



SYLLABUS

School: Department of Arts and Sciences
Course Number: MGF 2107
Course Name: Explorations in Mathematics
Credit Hours: 3 credit hours
Length of Course: 16 Weeks
Prerequisite: MAT 1033 or MAT 1100 with a grade of "C" or higher or placement scores

Course Description

This course includes topics from financial mathematics, linear and exponential growth, decay numbers and number systems, elementary number theory, right triangle trigonometry, and a history of mathematics. The purpose of MGF 2107 is to present the utility of mathematics to students who do not intend to take other mathematics courses. Gordon Rule course - must achieve a grade of "C" or higher for the A.A. and A.S. Degree.

Course Rationale

Rationale of the course:

- This course will introduce students to mathematical concepts which are directly linked to quantitative skills required in real life. Topics like Financial Mathematics, Voting Techniques apply to every individual, whereas Number Theory and the History of Math allow students to see the progression of mathematics.
- The course is set up in 9 modules which includes a quiz at the end of each module. Unit tests will include material from 2-3 of the modules presented. There are homework assignments in each module. There are also Interactive Learning Assignments (ILAs), which include discussions, videos, and assessments, in various modules.

Program Learning Outcomes

MGF 2107 is a General Education core course in Mathematics

The student will be able to apply critical thinking skills through problem solving.

Course Learning Outcomes /Objectives

The learners will be able to:

- **identify** the tools needed to complete the course.
- **identify** rational and irrational numbers in the real number system.
- **simplify** expressions with exponents and scientific notation.
- **recognize** and **use** arithmetic and geometric sequences.
- **analyze** number systems and perform arithmetic in other bases.

- **explore** the history of mathematics.
- **solve** simple and compound interest applications.
- **solve** a variety of consumer loan and money growth application problems.
- **solve** application problems involving installment buying.
- **analyze** the process of the different voting methods, defects in the voting methods, and weighted voting systems.

Course Resources

Textbook(s):

Thinking Mathematically, by Robert Blitzer; 6th Edition Pearson Publishing
 ISBN#978-0-321-92323-3 (text and access code from IRSC Bookstore)
 ISBN#978-0321867322 (text only)

This online course requires an access code to **MyMathLab** (publisher software accompanying the book). Instructions on how to register and enroll into MyMathLab are listed in BLACKBOARD under the **MyMathLab Quick Start Info folder**. (The Content material will not become available until you pass the Start Here Quiz with a 70% or higher.)

An access code is included with every new book purchased from the IRSC Bookstore. Access codes to MyMathLab (which contains an eText) may be purchased directly from www.mymathlab.com.

You may use the same access code for both MGF 2106 and MGF 2107, since they use the same textbook. But it is highly discouraged to take the courses simultaneously, as it is very difficult to pass them both in the same semester.

Additional Resources: A simple \$10-\$15 scientific calculator should be sufficient; but if you choose to purchase a graphing calculator, TI-83plus or TI-84 is best suited for IRSC. (TI-89, TI-92, TI-Nspire with CAS, Voyage 200 and HP-48G are prohibited. If you have a calculator not mentioned above, then you must have it approved before testing.) No other electronics (including but not limited to: cell phones, computers, smart phones, etc.) may be used as a calculator and phones must be turned off while in the classrooms, Assessment Center, and ASC labs.

Note on the day of an exam, memory in all calculators must be cleared. Please make arrangements for backing up information stored on your calculator if necessary.

You will need access to a computer with internet, a notebook, and pencils. In addition to the required materials, you may wish to have colored pencils and/or highlighters for note taking and 4" x 6" notecards.

Your class materials are found within the Content page of Blackboard, including a schedule of activities, test study guides, recordings of in-class lectures and handouts to follow along with the lessons.

Course Requirements

This course consists of a series of activities and assessments to assist you in achieving the outcomes/objectives for the course and instructional modules/ units. Each week you will work on various combinations of assignments, activities, discussions, readings, research, etc.

Grades and Grading Scale

Assignment of letter grades is based on a percentage of points earned. The letter grade will correspond with the following percentages achieved. All course requirements must be completed before a grade is assigned.

A	100 - 90
B	80 - 89
C	70 - 79
D	60 - 69
F	59 - and below
W	Withdraw (see policies below)
I	Incomplete (see policies below)

Note: Calculated grades will be rounded to the nearest whole number, only if the student has a passing grade in homework assignments and quizzes.

