

## I. Course Information

**Course Title:** Mathematical Explorations

**Course No. and Section:** MGF1107\_01

**Instructor Name:** Melissa Quigley

**Credit Hours:** 3 hours

**Course Location:** Building 7 room 113

**Meeting Dates:** Tuesday and Thursday from 9:30 a.m. to 10:45 a.m.

**Office Location:** \*Building 2 Room 207\* (temporary office)

**Office Hours:**

- Monday: 9:00 a.m.—9:30 a.m. and 11:50 a.m.—2:00 p.m.
- Tuesday: 9:00 a.m.—9:30 a.m. and 12:30 p.m.—2:00 p.m.
- Wednesday: 9:00 a.m.—9:30 a.m., 11:50 a.m.—3:30 p.m.
- Thursday: 9:00 a.m.—9:30 a.m. and 12:30 p.m.—2:00 p.m.
- I am still available through email and canvas (virtually) throughout the day

**Telephone No.:** Please reach me via email or Canvas

**Email:** quigleym@cf.edu

### Extended Emergency Closure

“For emergency campus closings (natural disasters, etc.) call 352-291-4499 or 800-831-9244 or check our [website](#) (CF.edu).”

## II. Course Description

This course is designed for students whose majors do not require courses in Statistics, College Algebra or Pre-Calculus. MGF 1107 is not designed as a prerequisite for other mathematics courses. This course covers many mathematical skills including topics such as history of mathematics, number systems, financial mathematics, elementary number theory and graph theory. This course counts toward the Gordon Rule mathematics requirement for the A.A. degree.

**Required Text Title:** MyMathLab access code, Blitzer.

**Author of Text:** Pearson

**Edition:** 7<sup>th</sup> edition

**ISBN No.:** 9780135903575

**Required Materials:** [TI30XS Multiview Scientific Calculator](#)

**Optional Materials:** paper copy of Thinking Mathematically 7<sup>th</sup> Edition, Blitzer (only if online e-text is not sufficient)

### III. Student Learning Outcomes/Course Objectives

The following list offers students a consistent way to see how CF's global learning outcomes are assessed in each class. This is for information purposes only and does not change the grading system used in this class. Only those learning outcomes relevant to this course are included below.

#### **Quantitative and Analytical Reasoning: The student will understand and apply mathematical and scientific principles and methods.**

1. Perform accurate computations using order of operations with and without technology.  
How Measured: Quiz, Exam
  2. Identify and organize relevant information and complete the solution of an applied problem.  
How Measured: Quiz, Exam, Project
  3. Interpret and communicate understanding of visual representations of data.  
How Measured: Quiz, Exam
  4. Demonstrate mathematical number sense and unit sense.  
How Measured: Quiz, Exam, Project
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### IV. Course Information & Assessment

#### **Assignment Weights:**

<b>Assessment</b>	<b>Points</b>	
Homework—5 points	x 29	145
Chapter Quizzes—10 points	x 6	60
Chapter 8 Financial Project—50 points		50
Attendance—50 points		50
Exams—150 points	x 5	750

**Extra Credit Opportunities:** Test Reviews (5 points each for 25 points total)

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## Grading Scale:

The grading scale is based on 1,000 points.

**\*a C or greater is required to pass\***

<b>Letter Grade</b>	<b>Points Required</b>
A	900+ points
B+	870-899.9 points
B	800-869.9 points
C+	770-799.9 points
C	700-769.9 points
D	600-699.9 points
F	< 600 points

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## Assignments:

### HOMEWORK ASSIGNMENTS

**145 points (14% of the grade)**

For each homework, the highest attempt counts. Each is worth 5 points. If you submit a partially completed paper, the grade will reflect the % completion.

### ATTENDANCE **50 points (5% of the grade)**

Attendance is mandatory and part of your grade. It is proven that students who attend class (are present AND participate) frequently are more successful both in class and ultimately earn the intended degree. Including attendance in the grade calculations is not a punishment but rather a form of motivation and establishing good habits. Please communicate with your professor as soon as possible if you have extenuating circumstances. Timely communication is essential!

- 90% or more of classes = 50 points
- 80%-89% of classes = 40 points
- 70-79% of classes = 35 points
- 60-69% of classes = 30 points
- Fewer than 60% = 0 points

### CHAPTER QUIZZES

**60 points (6% of the grade)**

For each quiz, the highest attempt counts. Each is worth 10 points. If you submit a partially completed paper, the grade will reflect the % completion.

## **PROCTORED TESTS (IN-CLASS)**

**750 points (71% of the grade)**

There will be five proctored exams. Exams will be given in class during designated class time.

All Exams are CLOSED NOTE AND CLOSED BOOK. Use of a personal calculator and scratch paper is allowed. Exam reviews (counted as extra credit) are posted with questions *very* similar to the exam questions. A conscientious effort on these reviews will leave you very well prepared for the exams. Each Exam is worth 150 points. There will be **NO MAKEUPS** and **NO RETAKES** of any proctored exam without prior notification and certified personal or family emergency. Any missed exam will count as a **ZERO**.

