## **Course Calendar for MATH 102**

Academic years 2023–2024 and 2024–2025

This MATH 102 course calendar was approved by the department on 11 April 2023. Notes:

- The aim is to build a reasonably paced course calendar that be followed without attempting to rush through last handful of sections.
- Some sections are marked for two class periods. We might be mistaken about which sections need more time, but at least those sections that span two class periods provide the schedule with some buffers.
- The textbook is *College Algebra*, Version  $\lfloor \pi \rfloor$ , Corrected Edition, by Carl Stitz and Jeff Zeager.
- We hope use this textbook and course calendar for the Academic years 2023–2024 and 2024–2025.
- Course instructors should meet toward the end of each term and to make needed tweaks to the calendar.
- This calendar has four midterm examinations and weekly homework assignments, but instructors are free to modify the course assessments.
- The LaT<sub>E</sub>X, code does automatic date arithmetic. Also, given the time of the class, it finds the correct day for the final exam.
- Each week of the calendar is spread over three rows, making the calendar natural for a MWF class and maybe a bit less natural for a TTh section.

## **Class Calendar**

Fall 2023

Week	Week of	Sections	Topics	Assessments
1	21 Aug	1.1	Sets of Real Numbers and the Cartesian Coordinate Plane	
		1.2	Relations	
		1.3	Introduction to Functions	HW 1
2	28 Aug	1.4	Function Notation	
		1.5	Function Arithmetic	
		1.6	Graphs of Functions	HW 2
3	4 Sept		No class (Labor Day)	
		1.7	Transformations	
		2.1	Linear Functions	HW 3
4	11 Sept	2.2	Absolute Value Functions	
		1.1—2.2	Exam review or catch up	
			Exam Day (15 Sept)	Exam 1
5	18 Sept	2.3	Quadratic Functions	
		2.4	Inequalities with Absolute Value and Quadratic Functions	
		2.4	Inequalities with Absolute Value and Quadratic Functions	HW 4
6	25 Sept	3.1	Graphs of Polynomials	
		3.2	The Factor Theorem and the Remainder Theorem	
		3.3	Real Zeros of Polynomials	HW 5
7	2 Oct	4.1	Introduction to Rational Functions	
		4.2	Graphs of Rational Functions	
		4.3	Rational Inequalities and Applications	HW 6
8	9 Oct	4.3	Rational Inequalities and Applications	
		2.3—4.3	Exam review or catch up	
			Exam Day (13 Oct)	Exam 2
9	16 Oct		No class (Fall Break)	
		5.1	Function Composition	
		5.2	Inverse Functions	HW 7
10	23 Oct	6.1	Introduction to Exponential and Logarithmic Functions	
		6.1	Introduction to Exponential and Logarithmic Functions	
		6.2	Properties of Logarithms	HW 8
11	30 Oct	6.2	Properties of Logarithms	
		6.3	Exponential Equations and Inequalities	
		6.4	Logarithmic Equations and Inequalities	HW 9
12	6 Nov	5.1—6.4	Exam review or catch up	
			Exam Day (8 Nov)	Exam 3
		6.5	Applications of Exponential and Logarithmic Functions	
13	13 Nov	6.5	Applications of Exponential and Logarithmic Functions	
		8.1	Systems of Linear Equations: Gaussian Elimination	
		8.1	Systems of Linear Equations: Gaussian Elimination	HW 10
14	20 Nov	8.2	Systems of Linear Equations: Augmented Matrices	HW 11
			No class (Thanksgiving)	
			No class (Thanksgiving)	
15	27 Nov	9.1	Sequences	
		6.5—9.1	Exam review or catch up	
			Exam Day (1 Dec)	Exam 4
16	4 Dec	9.2	Summation Notation	
		9.2	Summation Notation	
		1.1—9.2	Final Exam review or catch up	
17	11 Dec		Final Exam Monday 8:00 a.m.—10:00 a.m.	Final Exam

