# **MGF1106 Spring 2021 Syllabus**

This document is divided into two main sections. The first deals with the various policies, both UF and individual, which govern the course. The second is a list of the assignments in this class along with their due dates.

## **Course Summary**

MGF 1106, Mathematics for Liberal Arts I is a general education/math course which is not intended to prepare you for Precalculus or Calculus. Instead, this course is meant to cover topics that more broadly applicable and have intersections with the liberal arts.

#### **Communication Information**

Instructor Name: Dr. Ross Ptacek

Office Location: LIT 442 (but I won't be there)

Phone and Email: (352) 294-2350 [department], <a href="mailto:rptacek@ufl.edu">rptacek@ufl.edu</a>

Preferred form of Contact: Please use Canvas messages or email. For grade inquiries

you should use Canvas messages.

Office Hours: MWF 10:00-11:00 AM EST via Zoom

I primarily will communicate with the entire class through Canvas announcements. Otherwise, communication will come to your ufl.edu email address. If you send an email, you can generally assume a same business day response and no longer than two business days. If you don't get a response by then, **please resend your message**. Particularly around exams and deadlines I receive a large volume of emails, and it is not uncommon for one or two to slip between the cracks.

<u>Class Comportment:</u> We don't have scheduled class meetings, but please dress as though you were on campus/in class for Zoom meetings. Since the transition to distance learning in other classes, there have been too many sticky notes falling off of web cameras. Please be nice on the Canvas discussions. I do not typically have any trouble with this since math topics do not often provoke strong reactions in people. If you feel that people are not being civil, just let me know. Do not take action yourself.

#### Course Materials

- Required Reading and Other Course Materials:Our textbook is *Excursions in Modern Mathematics*, *9th Edition by Peter Tannenbaum*. The textbook is primarily available as an ebook which **must be purchased using UF All Access**. Instructions for purchasing the textbook are on the <u>Accessing MyMathLab</u> page of the introductory module. All other materials will be presented on the section pages on Canvas. These pages include links to the video lectures and notes. Typically video lectures are narration and annotation of slides, and the notes are the unannotated slides. While the video lectures are intended to be comprehensive, students are responsible both for watching the videos and reading the textbook.
- Required Technology:
  - **Zoom:** We will use Zoom for office hours, but that's it. UF's website for Zoom is <a href="https://video.ufl.edu/conferencing/zoom/">https://video.ufl.edu/conferencing/zoom/</a>. As a student you will be clicking Zoom links from within Canvas and this should all work automatically.

- **MyMathLab:** This is the course homework system that we will use. Enrollment in MyMathLab carries its own somewhat lengthy set of instructions which is on another page of this module (<u>Accessing MyMathLab</u>).
- **Honorlock:** Our exams will be proctored using Honorlock. Honorlock requires installing an extension into the Chrome browser. More **details** can be found on the <u>Honorlock</u> page.
- <u>Materials and Supplies Fee:</u> According to the UF schedule of courses, there are \$25.99 of additional course fees. The site is not currently showing the textbook price, but it is usually around \$100. Again, it **must** be purchased through UF All Access.

#### Course Format

This course is an **asynchronous online** course. Course content is delivered through video lectures that can be viewed on Ocanvas. Each sections videos can be found on on that section's page. The pages are arranged into modules which can be found in the <u>Modules</u> section of Canvas. The slides from which the lectures were given can also be found on the section page.

<u>Participation:</u> Since we are an online class class, participation means interacting with the course materials (e.g. watching videos and reading what I post on Canvas) and being active in the course discussions. Both of these are essential for the smooth running of the course. These materials are designed to answer the most frequently asked questions about the course.

Everyone begins with a full 10 participation points, but this number can go up (higher than 10 is bonus) or down (but not negative) over the term. The short of it is that if you do things that help the class run more smoothly you get points and if you do things which hinder it then you lose some points. Points are given and taken away entirely at my discretion.

The long version is that participation points **may** be awarded for

- asking insightful questions,
- suggesting improvements to the course materials (constructive criticism is **good**, and I'd rather hear about it sooner than later),
- answering questions on the discussions, or
- otherwise acting in any way that improves the course.

