



MATH 0305 002 Intermediate Algebra

Course Syllabus: Summer II 2017

“Northeast Texas Community College exists to provide responsible, exemplary learning opportunities.”

Amanda Ysasi

Office: N/A

Phone: 903-434-8100 (Ask for Delbra Anthony)

Email: aysasi@ntcc.edu

Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	7:40-8:00	7:40-8:00	7:40-8:00	7:40-8:00	None	As needed

The information contained in this syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

Catalog Course Description (include prerequisites): Intermediate algebra is designed to develop the skills and understanding contained in the second year of secondary school algebra. Topics include the properties of the real number system, operations on polynomials, special products, factor patterns, radicals, rational exponents, solutions of linear, quadratic, systems of equations, inequalities, coordinate systems, and graphing. Three hours of class each week. No college credit. Prerequisite: MATH 0303 or its equivalent.

Required Textbook(s):

No textbook is required; however, you must purchase a MyMathLab access code if you do not already have one.

Publisher: Pearson

ISBN Number: NA

Recommended Reading(s):

None

Student Learning Outcomes:

Upon the successful completion of this course, students will be able to:

1. Recognize, understand and analyze features of a function.
2. Recognize and use algebraic properties, concepts, procedures (including factoring), and algorithms to combine, transform, and evaluate polynomial expressions.
3. Identify and solve absolute value, polynomial, radical, and rational equations.
4. Identify and solve linear inequalities.
5. Model, interpret and justify mathematical ideas and concepts using multiple representations.
6. Connect and use multiple strands of mathematics in situations and problems, as well as in the study of other disciplines.

Lectures & Discussions:

- 8.1 Solving Linear Equations
- 8.1 Solving Inequalities
- 8.3 Solving Absolute Value Equations
- 3.2 Graphing Linear Equations in Two Variables
- 3.3 Slope of a Line
- 3.4 Writing and Graphing Equations of Lines
- 3.6 Introduction to Relations and Functions
- 3.7 Function Notation and Linear Equations
- 4.1 Solving Systems of Linear Equations by Graphing
- 4.2 Solving Systems of Linear Equations by Substitution
- 4.3 Solving Systems of Linear Equations by Elimination
- 6.1 Factoring: The Greatest Common Factor
- 6.1 Factoring by Grouping
- 6.2 Review Factoring Trinomials
- 6.4 Factoring Trinomials Using FOIL
- 6.5 Special Factoring Techniques
- 6.7 Solving Quadratic Equations by Factoring
- 7.1 Rational Expressions and Functions: Multiplying and Dividing
- 7.2 Adding and Subtracting Rational Expressions
- 7.3 Complex Fractions
- 7.4 Equations with Radical Expressions
- 9.1 Radical Expressions and Graphs
- 9.2 Rational Exponents
- 9.3 Simplifying Radical Expressions and the Pythagorean Formula
- 9.4 Adding and Subtracting Radical Expressions
- 9.6 Solving Equations with Radicals
- 10.1 Solving Quadratic Equations by the Square Root Property
- 10.3 Solving Quadratic Equations by the Quadratic Formula
- 10.6 Graphs of Quadratic Functions

Evaluation/Grading Policy:

Homework will be assigned every class period, and can be found online in MyMathLab. There will be time to work on homework in class and to be completed before the next class period even if absent. There will be an exam assigned almost every week and a comprehensive final. All exams, except the final, will be taken outside of class. The final exam will be taken in class on August 10. Students will be allowed two attempts on the exams, except the final, if needed, in order to achieve a passing score or to improve a score. Exams can only be taken when the review is completed at 80%. Exams will be open for five days, and if not taken by the due date, a zero will be posted as the grade. You may still take the exam; however, you will only have one attempt. Choosing not to do the homework assignments and exams is not an option; prerequisites, which must be completed at 70%, are set to insure completion of some assignments before moving on to new ones. At the end of the semester, zeros will replace any assignments or exams not done. This could seriously affect one's semester grade and could cause a student to fail the course. Passing a developmental course is required to be 70% or higher.

