COURSE TITLE: Developmental Mathematics II

COURSE NUMBER: MAT 0028

COURSE DESCRIPTION (with prerequisites):
This is a developmental course designed for the student who has little or no secondary school background in algebra and needs preparation for MAT 1033, Intermediate Algebra. Topics included: order of operations including parenthesis and exponents; operations on polynomial, rational and radical expressions; factoring; solve linear, literal and quadratic equations; graph linear equations. Prerequisite: A score of 96 – 112 on the PERT or a “C” grade or higher in MAT 0018 or consent of the department. A grade of "C" or higher must be earned in the course to advance to the next higher mathematics course which is MAT 1033. This course does not meet general education requirements in mathematics. 3 noncredit semester hours.

NAME(S) OF INSTRUCTORS:
Jo Ann Everett, JoAnn Parish, Joy Ree Ashmore

EFFECTIVE ACADEMIC YEAR:
2011-12

REQUIRED TEXTBOOKS AND INSTRUCTIONAL SUPPLIES:

GRADING POLICY:
The standing of a student in each course is expressed by one of the following letters and corresponding grading system:

A – 90 – 100
B – 80 – 89
C – 70 – 79
D – 60 – 69
F – 59 or less

The Chipola Catalog provides policies and procedures regarding the grading system. A student’s Grade Point Average is derived from the grading system/quality point scale.

ATTENDANCE AND WITHDRAWAL POLICIES:
Chipola College expects regular attendance of all students. Students who are absent from classes for any reason other than official college activities must satisfy the instructor concerned that the absence was due to illness or other clearly unavoidable reasons. Otherwise, the student may suffer grade loss at the discretion of the instructor. Chipola policy allows each instructor to specify in the Instructor First Day Handout whether or not an absence is excusable and what affect the absence or tardy may have on the grade.
A student is allowed to repeat a course a maximum of three (3) times. On the third attempt a student (1) must bear the full cost of instruction (unless waived by Student Services), (2) cannot withdraw, and (3) must receive a grade.

MAKE-UP POLICY:
Chipola allows each instructor to specify in the Instructor First Day Handout the makeup policy.

ACADEMIC HONOR CODE POLICY:
Students are expected to uphold the Academic Honor Code. Chipola College’s Honor Code is based on the premise that each student has the responsibility to (1) uphold the highest standards of academic honesty in his/her own work; (2) refuse to tolerate academic dishonesty in the college community; and (3) foster a high sense of honor and social responsibility on the part of students. Further information regarding the Academic Honor Code may be found in the Chipola Catalog, Student Governance section.

STUDENTS WITH DISABILITIES POLICY:
Chipola College is committed to making all programs and facilities accessible to anyone with a disability. Chipola’s goal is for students to obtain maximum benefit from their educational experience and to effectively transition into the college environment. Students with disabilities are requested to voluntarily contact the Office of Students with Disabilities to complete the intake process and determine their eligibility for reasonable accommodations.

LIBRARY AND ON-LINE REFERENCE MATERIALS:
The library is a comprehensive learning resource center providing information in print, electronic, and multimedia format to support the educational objectives of the College. On-line catalogs, e-books and electronic databases can be accessed by using the LINCCWeb icon on the Chipola Library website at www.chipola.edu/library. If you have questions about database usage consult the “How to Use the Chipola Databases” on the Library website or call the Library at 850/718-2274 during regular hours. Library hours are posted each semester at the building entrance and on the Library website. See your Instructor First Day Handout for individual instructor recommendations and resources.

TECHNOLOGY RESOURCES:
The Information Technology Center, located in the library, is equipped with computer workstations. Lab hours are posted each semester at the building entrance and on the Library website. The ACE Lab, located in Building L, is available for tutoring and is equipped with computer workstations. Lab hours are posted each semester at the room entrance. The college’s learning management system is Desire 2 Learn (d2l). Classes become available on d2l on the first day of the semester. It is the student’s responsibility to log onto the d2l system the first day of class to establish the first day of attendance and to check announcements. For further information, contact your instructor or the Director of Online Learning.

