MTH 167 Precalculus with Trigonometry Syllabus
Spring 2025

INSTRUCTOR INFORMATION

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COURSE MATERIALS

Textbooks: College Algebra. 3/e Corrected Edition July 2013 Stitz and Zeager.
Book available free: http://stitz-zeager.com/
Trigonometry by Pablo Chalmeta
(available for free here: http://www.nr.edu/chalmeta/trigonometry/Trigonometry_book.pdf)
Software: MyOpenMath Online Homework: https://www.myopenmath.com/
Course ID: 254108
Enrollment key: mth167

GRADING/EVALUATION

Description	Percentage
Tests (5)	60%
Introductory Quiz	2%
Homework	18%
Final Exam	20%
Total:	**100%**

Last Date to Complete Test	
Test 1	Feb. 12
Test 2	March 3
Test 3	March 26
Test 4	April 14
Test 5	May 6
Final	May 12

Introductory Quiz: You must take the introductory quiz in Canvas by the end of the first week or you will be withdrawn for non-participation in the course.

Tests.

1. There will be five (5) tests administered through the MyOpenMath homework software.
2. You must take the tests in a proctored environment such as our testing centers.
3. You will have 90 minutes to complete the test.
4. You may use a calculator but you **MAY NOT** use any of the symbolic abilities your calculator may have. This includes but is not limited to graphing and solving of equations of any type.
5. There will be no make-up tests. Any missed test will receive the score of "0". See Final Exam below.
6. Tests may be taken early.
7. *The average on all tests will count as 60% of the course grade*

Final Exam. There will be one comprehensive final given the last day of class. The score on the final will replace the lowest test score (including any missed test) if that will improve your final average. Testing procedures are the same for final as for the tests except you have 120 minutes to complete the final. *The final will count as at least 20% of the course grade*

HOMEWORK:

Giving your best effort on homework is the single best thing you can do to help your mathematics. As such, the homework will be submitted through the MyOpenMath software and will count for a significant portion of the grade. (18%) The homework is due weekly. There is no penalty for working on the homework late with a late pass. Academic Assistance also has qualified tutors who can work with you on a regular basis.

CALCULATOR:

A scientific calculator is recommended. If you own a calculator do not buy a new one. If you do not own a calculator don't spend a lot of money on one. I recommend the TI-30X IIS calculator.

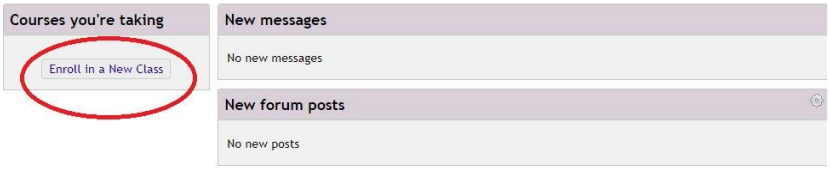
EMAIL POLICY

If you send me an e-mail always use your NRCC issued email address. Be sure that your email client includes your name in the header. You should always include a descriptive subject line that includes the course number. Please remember to use complete sentences and follow the rules of grammar. The Purdue OWL website (click) has excellent information about creating a professional email. I communicate through email to your NRCC issued address. I WILL NOT be replying to email that does not conform to these requirements. I do reply to email within 24 hours during the week. Weekends may be longer.

