.m.

Exams are written and completed in class without the aid of the textbook, notes, or similar materials. Exams last for the entire class period (50 minutes).

WeBWork

WeBWork is an online homework tool which the MSU Mathematics Department uses for all sections of MTH 103. We will spend time during the lecture to introduce this tool and to discuss how it is used. Each individual problem has two due dates; work submitted by the first date receives full credit, by the second receives 75% credit, and after that zero credit. You should work on these problems offline, and then go online to submit your answers. If you a particular problem is giving you trouble, my advice is to re-read the statement of the problem carefully, then work on the problem on a piece of paper, then check your work, and then attempt to submit your answer online. You will find the all right or all wrong mentality of the online homework frustrating at first, but you will definitely learn and improve your skills while using this system.

You can login to WebWork at `http://www.math.msu.edu/webwork`.

Quizzes

Quizzes will be administered on a weekly basis by your LA during recitation. The lowest two quiz scores will not count towards your final grade. There are no make-up quizzes.

Quizzes are an opportunity to test your current understanding and preparedness for a timed, written exam. Quizzes are written and will last 15 minutes. You are not permitted to use the textbook, notes, calculators, or similar materials during the quizzes. Solutions to quiz problems will be discussed during class time, either during lecture or during recitation.

Ungraded Work

You will not be successful in this course if you only complete the graded assignments. You must, in addition, regularly test your understanding by attempting exercises in the textbook and by attempting problems which we work on as a class during lecture and recitation. The course notes posted online include a list of exercises which you can use to test your understanding. If you cannot consistently solve most of the exercises, then you should not expect to achieve a high exam score. Moreover, if you are are unable to solve at least half of the recommended textbook exercises without making multiple or serious errors, then you should not expect to receive a passing grade on exams.

Students with Disabilities

MSU has a Resource Center For Persons with Disabilities (RCPD); URL: `http://www.rcpd.msu.edu/`. Please contact the RCPD if you require special accommodations, and then schedule an appointment to meet with the instructor and accommodations can be provided.

Academic Honesty

Cheating in any form will not be tolerated and will be reported to the Dean of the College. You will receive a zero on any assignment in which their is a case of cheating. This includes, but is not limited to, plagiarism, failure to give proper citations, and copying another's work. A copy of the Lyman Briggs College academic honesty policy can be found at this URL:
http://www.lymanbriggs.msu.edu/academics/LBC-Academic-Honesty.pdf If you are preparing an

assignment and have a question about whether you are adhering to this policy, please ask your instructor. If you work on an assignment with other students, you must give credit your collaborators.

Student Responsibilities

Attend class & arrive prepared. Regular attendance is required. Before attending the lecture, read the current course notes. At minimum, attempt to work through the first two examples in each current section, and write down any questions you have. Work through the exercises for the current sections and keep a notebook to record your progress.

Read outside of class. You should always have paper and pencil (and eraser!) readily available when reading mathematical text. Work through the examples by writing the steps out yourself until it is clear to you that the solution is correct. Once a topic has been introduced in lecture, you should re-read the corresponding sections from the text. You should work on the exercises at the end of these sections until you are proficient. I encourage you to work with other students and to help one another succeed in the course.

Participate in class. Be attentive and stay alert. Work with your classmates, especially those adjacent to your seat. Take careful notes on those topics which are unfamiliar. Ask questions! Don't be shy: we– including yours truly- are all here to learn!

Complete the homework assignments. Start WeBWork assignments early and discuss these with your classmates. Write your attempts to solve the problems on scratch paper. Then re-write, carefully and neatly, your solutions that you will submit online. When the answers to the WeBWork problems become available, compare your solutions to the posted answers and solutions; you might learn a new technique or another way to understand a concept.

Work through the exercises in the course notes. Attempt these problems and test your understanding. Ask questions about these exercises. Ask your classmates, your LA, your instructor, your roommate, your lab parter, etc. Part of the fun of mathematics is that you can discus mathematical problems with your others and together you can discover a solution.

Attend recitation. You are required to attend the recitation. Prepare for recitation by making a list of specific problems or concepts with which you would like additional help. Please keep in mind that if time runs out before your question is answered that you can send questions via e-mail to either the instructor or the LA.

What is recitation? Recitation is a problem solving session lead by your Learning Assistant (LA). The recitation will typically consist of a question and answer session followed by an opportunity to solve problems suggested by the LA. Additionally, there will usually be a 15 minute quiz administered at the end of each recitation.

Utilize office hours. Please consider bringing your questions to office hours. Both the instructor and LA have regularly scheduled office hours. Office hours are times set aside specifically as an opportunity for you to get additional help. If your schedule conflicts with the scheduled office hours, please make an appointment.

Please do not think of this as an inconvenience to your instructors; additional help is available if you seek it out. However, it is your responsibility to come to office hours only after first making a sincere effort to answer questions on your own. Learning is difficult: work hard, try new ideas, and ask questions. If you do this, you will see definite progress.

Send questions via e-mail. When e-mailing your instructor, be sure to state your question clearly. If you are asking about a specific exercise or example, be sure to restate the problem in its entirety.

Final Thoughts

The best way to learn mathematics is to write down solutions to specific mathematical problems. If you are able to solve most of the WeBWork problems, then I am confident that you will do very well in the course. But don't limit yourself to the WeBWork problems; the course notes include a variety of interesting exercises. Challenge yourself! Try working out problems that sound interesting to you. If you want more

practice or want more challenging problems, please drop by my office during office hours or make an appointment to meet with me.

If you are falling behind in the course, please seek help ASAP. There is help available during office hours, from your classmates (just ask them!), and here in the Holmes Hall math help room (2nd Floor of East Holmes Hall– your LA and other LAs will hold office hours here). Additionally, the Mathematics Department hosts the Math Learning Center (MLC) in Wells Hall and in some of the neighborhood communities on campus.

I want you to succeed in this course, and I'm here to facilitate this goal. But the burden is upon you to work hard, to set aside realistic amounts of time for study and to seek out help when you need it.

Some final advice: dedicate time to reading the book. Work through a few of the problems, check your answers, and then re-read the section. Learning to learn on one's own is key to becoming successful in both the university and in your future career.