ELECTRONIC DEVICE USAGE:
All electronic devices such as cell phones, beepers, pagers, and related devices are to be silenced prior to entering classrooms and/or laboratories to avoid disruption. Should
it become necessary for a student to leave his/her “device” on to send or receive an emergency call and/or text message, the student must inform the instructor prior to class. If the student finds it necessary to send and/or receive an emergency call and/or text message during class/lab time, he/she is instructed to take all books and belongings and step outside the classroom to deal with the situation. To minimize classroom disruption and the distraction to classmates, the student will not be permitted to reenter the classroom during that class period. Any time a test is being administered, all such devices must be turned off and put away. If a device is seen or heard during an exam, a score of zero will be given for that exam. Initial and repeated infractions may result in disciplinary action.

**DISCIPLINE SPECIFIC COMPETENCIES / LEARNING OUTCOMES:**
Demonstrate Basic Mathematical Skills and Knowledge

M-1  Apply arithmetic, algebraic, or geometric skills to solve mathematical problems.
M-2  Represent basic mathematical information verbally, numerically, graphically, or symbolically.
M-3  Use technology to solve mathematical problems.
M-4  Interpret mathematical models such as formulas, graphs, tables and schematics.
M-5  Use mathematical processes in solving real world applications.

**MAT 0028 is not a General Education core course and therefore a student in MAT 0028 will demonstrate selected learning outcomes from this list.**

**LINKING COURSE-LEVEL STUDENT LEARNING OUTCOMES WITH DISCIPLINE-SPECIFIC COMPETENCIES, ASSESSMENT METHODS, AND ARTIFACTS**

<table>
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<tr>
<th>COURSE-LEVEL STUDENT LEARNING OUTCOMES FOR MAT 0028</th>
<th>DISCIPLINE-SPECIFIC GENERAL EDUCATION COMPETENCIES</th>
<th>ASSESSMENT METHODS FOR COURSE LEVEL STUDENT LEARNING OUTCOMES</th>
<th>ARTIFACTS FOR AA PROGRAM ASSESSMENT</th>
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<tr>
<td>Calculate using real numbers</td>
<td>M-1, 3</td>
<td>Pre/Post, CF</td>
<td>No artifact will be submitted for program assessment as MAT 0028 is not a course that earns college credit.</td>
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<td>Determine solutions for linear and quadratic equations</td>
<td>M-1, 3</td>
<td>Pre/Post, CF</td>
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<tr>
<td>Apply more than one method to construct a graph of linear equations</td>
<td>M-1, 2, 3, 4</td>
<td>Pre/Post, CF</td>
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<tr>
<td>Change algebraic expressions into equivalent forms</td>
<td>M-1, 3</td>
<td>Pre/Post, CF</td>
<td></td>
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<tr>
<td>Use various operations to simplify</td>
<td>M-1, 3</td>
<td>Pre/Post, CF</td>
<td></td>
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</tbody>
</table>
algebraic expression

- Make use of mathematical concepts to solve real-world problems

| M-1, 3, 5 | Pre/Post, CF |

**Assessment Codes**

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<th>Description</th>
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<td>T</td>
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<td>Port.</td>
<td>Performance/Exhibition</td>
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**MEANS OF ACCOMPLISHING STUDENT LEARNING OUTCOMES:**

Student-centered: Uses adaptive technology to diagnose individual student abilities and then provide mastery-based learning. The teacher will be present during class to provide additional instruction as needed. Students may progress outside of the assigned class time, but must test under supervised conditions.

**ASSIGNMENT AND/OR COURSE OUTLINE**

- Order of Operations with Parenthesis and Exponents
- Simplify Expressions with Integer Exponents
- Add, Subtract, Multiply and Divide Polynomials
- Solve Quadratic Equations by Factoring
- Factor Polynomials
- Solve and Graph Linear Equations
- Solve Literal Equations
- Simplify Radical Expressions
- Add, Subtract, Multiply and Divide Radical Expressions
- Scientific Notation
- Application Problems with Perimeter and Area
- X and Y Intercepts
- Slope
- Real-world Problems with Fractions and Percents
- Linear Inequalities
- Pythagorean Theorem
- Ratio and Proportion
- Simplify Rational Expressions
- Add, Subtract, Multiply, and Divide Rational Expressions
- Measurement Conversion Between American and Metric Units

See your Instructor First Day Handout for individual instructor assignment schedule.