# Mathematics for Liberal Arts II  

**Course Number:** MGF 1107  

**Course Description (with prerequisites):**

This course is intended for students who will major in areas that do not require further mathematics. It will also enable students to meet part of the general education requirement in mathematics and receive instruction in a broad range of skills beyond algebra. Topics include: systems of numeration, number theory and the real number system, mathematical systems, exponential functions, consumer mathematics, graph theory, modular arithmetic, selected topics from history of mathematics, and voting and apportionment.

Prerequisites: Successful completion of the equivalent of one year of high school Algebra I and one year of high school Algebra II and an acceptable score on a state approved mathematics placement test, or a "C" or higher in MAT 1033, or a grade of "C" or higher in the high school equivalent course for MAT 1033 (Math for College Readiness) within the past two years and an acceptable score on a state approved mathematics placement test. A "C" grade or higher must be earned in this course to satisfy part of the general education requirements in mathematics. 3 semester hours credit.

**Name(s) of Instructors:**

Georgia Ashmore, JoAnn Parish, Stan Young

**Effective Academic Year:**

2011-12

**Required Textbooks and Instructional Supplies:**


2) REQUIRED: A password for access to the MyMathLab software. This software provides homework assignments, additional practice problems, tutorial videos and sample practice tests for each chapter. **The password comes free with every new textbook, or may be purchased separately.** The password for MGF 1106 may be used for MGF 1107 if used within two years.

*MyMathLab includes an electronic copy of the text. For students comfortable with accessing the text online, the printed text is optional.*
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.
## Linking Course-Level Student Learning Outcomes with Discipline-Specific Competencies, Assessment Methods, and Artifacts

### Course-Level Student Learning Outcomes for MGF 1107

<table>
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<tr>
<th>Course-Level Student Learning Outcomes</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>Convert between Hindu-Arabic and other numeration systems.</td>
<td>M1, M3, M4, M5, T1</td>
<td>H, UT, CF, EX</td>
<td>Apply number theory to radioactive isotopes problems.</td>
</tr>
<tr>
<td>Convert between base 10 other bases, and compute in other bases.</td>
<td>M1, M3, T1</td>
<td>H, UT, CF, EX</td>
<td></td>
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<tr>
<td>Analyze classifications of numbers and their properties.</td>
<td>M1, M2, M3, M4, M5</td>
<td>H, UT, CF, EX</td>
<td></td>
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<tr>
<td>Solve real world problems using a variety of techniques, such as financial tables, formulas, graph theory, technology, arithmetic and geometric patterns, and modular arithmetic.</td>
<td>M1, M2, M3, M4, M5, T1</td>
<td>H, UT, CF, EX</td>
<td></td>
</tr>
<tr>
<td>Identify the properties of a group.</td>
<td>M1, M2</td>
<td>H, UT, CF, EX</td>
<td></td>
</tr>
<tr>
<td>Compare voting methods and apportionment methods.</td>
<td>M1, M2, M3, M4, M5, T1</td>
<td>H, UT, CF, EX</td>
<td></td>
</tr>
</tbody>
</table>

**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** = Curriculum Frameworks
- **JP** = Judged
- **Performance/Exhibition** = Performance/Exhibition
MEANS OF ACCOMPLISHING STUDENT LEARNING OUTCOMES:
Teacher facilitated: The teacher will be leading class discussions on the material contained in the text.

Student-centered: The students will be solving problems using their own graphing calculators.

Office Hours: The instructor will be available during office hours for individual assistance. The instructor's schedule can be found posted on D2L, their web site, and/or on their office door.

ACE tutors: Student tutors are available in the Academic Center of Excellence (ACE). Hours can be found posted each semester on the lab door and/or via the web site.

ASSIGNMENT AND/OR COURSE OUTLINE
See your Instructor First Day Handout for individual instructor assignment schedule.