

## Pensacola State College District Syllabus MGF 1130\_D1013 Mathematical Thinking

Instructor: Jeremy Carr

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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, "Methematics courses must efford students a mostery of foundational meth

"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:** Four exams will be given during the term: Exam #1 (E1), Exam #2 (E2), Exam #3 (E3), and the Final Exam (FE). Each exam is mandatory. Each exam will be worth 100 Points. Course Average = (E1 + E2 + E3 + FE) / 4.

## **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	Pensacola State College is committed to upholding the highest standards of
Statement	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.
Al Statement for Writing	Because writing emphasis courses focus on the foundational skills of critical
Emphasis Courses	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.