College Algebra

Welcome!

Welcome and thank you for enrolling in this course! I think you will enjoy our time together!

Please take a few minutes to read the syllabus in its entirety. Exploring all the topics in this syllabus and related links will help you succeed in this course.

I am looking forward to working with you and having a great semester!

Jim Glackin, Ph.D.

College Algebra

Professor Information

Instructor:	Jim Glackin
School Name:	Fernandina Beach High School
Class Time:	Period 1 (M, T, Th, & F 9:00 – 9:54 AM, W 9:00 – 9:44 AM)
Office Location:	Room 10 – 12
Office Phone:	(904) 261–5713 ext. 2678
Email:	jglackin@fscj.edu or glackinja@nassau.k12.fl.us

To email your instructor, open your desired mail client (e.g. Outlook, Mac Mail…) and send your email to the address above.

Campus Information

This dual enrollment course is offered by Florida State College at Jacksonville and Fernandina Beach High School. For questions or concerns, please feel free to contact the dual enrollment program office (904)-632-3261.   For technical assistance, please contact the Help Desk at 877-572-8895 or (904) 632-3151 or via http://www.fscj.edu/campus-life/student-computing-resources/.

Course Description:

The major topics included in this course are linear equations and inequalities; quadratic equations and inequalities; relations and functions; graphs; systems of equations and inequalities; exponential and logarithmic functions; and applications. A review of algebraic techniques is also included in this course as well as a review of polynomials, factoring, exponents, roots and radicals.

Learning Outcomes

Upon completion of the course:

- Students will use algebraic techniques including symbolic, numerical, graphical and technology-aided procedures to solve equations and inequalities
- Students will demonstrate an understanding of the algebra of functions including compositions.
- Students will demonstrate an understanding of complex numbers and their operations.
- Students will apply symbolic, graphical, and numerical techniques including technology-aided procedures to solve systems of equations and inequalities.
- Students will apply algebraic techniques, including symbolic, numerical, graphical, and technology-aided procedures, and modeling techniques to solve real-world situations.
- Students will demonstrate an understanding of quantitative literacy in solving mathematical problems.
- Students will demonstrate an understanding of the application of mathematical principles to other disciplines through real-world applications.

Course Information

Course Number/Title: MAC 1105 / College Algebra
Reference Number: 5999
Number of Credit Hours: 3
Term/Year/Session/Length: Fall 2020
Course prerequisites: MAT 1033 with a grade of "C" or better, or satisfactory score on the placement test.

Important Dates

Class Begins	August 24, 2020
100% Refund Deadline	September 8, 2020
Withdraw with "W" Deadline	November 5, 2020
Course Evaluation	December 18. 2020
Class Ends	January 15, 2021

These dates are critical for this course.

Instructional Materials and Equipment

Required Text/Materials:

Graphical Appr to College Algebra (w/MyMath/StatLab Acc) Edition: 6th
Author: Hornsby
ISBN: 9780321909817
Copyright: 2015
Publisher: PEARSON EDUCATION

Recommended Materials:

A graphing calculator may be used but will not be required. TI-Nspire CX CAS calculators are available for student to sign out for the year. Students may not share calculators during tests. Cell phones may not be used as calculators.

Online Delivery System

This course will have an online component through MathXL. MathXL access will be provided by the Nassau County School District.

Technology Requirements

Reliable and consistent computer and Internet access is encouraged to successfully participate in and complete dual enrollment courses at Florida State College at Jacksonville. Ensure that your computer meets the minimum system requirements noted below and on the Florida State College at Jacksonville Online Learning site (http://www.fscj.edu/academics/online-learning). Please use the following checklist to determine your computer readiness.

You should own or have access to:

- An email account
- Computer with high speed access to the Internet
- Access to College computers when needed
- Virus-checking software
- Word-processing software
- Software and plug-Ins that may include (choose the titles for the free downloads)
    - Adobe Acrobat Reader (http://get.adobe.com/reader/)
    - Flash Player (http://get.adobe.com/flashplayer/)
    - Java (http://www.java.com/en/download/manual.jsp)
    - Shockwave Player (http://get.adobe.com/shockwave/)
    - VLC (http://www.videolan.org/)

It is a good idea to check your computer at the beginning of each course and a couple of times throughout the term to ensure you have all the necessary software and plug-ins to use the Canvas online system and course features.

Your Course Participation and Assessments

Portfolio: You are required to maintain an organized portfolio containing your class notes, board problems, homework, quizzes, and tests. I will check your portfolio once each quarter.
Homework: I will check your homework daily.
Quizzes: Cover limited amounts of material and check mastery of how to use a specific tool.
Chapter tests: Cover several topics to check knowledge of when and how to use multiple tools.
Final exam: The final exam will cover all course material.

