



NORTHWEST FLORIDA STATE COLLEGE

MGF 1130 Course Syllabus

Course Name: Mathematical Thinking

Course Number: MGF 1130

Section (CRN): 10876

Credit Hours: 3

Instructor Name: Allison Godwin

Instructor Office Location: Niceville campus, Building 500, Room 101B

Instructor Email: godwina6@nwfsc.edu

Course Curriculum

In this course, students will utilize multiple means of problem solving through student-centered mathematical exploration. The course is designed to teach students to think more effectively and vastly increase their problem-solving ability through practical application and divergent thinking. This course is appropriate for students in a wide range of disciplines/programs.

Goals

The goal of this course is to (1) give the student exposure to new mathematical concepts and problem-solving strategies and (2) allow students to explore how math can be used in a variety of settings.

Objectives

Student Learning Outcomes:

- Students will determine efficient means of solving a problem through investigation of multiple mathematical models.
- Students will apply logic in contextual situations to formulate and determine the validity of logical statements using a variety of methods.
- Students will apply mathematical concepts visually and contextually to represent, interpret and reason about geometric figures.
- Students will recognize the characteristics of numbers and utilize numbers along with their operations appropriately in context.
- Students will analyze and interpret representations of data to draw reasonable conclusions.

Expectations of the Instructor and Course

- a. Office Hours: I am available 10 hours each week for office hours. I am also available at other times. You can call me at 850-729-5219 or email me at godwina6@nwfsc.edu to schedule an appointment. My office hours will be posted on my office door and on Canvas after the semester begins.
- b. Email/voicemail response time of the instructor: You can anticipate responses to inquiries and questions within 24-48 hours of receipt except on weekends and holidays.
- c. Canvas: Learning Management System will be used to calculate the overall course grade and post assignments.
- d. MyOpenMath: Engages students with online tools used for formative assessment.

Expectations of the Student

a. Students are responsible for adherence to all college policies and procedures, including those related to academic freedom, cheating, classroom conduct, computer/network/email use and other items included in the Northwest Florida State College Catalog and Student Handbook. Students should be familiar with the rights and responsibilities detailed in the current Northwest Florida State College Catalog and Student Handbook. Plagiarism, cheating, or any other form of academic dishonesty is a serious breach of student responsibilities and may trigger consequences which range from a failing grade to formal disciplinary action. NWFSC prohibits the use of AI (Artificial Intelligence) tools, such as ChatGPT, to generate text that students represent as their own independent creation.

b. Attendance Policy: Regular attendance and participation are significant factors that help to promote success in college. Students are expected to attend ALL class meetings of all courses for which they are registered. Participation points are awarded in class and are not eligible for make up unless students are on a school related trip.

c. Classroom Conduct: Students are expected to participate in class activities by taking notes and trying problems. This will allow students to interact with the material and be more prepared for homework assignments and tests.

How Student Performance Will be Measured

This course uses various summative assessments to measure student performance towards the student learning outcomes listed above. The final grade will be calculated using a ten-point scale. A breakdown of the final grade is shown below.

- 15% Homework
- 15% Participation
- 25% Quizzes
- 25% Projects
- 20% Final Exam