Grading System:

Homework	30%
Exams	45%
Final Exam	25%

Tests/Exams:

Chapter 8
Chapters 3 and 4
Chapter 6
Chapters 6 and 7
Final Exam

NOTE: The grade showing on MyMathLab may not necessarily reflect the final grade for the course.

Assignments:

Chapter 8: Equations and Inequalities

- 8.1 Review of Solving Linear Equations and Inequalities
- 8.3 Absolute Value Equations

Chapter 3: Graphs of Linear Equations and Inequalities; Functions

- 3.2 Graphing Linear Equations in Two Variables
- 3.3 Slope of a Line
- 3.4 Writing and Graphing Equations of Lines
- 3.6 Introduction to Relations and Functions
- 3.7 Function Notation and Linear Equations

Chapter 4: Systems of Linear Equations and Inequalities

- 4.1 Solving Systems of Linear Equations by Graphing
- 4.2 Solving Systems of Linear Equations by Substitution
- 4.3 Solving Systems of Linear Equations by Elimination

Chapter 6: Factoring and Applications

- 6.1 Factoring: Greatest Common Factor and Grouping
- 6.2 Factoring Trinomials
- 6.4 Factoring Trinomials Using FOIL
- 6.5 Special Factoring Techniques
- 6.6 A General Approach to Factoring
- 6.7 Solving Quadratic Equations by Factoring

Chapter 7: Rational Expressions and Functions

- 7.1 Rational Expressions and Functions: Multiplying and Dividing
- 7.2 Adding and Subtracting Rational Expressions
- 7.3 Complex Fractions
- 7.4 Equations with Rational Expressions

Chapter 9: Roots, Radicals and Root Functions

- 9.1 Radical Expressions and Graphs
- 9.2 Rational Exponents

- 9.3 Simplifying Radical Expressions and the Pythagorean Formula
- 9.4 Adding and Subtracting Radical Expressions
- 9.6 Solving Equations with Radicals

Chapter 10: Quadratic Equations, Inequalities, and Functions

- 10.1 Solving Quadratic Equations by the Square Root Property
- 10.3 Solving Quadratic Equations by the Quadratic Formula
- 10.6 Graphs of Quadratic Functions

Other Course Requirements:

Bring paper or a spiral and a pen or pencil to class. Having access to a computer outside of class is critical. Homework and chapter exams are only submitted online. On campus there are computers available for student use in the library and IT 112. Computers are also available at the Hansen-Sewell Center in Pittsburg, the Naples/Omaha Education Center in Naples and public libraries. Call first to check for hours of operation.

Student Responsibilities/Expectations:

APPROPRIATE CLASSROOM BEHAVIOR

Students are expected to conduct themselves in a mature and respectful manner toward the instructor as well as other students. An orderly and cooperative classroom environment is essential for optimum learning to take place. In order to maintain an environment in which learning can take place the following behaviors are expected to be observed:

- Turn off cell phones or set them on silent.
- Pay attention during instruction. You should not be working on homework, texting, or social networking during instruction.
- Out of respect for the instructor and others in the class, avoid side conversations during instruction.
- Above all, be respectful to each other and practice the “Golden Rule.”

Other Course Policies:

If the TSI Assessment is retaken before the student completes a developmental course, the resulting score will determine placement in subsequent courses. It is the student’s responsibility to take the score to the instructor of the class. That instructor will give the student a grade of CR or a letter grade on the final grade sheet, and the student will no longer be required to attend that class for the rest of the semester.

NTCC Academic Honesty Statement:

"Students are expected to complete course work in an honest manner, using their intellects and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. NTCC upholds the highest standards of academic integrity. This course will follow the NTCC Academic Honesty policy stated in the Student Handbook."

Academic Ethics

The college expects all students to engage in academic pursuits in a manner that is beyond reproach. Students are expected to maintain complete honesty and integrity in their academic pursuit. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. Refer to the student handbook for more information on this subject.

ADA Statement:

It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford

equal educational opportunity. It is the student's responsibility to arrange an appointment with a College counselor to obtain a Request for Accommodations form. For more information, please refer to the NTCC Catalog or Student Handbook.

Family Educational Rights And Privacy Act (Ferpa):

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.