

MGF1106 Fall 2020 Syllabus

This document contains information about course logistics and policies, broken down by topic area followed by a list of graded work and the policies unique to those assignments. Students enrolled in the class can find a version that is easier to navigate on the course's Canvas page.

Course Policies

Area 1: Basic Course Communication Information

This section tells you how to contact the course instructor and gives an overview of how communication will happen and in what time frame.

Instructor Name: Dr. Ross Ptacek

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

Phone and Email: (352) 294-2350 [department], rptacek@ufl.edu

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

Communications: 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.

Class Comportment: 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. Generally, I do not have any trouble with this since math topics generally do not provoke strong reactions in people. If you feel that people not being civil, just let me know. Do not take action yourself.

Area 2: Required and Recommended Materials for this Course

This section overviews the materials you will need to complete the assigned work in the course.

- 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 e-book which **must be purchased using UF All Access**. Instructions for purchasing the textbook are in the introductory module on the home page of our Canvas course.

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 <https://video.ufl.edu/conferencing/zoom/>. 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 ([Accessing MyMathLab](#)).
 - **Honorlock:** We will use Honorlock to proctor three exams this term. Full instructions on how to use Honorlock can be found in the [Introduction module](#).
- Materials and Supplies Fee: According to the UF schedule of courses, the total course fee is \$130.23. This should be the cost of the textbook and access to MyMathLab.

Area 3: Grading Policies and Grade Scale

Grading in this course takes place within the following parameters.

- 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. re-submission) 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/>
- Assignment Values: Point values/percentages for each assignment are available in the [List of Graded Work page](#).
- 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.
- Grade Return Timing: Most assignments are automatically graded and will return immediately. The group assignments take considerably longer to grade and may take around a week and at most two weeks. There are 200 of you and just one of me!
- Point Range for this Class: Final grades are assigned based on the total points accumulated as shown in the table below.

Passing Grades		Non-Passing Grades	
Letter Grade	Point Range	Letter Grade	Point Range
A	1000-900	C-	620-659
A-	860-899	D+	580-619
B+	820-859	D	540-579

B	780-819	D-	500-539
B-	740-779	E	0-499
C+	700-739		
C	660-699		

Area 4: UF Policies Shaping This Course

This course is aligned with the UF policies below.

- Contact Hours: "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.
- Workload: 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.
- Statement Regarding Evaluations: 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 [the Gatorevals website](#). 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 [the evaluation system](#). Summaries of course evaluation results are available to students at the [public results website](#).
- Statement Regarding Course Recording: We do not have any standard class meetings, and office hours will not be recorded.

Area 5: Additional Course Policies and Information

The following are additional policies that shape my approach to teaching.

- *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.

- We are an asynchronous class, so the idea of an attendance policy changes to a participation policy. In this class, participation means actually watching the video lectures (or at least reading the slides and textbook thoroughly) and being active in the course discussions. Everyone begins with a full 5 participation points, but this number can go up (higher than 5 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 the points. Points are given and taken away entirely at my discretion. I really don't want to take the points away, but I do need some way to discourage behavior that greatly increases the amount of administrative (not educational) work that I do.

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 5 points. You will not be punished for dutifully completing the class on your own.

Additional UF Policies and Resources

University Police

[The UF police are together for a safe campus. 392-1111 \(or 9-1-1 for emergencies\)](http://www.police.ufl.edu/)
[http://www.police.ufl.edu/.](http://www.police.ufl.edu/)

Career Connections Center

[Career Connections Center](#) (352-392-1601 | CareerCenterMarketing@ufsa.ufl.edu) connects job seekers with employers and offers guidance to enrich your collegiate experience and prepare you for life after graduation.

Counseling and Wellness Center

[Counseling and Wellness Center](#) (352-392-1575) provides counseling and support as well as crisis and wellness services including a [variety of workshops](#) throughout the semester (e.g., Yappy Hour, Relaxation and Resilience).

Dean of Students Office

[Dean of Students Office](#) (352-392-1261) provides a variety of services to students and families, including [Field and Fork](#) (UF's food pantry) and [New Student and Family programs](#)

Disability Resource Center

- [Disability Resource Center](#) (DRCaccessUF@ufsa.ufl.edu | 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

[Multicultural and Diversity Affairs](#) (352-294-7850) celebrates and empowers diverse communities and advocates for an inclusive campus.

Office of Student Veteran Services

[Office of Student Veteran Services](#) (352-294-2948 | vacounselor@ufl.edu) assists student military veterans with access to benefits.

