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. Assistant 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: 4th
- 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/Section	MATH 0084 920	**Course Title:**	Introductory and Intermediate Algebra
Semester / Session:	Fall 2025	**Start / End Date:**	8/11/24 – 10/3/24

Instructor Information

Name:	Brandi Walker	**Credentials:**	BS in EDU, MBA/ACC
Phone Number:	419-961-6042	**E-Mail Address:**	bwalker2@ncstatecollege.edu
Office Location:	Online	**Office Hours:**	by appt.

I. 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

II. Course Assignments:

1. Introduction Discussion & Communication Assignment
2. Homework
3. Extra Credit Reflections
4. Tests
5. Final Exam

III. Grading and Testing Guidelines:

Activity	Percentage
MyMathLab Homework	35%
Additional Assignments/Extra Credit	5%
Tests (3)	45%
Final Exam	15%

Course Number:	MATH 0084 920	**Course Title:**	Introductory and Intermediate Algebra
Semester / Session:	Fall 2025 Session A	**Start / End Date:**	8/11/25 - 10/3/25

IV. 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.

V. Class Attendance and Homework Make-Up 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.

VI. 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!

Creating Your MyMathLab Account / Accessing Your Homework

1. To begin, navigate to 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 Access" button.

3. Have your e-mail address (school or personal - whichever one you use more frequently), your Course ID (listed below) and your Access Code, credit card or PayPal information ready.

   Scroll down and click on "I'm ready to register!"

4. Enter your Course ID.

   Your Course ID: shearer68466

   Click "Continue to register."

5. **Scroll down** and 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 Started."

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.
   - Purchase access using a credit card or PayPal. ($79.99)
   - Get temporary access without payment for 14 days.

North Central State College

MATH0084
Intro & Intermediate Algebra
Fall 2025

Brandi Walker
419-961-6042
bwalker2@ncstatecollege.edu

Course Calendar

Week 1
8/11 - 8/17

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

Assignments:
Introduce Yourself in Discussions on Canvas
Send an E-mail to your Instructor (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 and open the PDF file attached under MyMathLab.

Lecture Videos on Canvas / MyMathLab HOMEWORK:
1.7 - Order of Operations
2.2 - Linear Equations
2.3 - Linear Equations with Fractions & Decimals
2.5 - Translations

Due Sunday, August 17 at 11:59pm

Week 2
8/18 - 8/24

Lecture Videos on Canvas / MyMathLab HOMEWORK:
2.7 - Geometry & Uniform Motion
2.8 - Linear Inequalities (one variable)
3.5 - Slope
3.6 - Parallel & Perpendicular Lines
3.7 - Linear Inequalities (two variables)
4.1 - Solving Systems of Linear Equations by Graphing

Due Sunday, August 24 at 11:59pm

Week 3
8/25 - 8/31

Lecture Videos on Canvas / MyMathLab HOMEWORK:
4.2 - Solving Systems of Linear Equations using Substitution
4.3 - Solving Systems of Linear Equations using Elimination

*****COMPLETE TEST 1 / Chapters 1 - 4*****
Instructions & REVIEW VIDEO on Canvas

Due THURSDAY, August 28 at 11:59pm

Lecture Videos on Canvas / MyMathLab HOMEWORK:
5.4 - Dividing Monomials
5.5 - Dividing Polynomials
5.6 – Scientific Notation

Due Sunday, August 31 at 11:59pm

Week 4
9/1 - 9/7

Lecture Videos on Canvas / MyMathLab HOMEWORK:
6.1 - Greatest Common Factor, Grouping
6.2 - Factoring
6.3 - AC Method
6.4 - Perfect Square & Perfect Cube Factoring
6.6 - Solving Polynomial Equations by Factoring
7.2 - Multiplying & Dividing Rational Expressions

Due Sunday, September 7 at 11:59pm

Week 5
9/8 - 9/14

Lecture Videos on Canvas / MyMathLab HOMEWORK:
7.5 - Adding & Subtracting Rational Expressions

*****COMPLETE TEST 2 / Chapters 5 - 7*****
Instructions & REVIEW VIDEO on Canvas

Due TUESDAY, September 9 at 11:59pm

Lecture Videos on Canvas / MyMathLab HOMEWORK:
8.6 - Compound Inequalities
8.7 - Absolute Value Equations & Inequalities
8.8 - Variation
9.1 - Square Roots (Radicals)

Due Sunday, September 14 at 11:59pm

Week 6
9/15 - 9/21

Lecture Videos on Canvas / MyMathLab HOMEWORK:
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
9.6 - Rationalizing Radical Expressions
9.8 - Radical Equations
9.9 - Complex Numbers (Imaginary)

Due Sunday, September 21 at 11:59pm

Week 7
9/22 - 9/28

Lecture Videos on Canvas / MyMathLab HOMEWORK:

*****COMPLETE TEST 3 / Chapters 8 - 9*****
Instructions & REVIEW VIDEO on Canvas

Due MONDAY, September 22 at 11:59pm

Lecture Videos on Canvas / MyMathLab HOMEWORK:
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

Due Sunday, September 28 at 11:59pm

Week 8
9/29 - 10/3

Lecture Videos on Canvas / MyMathLab HOMEWORK:
12.1 - Distance & Midpoint Formulas
13.1 - Sequences & Summations
13.4 - Factorials, Binomial Coefficients & The Binomial Theorem

*****COMPLETE FINAL EXAM - TEST 4 / Chapters 10 - 13*****
Instructions & REVIEW VIDEO on Canvas

Due FRIDAY, October 3 at 11:59pm

HAVE A WONDERFUL FALL SEASON & ENJOY THE HOLIDAYS!! :)