

Course Syllabus Details

Course Online College Algebra	
Name	
Course - MAT 1340-G81/G82. Spring, 2024	
Section	
and Term	
GT GT-MA1	
Pathways	
Category	
Credits 4 credits, online.	
and	
Delivery	
Method	
Time 4 credits times 3 hours per credit = 12 hours per week. Budget 12 hours and adjust	up or
Expectatio down, according to how long you're taking to keep up.	•
n l	
Location Online	
of Class	
Meeting I'm basically on call 24/7.	
Dates and	
Time	
Instructor Harry S. (Steve) Mills	
E-mail hmills1@online.aims.edu	
Office Remote/ZOOM	
Location	
Phone 970-290-0550 - Call anytime. I <i>mean</i> that! Don't hesitate to call if you have an ur	gent
Number question or issue.	
Office Door is always open (Meaning call me any time). We will meet in ZOOM:	
Hours https://us02web.zoom.us/j/83458940025?pwd=RnhLSHNRTjFNam9hcTVZbFUrN	Wty
dz09	
Passcode: 775053	
Drop Monday, January 29 th	
Deadline	
Date	
Course Wednesday, April 3 rd	
Withdrawa	
1 Date	
Other https://www.aims.edu/resource-library/academic-calendars	
Important	

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Topic	Detailed Information			
Student	https://www.aims.edu/student-life/student-services			
Services				
Mental	If you are experiencing an immediate mental health concern the following resources are			
Wellness	available:			
	*Call or text 988 or visit 988 LIFELINE			
	*Colorado Crisis Services @ 1-844-493-8255 or Text "Talk" to 38255			
	Select <u>Academic Policies</u> to access more mental wellness and success resources. (https://www.aims.edu/academic-policies)			

Course Requirements

Торіс	Detailed Information
Prerequisite(s)	
Co-requisite(s)	None
Academic Policies – These	Closely review these <u>Academic Policies</u> .
Standards of Behavior statements	(https://www.aims.edu/academic-policies)
apply to every course at Aims	
Community College and are	
hereby incorporated into this	
document.	



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Materials	WebAssign (Linked from Course Shell). A laptop or desktop			
	computer is preferred, but a good pen tablet can probably do			
	the trick (Microsoft Surface, Chromebook, iPad, etc.).			
Other Necessary Items	The main thing is to be able to make clean, high-contrast,			
	multi-page PDFs of your written work that are easy to read.			
	You'll only have to do this 5 times this semester.			
	If you have a good pen tablet for writing math and making			
	PDFs of your written math (Not typed. Written.), you should			
	be golden. Just please use plain white wallpaper/background.			
	You can also do your work on regular plain white paper. Not notebook paper. Letter paper without the lines. If you write dark (Pen is OK. Just put a line through your mistakes) and			
	have access to a good scanner setup, that'll work. Here are some options:			
	1. Printer/Scanner devices.			
	a. Personal printer/scanner			
	b. Aims printers/scanners			
	c. Kinko's, UPS Store, FedEx Office			
	2. RocketBook PDFs			
	3. Camscannner app (I've had good and bad results,			
	depending on the phone and the skill of the student			
	using it.)			
	Your first written assignment will be all about making sure			
	that you're submitting written work appropriately.			

Course Information

Course Description: Focuses on a variety of functions and the exploration of their graphs. Topics include: equations and inequalities, operations on functions, exponential and logarithmic functions, linear and non-linear systems, and an introduction to conic sections. This course provides essential skills for Science, Technology, Engineering, and Math (STEM) pathways. This is a statewide Guaranteed Transfer course in the GT-MA1 category. Course readiness is determined by review of high school transcripts, assessment, and/or meeting with an Aims Academic Advisor. Course is not repeatable for credit.

Course Learning Outcomes – According to the Colorado Community College Common Course Database, upon completion of this course, the student/learner should be able to:

BEGIN BOILERPLATE THAT WON'T HELP YOU, MUCH, THIS SEMESTER, but which other institutions need to see in order for credits to transfer. A more practical guide is the list of assignments and the chapters covered in the text. Universal Syllabus page

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Your BEST overview of topics for this course may be found by correlating your Course Schedule with the table of contents in your textbook/eBook or the WebAssign homework assignments, which lay it all out very nicely for you. For now, you may safely skip down to the middle of Page 5 of this document.