Course Grade

Your final letter grade is determined by totaling the points earned on all graded coursework.

ASSIGNED WORK	POINTS
Homework – 18 total, 5 points each	90
Portfolio – two checks, 5 points each	10
Quizzes – six quizzes, 25 points each	150
Tests, Midterm, Final – six tests, 100 points each	600
Total	**850**

GRADE	POINTS
A	760 – 850
B	670 – 759
C	590 – 669
D	505 – 589
F	0 – 504

For additional information, please review the grading system and policies in the College catalog.

I reserve the right to lower your grade by two percentage points for each unexcused absence.

Calendar of Activities

College Algebra	Text Chapter / Concepts
Weeks 1 – 2	Chapter R: Reference: Basic Algebra Concepts 　R.1 Exponents and Polynomials 　R.2 Factoring 　R.3 Rational Expressions 　R.4 Negative and Rational Exponents 　R.5 Radicals
Weeks 3 – 4	Chapter 1: Linear Functions, Equations, and Inequalities 　1.1 Real Numbers and the Rectangular Coordinate System 　1.2 Introduction to Relations and Functions 　1.3 Linear Functions 　1.4 Equations of Lines and Linear Models 　1.5 Linear Equations and Inequalities 　1.6 Applications of Linear Functions
Weeks 5 – 7	Chapter 2: Analysis of Graphs of Functions 　2.1 Graphs of Basic Functions and Relations; Symmetry 　2.2 Vertical and Horizontal Shifts of Graphs 　2.3 Stretching, Shrinking, and Reflecting Graphs 　2.4 Absolute Value Function 　2.5 Piecewise-Defined Functions 　2.6 Operations and Composition
Weeks 8 – 11	Chapter 3: Polynomial Functions 　3.1 Complex Numbers 　3.2 Quadratic Functions and Graphs 　3.3 Quadratic Equations and Inequalities 　3.4 Applications of Quadratic Functions and Models 　3.5 Higher Degree Polynomial Functions and Graphs 　3.6/7 Topics in the Theory of Polynomial Functions 　3.8 Polynomial Equations and Inequalities

Week 12	Chapter 4: Rational, Power, and Root Functions
	  4.1/2 Rational Functions and Graphs
	  4.3 Rational Equations, Inequalities, Models and Applications
	  4.4 Functions Defined by Powers and Roots

Weeks 13	Chapter 6: Systems and Matrices
	  6.1 Systems of Equations
	  6.2 Solution of Linear Systems in Three Variables
	  6.7 Systems of Inequalities and Linear Programming
	Chapter 7: Analytic Geometry and Nonlinear Systems
	  7.1 Circles and Parabolas
	  7.2 Ellipses and Hyperbolas

Weeks 14 – 17	Chapter 5: Inverse, Exponential, and Logarithmic Functions
	  5.1 Inverse Functions
	  5.2 Exponential Functions
	  5.3 Logarithms and Their Properties
	  5.4 Logarithmic Functions
	  5.5 Exponential and Logarithmic Equations and Inequalities
	  5.6 Further Applications and Modeling

Week 18	End of Course Review and Exam

Special Note: The instructor reserves the right to modify this syllabus. You will be notified of any changes.

Course Guidelines/Policies

Academic Dishonesty Policy

Academic dishonesty, in any form, has severe consequences. Please review the *Student Rights and Responsibilities Section of the Student Handbook.*

Academic dishonesty incorporates the following:

- Cheating, which is defined as the giving or taking of any information or material with the intent of wrongfully aiding one's self or another in academic work considered in the determination of course grade or the outcome of a standardized test.
- Plagiarism, which is define as the act of stealing or passing off as one's own work the words, ideas or conclusions of another as if the work submitted were the product of one's own thinking rather than an idea or product derived from another source.
- Any other form of inappropriate behavior which may include but is not limited to: falsifying records or data, lying, unauthorized copying, tampering, abusing or otherwise unethically using computer or other stored information, and any other act or misconduct which may reasonably be deemed to be a part of this heading.

Any student alleged to have committed any act of academic dishonesty as defined herein shall be entitled to due process as defined in District Board of Trustees' Rule 6Hx7-2.18 prior to the administration of disciplinary action including suspension and dismissal.

Cheating will result in an academic score of zero on the assignment with no opportunity for remediation.