#### Participation points **may** be removed for

- asking questions that are directly answered in the course materials (remember that participation means interacting with the course materials),
- asking for more points/alternate assignments (Asking why you missed something is good, and may even **gain** participation points. Just asking for points or a bonus assignment is frustrating.),
- trying to game participation points (Don't spam the discussions/me with questions to appear involved. Complaining about point distribution is included here), or
- otherwise acting in a way that hinders the class environment.

Note that doing **nothing** will let you keep your original 10 points. You will not be punished for dutifully completing the class on your own.

### **Grade Polices**

- Grades are assigned A-E with plus/minus grades according to the scale at the bottom of this section. Only a grade of C or higher is considered passing for satisfying degree requirements. To keep this part succinct, I am only going to discuss policies that apply for all assignments. The various assignment types have different policies (e.g. resubmission) governing them, and these particulars are on the **List of Graded Work page**.
  - Grading in this class is consistent with UF policies available at: https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/
- <u>Honor Pledge:</u> UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (sccr.dso.ufl.edu/process/student-conduct-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.
- <u>Assignment Values:</u> Point values/percentages for each assignment are available in the <u>List of Graded Work page</u>.
- Policy on Late and Make-up Work: Any makeup request or extension must be made at least a business day prior to the deadline of the assignment unless an emergency prevents communication. Makeups and extensions are only approved in the case of official UF business, religious observances, or personal emergency. Makeups and extensions may be denied if the reason for absence was known well ahead of time. Assignments and lectures are made available well in advance of their due date, so students are expected to work around their extracurricular activities within reason, and the makeup request must be made as soon as possible.
- <u>Grade Return Timing:</u> Most assignments are automatically graded and will return immediately. For any manually graded assignments, please allow one week
- <u>Point Range for this Class:</u> Final grades are assigned based on the total points accumulated as shown in the table below. It is important to stress that your grade is entirely determined by the number of points accumulated. The percentage shown by is a good estimate of your standing in the class (e.g. 70% = 700 points), but the Canvas percentage can be inaccurate when there are unattempted or ungraded assignments, so please only use your point total to determine your grade. This is especially important toward the end of the term!

<b>Passing Grades</b>		<b>Non-Passing Grades</b>	
<b>Letter Grade</b>	<b>Point Range</b>	<b>Letter Grade</b>	<b>Point Range</b>
A	1000-900	C-	620-659
A-	860-899	D+	580-619
B+	820-859	D	540-579
В	780-819	D-	500-539
B-	740-779	E	0-499
C+	700-739		
C	660-699		

#### **UF Policies**

- <u>Contact Hours:</u> "Contact Hours" refers to the hours per week in which students are in contact with the instructor, excluding office hours or other voluntary contact. The number of contact hours in this course equals the number of credits the course offers.
- <u>Workload</u>: As a Carnegie I, research-intensive university, UF is required by federal law to assign at least 2 hours of work outside of class for every contact hour. Work done in these hours may include reading/viewing assigned material and doing explicitly assigned individual or group work, as well as reviewing notes from class, synthesizing information in advance of exams or papers, and other self-determined study tasks. **Note:** Because this is an asynchronous online class we do not have an in-class/out-of-class distinction, so this translates to 3 hours of work per credit hour or roughly 9 hours per week.
- Accommodation for Student with Disabilities: Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting https://disability.ufl.edu/students/get-started/. This class supports the needs of different learners; it is important for students to share their accommodation letter with their instructor and discuss their access needs as early as possible in the semester.
- <u>Statement Regarding Evaluations</u>: Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available from <u>the Gatorevals website (Links to an external site.)</u>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <u>the evaluation system</u>. (<u>Links to an external site.</u>) Summaries of course evaluation results are available to students at the <u>public results website (Links to an external site.</u>).
- <u>Statement Regarding Course Recording:</u> We do not have any standard (synchronous) class meetings, and office hours will not be recorded.

#### Additional UF Policies and Resources

• **UF Police:** The UF police are together for a safe campus. 392-1111 (or 9-1-1 for emergencies) and <a href="https://police.ufl.edu/">https://police.ufl.edu/</a>.