You can find grades by clicking My Grades in Blackboard. The Blackboard gradebook will be updated periodically. To check for the most current homework or quiz average, or to review a previous quiz or test, refer to the gradebook in MyMathLab.

TOTAL WEIGHTED GRADE		
Items	Number of items	Weight
Interactive Learning Assignments (ILAs)	7	5%
Homework Assignments	21	10%
Quizzes	11	15%
Tests (including Final)	5	70%
	TOTAL	100%

Schedule of Activities

The course schedule will be located in the Schedule of Activities link in the course control panel.

Course Policies

The course begins in the Start Here folder in Blackboard. Review the material in this section and then take the Start Here Quiz. The materials within the Content area of Blackboard will not be accessible until the student passes the Start Here Quiz with a 70% or better. The Start Here quiz grade is not counted in your overall grade.

All Homework Assignments, ILAs, and Quizzes can be done online at home. However, all tests and the cumulative final are proctored and you must go to any of the 5 IRSC Assessment Centers on the dates specified in the Schedule of Activities. If you are taking the test at a non-IRSC Assessment Center, arrangements need to be made with the Instructor and Director of Assessment Services, Steven Daniello (sdaniell@irsc.edu) 772-462-7583 prior to the beginning of the class.

You are required to take each unit test. A grade of zero will be posted for any test not attempted by the deadline. I do not drop a test grade.

There is no time limit for the Homework assignments. There are due dates specified in the Schedule of Activities under the Start Here folder in Blackboard. Homework (HW) assignments have an unlimited amount of attempts per question within the due date. **You should complete HW assignments before you complete quizzes** and tests, however, you may complete or correct any missed HW problem after the deadline with a grade deduction of 30% on just the problems that are late. If you get a HW problem wrong, click “Similar Exercise” to get a new chance at the problem. (Check the Schedule of Activities for due dates and the final submission deadline for late homework.)

There is a time limit of 45 minutes for each Quiz within MyMathLab. Quizzes have unlimited attempts within the due date, but the entire quiz must be retaken. I will take the highest score of all attempts for each quiz. There are no make-ups for quizzes after the deadline. The Personal Information assignment in Module 0 is worth a quiz grade, as well as enrolling in MyMathLab by the deadline.

Interactive Learning Assignments (ILAs) are found in the Module Folders in Blackboard. Most of them involve watching a short video and then answering questions. You may retry the questions as many times as you like. Some of the assignments are a Discussion post which requires interaction with your classmates, so there are two parts. The first part is an initial posting; the second part involves feedback or commenting on your classmates’ postings. One of the ILAs requires the use of Microsoft Excel, so make sure to review the information in Module 0 Study Activities, if you don’t currently have Excel. The other ILA involves downloading a word document and working through and submitting your work.

The Module 0 Discussion “Student Introduction” **must be done by the deadline to prove attendance in the course.** If it is not completed by the deadline, **you will be dropped (withdrawn) for non-attendance.** This is a graded assignment under the ILA category. A link to this assignment is also found in the Start Here section. Please check the Schedule of Activities under Start Here in Blackboard for the specific due dates.

Communicating with the Instructor

This course uses a “three before me” policy in regards to student-to-faculty communications. When questions arise during the course of this class, please remember to check these three sources for an answer before asking me to reply to your individual questions:

1. Course syllabus
2. Announcements in Blackboard
3. The “Ask the Instructor” discussion board

This policy will help you in potentially identifying answers before I can get back to you and it also helps your instructor from answering similar questions or concerns multiple times.

If you cannot find an answer to your question, please first post your question to the “Ask the Instructor” discussion board. Here your question can be answered to the benefit of all students by either your fellow students who know the answer to your question or the instructor. You are encouraged to answer questions from other students in the discussion forum when you know the answer to a question in order to help provide timely assistance.

If you have questions of a personal nature such as relating a personal emergency, questioning a grade on an assignment, or something else that needs to be communicated privately, please contact me **via Blackboard Course Messages**, found under the Tools link. Please allow 24/48

business hours for me to respond. I generally do not check email or messages on the weekends or holidays.

All instructor correspondence must be conducted within Blackboard Course Messages.

Please do not use your IRSC e-mail account because it is difficult to identify the course the student is in, and it takes communication outside of the Blackboard Course.

