College of Arts and Sciences
Department of Mathematics and Computer Science

COURSE	MATH 1111
COURSE TITLE	College Algebra
CRN	
CREDIT HOURS	3 semester hours
PREREQUISITES	MATH 0999 or Mathematics Placement test
Co-REQISITES (if applicable)	

INSTRUCTOR	Dr. Robert Steven Owor Email: Robert.owor@asurams.edu Telephone (new telephone number): 229-500-2158 Alternate Telephone Number: 229-288-1473 Office Hours: Mon-Wed: 9.00am – 12 Noon, Fri: 9.00am – 1.00pm.

CLASS MEETING TIMES	MW 2:00pm-3:15pm
CLASS MEETING LOCATION	BCB, 143

REQUIRED TEXT: ***College Algebra, Abramson, Openstax.*** Students are not required to purchase this textbook. Student can download for free at **https://openstax.org/details/books/college-algebra**

Required Materials: TI-83 or TI-84 graphing calculator is required for this course. No other model calculator will be allowed during testing.

Course Description: This course includes a study of topics in real numbers, linear and quadratic equations, complex numbers, various types of other functions and their graphs, exponential and logarithmic functions, systems of linear equations and inequalities

Institutional Student Learning Outcomes (ISLOs)

- **The outcome for communication**

Communication Skills – Students will effectively express and exchange ideas through listening, speaking, reading, writing and other modes of interpersonal expression.

- Create a written summary of the main ideas extracted from information gathered.
- Effectively organize communications, ensuring there is a clear introduction and conclusion, the content is well-sequenced and there are appropriate transitions.
- Know and use active listening skills.
- Make effective presentation, formatting and stylistic choices when developing a communication.
- Translate or explain what written information means and/or how it can be used.
- Understand the role of context, audience and purpose when developing a communication.

- Use appropriate posture, gestures, eye contact and vocal expressiveness to effectively communicate information.
- Use high-quality, credible, relevant sources to support writing.
- Use visual representations such as graphs, charts or graphics to enhance the meaning of the message that is being communicated.
- When communicating, use language that is appropriate to the audience.

❖ The outcome for problem solving

Critical Thinking Skills – Students will be able to apply and utilize analytical and synthetic skills to think through a problem, define its characteristics, evaluate alternatives design and test effective solutions. Students will demonstrate the following abilities:

- Clearly and completely state and describe a problem/issue.
- Consider the context, costs, benefits and consequences of potential solutions to problems or issues.
- Create and/or organize data and information into meaningful patterns in order to interpret and draw inferences from it.
- Develop a plan to implement a solution to a problem or issue.
- Evaluate information to identify limitations and biases.
- Identify quality sources for data and information pertinent to a problem or issue being examined.
- Identify the best solution to a problem or issue.
- Use creativity and alternative thinking to brainstorm new ideas and possible solutions to problems or issues.
- Use rules or frameworks to provide context for and understand problems or issues

❖ The outcome for critical thinking

Problem Solving Skills *- Students will be able to think critically and solve problems by identifying relevant information, evaluating alternatives, synthesizing findings and implementing effective solutions.*

Expected Student Learner Outcomes (SLOs)

After the successful completion of this course, the student will be able to:

❖ Evaluate formulas, equations, functions and inequalities.
❖ Solve equations, functions, inequalities and systems of equation.
❖ Graph equations, functions and inequalities.
❖ Develop equations and functions to solve application problems.
❖ Combine and evaluate functions using algebraic properties.

I. Course Schedule (This is tentative schedule, it is up to the Instructor to teach the order of the topics)

TENTATIVE CLASS CALENDAR/SCHEDULE

Dates	Chapters, Assignments, and Assessments Dates	
	Monday	**Wednesday**
Week 1	***Chapter 1 .*** *Prerequisites* Review of syllabus, course policies and expectations. **Chapter 1: Review** 1.1. Review of Real Numbers and Their Properties	1.1. Review of Real Numbers and Their Properties 1.2. Exponents and scientific notation
Week 2:	1.3. Radicals & Rational Exponents 1.4. Polynomials	1.5. Factoring Polynomials 1.6. Rational Expressions
Week 3	**Chapter 2: Equations, Inequalities** 2.1 Rectangular Coordinate Systems and Graphs	2.2 Linear Equations in One Variable
Week 4:	2.3 Models and Applications 2.4 Complex Numbers	Test 1
Week 5	2.5 Quadratic Equations	2.6. Other Types of Equations
Week 6:	2.6. Other Types of Equations	2.7 Linear Inequalities and absolute value Inequalities
Week 7:	2.7 Linear Inequalities and absolute value Inequalities	**Chapter 3: Functions** 3.1 Functions and Function Notation
Week 8:	3.2 Domain and Range 3.3 Rates of Changes; Behavior of Graphs	**Test 2/Midterm**
Week 9:	3.4 Composition of Functions 3.5 Transformation of Functions	3.6 Absolute value of Functions 3.7 Inverse Functions
Week 10:	4.1 Linear Functions 4.2 Modeling with Linear functions	**Chapter 5:** Polynomial & rational Functions 5.1 Quadratic Functions
Week 11:	5.2 Power Functions & Polynomial Functions 5.3 Graphs of Polynomial Functions	5.4 Dividing Polynomials 5.5 Zeros of Polynomial Functions
Week 12:	Test 3	5.6 Rational Functions
Week 13:	**Chapter 6: Exponential and Logarithmic Functions** 6.1 Exponential Functions 6.2 Graphs of Exponential Functions	6.3 Logarithmic Functions 6.4 Graphs of Logarithmic Functions
Week 14:	6.5 Logarithmic Properties	Test 4
Week 15:	**Chapter 7: Systems of Equations and Inequalities** 7. 1 System of Linear Equations: Two variables	7. 1 System of Linear Equations: Two variables
Week 16:	Review for the Final	Review for the Final
May	***FINAL EXAMS BEGIN!***	