## **Class Calendar**

Fall 2024

Week	Week of	Sections	Topics	Assessments
1	26 Aug	1.1	Sets of Real Numbers and the Cartesian Coordinate Plane	
		1.2	Relations	
		1.3	Introduction to Functions	HW 1
2	2 Sept	1.4	Function Notation	
		1.5	Function Arithmetic	
		1.6	Graphs of Functions	HW 2
3	9 Sept		No class (Labor Day)	
		1.7	Transformations	
		2.1	Linear Functions	HW 3
4	16 Sept	2.2	Absolute Value Functions	
		1.1—2.2	Exam review or catch up	
			Exam Day (20 Sept)	Exam 1
5	23 Sept	2.3	Quadratic Functions	
		2.4	Inequalities with Absolute Value and Quadratic Functions	
		2.4	Inequalities with Absolute Value and Quadratic Functions	HW 4
6	30 Sept	3.1	Graphs of Polynomials	
		3.2	The Factor Theorem and the Remainder Theorem	
		3.3	Real Zeros of Polynomials	HW 5
7	7 Oct	4.1	Introduction to Rational Functions	
		4.2	Graphs of Rational Functions	
		4.3	Rational Inequalities and Applications	HW 6
8	14 Oct	4.3	Rational Inequalities and Applications	
		2.3—4.3	Exam review or catch up	
			Exam Day (18 Oct)	Exam 2
9	21 Oct		No class (Fall Break)	
		5.1	Function Composition	
		5.2	Inverse Functions	HW 7
10	28 Oct	6.1	Introduction to Exponential and Logarithmic Functions	
		6.1	Introduction to Exponential and Logarithmic Functions	
		6.2	Properties of Logarithms	HW 8
11	4 Nov	6.2	Properties of Logarithms	
		6.3	Exponential Equations and Inequalities	
		6.4	Logarithmic Equations and Inequalities	HW 9
12	11 Nov	5.1—6.4	Exam review or catch up	
			Exam Day (13 Nov)	Exam 3
		6.5	Applications of Exponential and Logarithmic Functions	
13	18 Nov	6.5	Applications of Exponential and Logarithmic Functions	
		8.1	Systems of Linear Equations: Gaussian Elimination	
		8.1	Systems of Linear Equations: Gaussian Elimination	HW 10
14	25 Nov	8.2	Systems of Linear Equations: Augmented Matrices	HW 11
			No class (Thanksgiving)	
			No class (Thanksgiving)	
15	2 Dec	9.1	Sequences	
		6.5—9.1	Exam review or catch up	
			Exam Day (6 Dec)	Exam 4
16	9 Dec	9.2	Summation Notation	
		9.2	Summation Notation	
		1.1—9.2	Final Exam review or catch up	
17	16 Dec		Final Exam Monday 8:00 a.m.—10:00 a.m.	Final Exam

## **Class Calendar**

Spring 2024

Week	Week of	Sections	Topics	Assessments
1	22 Jan	1.1	Sets of Real Numbers and the Cartesian Coordinate Plane	
		1.2	Relations	
		1.3	Introduction to Functions	HW 1
2	29 Jan	1.4	Function Notation	
		1.5	Function Arithmetic	
		1.6	Graphs of Functions	HW 2
3	5 Feb	1.7	Transformations	
Ü	0100	2.1	Linear Functions	HW 3
		2.2	Absolute Value Functions	11110
4	12 Feb	1.1—2.2	Exam review or catch up	
-	12100	1.1 2.2	Exam Day (14 Feb)	Exam 1
		2.3	Quadratic Functions	LAUIII I
5	19 Feb	2.4	Inequalities with Absolute Value and Quadratic Functions	
3	13 гев	2.4	Inequalities with Absolute Value and Quadratic Functions	HW 4
		3.1	_	NW 4
<u> </u>	26 Feb		Graphs of Polynomials	
6	26 Feb	3.2	The Factor Theorem and the Remainder Theorem	TTTA7 =
		3.3	Real Zeros of Polynomials	HW 5
		4.1	Introduction to Rational Functions	
7	4 Mar	4.2	Graphs of Rational Functions	
		4.3	Rational Inequalities and Applications	HW 6
		4.3	Rational Inequalities and Applications	
8	11 Mar		No class (Spring Break)	
			No class (Spring Break)	
			No class (Spring Break)	
9	18 Mar	2.3—4.3	Exam review or catch up	
			Exam Day (20 Mar)	Exam 2
		5.1	Function Composition	
10	25 Mar	5.1	Function Composition	
		5.2	Inverse Functions	
		6.1	Introduction to Exponential and Logarithmic Functions	
11	1 Apr	6.1	Introduction to Exponential and Logarithmic Functions	
		6.2	Properties of Logarithms	HW 7
		6.2	Properties of Logarithms	
12	8 Apr	6.3	Exponential Equations and Inequalities	
	1	6.4	Logarithmic Equations and Inequalities	HW 8
		5.1—6.4	Exam review or catch up	
13	15 Apr		Exam Day (15 Apr)	Exam 3
-	r	6.5	Applications of Exponential and Logarithmic Functions	
		6.5	Applications of Exponential and Logarithmic Functions	
14	22 Apr	8.1	Systems of Linear Equations: Gaussian Elimination	
**	22.1p1	8.1	Systems of Linear Equations: Gaussian Elimination	HW 9
		8.2	Systems of Linear Equations: Augmented Matrices	HW 10
15	29 Apr	6.5—9.1	Exam review or catch up	1111110
10	20 Mpi	0.0 -0.1	Exam Day (1 May)	Exam 4
		9.1	Sequences	LAUIII 4
16	6 Morr	9.1	Summation Notation	
10	6 May	9.2	Summation Notation Summation Notation	
17	10 1/1	1.1—9.2	Final Exam review or catch up	Dim -1 D.
17	13 May		Final Exam Monday 8:00 a.m.—10:00 a.m.	Final Exam