Attendance/Participation

Preparation for class means completing all study activities required for that week. Attendance in an online course means logging into the Learning Management System (Blackboard) on a regular basis and participating in all of the activities that are posted in the course.

Studying and Preparation Time

The course requires you to spend time preparing and completing assignments. For **every credit hour** you should expect to spend at minimum of three to four (3 - 4) hours working on the course. Therefore, a 3-credit course would require approximately 9 – 12 hours of time, per week, to make the **minimum** passing grade.

Examination Policy

All **tests** are proctored and need to be taken at the **Assessment Center** during the specified window. **All tests will become available shortly after the drop deadline.** At that time, you can take each test any day, during assessment center hours up until the deadline of the test (Check Schedule of Activities for due dates and the availability date). You may take the test any time during assessment center hours before the deadline expires from the time it becomes available. You have choice of the 5 Assessment Centers at each IRSC campus.

You will need to take a calculator, writing utensil and a picture ID for the tests. You will be asked by an IRSC proctor to login to the **Lockdown Browser**. This will prompt you to login to Blackboard. Once you login to the Blackboard Course, click on the MyMathLab test link and look for the test. The proctor will put a password in to activate the test. A proctor will supply you with scrap paper on which you should **number your problems and show all of your work.** **I will review scrap paper for partial credit upon the request of the student.** All requests should be made in writing through Course Messages in Blackboard within two days of the test deadline. You won't be able to review the answers on your test until after the test deadline has expired.

For more specific information for each test, such as length of the test, additional materials that you may bring, etc., **print and read the Test Study Guide found in the Study link of the Module Folder in which the test occurs.**

A quick link to the Assessment Center Info (Testing) is located in Blackboard in the Assessment link of the Module Folder in which the test occurs.

Late or Missed Assignments

All assignments must be finished and turned in for full credit. Unless the instructor is notified before a test is due and proper documentation is provided for the cause of the missed test, no make-ups are allowed. There are no make-ups on missed quizzes, as the two lowest quiz grades will be dropped. Homework may be submitted after the deadline with a grade deduction of 30% on just the problems that are late. Interactive Learning Assignments (ILAs) may be submitted late for partial credit.

Submitting Assignments

All Homework and Tests are submitted in MyMathLab, but you will access MML through Blackboard. Interactive Learning Assignments are submitted in Blackboard. Most quizzes are submitted in MyMathLab, but there is one assignment worth a quiz grade that must be submitted within Blackboard Module 0 Assessments. The Cumulative Final is submitted through Blackboard.

Instructor Feedback

Your instructor will provide feedback within 7 to 14 days.

Cheating/plagiarism

Any form of academic dishonesty may result in a zero for the assignment, and you may possibly be taken before the Academic Review Board for dismissal from school. Copying and pasting from the internet without citing sources is plagiarism.

Withdrawals for Non-Attendance (WN) are given if the student does not complete the attendance assignment by the deadline, as well as show activity in the course. (Student Introduction Discussion – see Module 0 in Blackboard.)

Withdrawals are the responsibility of the student to complete before the withdrawal date published in the academic calendar.

Instructor Withdrawals after the withdraw deadline are only granted under the following conditions and will not be given after the final exam is completed:

- 1) Student submits a written request via Blackboard Course Messages at least 1 week before the end of the semester; and
- 2) student is current with all assignments, tests, and attendance, having a passing grade in homework & quizzes; and
- 3) student has consulted with Guidance on any consequences of receiving a W; and
- 4) one of the following:
 - A) a documented emergency or hardship prevents the student from completing the course; or
 - B) the student attends, participates, and completes all assignments except the final exam, but has no chance of passing the course with a C or higher.

Incompletes are only granted under the following conditions and will not be given after the final exam is completed:

- 1) Student has completed at least two-thirds of the semester and submits a written request via Blackboard Course Messages before the date of the final exam; and
- 2) student is current with all assignments, tests, and attendance with an **overall** passing grade for at least two-thirds of the semester's coursework; and
- 3) student has consulted with Guidance on any consequences of receiving an I; and
- 4) a documented emergency or hardship prevents the student from completing the course.

Subject to change notice

All material, assignments, and deadlines are subject to change with prior notice. It is your responsibility to stay in touch with your instructor, review the course site regularly, and communicate with other students to adjust as needed if there is any change in the course.

