



## North Central State College

**MASTER SYLLABUS**

**2025-2026**

- A. Academic Division: Liberal Arts
- B. Discipline: Mathematics
- C. Course Number and Title: MATH0084 Introductory and Intermediate Algebra
- D. Asstant Dean: Laura Irmer
- E. Credit Hours: 5  
Lecture:  
Laboratory:
- F. Prerequisites: MATH0072 or MATH0073 (Minimum grade of C- required) or qualifying placement test scores
- G. Last Course/Curriculum Revision Date: Fall 2023 Origin date: 10/25/2018
- H. Textbook(s) Title:
- Title: Elementary and Intermediate Algebra
  - Authors: Michael Sullivan, III, Katherine R. Struve and Janet Mazzarella
  - Copyright Year: 2018
  - Edition: 4<sup>th</sup>
  - ISBN: Hard-bound text and student access code – 9780134775401  
Loose-leaf text and student access code - 9780134775395  
Book-Specific MyMathLab Access Code – 978013475330
- Note: a new one-year access code is needed**
- I. Workbook(s) and/or Lab Manual: TI-83, TI-83+, TI-84 or TI-84+ calculator is required.
- J. Course Description: The course consists of a brief review of arithmetic concepts, signed numbers, fractions and decimals. It also includes linear equations and inequalities, polynomials, factoring, rational expressions and equations, coordinate graphing, systems of linear equations, simplification of radicals, functions (including linear, quadratic, exponential and logarithmic), exponents and complex numbers.
- K. College-Wide Learning Outcomes:

College-Wide Learning Outcome	Assessments - - How it is met & When it is met
Communication – Written	
Communication – Speech	
Intercultural Knowledge and Competence	
Critical Thinking	
Information Literacy	
Quantitative Literacy	

L. Course Outcomes and Assessment Methods:

Upon successful completion of this course, the student shall:

Outcomes	Assessments – How it is met & When it is met
1. Add, subtract, multiply and divide fractions, decimals and integers.	Homework and Test 1 – Early in the term. Final Exam – Week 16
2. Perform calculations involving percents.	Homework – Test 1 Early in the term. Final Exam
3. Evaluate exponential expressions and simplify expressions using the order of operations.	Homework and Test 1 Early in the term. Final Exam
4. Solve linear equations, inequalities and formulas.	Homework and Test 1 Early in the term. Final Exam
5. Graph linear equations in two variables. Determine the slope of a line as well as write the equation of a line.	Homework and Test 1 Early in the term. Final Exam
6. Solve systems of linear equations using graphing, substitution and elimination methods.	Homework and Test 1 Early in the term. Final Exam
7. Add, subtract, multiply and divide monomials and polynomials.	Homework and Test 2 Early in the term. Final Exam
8. Factor polynomials. Solve polynomial equations by factoring.	Homework and Test 2 Middle of the term. Final Exam
9. Add, subtract, multiply and divide rational expressions. Solve rational equations.	Homework and Test 2 Middle of the term. Final Exam
10. Graph functions. Solve compound inequalities, absolute value equations and absolute value inequalities. Solve equations involving variation.	Homework and Test 3 Middle of the term. Final Exam
11. Evaluate roots and rational exponents. Simplify expressions using laws of exponents and properties of radicals. Add, subtract and multiply radical expressions and complex numbers. Rationalize radical expressions. Solve radical equations.	Homework and Test 3 Middle of the term. Final Exam
12. Solve quadratic equations and polynomial inequalities. Graph quadratic equations.	Homework late in the term Final Exam
13. Identify composite, inverse, exponential and logarithmic functions. Use properties of logarithms to solve equations.	Homework late in the term. Final Exam
14. Identify arithmetic and geometric sequences. Compute the general term formula for arithmetic and geometric sequences. Use the binomial theorem to expand expressions.	Homework late in the term Final Exam

M. Recommended Grading Scale:

NUMERIC	GRADE	POINTS	DEFINITION
93–100	A	4.00	Superior
90–92	A-	3.67	Superior
87–89	B+	3.33	Above Average
83–86	B	3.00	Above Average
80–82	B-	2.67	Above Average
77–79	C+	2.33	Average
73–76	C	2.00	Average
70–72	C-	1.67	Below Average
67–69	D+	1.33	Below Average
63–66	D	1.00	Below Average
60–62	D-	0.67	Poor
00--59	F	0.00	Failure

N. College Procedures/Policies:

North Central State College believes that every student is a valued and equal member of the community.\* Every student brings different experiences to the College, and all are important in enriching academic life and developing greater understanding and appreciation of one another. Therefore, NC State College creates an inclusive culture in which students feel comfortable sharing their experiences. Discrimination and prejudice have no place on the campus, and the College takes any complaint in this regard seriously. Students encountering aspects of the instruction that result in barriers to their sense of being included and respected should contact the instructor, assistant dean, or dean without fear of reprisal.