II. Method of Student Evaluation

A. Course Grading Policy

Activity and/or Description		Maximum Possible Score
Assignments		Modify as needed
1	Participation	100 pts
2	Tests/Quizzes/Midterm	500 pts
3	Written Assignments/Labs/Other	200 pts
4	Comprehensive Final Project/eportfolio/Final	200 pts
Total Points		1000 pts

B. ASSESSMENT The final grade in the course will be determined as follows: (modify as needed)

Participation	10%
Tests/Quizzes/Midterm	50%
Written Assignments/Labs/Other	20%
Comprehensive Final Project/eportfolio/Final	20%

C. COURSE GRADES The final grade in the course is defined as follows:

Grade Equivalent	Percentage Equivalent
A	100 – 90
B	89 – 80
C	79 – 70
D	69 – 60
F	59 and below

III. Course Policies

A. Course Information and Instructor Expectations

B. Academic Honesty/Integrity

(See ASU Student Handbook for rules on academic honesty/integrity Page 62)
https://www.asurams.edu/student-affairs/student-handbook/2017-handbook/

The consequence for a violation of the Academic Honesty Code is "zero points" for the assignment. Add any additional information related to your discipline.

C. Students with Disabilities

a. Please refer to the following link for Counseling and Disability Services:
https://www.asurasm.edu-student-affairs/counseling-disability -services/

Students with Disabilities:
If you are a student with a disability, you should consult the Testing & Disability Services, New Student Center – Green Zone 2-141, 903-3610 or 3611, to identify which accommodations might be needed for this course. Please contact the course instructor as soon as possible to discuss your needs.

D. Campus Carry Information

a. Please refer to the following link for Campus Safety Information:
https://www.asurams.edu/police-policy-procedures/

E. Sexual Misconduct Policy (Harassment Policy)

a. Please refer to the following link for Title IX: Sexual Misconduct Policy:
https://www.asurams.edu/adminstration/title-ix/sexual-misconduct-policy/

F. University Math and Writing Centers Reinforcement Policy

- **a.** Support for math and writing is available at the various math and writing centers across campus. Please ask your instructor for help locating the most convenient one for you.
- **b.** Writing Center Information: https://www.asurams.edu/academic-affairs/learning-centers/east-writing-center/ OR https://www.asurams.edu/academic-affairs/learning-centers/west-writing-center/
- **c.** Math Center Information: https://www.asurams.edu/academic-affairs/learning-centers/east-math-center/ OR https://www.asurams.edu/academic-affairs/learning-centers/west-math-center/
- **d.** SmartThinking is available through GA VIEW. Please sign into GA VIEW and find the tutoring opportunities on the toolbar.

G. Integration of Technology

The use of technology is integral to the course design. You should have access to a computer (e.g., computer lab, library, home, or work), a general knowledge of the operation and care of a computer, and know some basic troubleshooting techniques. You should also have some basic understanding of how to use the Internet to seek, find, and retrieve information. Should you experience technology difficulties, please consult Information Technology Services, https://www.asurams.edu/Technology/ , https://www.asurams.edu/Technology/getting-started-students/ OR https://www.asurams.edu/Technology/?s=student+support for assistance with common issues.

All candidates should have a workable (functioning) ASU e-mail account, know how to send and retrieve e-mail messages with and without an attached file, know how to attach a file to an e-mail message, and how to download and open attached files. To ensure that you receive timely communications, it is your responsibility to notify the professor immediately of any changes to your e-mail address. All candidates should also know how to access the course in GAVIEW and be able to complete and submit assignments.

***NOTE: "ASU RAMmail account is the university's official means of electronic communication with students. Students are required to use the ASU website (www.asurams.edu) and RAMmail for important university's official information on financial aid, current class schedule, registration holds, account balances, etc. In order to communicate with students by other means as needed, each student is required to provide the university with his/her current telephone number(s) and mailing address via BannerWeb."**

H. Course Attendance Policy

. **Please refer to the following link for attendance policy**: https://catalog.asurams.edu/undergraduate/academic-affairs-requirements-regulations-support-services/general-policies/

I. Class Cancellation Policy

Please refer to the Handbook

J. Important University Dates

- **a.** Please refer to the online calendar for additional information: https://www.asurams.edu/academic-affairs/academic-services-registrar/academic-calendar/

IV. Directions and Rubrics

Will be provided for each assignment.

I have received a copy of the syllabus for this course. I have read and understand the requirements necessary to successfully complete this course and I understand that it is my responsibility to follow the policies set forth and complete the work required in order to pass this course.

Once again, I am also acknowledging my understanding of the Academic Honesty Policy, the Honor Code, and all other Program Handbook policies.

I have received a copy of the syllabus for the course and understand the requirements for successful completion of this course.

Student Name: (Print) _____

Student Signature: _____

Date: _____

Bibliography/References