Syllabus

MAT0024 College Preparatory Algebra

Term: SPRING 2009-2 **Reference #:550399**

Instructor's Name: Jose De Paz

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Office: Math Lab, Room # 2223 **Mail-box**: Math Lab, Room # 2223

Office Hours:TR 7:45-8:15

To leave a message for the instructor, please call the Math Lab at 305-237-3834 during its hours of operation:

MTWR 8:00 AM - 9:00 PM **F** 8:00 AM - 4:00 PM **S** 8:00 AM - 4:00 PM.

Course Description:

This course introduces students to the basic concepts of algebra. Students will simplify or perform operations on signed numbers, radicals, polynomials, and expressions containing exponents; factor polynomials; solve and graph linear equations and inequalities in one variable; graph linear equations in two variables; solve related applications.

AA degree-seeking students: Upon successful completion of MAT0024 (grade of S), you should register for MAT1033 after which you should register for MGF1106, MGF1107, MAC1105, or STA2023 depending on your major and the institution to which you are planning to transfer. Be sure to take your mathematics courses in consecutive terms

Credits: 4

Pre-requisites

MAT0002 (Grade of S) or MAT0020 (grade of P), or appropriate placement score

Textbook

Beginning and Intermediate Algebra, 4th Ed, by Elayn Martin-Gay; Pub. Prentice Hall

Assistance

You can obtain assistance for mathematics classes in the Mathematics Laboratory, room 2223. There, you will find course-related videotapes and computer software, and tutors that can help you to successfully complete this course. The Math Lab is open during these hours:

MTWR 8:00 AM - 9:00 PM **F** 8:00 AM - 4:00 PM **S** 8:00 AM-4:00 PM.

You do not need an appointment to get assistance from the tutors on the Floor, but the tutors on the Floor must help all the students and may have to take turns; they cannot work with one student for a prolonged period of time.

One-to-one tutoring (1 hour long session) is available by appointment only. Please visit the Math Lab and speak to any of the Supervisors to schedule an appointment.

If you have a problem with the Math Lab, please contact Arcides Acosta, Maliya Beylin, Jose De Paz, or Verdieu Lucas at 305-237-3834 or visit their offices in room 2223

Classroom and Laboratory Etiquette

The instructor would like to welcome all students into an environment that creates a sense of community, pride, courtesy and respect; we are all here to work cooperatively and to learn together. In order to create a smooth and harmonious learning community, please make every attempt to come to all the class sessions, to come to class on time, and to stay until the end of the class session unless you have informed your instructor that you must leave early. There may be a time when you are unavoidably late for class. In that case, please come into the room quietly (through the back door if there is one) and choose a seat closest to the entrance.

Once the class session has begun, please do not leave the room and then re-enter unless it is an emergency. If you miss a class meeting for any reason, you are responsible for all material discussed, for announcements made in your absence, and for acquiring any materials that may have been distributed in class. You are responsible for contacting the instructor for this information.

It is important that we are all able to stay focused on the class discussion. For this reason, only one person in the class at a time should be speaking. Side conversations are distracting for surrounding students and for the instructor. Professional behavior is expected at all times. You are encouraged to ask questions.

Please refrain from bringing food or drinks into any classroom or the Math lab.

Beepers and Cellular telephones must be turned off. ***The vibrate mode is not considered turned off***. Absolutely no text messaging or instant messaging is allowed in the classroom. The instructor may ask you to leave the classroom for the day if you are caught.

Problems with Instructor

If you are having a problem with your mathematics instructor, please see that instructor **during** office hours. Before or after class is generally not a good time to discuss a problem with an instructor who is either about to start class or on the way to the next class. If *after speaking with your instructor during office hours* you cannot resolve the problem, then you need to visit the chairperson, Dr. Alicia Giovinazzo (office 1540) as the next step.

Professional Student Behavior

The MDC Students' Rights and Responsibilities Handbook describes students' appropriate and inappropriate behaviors, along with their consequences. Additionally, please be aware that cheating, plagiarism, and disruptive behavior are not tolerated and can result in serious consequences such as failure of a course or dismissal from the college. For more information, go to http://www.mdc.edu/policy/student_rights_and_responsibilities.pdf.