\* *Inclusive of race, color, religion, gender, gender identity or expression, national origin (ancestry), military status (past, present or future), disability, age (40 years or older), status as a parent during pregnancy and immediately after the birth of a child, status as a parent of a young child, status as a foster parent, genetic information, or sexual orientation*

**Important information regarding College Procedures and Policies can be found on the syllabus supplement located at**

<https://ncstatecollege.edu/documents/President/PoliciesProcedures/PolicyManual/Final%20PDFs/14-081b.pdf>



## North Central State College

### SYLLABUS ADDENDUM

Academic Division: Liberal Arts

Discipline: Mathematics

Course Coordinator: Christine Shearer

Course Number: MATH-0084-920

Course Title: Elementary & Intermediate Algebra

Semester / Session: Spring 2026

Start / End Date: 1/12/26 – 3/6/26

#### Instructor Information

Name: Brandi Walker

Phone Number: 419-961-6042

E-Mail Address: bwalker2@ncstatecollege.edu

Office Location: Online

Office Hours: by appt.

- **Topical Timeline (Subject to Change):**

- Operations on Real Numbers and Algebraic Expressions
- Equations and Inequalities in One Variable
- Introduction to Graphing and Equations of Lines
- Systems of Linear Equations and Inequalities in Two Variables
- Exponents and Polynomials
- Factoring Polynomials
- Rational Expressions and Equations
- Graphs, Relations and Functions
- Radicals and Rational Exponents
- Quadratic Equations and Functions
- Exponential and Logarithmic Functions
- Sequences, Series and the Binomial Theorem

- **Grading Guidelines:**

MyMathLab (Online Homework): 35%  
Additional Assignments & Extra Credit: 5%  
Tests: 45%  
Final Exam: 15%

- **Examination Policy:**

Instructions on how to access your tests, complete your tests and submit your tests will be posted on Canvas for each exam. You may use a calculator and scrap paper for your exam. **You need to show all your work to earn full credit for each question.** Please be aware of DUE DATES! Exams will be graded within 72 hours of their due date.

- **Homework Policy:**

MyMathLab is the website we will be using to complete our homework assignments. Directions on how to register on MyMathLab can be found on Canvas. The homework for each week (which is laid out for you in the Course Calendar on Canvas) will be DUE at 11:59pm on listed due dates. Homework grades will be entered into Canvas the day after the due date. Homework assignments close/lock after the due date.

- **Classroom Expectations:**

WATCH THE LECTURE VIDEOS - the videos will teach you what you need to know for the homework and tests.

TIME MANAGEMENT is absolutely critical to be successful in a 5 credit, online course. It is so easy to fall behind, and very difficult to get caught back up, so be sure to stay on top of things!!

COMMUNICATION with your instructor is essential, especially with an online course! Always ask for help when you find yourself struggling!



## North Central State College

MATH-0084  
Elementary & Intermediate Algebra  
Spring 2026

Brandi Walker  
419-961-6042  
[bwalker2@ncstatecollege.edu](mailto:bwalker2@ncstatecollege.edu)

### Course Calendar

#### **Week 1**

1/12 - 1/18

Read through all items posted on the Home page of Canvas  
Add a Profile Picture of Yourself on Canvas  
(if you feel comfortable doing so)

#### **Assignments:**

Introduce Yourself in Discussions on Canvas  
Send an E-mail to your Instructor ( [bwalker2@ncstatecollege.edu](mailto:bwalker2@ncstatecollege.edu) )  
Send a Canvas Inbox message to your Instructor  
Send a Text Message to your Instructor (419-961-6042)

#### **Get Registered on MyMathLab:**

Instructions & COURSE ID can be found when you click on Class Content on the Home page of our course in Canvas and open the PDF file attached

#### **Watch Lecture Videos on Canvas:**

1.7 - Order of Operations  
2.2 - Linear Equations  
2.3 - Linear Equations with Fractions & Decimals  
2.5 - Translations  
2.7 - Geometry & Uniform Motion  
2.8 - Linear Inequalities (one variable)

**Complete Sections 1.7, 2.2, 2.3, 2.5, 2.7 & 2.8**

**MyMathLab HOMEWORK: Due Sunday, January 18 at 11:59pm**

**Week 2**

1/19 - 1/25

**Watch Lecture Videos on Canvas:**

3.5 - Slope

3.6 - Parallel & Perpendicular Lines

3.7 - Linear Inequalities (two variables)