## **FINANCIAL PROJECT**

**50 points (5% of the grade)**

In lieu of a chapter 8 exam, you will complete a financial budget project using the formulas and calculations learned in the unit. The project is done via PowerPoint but can easily be done as a dream board or video.

## **EXTRA CREDIT**

**25 points**

Test reviews are posted on Pearson with questions *very* similar to the exam questions. A conscientious effort on these reviews will leave you very well prepared for the exams.

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## **Additional Policies & Information:**

### **Late Work Policy:**

Homework assignments and chapter quizzes can be turned in late for a grade deduction. The last day to turn in any late assignments is at the time of the final exam. No make-up tests will be given unless there is an emergency or prior approval has been given by the instructor. In such an event, you must notify your professor before the exam due unless the emergency prohibits it and you will be asked to bring proof of the emergency. A make-up exam must be taken within one week of the original exam date unless the emergency prohibits it. While you do not need to disclose personal details, let your professor know **as soon as possible** if something is preventing you from participating online or completing work.

### **Canvas & Patriots Mail:**

Canvas is the main mode of communication for this course. Any important and immediate information will be posted in the announcements or through the canvas inbox. You are expected to log-in at least one per day to check announcements and work on assignments. Typically,

Canvas messages are sent to your Patriots mail, therefore you will want to check this daily as well.

### Supplemental Websites:

If you need more examples or a different way of approaching the problem try using YouTube or [Khan Academy](#) (not supported by Internet Explorer). Once on the website, search for the topic that you are having trouble with. YouTube will have countless videos of people all over the world answer questions and showing calculator steps. Khan Academy has videos as well, but within each unit, there are also practice problems that you can use to supplement your Math Lab practice.

## V. Course Schedule/Outline

Tentative Schedule				
Class Date	Sections Covered	Topic	Assignments	Due Date
Aug 16		Introductions & Syllabus	Look around Canvas	ASAP
Aug 18	5.1-5.3	Number Theory, Integers & Rational Numbers	HW: 5.1, 5.2, 5.3	Aug 22
Aug 23	5.4, 5.5	Rational & Irrational Numbers	HW: 5.4, 5.5 Quiz: Chapter 5	Aug 29
Aug 25	Chapter 5	Exam 1 Review	Exam 1 Practice Test	Sept 1
*Aug 30	6.1	<b><u>NO CLASS—</u></b> <b><u>Prerecorded Lecture:</u></b> Algebraic Expressions	HW: 6.1	Sept 5
Sept 1	<b>Exam 1: Chapter 5</b>			
Sept 6	6.2, 6.3	Linear Equations	HW: 6.2, 6.3 Quiz: Chapter 6	Sept 12
Sept 8	7.1, 7.2	Graphing	HW: 7.1, 7.2	Sept 12
Sept 13	7.3	Systems of Equations	HW: 7.3 Quiz: Chapter 7 Exam 2 Practice Test	Sept 19
Sept 15	Chapter 6 & 7	Exam 2 Review		Sept 20
Sept 20	<b>Exam 2: Chapters 6 &amp; 7</b>			
Sept 22	8.1, 8.3, 8.4	Sales Tax, Simple & Compound Interest	HW: 8.1, 8.3, 8.4 Project: Pages 2-7	Sept 26
Sept 27	8.2	Income Tax	HW: 8.2 Project: Page 8	Oct 3
Sept 29	8.5	Annuities, Savings & Investments	HW: 8.5	Oct 3
Oct 4	<b>No Class—Professional Development Day</b>			

<b>Oct 6</b>	8.6, 8.7	Cars; Home Ownership	HW: 8.6, 8.7 Project: Page 10,12	<b>Oct 10</b>
<b>Oct 11</b>	8.8	Credit Cards	HW: 8.8 Quiz: Chapter 8 Financial Literacy Project	<b>Oct 17</b> <b>Oct 25</b>
<b>Oct 13</b>	4.1, 4.4	Hindu-Arabic System & Early Numeration Systems	HW: 4.1, 4.4	<b>Oct 17</b>
<b>Oct 18</b>	4.2	Number Bases in Positional Systems	HW: 4.2	<b>Oct 24</b>
<b>Oct 20</b>	4.3	Computation in Positional Systems	HW: 4.3 Chapter 4 Quiz	<b>Oct 24</b>
<b>Oct 25</b>	Chapter 4	Exam 3 Review	Exam 3 Review	<b>Oct 27</b>
<b>Oct 27</b>	<b>Exam 3: Chapter 4</b>			
<b>Nov 1</b>	14.1	Graphs, Paths and Circuits	HW: 14.1	<b>Nov 7</b>
<b>Nov 3</b>	14.2	Euler Paths & Circuits	HW: 14.2	<b>Nov 7</b>
<b>Nov 8</b>	14.3	Hamilton Paths & Circuits	HW: 14.3	<b>Nov 14</b>
<b>Nov 10</b>	14.4	Trees	HW: 14.4 Exam 4 Review	<b>Nov 14</b>
<b>Nov 15</b>	Ch 14	Exam 4 Review	Exam 4: Chapter 3	<b>Nov 17</b>
<b>Nov 17</b>	<b>Exam 4: Chapter 14</b>			
<b>Nov 22</b>	12.1	Sampling	HW: 12.1	<b>Nov 28</b>
<b>Nov 23—25</b>	<b>No Class—Campus is Closed for Break</b>			
<b>Nov 29</b>	12.2	Measures of Central Tendency	HW: 12.1, 12.2 Quiz: Chapter 12 Final Exam Review	<b>*Dec 8</b>
<b>Dec 1</b>	Ch 4-8, 12,14	Final Exam Review		<b>Dec 8</b>
<b>Dec 6</b>	<b>No Class—Exam Week</b>			
<b>Dec 8</b>	<b>Cumulative Final Exam: 9:30 a.m. to 11:30 a.m. in room 7-113</b>			