- Career Connections Center: <u>Career Connections Center (Links to an external site.)</u> (352-392-1601 | <u>CareerCenterMarketing@ufsa.ufl.edu</u>) connects job seekers with employers and offers guidance to enrich your collegiate experience and prepare you for life after graduation.
- Counseling and Wellness Center: <u>Counseling and Wellness Center (Links to an external site.)</u> (352-392-1575) provides counseling and support as well as crisis and wellness services including a <u>variety of workshops (Links to an external site.)</u> throughout the semester (e.g., Yappy Hour, Relaxation and Resilience).
- **Dean of Students Office:** Dean of Students Office (Links to an external site.) (352-392-1261) provides a variety of services to students and families, including <u>Field and Fork (Links to an external site.</u>) (UF's food pantry) and <u>New Student and Family programs (Links to an external site.</u>)
- **Disability Resource Center:** <u>Disability Resource Center (Links to an external site.)</u> (<u>DRCaccessUF@ufsa.ufl.edu</u> | 352-392-8565) helps to provide an accessible learning environment for all by providing support services and facilitating accommodations, which may vary from course to course. Once registered with DRC, students will receive an accommodation letter that must be presented to the instructor when requesting accommodations. Students should follow this procedure as early as possible in the semester.
- **Multicultural and Diversity Affairs:** <u>Multicultural and Diversity Affairs (Links to an external site.)</u> (352-294-7850) celebrates and empowers diverse communities and advocates for an inclusive campus.
- Office of Student Veteran Services: Office of Student Veteran Services (Links to an external site.) (352-294-2948 | vacounselor@ufl.edu) assists student military veterans with access to benefits.
- **ONE.UF**: <u>ONE.UF</u> (<u>Links to an external site.</u>) is the home of all the student self-service applications, including access to:
  - Advising (Links to an external site.)
  - Bursar (Links to an external site.) (352-392-0181)
  - Financial Aid (Links to an external site.) (352-392-1275)
  - Registrar (Links to an external site.) (352-392-1374)
- **Official Sources of Rules and Regulations:** The official source of rules and regulations for UF students is the <u>Undergraduate Catalog (Links to an external site.)</u> and <u>Graduate Catalog (Links to an external site.)</u>. Quick links to other information have also been provided below.
  - Student Handbook (Links to an external site.)
  - <u>Student Responsibilities (Links to an external site.)</u>, including academic honesty and student conduct code
  - <u>e-Learning Supported Services Policies (Links to an external site.)</u> includes links to relevant policies including Acceptable Use, Privacy, and many more
  - <u>Accessibility (Links to an external site.)</u>, including the Electronic Information Technology Accessibility Policy and ADA Compliance
  - <u>Student Computing Requirements (Links to an external site.)</u>, including minimum and recommended technology requirements and competencies

## **Weekly Schedule**

Students in the course should use the Modules section of Canvas for a more detailed weekly schedule.

- **Week 1.** Intro to the course, elections (Drop/Add week)
- Week 2. Voting theory: Plurality, Borda count, and Plurality-with-Elimination methods
- Week 3. Voting theory: Pairwise comparison method, Fairness
- Week 4. Weighted voting theory: Coalitions, Banzhaf power
- **Week 5.** Weighted voting theory: Sequential coalitions, Shapley-Shubik power, counting problems
- Week 6. Exam 1 (voting theory, weighted voting theory), Probability: Sample space,
- **Week 7.** Probability: Sample space, events, probability distributions, combinations and permutations
- Week 8. Probability: Weighted averages, expectation, measuring risk
- Week 9. Statistics: Describing data, normal distributions
- Week 10. Statistics: The empirical rule, approximating with normal distributions
- Week 11. Exam 2 (probability, statistics), Symmetry: rigid motions, reflections, rotations
- Week 12. Symmetry: glide reflections, symmetry groups, Frieze patterns
- Week 13. Fractals: Koch snowflake, dimension, geometric progressions
- Week 14. Fractals: Sierpinski gasket, Mandelbrot set
- Week 15. Exam 3 (symmetry, fractals)

# **List of Graded Work**

This section covers each type of assignment in this class in more detail including the points earned from each assignment and the specific policies that apply to those assignments.

#### **Exams**

- There are three proctored exams during the term. We will use <u>Honorlock</u> for the proctoring.
  - Exam 1 covers material from chapters 1 and 2
  - Exam 2 covers material from chapters 16 and 17
  - Exam 3 covers material from chapters 11 and 12
- Each exam is a 60 minute exam, but an extra 15 minutes are added to account for any delays caused by Honorlock.
- **Submission:** MyMathLab
- **Value:** 3×165 points = 495 points.

