

# Course Syllabus

## Course Information

**Course Title:** Mathematics For Liberal Arts 1

**Subject and Number:** MGF 1106

**Course Description:** The student will examine sets, logic, Euclidean geometry, probability, and statistics. Prerequisite: MAT0029 or MAT1033 or MGF1107. Fulfills Gordon Rule computational requirement.

**Class Number:** LOREM IPSUM

**Term and Year:** LOREM IPSUM

**Course Modality:** [MDC Modalities](https://www.mdc.edu/registration/options/default.aspx)

## Instructor Information

**Name:** LOREM IPSUM

**Department and Campus:** LOREM IPSUM

**Office location:** LOREM IPSUM

**Office hours:** *(communicate course office hours with students)*

**Phone number:** 123-456-7890

**Email:** LOREM IPSUM

**Communication Policy:** *(Faculty will establish protocols for communication with students)*

## Required Textbook, Course Materials, and Technology

**Required course materials:** *(Textbook(s), library reserves, shark pack, and/or other required readings. Include ISBN Number and author(s))*

**List optional/supplemental materials/OER:** LOREM IPSUM

**Technology & Technical Skill Requirements:** *(Technology tools or equipment students need to complete this course are included)*

## Grading Policy & Assessment Methods

*List all activities, papers, quizzes, tests, etc. including grading scale used for final grade calculation. Relationships between the final grade and the learner’s accumulated points or percentages/weights breakdown for each assessment or component of the course grade.*

*Include policy on late submissions.*

*For MDC Live and MDC Online courses, include policy regarding exams (e.g., ProctorU, Respondus Lockdown and Monitor, etc.)*

*If applicable, include guidelines for extra credit.*

**Incomplete Grades:** [View the college’s procedures for Incomplete Grades](https://www.mdc.edu/procedures/Chapter8/8381.pdf)

## Miami Dade College Policies

**Attendance Policy:** *(Faculty include precise statements about illnesses/emergencies/ tardiness, missed assignments/make-up.)*

**Students Rights and Responsibilities:** *Policies addressing academic integrity and plagiarism, code of conduct, grade appeals, religious observations, services for students with special needs, student complaints, and other.*

[For more information, visit the Student’s Rights and Responsibilities page](https://www.mdc.edu/rightsandresponsibilities/)

## Available Support Services & Resources

* [Tutoring Labs and Technology – Learning Resources](https://www.mdc.edu/learning-resources/tutoring-labs-technology/)
* [Virtual Tutoring through Learning Resources or Smarthinking Online Tutoring](https://libraryguides.mdc.edu/BbLTutoring)
* [ACCESS: A Comprehensive Center for Exceptional Student Services](https://www.mdc.edu/access/)
* [Advisement](https://www.mdc.edu/advisement/)
* [Password and Login Technical Support](https://www.mdc.edu/registration/password.aspx)
* [Technical Support for MDC Live and MDC Online Courses](https://www.mdc.edu/online/resources/tech-support.aspx)
* [SMART Plan](https://www.mdc.edu/smart/)

*(Faculty select from the above if applicable and include additional course/campus specific resources)*

## Available Support Services & Resources

* [Public Safety - Services](https://www.mdc.edu/safety/services/)
* [Hurricane and Other Natural Disasters:](https://www.mdc.edu/safety/in-case-of-emergency/) In the event of a hurricane or other disaster, the class follows the schedule established by the College for campus-based courses. Please visit the MDC website or call the MDC Hotline (305-237-7500) for situation updates.

## Course Description

**MGF1106 | Mathematics For Liberal Arts 1 | 3 credits**

The student will examine sets, logic, Euclidean geometry, probability, and statistics. Prerequisite: MAT0029 or MAT1033 or MGF1107. Fulfills Gordon Rule computational requirement.

## Course Competencies

### Competency 1:

The student will demonstrate knowledge of set operations by:

* Finding complements, unions, intersections, subsets, and applying DeMorgan’s laws.
* Drawing and applying Venn diagrams.

Learning Outcomes

* Communication
* Critical thinking
* Information Literacy
* Numbers / Data
* Social Responsibility

### Competency 2:

The student will demonstrate knowledge of logic by:

* Analyzing/determining negations, disjunctions, conjunctions and various forms of conditional statements.
* Determining the validity of arguments, using symbolic logic and/or Euler circles.

Learning Outcomes

* Communication
* Critical thinking
* Information Literacy
* Numbers / Data
* Social Responsibility

### Competency 3:

The student will demonstrate knowledge of combinatorics by:

* Using the Fundamental Principle of Counting.
* Calculating Combinations and Permutations.

Learning Outcomes

* Communication
* Critical thinking
* Information Literacy
* Numbers / Data
* Social Responsibility

### Competency 4:

The student will demonstrate knowledge of probability by:

* Describing sample spaces and events.
* Calculating probabilities of simple, compound and conditional events.

Learning Outcomes

* Communication
* Critical thinking
* Information Literacy
* Numbers / Data
* Social Responsibility

### Competency 5:

The student will demonstrate knowledge of statistics by:

* Distinguishing between sampling methods.
* Interpreting data presented in graphs, charts and tables.
* Finding relationships between data sets.
* Calculating and understanding relationships between measures of central tendency.

Learning Outcomes

* Communication
* Critical thinking
* Information Literacy
* Numbers / Data
* Social Responsibility

### Competency 6:

The student will demonstrate knowledge of plane geometry by:

* Rounding measurements, and converting and determining appropriate units of measure.
* Computing perimeters, areas, and volumes of various plane and solid figures.
* Distinguishing between the various characteristics of quadrilaterals.
* Calculating angles in diagrams involving parallel lines.
* Classifying different types of triangles, calculating angles, and applying the Pythagorean Theorem.

Learning Outcomes

* Communication
* Critical thinking
* Information Literacy
* Numbers / Data
* Social Responsibility