MGF1107 (Spr 2019)

MGF1106 Syllabus

Course Summary

MGF 1107, Mathematics for Liberal Arts 2 is a general education/math course which is not intended to prepare you for Precalculus or Calculus. Instead, this course emphasizes mathematical reasoning and the connections between mathematics and the liberal arts. This course qualifies for both GenEd and Gordon Rule credits.

Prerequisites: None (No, not even MGF1106. The courses are independent.)

Credits: 3

Textbook: We will primarily the free textbooks from Discovering the Art of Mathematics. These can be found at https://www.artofmathematics.org/books. On occasion there will be notes or worksheets distributed in class and through Canvas.

Course Content: This course focuses on mathematical thinking and how it can be applied to problems both within and outside of pure mathematics. Covering particular material is of secondary importance. That said, we will apply mathematical reasoning to topics from game theory, graph theory, counting principles, probability and statistics, and elementary number theory. Course material is flexible and will be guided to some extend by student interest.

Course Format

There will be very little traditional lecture in this course. Most classes will have the class form small groups to work on challenging problems. Following some initial time to work on the problem, groups will present their (partial) solutions to the class. Followup activities will be given for homework and weekly quizzes will be given to reinforce the topics from the group activities. Finally, there will be three major projects throughout the semester instead of exams.

All course communication will be through Canvas or your ufl email. Homework assignments and course announcements will be posted on Canvas, so it is highly recommended to have notifications from canvas

announcements will be posted on Canvas, so it is highly recommended to have notifications from canvas sent to your email (Click on "Account" in the side bar of Canvas, then go to "Notifications" and set announcements to email). This should be the default setting.

Assignments

Assignments are graded either based on mastery or numerically. In short, mastery grades will either give all points or none but have a chance for resubmission while numerical grades are graded once for points. Details can be found below in the "Grading Procedures" section.

In-Class Groupwork: Most days class will begin by dividing into groups of 3-5 and working on a problem or a continuation of a previous day's problem. Every day students will be assessed as participating or insufficiently participating. Each group will be given a mastery grade on the groupwork.

Homework: There will also be a list of problems relating to the in-class group problems maintained on Canvas. Homework will also be given a mastery grade. While students are encouraged to discuss homework problems with their peers (it is natural to team up with your group members to discuss) final solutions must all be original work. Students found to be copying answers will be unable to master that assignment.

Quizzes: We will have a quiz every week which will be graded numerically. Quizzes are individual assignments which cover topics from that week's groupwork.

Documentaries: Throughout the semester you will be provided with documentaries that deal with the history and application of mathematics. Students are required to watch some of these, and this will be evaluated with a quiz or a short writing assignment.

Projects: There will be three major projects over the course of the semester. Projects will be given a numerical grade rather than a mastery grade. With few exceptions, these will have the same conditions as homework. All final work must be original work. Copied answers will result in a score of 0 for that project.

Grading Procedures

Every assignment in this course is either given a numerical grade or a mastery-based grade. Numerical grades are the kind of grades you are familiar with. An assignment that is graded based on mastery will either be awarded 0 points or full points. However, assignments given a mastery grade may be resubmitted up until the final deadline. For example a 10 point assignment with a numerical grade could be assigned 0/10, 10/10 or any grade in between like 7/10, but the grade received is final. A 10 point assignment with a mastery grade will be given either 0/10 or 10/10 but will have a chance for resubmission up until the assignment's final deadline.

This course is divided into three grading periods, each with a possible 250 points. **The three grading periods end on 2/5, 3/19, and 4/23.** The grade for each period will be (roughly) as follows:

Groupwork	25 points
Homework	50 points
Quizzes	50 points
Documentaries	25 points
Project	100 points
Total	250 points

So there are a total of 750 points in the class. The final course grade will be given by the following grading scale:

Passing Grades				Non-Passing Grades	
Letter Grade	**Point Range**			**Letter Grade**	**Point Range**
A	675-750			C-	465-494
A-	645-674			D+	435-464
B+	615-644			D	405-434
B	585-614			D-	375-404
B-	555-584			E	0-374
C+	525-554				
C	495-524				

This grading scale will be strictly adhered to.

Makeup Policy

Any makeup request **must be made prior to the deadline of the assignment** unless an emergency prevents communication. Makeups are only approved in the case of official UF business, religious observances, or personal emergency. Makeups may be denied if the reason for absence was known about well before it being communicated. **There are makeups for group work**, but the lowest 3 group work assignments (one per grading period) will be dropped to compensate for this.

Special Accommodations

Students with disabilities requesting accommodations on homework, quizzes, and exams must first register with the Dean of Students Office. The Dean will provide the student with documentation, which must be turned in to the course coordinator or your instructor **during the first two weeks of the semester**. Since

there are no exams

Academic Honesty

The University of Florida expects students to be honest in all of their university class work. Please remember to commit yourself to academic honesty with the pledge:

"*We, the members of the University of Florida Community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.*"

The Math Department expects you to follow the academic honesty guidelines. Matters of violations of academic honesty are adjudicated by the Student Honor Code.

> In this course, it is especially important that students do their own work. Since the bulk of the class is about mathematical reasoning, the use of a tutor is **strongly discouraged**. In general, if a student cannot adequately explain their reasoning to the point that the instructor does not believe that it is the student's work, it will be treated as though the student copied the answers.