

MGF 1107E – 501 Liberal Arts Mathematics II

Course Information

Fall 2023 (August 28-December 8)

Credit Hours 3

Modality:

Online

Instructor:

Dr. Blayneh

Email:

Kbenesh.blayneh@famu.edu

Phone:

850-412-5228

MWF 11:15 am-12:00pm

Office Hour:

Zoom

See the course navigation on the left for zoom link

Office Location

Jackson Davis Hall, Room 304

Note: The best ways to reach us for content related questions are

1. *E-mail. Kbenesh.blayneh@famu.edu*
2. *the online discussion board,*

Prerequisites or Co-requisites MAT 1033 or Suitable Placement Score

Required Text: *The Nature of Mathematics 13th edition* by Karl Smith (Publisher: Cengage) with web access to www.webassign.com, for homework, quizzes and tests.

Software for MGF1107:

Required Technology

- Internet connection (DSL, LAN, or cable connection desirable)
- Access to [CANVAS](#)

LMS Access (Access to Learning Management System used by the university)

To ensure that you are using a supported browser and have required plug-ins please run the Check Browser (Links to an external site.) from your course.

- **Course Description:**
- This course is appropriate for liberal arts students who plan to concentrate in fields which require no specialized mathematics beyond the general education level. The content of this course includes the following: problem solving, financial mathematics, linear and exponential growth, numbers and number systems, history of mathematics, elementary number theory, voting techniques, and graph theory.

FAMU CANVAS Access

To access this course on FAMU CANVAS you will need access to the Internet and a supported Web browser (*Internet Explorer, Firefox, Safari, and Google Chrome*). To ensure that you are using a supported browser and have required plug-ins please run the [Check Browser](#) from your CANVAS course.

IMPORTANT: Install the Respondus LockDown Browser on your laptop prior to taking the unit tests and final exam. Students who do not have this program downloaded on their laptops will NOT be able to take the unit tests and final exam. You MUST bring your laptop with the download.

Course Structure

This course will be **delivered** through the course management system CANVAS where homework, quizzes and tests are posted on www.WebAssign.com. All homework, quizzes and tests are available at Cengage/WebAssign, and you will access these assignments at WebAssign that is linked through CANVAS.

You need to have a Cengage account (contact FAMU Book Store about Cengage Unlimited) for Cengage.com and enroll in WebAssign through CANVAS to access the homework and quizzes in WebAssign.

For more help go to https://www.webassign.net/manual/student_guide/introduction.htm

You will use your FAMNet username and password to login to the course from the FAMU [CANVAS](#) page.

In CANVAS, you will access modules, where information on course materials, instructions about activities in WebAssign and resources. At designated times throughout the semester, we

will participate in a blend of self-paced and group-paced activities using CANVAS and alternative Internet-based technologies. Activities will consist of *chat, discussion forums, email, and web posting.*

Technical Assistance

If you need technical assistance at any time during the course or to report a problem with CANVAS you can:

- Visit the [Office of Instructional Technology](#) page
- Contact the Office of Instructional Technology at 850-599-3460 or oit@famuedu.edu
- View [CANVAS Guides](#) to learn more about using [CANVAS](#)

Grading Policy

Description	Grading Percentages
Tests (3)	40%
Homework	20%
Quizzes	10%
Self-Check	15%
Final	15%

Grade Calculation: 40%(Test average) + 20%(Homework average) + 10%(Quiz average) + 15%(Self-Check) + 15%(Final).

Letter Grade Assignment

Final grades assigned for this course will be based on the percentage of total points earned and are assigned as follows:

Letter grade	
Letter Grade	Percentage
A	90-100 %
B	80-89 %
C	70-79 %
D	60-69%
F	0-59%

Test Dates:

Test 1: September 21, 2023

Test 2: October 17, 2023

Test 3: November 17, 2023

Final Exam: The Final Exam will be given by schedule provided by the Department of Mathematics for 1000 level courses.

Incomplete: A grade of I, incomplete will not be given to anyone who failed (Total below 70%) or missed a test, who has poor class attendance, online activity (failed to submit assignments by given due dates). You are advised to look at your grade on Canvas and decide to stay or drop the course by the withdrawal deadline.

