

Pensacola State College District Syllabus
MGF 1130_D9136 Mathematical Thinking

Instructor: Ms. Mary Anne Petruska

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Credits

3 cc

Prerequisites

Placement at the college level or completion of the appropriate exit-level developmental course(s) with a grade of C or better.

Course Description

Consists of the following topics: set theory, symbolic logic, introductory counting methods, probability, descriptive statistics, number theory, linear programming and geometries with applications, history of mathematics, and algebra applications.

Offered

FA, SP, SU.

Distribution

Meets AA General Education Core, Mathematics requirement.

Notes

Student may take either MGF 1130 or MGF 1131 first.

Textbooks:

Thinking Mathematically (PSC CUSTOM); Blitzer; 9780137289387; 8th; Pearson; 2023

Supplemental Materials:

None

Special Requirements:

Distance Learning/Hybrid Course statement: There is a \$24.99 Lab Fee for Distance Learning courses and NO Lab Fee for Hybrid courses. Distance Learning and Hybrid Sections require a MyMathLab access code. Use of MyMathLab in face-to-face sections is at the discretion of the instructor. Contact your instructor to determine if MyMathLab is required. For sections NOT requiring MyMathLab the textbook listed is required.

Student Expectations—Students enrolled in this course can expect the following:

- 1) clearly identified course objectives
- 2) productive class meetings
- 3) a positive learning environment
- 4) opportunities for appropriate student participation
- 5) effective instruction
- 6) positive and appropriate interactions
- 7) assistance with meeting course objectives during and beyond class hours
- 8) evaluation of student performance and appropriate and timely feedback
- 9) clear and well-organized instruction.

General Education Student Learning Outcomes:

Critical Thinking:

The student analyzes, evaluates, and, if necessary, challenges the validity of ideas, principles, or data in order to develop informed opinions, probable predictions, or defensible conclusions.

Scientific and Mathematical Literacy:

The student properly identifies and applies scientific or mathematical principles and methods.

Information Literacy:

The student effectively locates, evaluates, and applies information from a variety of sources.

Course Learning Outcomes:

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

Course Learning Outcomes:

Methods of Evaluation

Grade calculation: Your final grade is based on your (1) 4 chapter tests, (2) homework, (3) portfolio, (4) In-class projects, (5) midterm grade and (6) final exam grade.

Points break-down:

Downloaded tests	80 pts [20 pts. ea.]
Homework	250 pts
On-Line Projects	20 pts*
On-Line Portfolio	50 pts**
Mid-term	200 pts
<u>Final exam</u>	<u>400 pts</u>
Total	1000 pts

Student Email Accounts

Pensacola State College provides an institutional email account to all students enrolled in courses for credit. PirateMail is the official method of communication, and students must use Piratemail when communicating with the College. In cases where companion software is used for a particular class, email may be exchanged between instructor and student using the companion software.

Flexibility

It is the intention of the instructor to accomplish the objectives specified in the course syllabus. However, circumstances may arise which prohibit the fulfilling of this endeavor. Therefore, this syllabus is subject to change. When possible, students will be notified of any change in advance of its occurrence.

ADA Statement

Students with a disability that falls under the Americans with Disability Act or Section 504 of the Rehabilitation Act, it is the responsibility of the student to notify Student Resource Center for ADA Services to discuss any special needs or equipment necessary to accomplish the requirements for this course. Upon completion of registration with the Student Resource Center for ADA Services office, specific arrangements can be discussed with the instructor.

Equity Statement

Pensacola State College does not discriminate against any person on the basis of race, color, national origin, sex, disability, age, ethnicity, religion, marital status, pregnancy, sexual orientation, gender identity or genetic information in its programs, activities, and employment. For inquiries regarding the College's nondiscrimination policies, contact the Executive Director of Institutional Equity and Student Conduct, 1000 College Blvd., Building 5, Pensacola, Florida 32504, (850) 484-1759.

Security Statement

Pensacola State College is committed to encouraging all members of the College community to be proactive in personal safety measures. In case of emergency, students should ensure that they are aware of the building exit closest to each of their classrooms, as well as all alternative building exits in case circumstances require using a different route.

Emergency Statement

In the case of severe weather or other emergency, the College administration maintains communication with appropriate state and local agencies and makes a determination regarding the cancellation of classes. Notices of cancellation will be made through the College's PSC Alert system and on the College's website.