#### **Exam Reviews**

- Each exam has a corresponding review with questions similar to exam questions.
- Students get unlimited attempts, but the correct answers will only show after the due date.
- Exam reviews are always due at midnight before the exam window begins.
- **Submissions:** MyMathLab
- **Value:** 5 points  $\times$  3 = 15 points

#### **Final Exam**

- There is a proctored cumulative final exam during finals week. We will use Honorlock for the proctoring.
- The final exam is a 90 minute exam, but an extra 15 minutes are added to account for any delays caused by Honorlock.
- The final exam is optional and only serves to replace one of the other two exams if that would be beneficial. In other words, there are 4 exams (three during-term and one final), and only your best three will count.
- **Submission:** MyMathLab
- **Value:** Replace one 245 point Exam if beneficial.

### Quizzes

- Each chapter also has a guiz associated with it (six total).
- The quiz is timed (45 minutes) but not proctored.
- Students get two attempts, the better of which counts.
- **Submission:** MyMathLab
- **Value:**  $6 \times 20$  points = 120 points

## **Lecture Quizzes**

- Each video lecture (approx. 30) has a corresponding lecture quiz to test comprehension of the basic principles of the lecture. The quiz must be completed prior to attempting the corresponding homework.
- The quiz is not timed and is not proctored.
- Five attempts are given, the best of which counts for your grade.
- Lecture quizzes stays open until the beginning of the final exam week, and can continue to be worked on for credit (unless five attempts are used.)
- Submission: MyMathLab
- **Value:**  $30 \times 2$  points = 60 points.

## **Intro Assignments**

- There are four introductory assignments due the first week of class.
  - 1. Chapter O homework: Orientation for the MyMathLab online homework system
    - **Submission:** MyMathLab
    - **Value:** 5 points
  - 2. Syllabus Quiz: A guiz on commonly missed class policies.
    - Submission: Canvas
    - **Value:** 5 points
  - 3. <u>Course Introduction</u>: A post in the Canvas discussions to introduce yourself to your classmates.
    - **Submission:** Canvas
    - **Value:** 5 points

4. <u>Practice MyMathLab Exam</u>: This lets you experience how Honorlock is used to gain access to password protected/proctored exams.

#### Homework

- Each video lecture (approximately 30) has corresponding homework.
- Homework stays open until the beginning of the final exam week, and can continue to be worked on for credit.
- **Submission:** MyMathLab
- Value: Total 200 points (approximately 20 points per week)

## **Participation**

- Students begin with full participation points.
- Participation points can be gained (bonus) by contributing meaningfully to Canvas discussions other than the group discussion -- these are already graded. They can also be gained for a variety of actions that help the class run more smoothly.
- Participation points can be lost by doing things that hinder the class running smoothly. A full discussion is in the <u>Course Overview and Policies</u> page in Area 5: Additional Course Policies.
- Submission: NoneValue: 10 points

## **Summary**

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Homework: 270 Points (20 points intro + 250 from weekly hw)
Lecture Quizzes: 60 Points (Approx. 2 per section)
Quizzes: 150 Points (6 quizzes x 25 points)
Exams: 495 Points (3 exams x 165 points)
Exam Reviews: 15 Points (2 reviews x 5 points)
Participation: 10 Points (Potentially more as bonus)
Total:
```

## **Grading Scale**

Final grades are assigned based on the total points accumulated as shown in the table below.

Passing Grades		<b>Non-Passing Grades</b>	
<b>Letter Grade</b>	<b>Point Range</b>	<b>Letter Grade</b>	<b>Point Range</b>
A	1000-900	C-	620-659
A-	860-899	D+	580-619
B+	820-859	D	540-579
В	780-819	D-	500-539
B-	740-779	E	0-499
C+	700-739		
C	660-699		

The grading scheme above will be strictly adhered to. Partial points are **not** rounded up. The percentage grade shown in Canvas or MyMathLab is a useful **estimate** of your status in the class, but your **final grade is completely determined by your points earned as shown in the Canvas gradebook**. To estimate your grade, take the percentage in Canvas or MyMathLab as a decimal and

multiply by 1000. For example a 75% would estimate that you will complete the course with 0.75\*1000=750 points which is a B-. Grade points are assigned as in <a href="https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/">https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/</a>.