Attendance Policy

Regular attendance is necessary in order to be successful in this course. Students who are absent from class will be responsible for material covered in class. You have five school days to make up graded requirements missed due to an excused absence. After five school days, the assignment will be considered late with a 10% grade reduction per day. Missed assignments over extended periods of excused absence will be dealt with on a case by case basis. You will not be allowed to "make up" any work missed due to an unexcused absence. **I reserve the right to lower your grade by two percentage points for each unexcused absence.**

Late/Make Up Work Policy

Late work will be assessed a 10% penalty per day for each class day that the assignment is late.

Expectations of Student Conduct

The College's *Expectations of Student Conduct* (http://catalog.fscj.edu/content.php?catoid=31&navoid=3998#conduct) extends to the dual enrollment classroom. It is expected that each of you use appropriate, professional language and respect when addressing classmates, as well as your instructor, in any part of the online classroom. That same level of professional conduct should extend to all assignments submitted. It is expected that you will not make insulting or inflammatory statements to other members of the class. Read the comments of other classmates thoroughly before entering your remarks and responses. Be positive, thoughtful, and constructive in your comments and responses.

Recommendations for Success in this Course

- Have a place where you can study and set aside an appropriate amount of time to do it. Generally, a 3-credit hour course requires a minimum of 12 hours of self-study time each week in addition to the time spent completing assignments.
- Practice and repetition are the best way to ensure your mastery of the material.
- Communicate with your instructor to ask any important questions and to discuss important concepts.
- Complete all reading assignments and view and review all chapter resources.
- Complete and review all course activities.

College Resources

Florida State College at Jacksonville offers many resources to help you become successful in your course and academic career. As a dual enrollment student, you are able to take advantage of all of these resources. A brief description of some of these resources follows.

Academic Advising

FSCJ Counselors and advisors are available to assist students with the achievement of their academic goals. Academic advising is available to help students identify appropriate courses, select majors, select transfer institutions and assist with academic problems. Students are encouraged to seek advising on a regular basis in order to achieve their educational objectives.

As a dual enrollment student, you also have access to advising from your designated Campus Dual Enrollment Coordinator, who is familiar with all the policies and procedures associated with the dual enrollment program as well as advising you on courses to take toward your desired college major.

Your designated Campus Dual Enrollment Coordinator is:

Mr. Roy Barker
Phone number: 904-766-6644
E-mail: rbarker@fscj.edu

Student Assistance Program

Any student can experience personal problems that affect them in or out of school. Stress, conflicts, family worries, financial/legal issues and balancing college and home life (and work for many) are some examples. The College now provides a free Student Assistance Program services. For services call 904-384-1800 or 855-384-1800 (toll-free number) or visit http://www.fscj.edu/admissions-aid/counseling-advising/student-assistance-non-academic-counseling-and-support/

Library and Learning Commons (LLC)

The Library and Learning Commons (LLC) is an academic support area of FSCJ that provides a variety of learning resources and services to currently enrolled students. LLC services include on-campus and online tutoring, research support, access to traditional and virtual library materials, varied study spaces, access to computers and multimedia technology, and engaging programming. Please click on the links below for access to the LLC's resources and services:
- Find Library Materials (search for physical and online library materials): https://guides.fscj.edu/llc
- Get Library Help (connect with a librarian for help with research projects or get answers to frequently asked questions) : https://libanswers.fscj.edu/index.php
- Research Guides (access a variety of research guides that can serve as a starting point for your research projects):   https://guides.fscj.edu/?b=g&d=a
- Tutoring (learn how to access on-campus and online tutoring services—described more below): https://guides.fscj.edu/TutoringServices/Home
- LLC Programs (see a schedule of upcoming LLC workshops and programs): https://libcal.fscj.edu/calendar/LLC/?cid=5854&t=d&d=0000-00-00&cal=5854

Tutoring Resources

As a dual enrollment student, you have access to tutoring resources to assist you in mastering the content of this course. Tutoring services are available in the LLC's at our campus and center locations during the day, evening, and even on the weekends at some locations. If you can't come to a campus or center location, you can access an online tutoring service called Brainfuse.

Find out how you can access tutoring services at: https://guides.fscj.edu/TutoringServices/Home

Accommodations Resources

If you require specific accommodations to complete this course, contact the Florida State College at Jacksonville Office of Services for Students with Disabilities (http://www.fscj.edu/admissions-aid/services-for-students-with-disabilities), located at 101 W State St, Room A1020, Jacksonville, FL 32202 with additional offices at Kent, North, and South campuses. You may reach the main OSSD office at (904) 632-5007.