IRSC Resources

Quick links to the Indian River State College's resources and policies are listed in the Institutional Resources section of the course, including:

- MyIRSC – Register for classes, view grades and financial aid awards
- Student Handbook & Student Handbook Reference Guide
- Advising
- Catalog
- Drop/Add
- Equity Statement
- Financial Aid
- Incomplete Grade
- IRSC Mission Statement
- Office of Student Disabilities
- Student Activities
- Student Success Services
- Testing Services
- Transcripts
- Update Personal Information
- Withdrawal Policy

Academic Resources

Quick links to the Indian River State College's Academic Resources can be found in the Institutional Resources section in Blackboard. Quick links include:

- Academic Calendar
- Academic Support Center
- Academic Notice/Deficiency/Suspension
- Assessment/Examination Policy
- Graduation
- How to Succeed in this Course
- Incomplete Grade
- Netiquette Rules
- Smarthinking - Tutoring
- Student Responsibility
- Studying and Time Management

Library & Research Paper Resources

Quick links to the Indian River State College's Library and Research Paper Resources can be found in the Institutional Resources section in Blackboard. Quick links include:

- Library Link
- Course Specific Custom Library Guides
- Ask the Librarian (24/7)
- American Psychological Association Tutorial
- APA Guidelines
- MLA Guidelines
- CSE Guidelines
- Legal Citation
- Plagiarism Policy
- Writing a Research Paper

Writing Expectations:

All students should write at college level in all course communication and assignments.

Citation and Reference Style:

Students should use the APA citation style unless otherwise directed by their instructor.

Technical Requirements

Course Specific Technology Requirements

All students should have a computer with all plugins required for Blackboard to work. This is consistent for the MyMathLAB website to work as well. Students wishing to use the supplemental PowerPoint presentation will either need to install the PowerPoint software or download the free PowerPoint reader. In addition, for some Blackboard assignments, students may need to create an assignment to be attached. Any attached assignments should either be in Word or PDF format.

IRSC Computer Requirements

Students must have a reliable computer and Internet connection throughout the course. Quick links to the Indian River State College's Blackboard Technical Information can be found in the Institutional Resources section in Blackboard. Quick links include:

- Essential Technical Skills Checklist
- Browser Support
- Blackboard Learn Mobile

Blackboard Learning Management System (LMS)

If you need assistance with Blackboard, please review the Blackboard Help Videos by clicking on the link provided on the course menu.

Note: The preferred browsers are Google Chrome and Mozilla Firefox.

Blackboard LOG IN:

USERNAME: Student ID number (no dashes)

PASSWORD: IRSC web registration/pay pin

Technical Support

If you can't find your answer within the Blackboard Help Videos section, visit the [Blackboard Help Center](#).



Accessibility Statement

In compliance with the Rehabilitation Act of 1973, Section 504, and the Americans with Disabilities Act of 1990, professional disability specialists and support staff at the Student Disability Services (SDS) facilitate a comprehensive range of academic support services and accommodations for qualified students with disabilities.

IRSC offers many disability resources at on-campus labs. The SDS works with online students to ensure accessibility. A quick link is located to the SDS in the Institutional Resources section in the course control panel. Students who wish to request an accommodation for a documented disability should contact the SDS immediately at 772-462-7782 or 772-462-7808.

Non-Discrimination and Non-Harassment Policy

Indian River State College (College) is committed to maintaining a fair and respectful employment and educational environment. In accordance with federal, state and local equal opportunity laws, Indian River State College prohibits discrimination on the basis of race, color, national origin, ethnicity, sex, religion, age, disability, sexual orientation, marital status, veteran status, or genetic information.

Syllabus Disclaimer

The instructor views the course syllabus as an educational contract between the instructor and students. Every effort will be made to avoid changing the course schedule but the possibility exists that unforeseen events will make syllabus changes necessary. The instructor reserves the right to make changes to the syllabus as deemed necessary. Students will be notified in a timely manner of any syllabus changes in the course Announcements or course e-mail.

If you are experiencing difficulty in your course, your first obligation is to work directly with your instructor to resolve the issue. If you are unable to settle your concerns with the assistance of your instructor, you can contact the Academic Dean, Dr. Paul Horton (phorton@irsc.edu 772- 462-7520) or Vice President Dr. Marta Cronin (mcronin@irsc.edu 772-462-4702). Please visit <http://tinyurl.com/IRSCadmininfo> to access additional contact information.

IRSC is an equal employment/equal opportunity educational institution.