COURSE TITLE: Intermediate Algebra  
COURSE NUMBER: MAT 1033

COURSE DESCRIPTION (with prerequisites):
This course includes the study of real numbers, linear and quadratic equations, linear inequalities, systems of linear equations, exponents, polynomials, factoring, rational expressions and related equations, radicals, quadratic formula, complex numbers, absolute value, graphing, and applications. Prerequisite: An acceptable score on a state approved mathematics placement test and successful completion of the equivalent of one year of Algebra I, or a “C” or higher in MAT 0024, or a grade of “C” or higher in an equivalent high school course (Math for College Success) within the past two years. This is not a Gordon Rule course and does not satisfy part of the general education requirements in mathematics. A “C” grade or higher must be made in this course to advance to a higher level mathematics course. 3 semester hours elective credit.

NAME(S) OF INSTRUCTORS:
Georgia Ashmore, Rose Cavin, JoAnn Parish, Cherry Ward, Stan Young.
Instructors vary from semester to semester.

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 1033 is not a General Education core course and therefore a student in MAT 1033 will demonstrate selected learning outcomes from this list.**
## LINKING COURSE-LEVEL STUDENT LEARNING OUTCOMES WITH DISCIPLINE-SPECIFIC COMPETENCIES, ASSESSMENT METHODS, AND ARTIFACTS

<table>
<thead>
<tr>
<th>COURSE-LEVEL STUDENT LEARNING OUTCOMES FOR MAT 1033</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>
</tr>
</thead>
<tbody>
<tr>
<td>• Apply properties of algebra to simplify, add, subtract, multiply and/or divide algebraic terms</td>
<td>M-1</td>
<td>UT, CF, H, EX</td>
<td>No artifact will be submitted for program assessment as MAT 1033 is not a course with general education credit.</td>
</tr>
<tr>
<td>• Solve various types of equations and inequalities</td>
<td>M-1</td>
<td>UT, CF, H, EX</td>
<td></td>
</tr>
<tr>
<td>• Determine the equation of a linear function</td>
<td>M-1</td>
<td>UT, CF, H, EX</td>
<td></td>
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<tr>
<td>• Identify various characteristics related to the graph of a function such as domain, range, and intercepts</td>
<td>M-1, M-2</td>
<td>UT, CF, H, EX</td>
<td></td>
</tr>
<tr>
<td>• Solve systems of equations and inequalities</td>
<td>M-1, M-2</td>
<td>UT, CF, H, EX</td>
<td></td>
</tr>
<tr>
<td>• Use mathematical concepts to solve problems in other disciplines</td>
<td>M-1, M-5</td>
<td>UT, CF, H, EX</td>
<td></td>
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</tbody>
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**Assessment Codes**

- **T** = Tests
- **Pre/Post** = Pre- and Post-Tests
- **OT** = Objective Tests
- **UT** = Unit Tests
- **Q** = Quizzes
- **F** = Final Examination
- **CF** = Cumulative Final
- **EX** = Departmental Exam
- **SE** = Nat’l or State Standardized Exam
- **RPT** = Report/Presentation
- **SP** = Skills Performance
- **SD** = Skills Demonstration
- **W** = Writing Assignments
- **E** = Essays
- **DE** = Documented Essays
- **RP** = Research papers
- **J** = Jury
- **R** = Recital
- **Proj.** = Projects
- **Exp.** = Experiments
- **Cap. Proj.** = Capstone Project
- **Cap. Course** = Capstone Course
- **Prac.** = Practicum
- **Intern.** = Internship
- **H** = Homework
- **PS** = Problem Solving
- **DB** = Discussion Board
- **BO** = Behavioral Observation
- **Clin.** = Clinicals
- **CS** = Case Study
- **CP** = Case Plan
- **Port.** = Portfolio
- **Obs.** = Teacher Observation
- **Sk. Check** = Skills Check-off
- **Curriculum Frameworks**
- **JP** = Judged
- **Performance/Exhibition**

## MEANS OF ACCOMPLISHING STUDENT LEARNING OUTCOMES:

- **Teacher facilitated**: The teacher will be leading class discussions on the material contained in the text during each class period.

- **Student-centered**: The students will take notes and practice solving problems during each class period.
• Office Hours: The instructor will be available during office hours for individual assistance. The instructor’s schedule can be found posted on their office door and/or via their individual web site.

• ACE tutors: Student tutors are available in the ACE to provide individualized help. Hours can be found posted each semester on the ACE door and/or via the web site.

ASSIGNMENT AND/OR COURSE OUTLINE
MAT 1033 – Intermediate Algebra
Course Objectives
Simplify and evaluate algebraic expressions
Add, subtract, multiply and factor polynomials
Add, subtract, multiply, and divide rational expressions
Solve linear, quadratic, rational, radical, and absolute value equations
Solve formulas for a given variable
Solve problems as they relate to real-world applications
Solve problems relating to direct and inverse variation
Use function notation and determine the indicated function value given a function in visual, numeric, or symbolic form.
Determine the domain and range of a function given in visual, numeric, or symbolic form.
Graph linear functions by plotting points, finding the intercepts, and using the slope and y-intercept.
Find the equation of the line given a point and a slope or two points.
Solve a system of two equations graphically, by using the substitution method, and by the addition/elimination method.
Solve real-world applications requiring the use of a system of two equations
Solve inequalities.
Express solutions in interval notation and set notation.
Solve inequalities in two variables graphically.
Simplify, multiply, divide, add and subtract radical expressions.
Simplify, add, subtract, multiply, and divide complex numbers.
Simplify expressions with rational exponents.
Use the Pythagorean Theorem to solve real-world applications.
Graph quadratic equations using the vertex and leading coefficient.

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