I. Course Information

Course Title: Mathematical Explorations Course No. and Section: MGF1107_71 Instructor Name: Melissa Quigley

Credit Hours: 3 hours
Course Location: ONLINE

Meeting Dates: ASYNCHRONOUS—SELF PACED

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.; 7:00 p.m.—8:30 (Virtual)

• 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, voting and appointment techniques, 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**: 7th edition

ISBN No.: 9780135903575

Required Materials: TI30XS Multiview Scientific Calculator, Computer with working Camera

and Audio

Optional Materials: paper copy of Thinking Mathematically 7th 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

IV. Course Information & Assessment

Assignment Weights:

| Assessment | Points | |
|---------------------------------------|--------|-----|
| Homework—5 points | x 29 | 145 |
| Chapter Quizzes—20 points | x 6 | 120 |
| Chapter 8 Financial Project—50 points | | 50 |
| Exams—150 points | x 5 | 750 |

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

Grading Scale:

The grading scale is based on 1,000 points.

a C or greater is required to pass

| Letter Grade | Points Required |
|------------------|--------------------|
| \boldsymbol{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 |

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.

CHAPTER QUIZZES

120 points (11% 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.

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. You will begin the project by determining the monthly salary of your future career. From there, you will work to keep a budget as you calculate federal income taxes and pay marginal taxes, deduct insurance costs, purchase a home, account for utilities, purchase a car, pay towards student loans and other debts, and purchase food and items for your home all while trying to save money and enjoy life! The project is done via PowerPoint but can easily be done as a dream board, video or other presentation application.

PROCTORED TESTS

750 points (70% of the grade)

There will be five proctored exams. All Exams are CLOSED NOTE AND CLOSED BOOK. Use of <u>Pearson's online calculator</u> 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 <u>prior</u>

notification and certified personal or family emergency. Any missed exam will count as a **ZERO**.

If there are circumstances that prevent you from making it to any one of our campus testing centers, you must reach out through email to discuss other options. Alternative testing is considered on a case-by-case basis and may come with additional costs.

- Ocala: schedule an appointment
 - o Monday—Thursday: 8 a.m. to 6:30 p.m.
 - o Friday: 8 a.m. to 4:30 p.m.
- Citrus: schedule an appointment
 - o Monday—Friday: 8 a.m. to 4:30 p.m.
- Levy: schedule an appointment
 - o Monday—Friday: 8 a.m. to 4:30 p.m

You must make an appointment to test at any CF testing Center. Make your appointment EARLY and keep in mind that they will not allow a test to begin within two hours of closing

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.

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.

How to be Successful in This Course

The general rule for a three-credit class is that you spend approximately 9 credit hours PER WEEK interacting with the material and studying. Since this is an online course, you should expect to spend anywhere between 9 and 18 hours (possibly more) working on material.

| Example Weekly Schedule | | | | |
|-------------------------|---|--|--|--|
| Day | Task | | | |
| Monday-Wednesday | Take notes on PowerPoints and interact with any | | | |
| | other module content | | | |
| Thursday & Friday | Work on homework assignments | | | |
| Saturday & Sunday | Work on any quizzes and reviews (if applicable that week) | | | |

V. Course Schedule/Outline

| Open | Start | Due | Module | | |
|------|---------------------|---------------------|--|--|--|
| 8/15 | 8/15 | 8/22 | Course Launch, Introductions, Syllabus and Orientation | | |
| 8/15 | 8/15 | 8/22 | Section 5.1—5.2: Number Theory; Integers | | |
| | 8/22 | 8/29 | Section 5.3—5.4: Rational Numbers; Irrational Numbers | | |
| | 8/29 | *9/6 | Section 5.5: Clock Arithmetic | | |
| | | (due to holiday) | Test 1 due *Sept 6 th by 6:30 p.m. | | |
| | *9/6 | 9/12 | Chapter 6: Algebraic Expressions and Linear Equations | | |
| | (due to holiday) | | | | |
| | 9/12 | 9/19 | Section 7.1—7.2: Graphing | | |
| | 9/19 | 9/26 | Section 7.3: Systems of Equations | | |
| | | | Test 2 due Sept 26 th by 6:30 p.m. | | |
| | 9/26 | 10/3 | Section 8.1—8.2: Sales Tax; Income Tax | | |
| | 10/3 | 10/10 | Section 8.3—8.4: Simple Interest; Compound Interest | | |
| | 10/10 | 10/17 | Section 8.5—8.6: Annuities, Savings, Investments; Cars | | |
| | 10/17 | 10/24 | Section 8.7—8.8: Home Ownership; Credit Cards | | |
| | | | Financial Project due Oct 31st by 6:30 p.m. | | |
| | 10/24 | 10/31 | Section 4.1—4.3: Hindu-Arabic System; Positional Systems | | |
| | 10/31 | 11/7 | Section 4.4: Early Numeration Systems | | |
| | | | Test 3 due Nov 7 th by 6:30 p.m. | | |
| | 11/7 | 11/14 | Section 14.1—14.2: Graphs, Paths, Circuits; Euler Paths and Circuits | | |
| | 11/14 | 11/21 | Section 14.3—14.4: Hamilton Paths and Circuits; Trees | | |
| | | | Test 4 due Nov 21st by 6:30 p.m. | | |
| | 11/21 | 11/27 | Thanksgiving Break | | |
| | 11/27 | 12/5 | Chapter 12: Sampling; Measures of Central Tendency | | |
| | 12/5 | 12/7 | Final Exam due Dec 7 th by 6:30 p.m. | | |

Notes:

- A week is designed to begin on Monday and end on the following Monday (*due to holiday and school calendar, some dates are adjusted). There will be overlap if you wait until the last minute to turn in assignments.
- Assignments will be due by 6:30 p.m. on the day of the deadline. Should complications arise during testing, it is difficult to find help late into the evening.
- Test Deadlines (No Extensions or Makeups): 9/6, 9/26, 11/7, 11/21, 12/7
- You can always work ahead but try not to fall behind. Falling behind puts you at risk of missing exam dates and/or not being fully prepared.
- 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
 - o 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
 - o Building 3, Room101 (appointment only)
 - o 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 (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 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, 352-854-2322 x1345) or the Citrus campus library (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.