MATH 1005 - Algebra Essentials
3 Credit Hours

Course Description:

This course Includes operations with polynomials, analysis of quadratic functions, graphs, solving quadratic equations, and other types of functions. The course is designed to prepare students for algebra intensive courses.

Course Outcomes:

Upon successful completion of this course, students will demonstrate an understanding of the following:

- Positive and Negative Exponents
- Addition, Subtraction, and Multiplication of Polynomials
- Perfect Square Trinomials and Difference of Two Squares
- Greatest Common Factor
- Factoring Trinomials of the form x^2+bx+c
- Factoring Trinomials of the form ax^2+bx+c
- Factoring Perfect Square Trinomials and the Difference of Two Squares
- Solving Quadratic Equations by Factoring
- Simplify Rational Expressions
- Multiply and Divide Rational Expressions
- Adding and Subtracting Rational Expressions with the Same Denominator
- Adding and Subtracting Rational Expressions with Different Denominators
- Solving Equations Containing Rational Expressions
- Rational Equations and Problem Solving
- Simplifying Complex Fractions
- Introduction to Radicals
- Simplifying Radicals
- Adding and Subtracting Radicals
- Multiplying and Dividing Radicals
- Quadratic Equations and Problem Solving
- Solving Quadratic Equations by the Square Root Property
- Solving Quadratic Equations by the Quadratic Formula
- Graphing Quadratics

Prerequisites and Corequisites:

An acceptable placement score (Compass >= 30 or ACT math subscore >= 19) or completion of Learning Support mathematics competencies 1-5.

Course Topics:

- Exponents and Polynomials
- Factoring Polynomials
- Rational Expressions
- Roots and Radicals
- Solving and Graphing Quadratics

Required Textbooks:

Please visit the [Virtual Bookstore](#) to obtain textbook information for this course. Move your cursor over the "Books" link in the navigation bar and select "Textbooks & Course Materials." Select your Program, Term, Department, and Course; then select "Submit."

Hardware and Software Requirements:

Minimum hardware requirements can be found [here](#).

Minimum software requirements can be found [here](#).

Common applications you might need:
To read a PDF file download the latest version of [Adobe Reader here](#)
Don't have Microsoft Word? Explore an alternative [OpenOffice here](#)
Accessing a PowerPoint file? Download the [PowerPoint Viewer here](#)

Web Resources:

Purdue [OWL Online Writing Lab](#) (for APA, MLA, or Chicago style)

The Writing Center [Online Writer's Handbook](#)

Student Resources:

- Technical support information can be found on the [TN eCampus Help Desk](#) page.
- Smarthinking virtual tutoring is available **FREE** of charge. to access Smarthinking, visit the course homepage and select Smarthinking under Course Resources. You also view [sample sessions](#) to see what Smarthinking offers and how it works.
- Information on other student issues or concerns can be located on the [TN eCampus Student Resources](#) page.

Instructor Information:

Please see "Instructor Information" in the Getting Started Module for instructor contact information, virtual office hours, and other communication information. You can expect to receive a response from the instructor within 24-48 hours unless notified of extenuating circumstances.

Testing Procedures:

The Midterm and Final Exam are proctored and may be taken at any TBR Testing Center. Students must call and make an appointment to take the Midterm and Final Exam. Proctoring information can be found at http://www.tnecampus.info/steps-obtaining-proctor

Grading Procedures:

Final Average = .15(HW Avg. (includes quizzes)) + .15(Non-Proctored Test Avg. + .35(Midterm) + .35(Final)

Description	Points
27 HW Assignments	vary by assignment
11 Quizzes	vary by quiz
5 Non-Proctored Tests	100 pts each
1 Midterm Exam	100 pts
1 Final Exam	100 pts

Grading Scale:

Percentages	Assigned Grade
90-100	A
80-89	B
70-79	C
60-69	D
<60	F

Assignments and Projects:

Media Assignments consist of videos, interactive animations and short, concise mini-lectures.

All HW assignments include an e-book reference and vide. Media Assignments are a part of the HW assignments.

Class Participation:

Please participate in the weekly discussion postings.

Late Policy:

Students must be aware of the assignment deadlines (posted in the checklist and in the calendar) and determine when materials are due and adjust study schedules accordingly. Once a deadline has passed, students are "locked out" of material.

