



Pensacola State College District Syllabus
MGF 1130_D9106
Mathematical Thinking

Instructor: Ms. Mary Anne C. Petruska

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Semester Hours: 3 credit hours

Prerequisite(s): None

Corequisite(s): None

Course Description: 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 increase their problem solving ability through practical application and divergent thinking. This course is appropriate for students in a wide range of disciplines/programs.

Semester Offered: Fall, Spring, Summer.

Course Designation: Meets AA General Education Core, Mathematics requirement.

General Education Core Course Standard: Per Florida Statute 1007.25,
"Mathematics courses must afford students a mastery of foundational mathematical and computation models and methods by applying such models and methods in problem solving."

Textbook: Thinking Mathematically; Robert F. Blitzer; 9780138274917; 8th; Pearson; 2023

Supplemental Materials: scientific calculator

Special Requirements:

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.

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 about 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.

Methods of Evaluation

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

Points break-down:	take home tests	80 pts [20 pts. ea.]
	homework	270 pts
	portfolio	50 pts
	mid-term	200 pts
	<u>final exam</u>	<u>400 pts</u>
	Total	1000 pts

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.

Academic Dishonesty Statement	Pensacola State College is committed to upholding the highest standards of academic conduct. All forms of academic dishonesty, to include plagiarism and cheating, are prohibited. Penalties for academic dishonesty include but are not limited to one or more of the following: the awarding of no credit on the assignment, a reduction in the course grade, or the assignment of a final course grade of F and removal from the course. See the College Catalog for more details: Academic Integrity
ADA Statement	Students with a disability that falls under the Americans with Disability Act Amendments Act of 2008 or Section 504 of the Rehabilitation Act should contact the Student Resource Center for ADA Services to discuss academic accommodations. Appropriate academic accommodations are determined on an individual basis with careful consideration of the course learning outcomes and the documentation of the disability. For more information, students should visit the Student Resource Center for ADA Services on the Pensacola campus in building 6, room 603; call 850-484-1637; email ADAservices@pensacolastate.edu ; or complete the online intake form in the ADA Services app within the MyPSC apps dashboard.
AI Statement for Writing Emphasis Courses	Because writing emphasis courses focus on the foundational skills of critical thinking, rhetorical awareness, and information literacy, the work presented by students must be original. As such, the use of generative AI for graded assignments is prohibited unless specifically authorized by the instructor. The instructor reserves the right to assign a failing grade to an assignment determined to exhibit markers of generative AI use. In such instances, the student may challenge the failing grade and is responsible for demonstrating the originality of a submitted text. Continued registration in the course will be understood as acceptance of this policy.

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.
Flexibility Statement	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.
Nondiscrimination Statement	Pensacola State College does not discriminate against any person on the basis of race, color, ethnicity, religion, sex (as defined by applicable federal and state law), national origin, age, disability, genetic information, pregnancy, or marital status in its educational programs, activities, or employment. For inquiries regarding the College's nondiscrimination policies, contact the Civil Rights Compliance Officer at (850) 484-1759, Pensacola State College, 1000 College Blvd., Pensacola, Florida 32504.
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.
Student Email Statement	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.