Grades will be posted in the Grade Center in CANVAS.

Viewing Grades in CANVAS

Points you receive for graded activities will be posted to the FAMU CANVAS Grade Book. Click on the *Grades* link on the left navigation to view your points.

Policy for Late homework and quiz or missed test, attendance withdrawal date:

Homework, Quizzes, Self-Check and Final are given in Cengage/WebAssign which you will access through Canvas. A test could be either posted on Cengage or on paper or a combination of both. For those tests where Part I is on Cengage, Part II will be in class on Paper.

Homework and Quizzes: In each section, before starting a quiz, you must complete homework in the same section (Ex. Homework in Chapter 4 are supposed to be done before Quiz (Ch 4).

No makeup for a missed quiz regardless of the excuse. No extension of due dates. Please submit your assignments ahead of the deadlines. Homework from each section covered by a self-check on that section should be submitted before the due date of the self-check. I will not accept

email submission of any course material. As you are taking an online course, make sure your computer and internet connections are ready by exam dates.

If several assignments have the same due dates and while they are available over a longer period, waiting till the eleventh hour is not a good idea. You cannot use excuses such WiFi or computer problem prevented me to submit just before assignments close. Furthermore, you are strongly advised to use the suggested **Weekly Activity**.

Tests: A student who misses a test due to an avoidable reason can request a makeup test. However, a student **cannot** request a makeup test for **more than one missed test regardless of reasons**, and if more than one test is missed, the score on the second test remains zero. The instructor will assess the student's class attendance and online participation (work on homework, quiz and self-checks) before granting a request for a makeup test. The instructor will determine how and when a makeup test is offered in the semester. If any part of a test is given online, then lockdown browser will be used. Each student is responsible to make their computer ready to use LockDown Browser. If this is required, it will be announced before the test.

Due to time constraints, however, you will not be able to make up the final examination at the end of the semester. All tests and final exams will be given on WebAssign which you access through Canvas.

Self-Check: Before each test there is a self-check test. The **prerequisite quizzes** for a given self-check need to be submitted before the self-check. Please see the Course Outline/Schedule table.

Attendance/Participation

You are required to access this course and regularly **a minimum of two times a week**. *Participation means* keeping up with the Quizzes from each section along with homework to be completed before each Self-Check.

Attendance Holds: Unless you register at Cengage/WebAssign and submit assignment, your attendance on the iRattler will not be recorded.

Deadline to Withdraw: The deadline to withdraw from this class is **November 9, 2023**. Note that this is a temporary schedule at the Registrar's website. You will have to double check if there is any change on this date. The score you see on Grade of Canvas should be used as a Mid-Term grade. For anyone who fails the course (with F) and who stops activities before the deadline to withdraw, a grade of WF will be assigned. Those who failed this course with F, but had activity past the withdrawal date will receive F. Please refer to the Registrar's website for more information.

Last day of classes: December 8, 2023.

Chapters Covered (for MGF 1107): What each exam covers will be announced before the exam date. This is tentative schedule.

Chapter 4 (The Nature of Numeration Systems),

Chapter 5 (The Nature of Numbers) – **Test 1**

Chapter 6 (The Nature of Algebra) – **Test 2**

Chapter 10 (The Nature of Growth)

Chapter 11 (The Nature of Financial Management) – **Test 3**

Chapter 15 (The Nature of Graphs and Functions)

Chapter 16 (The Nature of Mathematical Systems)–

Chapter 17 (The Nature of Voting and Apportionment

The Final Exam is comprehensive (all chapters are included).

