

COLLEGE OF CENTRAL FLORIDA

COLLEGE ALGEBRA

MAC1105

Fall - C (Aug. 15 – Dec. 8)

2022 SYLLABUS

Section 01 – meets M and W 4:30 pm - 4:45 pm (7-111)

I. Course Information

| | | | | | |
|-------------------------|--|----------------|-------------------------------|-----------------------|------------------|
| Instructor Name: | Dr. José A. Toro-Clarke (Dr. T) | | Mathematics Building 2 | Office 207 | |
| e-mail: | clarkej@cf.edu | | Telephone No.: | (352) 873-5800 | ext. 1202 |
| Office Hours | Monday | Tuesday | Wednesday | Thursday | Friday |
| | | 11:00-4:15 pm | 11:00-12:15 pm | 12:30-4:15 pm | |

How the professor wants me to contact him (Dr. T)?

Always through **CANVAS** inbox, never by email.

Where can I find Dr. T Course Materials?

Also, everything you need will be in Modules in **CANVAS**: PowerPoint, Dr. T Pre-recorded Lectures, Study Plan (Homework/Quizzes), and Tests.

How will Dr. T communicate with the students at large?

Dr. T will contact through **Announcements** in **CANVAS**. So, check it regularly.

How to enroll in MyLab Math?

To enroll in the MyStatLab course, click on the MyLabs and Mastering link in the Canvas menu. Follow the prompts. Also, you will find information in Module A in Canvas.

Because you must register through Canvas, the course ID is not required to register for MyLab Math.

Check Announcements Regularly!

Extended Emergency Closure

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

Important CF Dates Spring 2022

| 2022 | Fall Term | Comments |
|--------------------|----------------------|--------------------------------------|
| Sept. 5 (M) | Labor Day | College Closed |
| Oct. 4 (T) | Faculty Prof Dev Day | No day classes, evening classes meet |
| Nov. 11 (F) | Veterans Day | College Closed |
| Nov. 23-27 (W-Sun) | Thanks Giving Break | College Closed |
| Dec. 2-8 (F-Th) | Final Exam Week | |

<https://pr.cf.edu/files/admissions/Academic.Calendar.2022-2023.pdf>

Required Materials

MyLab Math access code: MyLab Math will be where you complete all of your assignments for the course and monitor your grade. A copy of the eText is provided with this code. The access code can be purchased at the CF bookstore.

Prerequisite: MAT 1033 or CLM score of at least 40

| | | | |
|-------------------------------|--|----------------------------|--|
| Required Text – Title: | College Algebra: Graphs and Models | Author of Text: | Bittinger, Marvin Beecher, Judith Ellenbogen, David Penna, Judith |
| Edition: | 6th Edition | ISBN-13: 9780134179032 | |
| Required Materials: | MyMathLab Course ID: NONE NEEDED. You will link the course via Canvas. | Optional Materials: | MyLab Math access code and calculator (No graphing calculators permitted) |

II. Course Description

This course is designed as a foundational course for those students who must take additional mathematics in their chosen majors and do not yet have an appropriate background. The emphasis is the study of mathematics from a functional perspective—including linear, quadratic, rational, absolute value, radical, exponential, and logarithmic functions. Systems of equations and inequalities and applications such as curve fitting, mathematical modeling, optimization, and exponential growth and decay are included.

III. Student Learning Outcomes

Quantitative and Analytical Reasoning: The student will understand and apply mathematical and scientific principles and methods. Learning Outcomes are measured via quizzes and tests.

1. Perform accurate computations using the order of operations with and without technology.
2. Identify and organize relevant information and complete the solution of an applied problem.
3. Interpret and communicate an understanding of visual representations of data.
4. Demonstrate mathematical number sense and unit sense.

IV. Assessment

Class Attendance: Attendance, punctuality, and class participation are all expected at the college level. Class attendance will be recorded. Regular attendance and being on time are a requirement for this course.

The student is responsible for **ALL** information/material/assignments covered in class. Attendance is required for all tests. Students who are absent for more than three classes may be dropped from the course. However, non-attendance does not constitute withdrawal from this course. It is the student's responsibility to complete the withdrawal forms by the appropriate date. However, you need to be registered in **MyLab Math** before Friday, January 14, 2022, for your attendance to count (if you cannot afford it because you depend on the money of Financial Aid remember that **MyLab Math** has a **14-day Trial Version** period).

