DIVISION OF SCIENCE, MATHEMATICS AND HEALTH PROFESSIONS

Syllabus
Math 1111, College Algebra

Semester:
Instructor:
Course number: Math 1111
Course registration number:
Course Start Date:
MyMathLab Course Id:

Campus/Location:
Room Number:
Meeting Days and Times:
Final Assessment Date:

Instructor Contact Information:
Office location:
Office telephone:
Office hours:

AMSC Email address:

Credit Hours: 3

Course Description:
This course is a functional approach to algebra that incorporates the use of appropriate technology. Emphasis is placed on the study of functions and their graphs, inequalities, and linear, quadratic, rational, polynomial, exponential, and logarithmic functions. Appropriate applications are included.
Prerequisite: Exit or exemption from Learning Support Mathematics.

Required Text: Text: ***College Algebra 6th edition by Mark Dugopolski.***

Required: MyMathlab Access Code: The Access Code is required to do all homework--All homework is done online using the MyMathlab code.

Required: **Graphing** Calculator (TI 82 or higher)--(Cell phones and other communication devices **can NOT** be used in class during quizzes and exams).

Required: 5 blue or green exam booklets.

Required: Graphing paper.

The Text, MyMathlab code, and all other resource materials can be purchased from the campus bookstore.

Important Dates:

Mid-Term (regular semester):
< l**ast day to withdraw without penalty >**
Holidays:
Last day of class:
Final exam:

General **E**ducation (**M**athematics/Quantitative) **L**earning **O**utcomes

Student who successfully complete Math 1111 will be able to: Use mathematical operations and concepts to solve problems related to practical situations.

Americans with Disability Act

Atlanta Metropolitan College is committed to providing support for all students and making their college experiences an enriching opportunity. In compliance with Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990, The Office of Disability Services located on the second floor of the Academic Building in room 228 oversees the coordination of services for students with documented disabilities. The Coordinator of Disability Services collaborates with faculty and staff to offer provisions for reasonable accommodations to students who meet the requirements. Accommodations cannot be provided until a reasonable accommodation plan is in place. To the greatest extent possible, all college representatives shall observe confidentiality.

Long-Term Emergency Closure of the College: Plan for Continuation of Instruction
In the event of an emergency that forces the college to close for an extended period, students **must** contact the instructor of this class within 48 hours using the contact information (e.g., email address, D2L or telephone number) on the syllabus to obtain directions for continuing the course. The instructor will provide directions for the transmission and submission of course assignments and course assessments, including due dates.

The student is responsible for submitting valid, accurate contact information, including an active AMC email address to the instructor by the end of the first week of the course. Students can obtain an Atlanta Metropolitan College Student email address in the Academic Support Center on the third floor of the Library Building.

If the instructor for the course cannot be reached within the specified period of time (within 48 hours), the chair of the division responsible for the course can be reached at the email address posted on the college's website.

Class Policies:

WITHDRAWAL POLICY

Withdrawal Before Midterm:

Withdrawal from a course is solely the responsibility of the student.

1. **Instructors *will NOT* initiate student withdrawals for students who have attended class.**
2. **A student who wishes to withdraw from a course *MUST* submit a *completed withdrawal form* (schedule reduction form) to the Registrar's Office *BEFORE MID-TERM* in order to receive a grade of "W" for the course. (To be "Complete", the form must have all necessary signatures.)**
3. **Failure to complete the withdrawal process will result in a grade of F for the class.**

You may withdraw from classes UP TO MID-TERM without penalty. If you do not attend classes in courses for which you have registered, and you have not officially withdrawn from them, you have abandoned the courses. Failure to withdraw from classes that you do not attend means that you will earn a grade of F in the courses. Please remember that it is the student's responsibility to initiate the withdrawal process.

Hardship Withdrawals: Hardship Withdrawals are only considered for serious events that are non-academic in nature and are **rarely** given. Hardship Withdrawals are negotiated through a conference with the Director of Academic Advisement in the Academic Advising Center.

INSTITUTIONAL PRIORITIES

In order to promote AMSC's commitment to developing students' Critical Thinking Skills, you will be required to participate in activities that require using higher-order thinking skills in order to appreciate REAL mathematical "problem solving."

ACADEMIC MISSCONDUCT POLICY

Academic Misconduct or Cheating takes many different forms. Although different instructors assign various penalties, academic misconduct is grounds for expulsion from the college. Examples of academic misconduct include, but are not limited to, copying exam answers from others; using notes, calculators, dictionaries and books during examinations or assignments without the authorization of the instructor; handling in someone else's work as one's own; or any deceptive act that interferes with the instructors effort to accurately evaluate a student's academic performance.

PLAGIARISM includes the copying of the material directly from a source and/or using someone else's work or ideas without acknowledging the source. In short, plagiarism is claiming another person's word or ideas as one's own. Essay, term papers, and tests must be the work of the student. If the student uses someone else's idea, words or a computer program, the student must acknowledge the source.