GT-MA1: MATHEMATICS CONTENT CRITERIA (General)

Students should be able to:

- a) Demonstrate good problem-solving habits, including:
 - Estimating solutions and recognizing unreasonable results.
 - Considering a variety of approaches to a given problem, and selecting one that is appropriate.
 - Interpreting solutions correctly.
- b) Generate and interpret symbolic, graphical, numerical, and verbal (written or oral) representations of mathematical ideas.
- c) Communicate mathematical ideas in written and/or oral form using appropriate mathematical language, notation, and style.
- d) Apply mathematical concepts, procedures, and techniques appropriate to the course.
- e) Recognize and apply patterns or mathematical structure.

Utilize and integrate appropriate technology.

GT-MA1 COMPETENCY & STUDENT LEARNING OUTCOMES (General)

Competency: Quantitative Literacy:

Students should be able to:

1. Interpret Information

a. Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words).

2. <u>Represent Information</u>

a. Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words).

3. <u>Perform Calculations</u>

- a. Solve problems or equations at the appropriate course level.
- b. Use appropriate mathematical notation.
- c. Solve a variety of different problem types that involve a multi-step solution and address the validity of the results.

4. <u>Apply and Analyze Information</u>

- a. Make use of graphical objects (such as graphs of equations in two or three variables, histograms, scatterplots of bivariate data, geometrical figures, etc.) to supplement a solution to a typical problem at the appropriate level.
- b. Formulate, organize, and articulate solutions to theoretical and application problems at the appropriate course level.
- c. Make judgments based on mathematical analysis appropriate to the course level.

5. <u>Communicate Using Mathematical Forms</u>



a. Express mathematical analysis symbolically, graphically, and in written language that clarifies/justifies/summarizes reasoning (may also include oral communication).

6. Address Assumptions (required of Statistics courses only)

Describe and support assumptions in estimation, modeling, and data analysis, used as appropriate for the course.

Topical Outline – These topics will be covered in class, but not necessarily in this order:

- 1. Identify properties of functions including domain, range, increasing and decreasing.
- 2. Apply function notation.
- 3. Determine the inverse of a function.
- 4. Examine functions algebraically.
- 5. Analyze behavior and roots of polynomial functions.
- 6. Solve polynomial, rational and absolute value equations and inequalities.
- 7. Analyze polynomial, exponential, logarithmic and rational functions.
- 8. Create graphs of polynomial, exponential, logarithmic and rational functions.
- 9. Solve exponential and logarithmic equations.
- 10. Analyze piecewise functions.
- 11. Graph parent functions and their transformations.
- 12. Utilize algebraic techniques to solve application problems.
- 13. Solve systems of equations.
- 14. Classify conic sections.

State General Education State General Education and Common Learning Outcomes: (for GT Pathways Courses)

The Colorado Commission on Higher Education has approved [*insert course prefix & number*] for inclusion in the Guaranteed Transfer (GT) Pathways program in the GT-MA1 category. For transferring students, successful completion with a minimum C– grade guarantees transfer and application of credit in this GT Pathways category. For more information on the GT Pathways program, go to <u>https://highered.colorado.gov/academics/transfers/gtpathways/curriculum.html</u>.



Aims Common Learning Outcomes – These outcomes define the expectations of an Aims Community College education and provide the benchmarks against which the college holds itself accountable. Find the outcomes at

https://www.aims.edu/departments/institutional-research/assessment

Course Delivery Method: Online. We will be unaffected by campus closures.

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End Boilerplate.

Attendance Policy

Your attendance is measured solely by your timely, finished work.

Communication and Feedback

Call any time: 970-290-0550 - For urgent, time-sensitive matters.

Email me: <u>hmills1@online.aims.edu</u> on online.aims.edu - Use Classlist for prompt service. If you send e-mail to my regular e-mail, I might not see it for days. I empty my inbox on D2L *every day*, so that turnaround time is always 24 hours or less.

Grading

Orientation Tasks, like e-mail settings on D2L: 10% Homework: 20% Writing Projects: 10% Tests: 60%



Grading Scale

Percentage	Grade	Details
90% - 100%	Α	(Superior and excellent)
80% - 89%	В	(Above average)
70% - 79%	С	(Average)
60% - 69%	D	(Below average level of achievement)
Below 60%	F	(Not acceptable)

Course Schedule:

This <u>schedule</u> is made with a spreadsheet, not with a chisel on granite.

https://harryzaims.com/public html/121-online/1340-online-spring-24/1340-schedule-spring-24.pdf