Course Ground Rules:

The following two statements (1., 2.) were derived from the TBR System-wide Student Rules document, released January 2012:

RULES OF THE TENNESSEE BOARD OF REGENTS STATE UNIVERSITY AND COMMUNITY COLLEGE SYSTEM OF TENNESSEE SYSTEMWIDE STUDENT RULES CHAPTER 0240-02-03 STUDENT CONDUCT AND DISCIPLINARY SANCTIONS

Read the document in its entirety here.

1. Standards of Conduct:

- Students are required to adhere to the same professional, legal and ethical standards of conduct online as on campus. In addition, students should conform to generally accepted standards of "netiquette" while sending e-mail, posting comments to the discussion board, and while participating in other means of communicating online. Specifically, students should refrain from inappropriate and/or offensive language, comments and actions.

2. [Review the TN eCampus Academic Integrity/Academic Honesty Policy](#)**:**

- In their academic activities, students are expected to maintain high standards of honesty and integrity. Academic dishonesty is prohibited.

Such conduct includes, but is not limited to:

- an attempt by one or more students to use unauthorized information in the taking of an exam
- to submit as one's own work, themes, reports, drawings, laboratory notes, computer programs, or other products prepared by another person,
- or to knowingly assist another student in obtaining or using unauthorized materials.

Plagiarism, cheating, and other forms of academic dishonesty are prohibited.

Students guilty of academic misconduct, either directly or indirectly through participation or assistance, are subject to disciplinary action through the regular procedures of the student's home institution. Refer to the student handbook provided by your home institution to review the student conduct policy.

In addition to other possible disciplinary sanctions that may be imposed, the instructor has the authority to assign an "F" or zero for an activity or to assign an "F" for the course.

Other Course Rules:

Students are expected to:

- Participate in all aspects of the course
- Communicate with other students
- Learn how to navigate in Brightspace
- Keep abreast of course announcements
- Use the assigned course management (Brightspace) email address rather than a personal email address
- Address technical problems immediately:
    - [Contact Technical Support](#)

- View Term Calendar here
- Observe course netiquette at all times.

Guidelines for Communications:

Email:

- Always include a subject line.
- Remember without facial expressions some comments may be taken the wrong way. Be careful in wording your emails. Use of emoticons might be helpful in some cases.
- Use standard fonts.
- Do not send large attachments without permission.
- Special formatting such as centering, audio messages, tables, html, etc. should be avoided unless necessary to complete an assignment or other communication.
- Respect the privacy of other class members

Discussions:

- Review the discussion threads thoroughly before entering the discussion. Be a lurker then a discussant.
- Try to maintain threads by using the "Reply" button rather starting a new topic.
- Do not make insulting or inflammatory statements to other members of the discussion group. Be respectful of other's ideas.
- Be patient and read the comments of other group members thoroughly before entering your remarks.
- Be cooperative with group leaders in completing assigned tasks.
- Be positive and constructive in group discussions.
- Respond in a thoughtful and timely manner.

Library:

The Tennessee Virtual Library is available to all students enrolled in TN eCampus programs and courses. Links to library materials (such as electronic journals, databases, interlibrary loans, digital reserves, dictionaries, encyclopedias, maps, and librarian support) and Internet resources needed by learners to complete online assignments and as background reading will be included within the course modules. To access the Virtual Library, go to the course homepage and select the *Virtual Library* link under Course Resources.

Students with Disabilities:

Qualified students with disabilities will be provided reasonable and necessary academic accommodations if determined eligible by the appropriate disability services staff at their home institution. Prior to granting disability accommodations in this course, the instructor must receive written verification of a student's eligibility for specific accommodations from the disability services staff at the home institution. It is the student's responsibility to initiate contact with their home institution's disability services staff and to follow the established procedures for having the accommodation notice sent to the instructor.

Syllabus Changes:

The instructor reserves the right to make changes as necessary to this syllabus. If changes are necessitated during the term of the course, the instructor will immediately notify students of such changes both by individual email communication and posting both notification and nature of change(s) on the course bulletin board.

Disclaimer

The information contained in this syllabus is for general information purposes only. While we endeavor to keep this information up-to-date and accurate, there may be some discrepancies between this syllabus and the one found in your online course. The syllabus of record is the one found in your online course. Please make sure you read the syllabus in your course at the beginning of the semester. Questions regarding course content should be directed to your instructor.