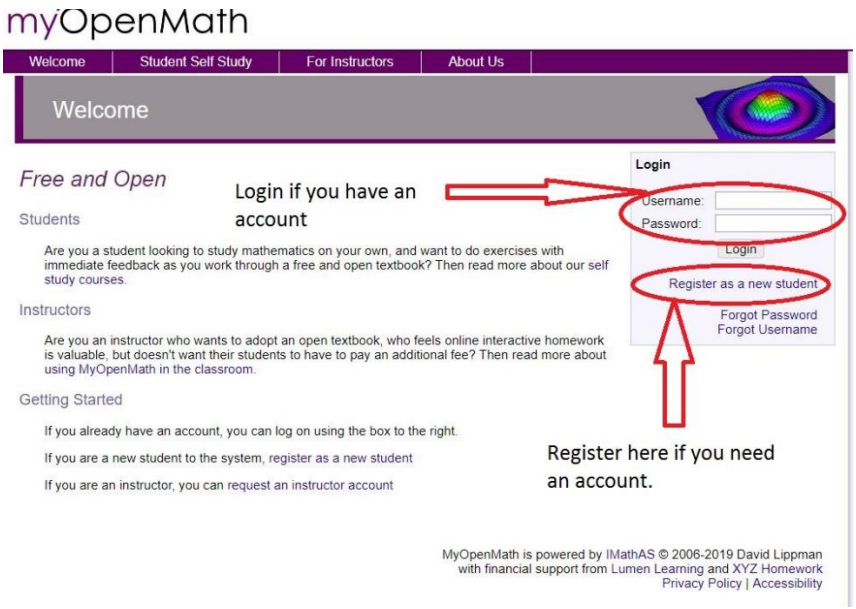
MYOPENMATH STUDENT REGISTRATION:

1. Enter https://www.myopenmath.com/ in your Web Browser.

2a. If you already have an account, you can log on and go to "enroll in a new class".



2b. If you are a new student to the system, register as a new student



3. Enter the course information. Enter your **Course ID** and **Enrollment Key** exactly as provided by your instructor (See Page 1) and click "**Submit**". *Your course information should appear. If not, contact your instructor to verify the correct Course ID.*

4. Verify that you are in the right class by returning the main page.

		College Algebra V. 3	
		Stitz & Zeager	
Week	Section	Title	Text Homework
	1	**Relations and Functions**	
	1.1	Sets of Real Numbers and the Cartesian Coordinate Plane	p. 14 #1, 2 - 20 even, 21, 22, 24, 26, 32, 34, 37, 38
	1.2	Relations	p. 29 #2, 3, 7, 9, 11, 15, 21, 22, 27, 28, 31-36, 41 - 49 odd
	1.3	Introduction to Functions	p. 49 #1-14, 16 - 30 even, 33, 36, 39, 42, 45, 48
	1.4	Function Notation	p. 63 #2-14 even, 20, 22, 26, 28, 30, 35, 36, 38 - 50 even, 64, 71, 72, 73
	1.5	Function Arithmetic	p. 84 #2-12 even, 16, 18, 22-28, 46, 47, 51, 53
	1.6	Graphs of Functions	p. 107 #1 - 6, 13 - 15, 17, 22, 24, 26, 29, 36, 58 - 73, 78-90, 96
	1.7	Transformations	p. 140 #12, 3, 4, 5, 7, 9, 10, 11, 15, 19-23, 25, 29, 30, 31, 33, 35, 36, 38, 39, 41, 42, 44, 54-61
	2	**Linear and Quadratic Functions**	
	2.1	Linear Functions	p. 163 #1-19 odd, 21 - 26, 28, 30, 32, 34, 39, 42, 44, 56, 60-70 even
	2.2	Absolute Value Functions	p. 183 # 2 - 12 even, 16, 17, 22, 23, 26, 28
	2.3	Quadratic Functions	p. 200 #1 - 8, 10, 12, 16, 17, 22, 23, 31
	2.4	Inequalities with Absolute Value and Quadratic Functions	p. 220 # 1 - 7 odd, 17 - 25 odd
3		**Test 1**	**Chapter 1 and 2**
	3	**Polynomial Functions**	
	3.1	Graphs of Polynomials	p. 235 #1 - 25 odd
	3.2	The Factor Theorem and the Remainder Theorem	p. 257 #1 - 27 odd, 31, 33, 35, 38, 41, 42, 43
	3.3	Real Zeros of Polynomials	p. 269 #1, 6, 7, 9, 11, 13, 15, 19, 21, 23, 31
	3.4	Complex Zeros and the Fundamental Theorem of Algebra	p. 287 #1 - 20, 27 - 30, 47 - 50
	4	**Rational Functions**	
	4.1	Introduction to Rational Functions	p. 314 #1 - 10, 19, 20
	4.2	Graphs of Rational Functions	p. 333 #1 - 6, 9
	4.3	Rational Inequalities and Applications	p. 353 # 1 -5, 7, 8, 9
6		**Test 2**	**Chapter 3 and 4**
	5	**Further Topics in Functions**	
	5.1	Function Composition	p. 369 #1 - 23 odd, 31, 33, 56 - 61
	5.2	Inverse Functions	p. 394 #1 - 17 odd