Tests Attendance is required for each test. **Make-up exams will not be given.** Life happens, so, if the **student misses a test**, the **final exam grade will replace that test score. Even if it is a GOOD excuse**, there will be **no make-up**. However, with prior approval, you can take the exams during a different section-time period. If the student misses 2 or more exams, zeros will be given. (**This does not apply to college-sponsored activities**). ALL grades count: in other words, the lowest grade is **NOT** dropped. **However, a zero representing a missed test OR a low-test score will be replaced by the final exam score.**

Homework/Quizzes (Study Plan): You will find the homework schedule and assignments online, and you will submit your homework online through Pearson **MyLab Math**. You will have up to each **partial test (once you have taken the test that section will close. No extensions, no MATTER WHAT!!!)**

If you do the Study Plan (Homework/Quizzes) problems, you will be well prepared for the tests, as these problems are closely aligned with the test questions. Further, the online tests and quizzes have strict requirements for the form in which an answer must be submitted. Practice with the homework and tutorial problems will guide you as to how to structure your solutions. The scores will be transferred manually to Canvas on weekly basis. You will get immediate feedback on your homework scores, and they will be posted in your online grade book. A missed homework assignment will be posted as a zero.

Homework/Quizzes (Study Plan) will comprise 20% of your grade.

You can attempt each HW/Q as many times as you need.

Where to go in Canvas to find the coursework?

The course is set up on a modular system and each **HOME** or **MODULE**.

Proctoring: Test will be administered by me in the classroom or **CF Testing Center** (contact me for this option).

| | | | *Grade Example | |
|---|---------------|--------------|-------------------------|---|
| Assignments are weighted as follows: | Weight System | Point System | Weight System | Point System |
| Homework/Quizzes (Study Plan) | 20% | 200 | $0.2 * 85\% = 17.00\%$ | $200 * 85\% = 170.0$ |
| 3 Tests | 51% | 510 | | |
| Test 1 | 17% | 170 | $0.17 * 70\% = 11.90\%$ | $170 * 70\% = 119.0$ |
| Test 2 | 17% | 170 | $0.17 * 79\% = 13.43\%$ | $170 * 79\% = 134.3$ |
| Test 3 | 17% | 170 | $0.17 * 85\% = 14.45\%$ | $170 * 85\% = 144.5$ |
| Final Test | 29% | 290 | $0.29 * 90\% = 26.10\%$ | $290 * 90\% = 261.0$ |
| Total | 100% | 1,000 | 82.22% | $828.8 \div 1000 = 0.82$ so $0.82 * 100 = 83\%$ |

***Grade Example** will always have a minor discrepancy between the margins of error

Assignments are weighted as follows:

| | |
|-------------------------------|------------|
| Homework/Quizzes (Study Plan) | 20% |
| 3 Tests | 51% |
| Test 1 | 17% |
| Test 2 | 17% |
| Test 3 | 17% |
| Final Test | 29% |

This is something some students tend to request at the end of the semester, before finals:

Dr. T could get some Extra Credit to be able to increase my grade.

No, the reason is there is extra credit already in place. The Study Plan and the discussion are plans already. The detail of the extra credit is detailed below.

You can earn up to 55 points in extra credit:

Extra Credit Policy:

1. Mandatory Reading (5 points for the Final Test):
 - My published article “*A Participative and Individualized laboratory: A Strategy for Increasing Students Success in College-Level Math Courses*” from the book “*The Mathematics Education for the Future Project*” Proceedings of the 15th International Conference “*Theory and Practice: An Interface or A Great Divide*” August 4-9, 2019, Maynooth University, Kildare, Ireland.
 - Once you read this write five sentences of your interpretation and opinion of why I do this (which needs to be related to my published article).
2. Do **Study Plans** (up to 10 points) for each Test (Prior to attempting the Tests, you can redo them after doing the Test for a better score). Need to accomplish a Mastery in the knowledge of **70% or higher**
 - a. You could earn between **7-10** points. They are 4 Tests (T1, T2, and T3) so you could earn between 28-40 points. If you earn **70%** you will earn **7** points, if is **84%** will be **8** points and if is **95%** will be **10** points. If you can't reach the minimum 70% mark after each Test (48 hours after the Test). Visits me during office hours. So, we can see what is going on; you could earn some extra points. To earn the **Extra Credit**, you need to do the Study Plan before attempting each Test. I will give you 48 hours to increase your extra credit score. I will contact you by email if you need to improve your scores after the Test.
3. Going to **Tutoring** (seeking help is a wise move) and taking and getting help from the Tutor in Math Lab up to 20 Points:
 - a. You could earn up to 5 points per Test (you need to register your assistance using your CF code). I will request the attendance weekly report (or per Test) from the Math Lab Coordinator.