ENTRY LEVEL SKILLS

Students enrolling in Math 1111 should be able to:

- ❖ Factor polynomials by methods involving the distribution property, the difference of two squares, second degree trinomials, the sum and difference of two cubes and grouping.
- ❖ Perform fundamental operations (i.e., addition, subtraction, multiplication and division) with polynomials and rational expressions.
- ❖ Perform fundamental operations (i.e., addition, subtraction, multiplication, division and exponentiation with integral and rational exponents and radicals.
- ❖ Solve first degree equations in one variable with applications.
- ❖ Solve and graph first degree inequalities (i.e., single and multiple) in one variable with applications.
- ❖ Solve quadratic equations in one variable by factoring, completing the square and by using the quadratic formula.
- ❖ Construct graphs of linear equations in two variables using the slope-intercept, the two-point and the intercept method.
- ❖ Construct graphs of second degree equations of the form: $y = a x^2 + b x + c$.
- ❖ Solve systems of two equations in two variables by Elimination and Substitution.
- ❖ Solve problems using the concepts of ratio and proportion and variation.

ASSESSMENT

GRADE ASSESSMENT

Your grade will be computed in two parts:

- ❖ Part I: The assessment will be based on performance on chapter examinations, "In Class" Quizzes, Classroom Assignments, and Final Exams.
- ❖ Part II: The assessment will be based on performance on "Online Homework and Online Quizzes" in the Mymathlab Course Management System.

- Your performance on the chapter examinations constitutes 60% of your final average.

- You will be given 5 exams: Exam 1A which will cover Sections 1.1 and 1.2. Exam 1B which will cover all of Chapter 1and Section P.7. The average of the 1A and 1B exam scores will be used as the common grade for Chapter 1. Exam 2 will cover chapters 2. Exam 3 will cover Sections 3.1,3.2,3.3,3.4. Exam 4 will cover Sections 4.1,4.2,5.1,5.3.

- Your performance on MyMathLab Online-Homework constitutes 15 % of the

final average. You are encouraged to do more problems in MyMathLab than what are identified in the course syllabus.

- Your performance on Online and/or In-Class Quizzes constitutes 10% of the final average.

- Your performance on the Departmental Final Exam (comprehensive) constitutes 15% of your final average. The final exam covers chapters 1, Chapter 2, Chapter 3 excluding Section 3.5, and Sections 4.1, 4.2, 5.1, 5.3, P.7. If the final exam score exceeds the lowest chapter exam test scores, it will be used to replace the lowest score.

		A = 90% +
Five Unit Exams (4 grades)	= 60%	B = 80-89%
Final Exam	= 15%	C = 70-79%
MyMathLab Homework	= 15%	D = 55-69%
Quizzes/Class work	= 10%	F = Below 55%

Formula for final grade: 0.6x (avg of 4 tests)+ 0.15x(Final Exam Score) +0.15×Online Homework + 0.10×Other

MISSED EXAMS

All missed exams will receive a grade of 0 (zero). There will be only ONE opportunity for making up a missed exam. If you have an **excusable, legitimate, reason beyond your control,** the exam may be made up at a pre-arranged time, no later than one week after the exam was given. It is important that you provide **verifiable documentation.** There won't be any make up quizzes or class assignments. The two lowest quizzes will be dropped.

GENERAL GUIDELINES:

Get in touch with the instructor at the **first** sign of trouble. Being a college student should entail the same amount of time as having a full-time job : 40/45 hours a week. Since a typical course load is 15 credit hours (12.5 hours in class), this would indicate that an average student with an average background in a course of average difficulty who expects an average **('C')** grade should be spending a little more than two hours of work outside class for every hour in class. A grade better than a 'C', a more difficult class, etc. would require correspondingly more work while a grade lower than a 'C' would require less work.

Problems related to the grading policy for this course or other courses management concerns should be first brought to the attention of the professor for the course. However, a resolution of unsettled problems or concerns may be pursued by following the

grievance procedures outlined in the AMC Student Handbook and the Academic Catalog.

COURSE TOPICS AND LEARNING OBJECTIVES:

I. Equations and Inequalities

Students will demonstrate proficiency in:

A Solving linear, quadratic, rational, and absolute value equations.
B Solving linear, quadratic, rational, and absolute value inequalities.
C Solving equations by additional techniques.
D Applications involving the above.

II. Relations, Functions and their Graphs

Students should demonstrate proficiency in:

A. Defining and testing for relations and functions.
B. Defining and determining the domain and range of a function.
C. Analyzing the graph of functions.
D. Performing operations on functions.
E. Performing transformations of functions.
F. Modeling functions using variation.

III. Polynomial and Rational Functions

Students should demonstrate proficiency in:

A. Graphing, modeling with, and solving quadratic functions.
B. Finding all the real zeros of a function.
C. Graphing polynomial functions
D. Solving quadratic inequalities..