**STATEMENT:** Assignments are due each Monday by 11:59 p.m. (except test reviews). Due to unforeseen happenings, it may be necessary for the course assignment schedule to be altered. The instructor will always strive to be fair about any changes.

## **VIII. Additional statements for this course**

### **Additional Tutoring:**

Tutoring is FREE for CF students! There are 3 options available:

- Ocala Campus—Mathematics Lab
  - Building 7, Room 106 (drop in only)
  - Monday—Thursday from 9:00 a.m. to 6:00 p.m. (check sign on door for any Friday times)
- Ocala Campus-Learning Support Center
  - Building 3, Room101 (appointment only)
  - 352-854-2322 ext. 1246
- Smarthink Tutoring Online
  - Available through Canvas and as a “Question Help” option on Pearson HW assignments

**\*\*Citrus and Levy have on-campus tutoring available as well\*\***

## **Do You Need Financial Aid?**

Attendance Verification is submitted each semester, generally in the third week of the term. Federal Student Aid requires that attendance is based on academic attendance or attendance at an academically-related activity. For this class, your attendance is verified based on **Chapter 5.1 HW** on Pearson My Math Lab.

## **Early Support Program (ESP)**

The College of Central Florida is committed to helping you succeed and achieve your academic, personal and career goals. One of the ways we can accomplish this goal with you is through an Early Support Program. Our philosophy, based on extensive research and practice, is that when students are connected early to resources and support systems on campus they are more likely to stay in classes, perform better in those classes, and complete their path more quickly. Therefore, you may be contacted by your First Year Success Specialist, program Advisor and/or other resources on our campus if there is a time during the semester I feel it would be beneficial to your continued success. I am always your first point of contact for any concerns that affect your success or with course content, so I encourage you to come to me to discuss those issues. Also, be assured that I will first communicate any concerns I have with you and will then connect you with the other areas on our campus to help develop a network of support for you.

## **Technology Requirements**

This course uses Canvas to post course materials. Go to [MyCF](https://mycf.cf.edu/ICS/) (mycf.cf.edu/ICS/), login, click on the Academics tab, and follow the link to Go to Canvas. If you are not familiar with Canvas, you may access a self-tutorial by hovering over the Courses tab in Canvas and clicking on the Getting Started in Canvas course. Additional Canvas tutorials can be found under the help menu in the upper-right corner of your Canvas page. If you have any questions or encounter any problems logging on to Canvas or within the system, contact the Distance Learning Help Desk Monday through Friday, 8 a.m.-4:30 p.m. (fall and spring hours), or Monday through Thursday, 8:00 a.m.-4:30 p.m. (summer hours), at [dlhelp@cf.edu](mailto:dlhelp@cf.edu) or at 352-854-2322, ext. 1317. You may also use the 24/7 Canvas help desk by clicking the Help link in the upper right corner of Canvas.

## **Library Resources**

The CF Libraries are here to help with your research and information needs. Search the library catalog (library.cf.edu), or contact the Ocala campus library ([library@cf.edu](mailto:library@cf.edu), 352-854-2322 x1345) or the Citrus campus library ([citruslb@cf.edu](mailto:citruslb@cf.edu), 352-249-1205) with questions. Learn more about research help, online and database searching, and citing your sources by visiting the CF Virtual Library (cf.libguides.com) or by visiting the Ocala library (Building 3) or Citrus library (Building C2, Room 202) for one-on-one help. Course reserves: Course textbooks and/or supplemental course material may be on reserve at the Library. Please call to inquire. If the item you are looking for is not on reserve, ask your instructor if they are able to place a copy on reserve.



## **Correspondence**

Please allow 24 hours for a response Monday morning through Friday afternoon and up to 48 hours for a response Friday evening through Sunday evening. Scheduled holidays may extend the response time.