Grades: The final grade will be calculated based upon your performance on tests (In Class), homework assignments (In MyMathLab), and the online quizzes (In MyMathLab). The following system will be used for the final grade:

A: 90 – 100% **B+: 89 – 87 %** **B: 80 – 86 %** **C+: 79 – 77%**
C: 70 – 76% **D: 60 – 69%** **F: 0 – 59%**

V. Course Schedule/Outline

| MAC1105 – College Algebra Tentative Lecture Schedule | | |
|---|---|---|
| Weeks | Topic | Sections Covered (Homework) |
| Week 1 | Introduction to Graphing | Required -Read my published article <i>“A Participative and Individualized laboratory: A Strategy for Increasing Students Success in College-Level Math Courses”</i> See Extra Credit Policy for details-This can be found in Home or Modules in CANVAS 1 hour Introduction, Syllabus & Chapter 1 (1.1) |
| | Functions and Graph | 1.1 & 1.2 |
| Week 2 | Linear Functions | 1.2 & 1.3 |
| | Equations of Lines | 1.3, 1.4 & 1.5 |
| Week 3 | Solving Linear Equation, Linear Inequalities, and System of Equations | 1.5, 1.6 & 6.1 |
| | | Homework **Study Plan Test 1 (Chapter 1) Required a minimum of 70% to receive extra credit for Test 1 5 hours |
| Week 4 | Test 1 in the classroom (Computer Lab) | Test* 1 (Chapter 1) 85 minutes |
| | | |
| Week 5 | Piecwise-Defined Functions The Algebra of Functions | Chapter 2 (2.1 & 2.2) |
| | The Composition of Functions Symmetry Transformations Variation & Applications | 2.3, 2.4, 2.5 & 2.6 |
| | | Homework **Study Plan Test 2 (Chapter 2) |

**MAC1105 – College Algebra
Tentative Lecture Schedule**

| | | |
|----------------|--|---|
| | | Required a minimum of 70% to receive extra credit for Test 2 5 hours |
| | Test 2 in the classroom (Computer Lab) | Test* 2 (Chapter 2) 85 minutes |
| Week 6 | Complex Numbers | Chapter 3 (3.1) |
| | Quadratic Equations Analyzing Graphic of Quadratic Equations | 3.2 & 3.3 |
| Week 7 | Solving Rational Equations and Radical Equations Solving Equations and Inequalities with Absolute Value | 3.4 & 3.5 |
| Week 8 | Polynomial Functions and Modeling | Chapter 4 (4.1) |
| Week 9 | Graphing Polynomial Functions | 4.2 |
| | Polynomial Division; The Remainder Theorem | 4.3 |
| Week 10 | Theorems about Zeros and Polynomial Functions Rational Function | 4.4 & 4.5 |
| | | Homework **Study Plan Test 3 (Chapter 3 & 4) Required a minimum of 70% to receive extra credit for Test 3 5 hours |
| | Test 3 in the classroom (Computer Lab) | Test* 3 (Chapter 3 & 4) 85 minutes |
| Week 11 | Inverse Functions | Chapter 5 (5.1) |
| | Exponential Functions and Graphs | 5.2 |
| Week 12 | Logarithmic Functions and Graphs | 5.3 |
| | Property of Logarithms | 5.4 |
| Week 13 | Exponential and Logarithmic Equations | 5.3 |
| | Exponential and Logarithmic Models | 5.4 |
| Week 14 | Solving Exponential Equations Logarithmic Equations Applications | 5.5 & 5.6 |
| Week 15 | | Homework **Study Plan Final Test (Chapter 1-6) Required a minimum of 70% to receive extra credit for Final Test 5 hours |
| Week 16 | Final Test in the classroom (Computer Lab) | <i>Final Exam</i> TBA |

MAC1105 – College Algebra Tentative Lecture Schedule

Dec. 2-8 (F-Th)

85 minutes

Test – if missed you can replace the ZERO with the FINAL EXAM.

****Study Plan (SP)** – Once you do a Problem in the SP correct and fail a similar problem in the Test, MyLab Math will reduce your points in the SP. So, do not do the minimum, because you could be able to earn no extra credit bonus points.

Tutoring: Tutoring is **FREE** for **CF** students!

| | | |
|--------------------------------------|----------------------|------------------------|
| Ocala Campus-Mathematics Lab | Building 7, Room 106 | 352-854-2322 ext. 1259 |
| Ocala Campus-Learning Support Center | Building 3, Room 101 | ext. 1246 |

Additional Tips

- Make sure your browser is up-to-date.
- Keep and/or print a copy of the course syllabus and schedule on your computer.
- Check the course and course email regularly.
- Questions about grades or other personal matters should be emailed to the facilitator(s).
- Set aside specific times each week to complete class activities. If not, your other work will expand to fill all the time you have.
- Expect electronic glitches/power outages and plan ahead. Don't wait until the last minute to submit your work.
- Maintain back-up copies of all your coursework on a flash or jump drive.

STATEMENT: 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.

The College of Central Florida is committed to helping you succeed and achieve your academic, personal, and career goals. There is a wide range of resources and support services available to you. 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 paths more quickly. One example is through an Early Support Program, where you may receive an email indicating your professor or advisor is reaching out directly to help connect you to support services. This may include connecting you to tutoring, financial support, psychological support services, and disability services just to name a few. Be aware, you can also reach out to these services on your own as well. Additionally, we offer disability services, a testing center, and many other resources which are all available to you. [Please refer to the College Resources, Dates, and Policies document in your Canvas course to learn more about these supports.](#)