Learning objective by chapter:

Upon completion of

Chapter 4 (The Nature of Numeration Systems) students will be able to:

Evaluate an exponential expression, write Hindu-Arabic numerals in expanded form, express a number's expanded form as a Hindu-Arabic numeral, understand and use the Babylonian numeration system, and use the Mayan numeration system;

Chapter 5 (The Nature of Numbers) students will be able to:

Determine divisibility, write the prime factorization of a composite number, find the greatest common divisor of two numbers, solve problems using the greatest common divisor, find the least common multiple of two numbers, solve problems using the least common multiple, define

the integers, graph integers on a number line, use the symbols $<$ and $>$, find the absolute value of an integer, perform operations with integers, use the order of operations agreement, define the rational numbers, reduce rational numbers, convert between mixed numbers and improper fractions, express rational numbers as decimals, express decimals in the form \dots multiply and divide rational numbers, add and subtract rational numbers, use the order of operations agreement with rational numbers, apply the density property of rational numbers, solve problems involving rational numbers, define the irrational numbers, simplify square roots, perform operations with square roots, rationalize denominators, recognize subsets of the real numbers, recognize properties of real numbers, use properties of exponents, convert from scientific notation to decimal notation, convert from decimal notation to scientific notation, perform computations using scientific notation, solve applied problems using scientific notation;

Chapter 6 (The Nature of Algebra) students will be able to:

Multiply binomials using the FOIL method, factor trinomials, solve quadratic equations by factoring, solve quadratic equations using the quadratic formula, solve problems modeled by quadratic equations, solve linear systems by addition, identify systems that do not have exactly one ordered-pair solution, solve problems using systems of linear equations, graph a linear inequality in two variables, use mathematical models involving linear inequalities, graph a system of linear inequalities, write an objective function describing a quantity that must be maximized or minimized, use inequalities to describe limitations in a situation, use linear programming to solve problem;

Chapter 10 (The Nature of Growth) students will be able to: graph exponential functions, use exponential models, graph logarithmic functions, use logarithmic models, graph quadratic functions, use quadratic models, determine an appropriate function for modeling data;

Chapter 11 (The Nature of Financial Management) students will be able to:

use express a fraction as a percent, express a decimal as percent, solve applied problems involving sales tax and discounts, compute income tax, determine percent increase or decrease, investigate some of the ways percent can be abused, calculate simple interest, use the future value formula, use the simple interest formula on discounted loans, and use compound interest formulas;

Chapter 15 (The Nature of Graphs and Functions) students will be able to: plot graphs on rectangular coordinate systems, and graph functions, use vertical line test, use intercepts to draw graphs of linear functions, calculate slopes of lines and use them as rate of change, solve linear systems using substitution and graphing methods;

Chapter 16 (The Nature of Mathematical Systems) students will be able to: apply systems of linear equations to solve problems, graph systems of linear inequalities, write an objective function to optimize a quantity;

Chapter 17 (The Nature of Voting) students will be able to use plurality, Borda, and pairwise comparison methods to determine an election's winner.

Important note: This is a tentative schedule for the course, and the instructor may change it without any prior notice.

Course Outline/Schedule

TABLE 1

Weekly Coverage of Course Material

Weeks	Sections	Assessments	Test Dates
Week 1: Aug. 28 - Sep.1	Sections 4.1 & 4.2	Homework (4.2)	
Week 2: Sep. 4 - 8	Sections 4.3 & 4.4	Homework (4.3, 4.4), Quiz (Ch.4)	
Week 3: Sep. 11 - 15	Sections 5.1 &5.2		
	Sections 5.3 & 5.4	Homework (5.3 – 5.4)	
Week 4: Sep. 18 - 22	Sections 5.5	Quiz (Ch. 5) Self-Check -1	9/20/23

Test 1 on Chapter 5&4 9/21/23

Week 5: Sep. 25 - 29	Sections 6.1&6.2	Homework (6.1&6.2)	
Week 6: Oct. 2 - 6	Sections 6.3&6.4	Homework (6.3&6.4)	
Week 7: Oct. 9 - 13	Sections 6.5, 6.6, 6.7	Homework (6.5, 6.6, 6.7)	
Week 8: Oct. 16 - 20		Self-Check - 2	10/16/23
		Test 2 on Ch. 6	10/17/23
Week 9: Oct. 23 - 27	Sections 10.1&10.2	Homework, Quiz (Ch. 6)	
Week 10: Oct. 30 – Nov. 3	Sections 10.3	Homework (10.1, 10.2, 10.3)	
		Last Day to Withdraw	11/09/23