IV. Exponential and Logarithmic Functions.

Students should demonstrate proficiency in:

A. Evaluating Exponential Functions.
B. Solving Exponential Equations and its applications.
C Solving Business and Science Applications.

V. System of Equations

Students should demonstrate proficiency in:

A. Solving systems of two equations in two unknowns
B. Solving systems of three equations in three unknowns
C. Systems of non-linear equations

Homework

Homework questions, together with the various assist components are provided through MyMathLab.

Each question on a quiz will come from a pool of questions with the same objective in the homework.

Course Outline

wk		Section(s)
1		1.1
2		1.2, **Test 1A for sections 1.1, 1.2.**
3		P.7(complex number),1.5
4		1.3,1.4
5		1.4, 1.6
6		**1.7,Test 1B for Chapter** 1
7		2.1,2.2
8		2.3,2.4
9		2.5,2.6,
10		**Exam 2 for Chapter 2,**3.1
11		3.2,3.3
12		3.4, **Exam 3 for Chapter 3 excluding section 3.5**
13		4.1,4.2
14		5.1,5.3
15		**Exam 4 for sections 4.1,4.2,5.1,5.3**,Final Exam Overview

Course Timeline may change as needed.

INSTRUCTIONAL RESOURCES

The course delivery method is primarily lecture based. It will also incorporate discussions and problem solving activities. External to the classroom, a technology based enhancement of the course will utilize software such as **Desire2Learn** and **MyMathlab**.

Desire 2 Learn(D2L)

Every class at AMSC has a D2L course associated with the class. Access D2L through the link on the AMSC website (www. atlm.edu). This will be used to post this syllabus and other matters of interest such as communications to and from the instructor. Enter your user ID (you can get it from ASC) and password (the password that you use for registration). If you have a problem with accessing D2L, send an email to Mr. Nwaogu at enwaogu@atlm.edu.

MyMathLab software**.** The instructor will provide the Course Access Code that will enable the student to complete online registration. MyMathlab is a course management

and computerized homework system that will provide the student with a study guide, algorithmically driven exercises, homework with various assists such as "show me how", videos, animation, power point presentation, and live tutors. There are also homework assessment quizzes, practice quizzes, and practice exams

ACADEMIC SUPPORT CENTER: The Academic Support Center (ASC) is located on the **THIRD FLOOR** of the Library Building. ASC provides **Individualized tutoring; Computerized Tutorials; Handouts; Videos; Practice Tests**; and **Web Assignments.**

The hours of operation in the Center are:

M,T,W,R	**8:00 am -8:00 pm**
F	**8:00 am -5:00 pm**
S	**10:00 am – 2:00 pm**
U	**2:00 pm – 6:00 pm**

STUDENT SUPPORT SERVICES: Student Support Services is located on the First Floor of the Academic Building. Please see Mr. Christopher Bennett (First floor of the Academic Building) to see if you qualify for their one-on-one tutoring services.

COUNSELING
If you are having academic or personal problems that are causing difficulties in this course and you need assistance, you might wish to talk with a counselor. Contact a member of the Counseling Center, second floor of the Academic Building, Room A-225 or via phone: Phone 404.756.4016.

PROTOCOL for Issues between student and Professor
There is proper protocol for communicating issues you may have with an AMSC instructor related to the grading policy or other course management concerns. Should you have a problem/concern/complaint/etc. that you feel needs to be addressed, you should **FIRST** have a private conference with the instructor concerning the issue. If the issue cannot be resolved at the instructor's level, the next person to talk with is the Mathematics Department Head. If the issue is still not resolved, then the student will be notified as to the next step in the process until final resolution is made in accordance with the grievance procedures outlined in the AMSC Student Handbook and the Academic Catalog. In order to have your concern addressed, please follow this protocol.

CLASSROOM MANAGEMENT POLICIES

- **Classroom Behavior**

Students are expected to respect the rights of other students, the instructor, guest lecturers, etc.; and students are expected to adhere to the codes of conduct and ethics as set forth in the ***AMSC Student Handbook***. Get in touch with the instructor at the **first** sign of trouble. Being a college student entails a lot of responsibility, discipline, and hard work.

- **Cell Phone Policy**— Cell phones are not allowed in the classroom or laboratory setting unless they are kept on mute or vibrate and out of sight. This especially includes using the phone as a calculator for any purpose during class or on an exam. Talking on the phone and text messaging during class is disruptive and therefore strictly prohibited. Students are

expected to adhere to the codes of conduct and ethics as set forth in the AMSC Student Handbook. **The penalty for a ringing phone/pager or for answering the phone/pager in the classroom is 15 points per violation during testing.** The other penalty may include a verbal reprimand, or dismissal from the class. There will be a penalty of 15 points for surfing the web during the lab time. Please be courteous to others and respect the learning environment at Atlanta Metropolitan College.