ONE.UF

[ONE.UF](#) is the home of all the student self-service applications, including access to:

- [Advising](#)
- [Bursar](#) (352-392-0181)
- [Financial Aid](#) (352-392-1275)
- [Registrar](#) (352-392-1374)

Official Sources of Rules and Regulations

The official source of rules and regulations for UF students is the [Undergraduate Catalog](#) and [Graduate Catalog](#). Quick links to other information have also been provided below.

- [Student Handbook](#)
- [Student Responsibilities](#), including academic honesty and student conduct code
- [e-Learning Supported Services Policies](#) includes links to relevant policies including Acceptable Use, Privacy, and many more
- [Accessibility](#), including the Electronic Information Technology Accessibility Policy and ADA Compliance
- [Student Computing Requirements](#), including minimum and recommended technology requirements and competencies

Weekly Schedule

- Week 1: Introduction to the course and course technologies
- Week 2: Voting methods, plurality, Borda count, elimination methods
- Week 3: Condorcet methods, fairness
- Week 4: Weighted voting, Banzhaf power
- Week 5: Shapley-Shubik power, subsets and permutations
- Week 6: Random experiments, sample space, events, permutations and combinations
- Week 7: Expectation and risk
- Week 8: Midterm, Describing data (mean, median, percentiles)
- Week 9: Normal distributions, empirical rule
- Week 10: Approximately normal data, central limit theorem
- Week 11: Rigid motions, reflections, rotations, glide reflections
- Week 12: Symmetry type, Frieze patterns
- Week 13: Fractals, dimension, geometric progressions and sums
- Week 14: Fractals and randomness, the Mandelbrot set, complex arithmetic
- Week 15: Exam 2
- Finals Week: Optional Final

Full List of Graded Work

Exams

- There are two proctored exams during the term. We will use Honorlock for the proctoring.
 - Exam 1 covers material from chapters 1, 2, and 16.
 - Exam 2 covers material from chapters 17, 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:** 2×250 points = 500 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 the start of the corresponding exam's window, typically at 8AM.
- **Submissions:** MyMathLab
- **Value:** 5 points $\times 2 = 10$ 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.
- **Submission:** MyMathLab
- **Value:** Replace one 250 point Exam if beneficial.

Group Assignments

- There are six group assignments over the course of the term, one for each chapter.
 - [Chapter 1](#). Analyze a voting method other than one of the main four from class.
 - [Chapter 2](#). Study the US Electoral College as a weighted voting system.
 - [Chapter 16](#). Find a solution for and understanding of the so-called "Birthday Paradox".
 - [Chapter 17](#). Repeat a random experiment to produce an approximately normal distribution. Analyze the distribution using the empirical rule.
 - [Chapter 11](#). Find and identify symmetries in the world.
 - [Chapter 12](#). Explore the "Chaos Game" to see how fractals can arise from randomness.
- Students are assessed on their answers to the questions as well as their participation. In the case of zero participation, the student will receive an overall zero.
- **Submission of answers:** Canvas
- **Value of answers:** 6×15 points = 90 points
- **Submission of participation:** Canvas Discussion
- **Value of participation:** 6×5 points = 30 points

Quizzes

- Each chapter also has a quiz 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:** 6×20 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 untimed and unproctored.
- Five attempts are given, the best of which counts.
- 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:** 30×1 point = 30 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 quiz on commonly missed class policies.
 - **Submission:** Canvas
 - **Value:** 5 points
 3. [Course Introduction](#): A post in the Canvas discussions to introduce yourself to your classmates.
 - **Submission:** Canvas
 - **Value:** 5 points
 4. [Practice MyMathLab Exam](#): This lets you experience how Honorlock is used to gain access to password protected/proctored exams.

Homework

- Each video lecture (approx. 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 205 points (approx 15 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 [Course Overview and Policies](#) page in Area 5: Additional Course Policies.
- **Submission:** None
- **Value:** 10 points

Summary

Homework:	220 Points	(15 points intro + 205 from weekly hw)
Lecture Quizzes:	30 Points	(Approx. 1 per section)
Quizzes:	120 Points	(6 quizzes x 20 points)
Groupwork:	120 Points	(6 projects x 20 points)
Exams:	490 Points	(2 exams x 245 points)
Exam Reviews:	10 Points	(2 reviews x 5 points)
Participation:	10 Points	(Potentially more as bonus)
Total:	1000 Points	

Grading Scale

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

Passing Grades		Non-Passing Grades	
Letter Grade	Point Range	Letter Grade	Point Range
A	1000-900	C-	620-659
A-	860-899	D+	580-619
B+	820-859	D	540-579
B	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 $0.75 \times 1000 = 750$ points which is a B-. Grade points are assigned as in <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>.