Week 12:	Sections 11.1&11.2	Self-Check 3, 11/16/23	
Nov. 13 - 17		Test 3 on Ch 10 & 11	11/17/23
		Quiz (Ch. 10&11)	
Week 13:	Sections 15.1&15.2	Homework (Ch. 15)	
Nov. 20 - 24			
Week 14:	Section 16.1, 16.2 &16.3	Homework (16.1, 16.2&16.3), Quiz (Ch.16)	
Nov 27 – Dec. 1		Thanksgiving Week	
Week 15:	Section 17.1&17.2	Homework, Quiz (17.1&17.2)	
Dec. 4 - 8			
Week 16:		Final Exam	TBD
Dec. 11 - 15			

Syllabus Change Policy

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.

Netiquette Statement

Policy Statement on Non-Discrimination

It is the policy of Florida Agricultural and Mechanical University to assure that each member of the University community be permitted to work or attend classes in an environment free from any form of discrimination including race, religion, colour, age, disability, sex, marital status, national origin, veteran status and sexual harassment as prohibited by state and federal statutes. This shall include applicants for admission to the University and employment.

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Academic Honor Policy Statement

Florida A&M University is committed to academic honesty and its core values, which include scholarship, excellence, accountability, integrity, fairness, respect, and ethics. These core values are integrated into this academic honesty policy. Being unaware of the Academic Honesty Policy is not a defence for violations of academic honesty. Additional detail on FAMU Academic Honesty Violations are provided in University Policy 2.012 (10.)(s). If you have any questions, please see your Academic Advisor.

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University Americans with Disabilities Act (ADA) Statement

The Florida A&M University Americans with Disabilities Act (ADA) Policy Statement states that “Individuals who need a reasonable accommodation must notify the Office of Equal Opportunity Programs at 599-3076.” It is the responsibility of the FAMU Equal Opportunity Programs (EOP) Office, through the ADA Coordinator, to ensure the Florida A&M University is in compliance with the Americans with Disabilities Act. If you have any questions, please contact your Academic Advisor or the University EOP Officer, Equal Opportunity Programs, 674 Gamble Street, Tallahassee, FL 32307, (850) 599-3076.

Procedure for Resolving Faculty-Student Conflict

1. Student first attempts to resolve issue with instructor.
2. Student submits written notification of problem to chair.

3. Chair forwards student letter to instructor.
4. Instructor responds in writing to chair.
5. Chair meets with instructor and/or student if necessary.
6. Chair forwards response/recommendation to Dean's office.
7. Dean decides what further course of action is available to the student.

College Grievance Deadlines

Intent to Grieve Form

Students must submit Intent to Grieve Forms, online, within two weeks of grades being made available for students to view in accordance with the University Registrar's calendar. Students cannot submit an Academic Grade Grievance without submitting an Intent to Grieve Form unless they receive an exception from the Associate Dean.

Grievances submitted to the College of Science and Technology Grievance Committee for fall semester grade disputes must be communicated to the College of Science and Technology Dean's Office by the deadlines listed below. These will only be reviewed if an Intent Grieve Form was filed by the stated deadline or an exception is provided by the Associate Dean allowing the student to submit a grievance without filing and Intent to Grieve Form.

- Biology, Chemistry, Math, Physics courses – student must submit the grievance no later than March 1st (or next business day).
- CIS courses – No later than three weeks after the student receives notification of the outcome of the Academic Complaint Process (ACP) from the CIS chairperson.

Honor Code

The Florida Agricultural and Mechanical University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to “. . . be honest and truthful and . . . [to] strive for personal and institutional integrity at Florida Agricultural and Mechanical University.” The University's Academic Honor Policy is located in the FANG Student Handbook, under the Student Code of Conduct- Regulation 2.012 section, beginning on page 55-56.

Please be aware that using social media to collaborate on and share course exams or assignments with other students that are not identified by the course instructor as group work is a violation of the FAMU Academic Honor Policy.

Any violation of the collaboration policies, including exchanging answers electronically, plagiarism or cheating on tests will be considered violations of the Academic Honor Code of FAMU.