4.1 - Solving Systems of Linear Equations by Graphing

4.2 - Solving Systems of Linear Equations using Substitution

4.3 - Solving Systems of Linear Equations using Elimination

**Complete Sections:** 3.5, 3.6, 3.7, 4.1, 4.2 & 4.3

**Watch Test 1 Review Video on Canvas**

**COMPLETE TEST 1** (Instructions on Canvas)

**MyMathLab HOMEWORK & TEST 1: Due Sunday, January 25 at 11:59pm**

**Week 3**

1/26 - 2/1

**Watch Lecture Videos on Canvas:**

5.4 - Dividing Monomials

5.5 - Dividing Polynomials

5.6 – Scientific Notation

6.1 - Greatest Common Factor, Grouping

6.2 - Factoring

6.3 - AC Method

6.4 - Perfect Square & Perfect Cube Factoring

**Complete Sections** 5.4, 5.5, 5.6, 6.1, 6.2, 6.3 & 6.4

**MyMathLab HOMEWORK: Due Sunday, February 1 at 11:59pm**

**Week 4**

2/2 - 2/8

**Watch Lecture Videos on Canvas:**

- 6.6 - Solving Polynomial Equations by Factoring
- 7.2 - Multiplying & Dividing Rational Expressions
- 7.5 - Adding & Subtracting Rational Expressions

**Complete Sections 6.6, 7.2 & 7.5**

**Watch Test 2 Review Video on Canvas**

**COMPLETE TEST 2** (Instructions on Canvas)

**MyMathLab HOMEWORK & TEST 2:  
Due THURSDAY, February 5 at 11:59pm**

**Watch Lecture Videos on Canvas:**

- 8.6 - Compound Inequalities
- 8.7 - Absolute Value Equations & Inequalities
- 8.8 - Variation

**Complete Sections 8.6, 8.7 & 8.8**

**MyMathLab HOMEWORK: Due Sunday, February 8 at 11:59pm**

**Week 5**

2/9 - 2/15

**Watch Lecture Videos on Canvas:**

- 9.1 - Square Roots (Radicals)
- 9.2 -  $n$ th Roots & Rational Exponents
- 9.3 - Simplifying Expressions using Laws of Exponents
- 9.4 - Simplifying Radical Expressions
- 9.5 - Add, Subtract & Multiply Radical Expressions

**Complete Sections 9.1, 9.2, 9.3, 9.4 & 9.5**

**MyMathLab HOMEWORK: Due Sunday, February 15 at 11:59pm**

**Week 6**

2/16 - 2/22

**Watch Lecture Videos on Canvas:**

9.6 - Rationalizing Radical Expressions

9.8 - Radical Equations

9.9 - Complex Numbers (Imaginary)

**Complete Sections 9.6, 9.8 & 9.9**

**Watch Test 3 Review Video on Canvas**

**COMPLETE TEST 3** (Instructions on Canvas)

**MyMathLab HOMEWORK & TEST 3:**

**Due Sunday, February 22 at 11:59pm**

**Week 7**

2/23 - 3/1

**Watch Lecture Videos on Canvas:**

10.1 - Square Root Property, Completing the Square,  
Pythagorean Theorem

10.2 - Quadratic Equation

11.1 - Composite & Inverse Functions

11.2 - Exponential Functions

11.3 - Logarithmic Functions

11.5 - Exponential & Logarithmic Equations

**Complete Sections 10.1, 10.2, 11.1, 11.2, 11.3 & 11.5**

**MyMathLab HOMEWORK: Due Sunday, March 1 at 11:59pm**



**Week 8**

3/2 - 3/6

**Watch Lecture Videos on Canvas:**

12.1 - Distance & Midpoint Formulas

13.1 - Sequences & Summations

13.4 - Factorials, Binomial Coefficients & The Binomial Theorem

**Complete Sections 12.1, 13.1 & 13.4**

**Watch Test 4 Review Video on Canvas**

**COMPLETE FINAL EXAM - TEST 4** (Instructions on Canvas)

**MyMathLab HOMEWORK & FINAL EXAM:**

**Due FRIDAY, March 6 at 11:59pm**

HAVE A WONDERFUL SPRING BREAK!! :)

## Creating Your MyMathLab Account / Accessing Your Homework

1. To begin, navigate to [www.mymathlab.com](http://www.mymathlab.com).  
Bookmark this page as this is the site from which you will access your MyMathLab course content throughout the semester.
2. Click on the "Student" button.
3. Have your e-mail address (school or personal - whichever one you use more frequently)  
Course ID (listed below)  
Access Code (which came with your Textbook) or Credit Card or PayPal information ready  
  
Click on "OK! Register Now!"
4. Enter your Course ID.

**Your Course ID: **shearer78450****

Click "Continue to register."

5. Scroll Down - Click on "Create an account."
6. Enter all required information (please make sure you **write down your Username & Password** because you will need this information every time you log in to do your homework.)  
  
Check the box to agree to the "Terms of Use."  
  
Click "Create Account."
7. Click "Get Registered."
8. You will be prompted to enter your purchase information. You have three options.

Enter the access code that came with the textbook you purchased.

or

Purchase access using a credit card or PayPal. (\$74.99)

or

Get temporary access without payment for 14 days.