	6	**Exponential and Logarithmic Functions**	
	6.1	Introduction to Exponential and Logaritmic Functions	p. 429 #1-35 odd, 43, 45, 58, 59, 60, 64, 75, 77
	6.2	Properties of Logarithms	p.445 #1-6, 10-14, 16-22, 35, 37, 39
	6.3	Exponential Equations	p. 456 #1-23 odd
	6.4	Logarithmic Equations	p. 466 #1-19 odd
	6.5	Application of Exponential and Logarithmic Functions	p. 482 #1, 2, 5, 6, 8-11, 15, 17, 21-25, 27, 28, 29
	8	**Systems of Equations and Matrices**	
	8.1	Systems of Linear Equations: Gaussian Elimination	p. 562 # 1 - 15 odd, 21
	8.6	Partial Fraction Decomposition	p. 635 #1 - 6, 7, 8, 9, 11
9		**Test 3**	**Chapter 5, 6 and 8**
	7	**Hooked on Conics**	
	7.1	Introduction to Conics	None
	7.2	Circles	p. 502 #1, 3, 7, 11, 13, 15
	7.3	Parabolas	p. 512 # 1-17 odd
	7.4	Ellipses	p. 525 #1-19 odd
	7.5	Hyperbolas	p. 541 #1 - 4, 9,10, 13-23 odd
		Trigonmetry Chalmeta	
Week	**1**	**Trigonometric Functions**	
	1.1	Angles and Their Measure	p. 9 #1 - 15 odd, 21, 24, 27, 30, 33, 37, 41, 43, 45, 51, 53
	1.2	Right Triangle Trigonometry	p. 20 # 1-11 odd, 17-25 odd, 26
	1.3	Trigonometric Functions of Any Angle	p. 30 # 1 - 23 odd, 25, 30, 35, 41, 43, 45
	1.4	The Unit Circle	p. 37 #1 - 8, 9, 11, 14, 16, 19
	1.5	Applications and Models	p. 43 #1, 3, 5, 7, 13-21 odd, 22
11		**Test 4**	**Chapter 7 Conics & Chapter 1 Trigonometry**
	2	**Graphs and Inverse Functions**	
	2.1	Graphs of Sine and Cosine	p. 56 #1-9 odd, 13-19 odd, 22
	2.2	Graphs of tan(x), cot(x), csc(x) and sec(x)	p. 64 # 1, 2, 3
	2.3	Inverse Trigonometric Functions	p. 73 #1-19, 29, 30
	2.4	Solving Trigonometric Equations	p.80 #1-15 odd, 19-25 odd, 29
	3	**Trigonometric Identities**	

	3.1	Fundamental Identities	p. 87 #1-17 odd
	3.2	Proving Identities	p. 92 #1-13 odd, 21, 23, 29, 31
	3.3	Sum and Difference Formulas	p. 100 #1, 3, 6, 8, 9, 13, 17, 19, 23, 27, 31-39 odd
	3.4	Multiple-Angle Formulas	p. 107 #1, 3, 5, 11, 13, 17, 19, 23, 25, 31
	5	**Additional Topics**	
	5.1	Polar Coordinates	p. 137 # 1-31 odd
14		**Test 5**	**Chapters 2, 3, & 5**
15		**Final Exam**	