Office Hours

Your professor urges you to avail yourself of his/hers individual instruction during office hours. Do not wait until you are in trouble. If you have been absent or late to class, please read the lesson you missed and come to his/her office prepared with questions.

Attendance

The number one key to educational success is to attend classes. Students are responsible for any work missed when absent. Class attendance will be recorded daily. ***Frequent absences may cause you to be dropped from the course***. You should make an effort to be in class, and on time. *Lateness is rude and disruptive.*

Registration

It is your responsibility to make sure that you are registered for this course. Be sure to obtain a copy of your schedule to verify the reference number and that you do not have any outstanding fees. *You will not be allowed to take the final exam if you are not in your instructor's class roster* so make sure to resolve any issues prior to the final exam date.

Withdrawal

If you feel that you will be unable to complete the requirements for passing this class, it is important that you drop the class by the college's "drop date" as established by the registrar's office. You should speak to your instructor prior to making the decision to drop. Remember that it is your responsibility to drop a class, not the instructor's. If circumstances such as illness, accident, change in employment situation, etc., prevent you from continuing to attend your class **before** the drop date, speak to your instructor first and if needed, to the Chairperson, Dr. Alicia Giovinazzo (office 1540) for your options regarding an appeal. If such a situation occurs **after** the drop date, you should contact the instructor for information as to how you can complete the requirements for passing the course.

Study Sessions

All college preparatory mathematics courses have required study sessions and laboratory hours. The study sessions are designed to give students an opportunity to communicate with each other about their course work, to get individualized help from the study session facilitator, to review for exams, and in some cases to work on course-related projects.

You are required to attend your study session each week. One of the requirements for receiving an S in this class is to earn at least a grade of 70% in your study session. **Your Study Session instructor will send quarterly updates of your grades to your lecture instructor so that your instructor is aware of your progress.** If you have a problem with your Study Session, speak to your study session instructor first. If after speaking with your instructor you cannot resolve the problem, then please contact Arcides Acosta, Maliya Beylin, Jose De Paz, or Verdieu Lucas at their offices in room 2223.

Lab Hours

You are required to complete 16 hours during the term in the mathematics laboratory (Room 2223). We recommend that you have completed a minimum of 8 hours by the midterm date, as you *will be credited up to a maximum of three hours on any given day*. You *may not* complete Lab hours during times when you are scheduled to be in class or in your Study Session. If you do so, you may lose every hour that you have accumulated to that point. **You will need to check in and out of the Math Lab each time** you are there to earn the credit for the College Prep lab hour requirement.

Homework

At the discretion of the instructor, homework may be completed on line or on paper. Homework completed on paper is turned in to the instructor at the beginning of class on the day of each unit test and is generally checked for completion. All work must be shown. Your complete name and MDC-ID, instructor's name and reference number, book section numbers and problem numbers must be clearly written on your homework. Section numbers must be highlighted. The homework must be turned in stapled together and in the proper order. Homework may not be turned in late.

Grading

In this class, you will have

- 4 Departmental Unit Exams
- Short in-class quizzes, at the instructor's discretion
- Online quizzes, homework and reviews, at the instructor's discretion
- A Departmental Mid-Term Exam
- A State Final Exam, which is cumulative and must be taken during final exam week on the date and time designated by the registrar's office (http://www.mdc.edu/main/finals).

If a student misses an exam, the final exam grade will be used to replace this grade. For any further missing exams, the grade will be zero. **There will not be any make-ups**

In this as in all College Preparatory courses, you will earn an **S** (Satisfactory) which is the required passing grade. **P** (Progress) or **U** (Unsatisfactory) are not passing grades.

To earn a grade of **S** you will need to fulfill **all** of the following requirements:

- Complete a minimum of 16 hours in the Math Lab (Room 2223)
- Attend required Study Sessions and complete all assignments, projects, and quizzes. You must earn at least 70% combined score in your study session
- Attend required lecture classes and complete all assignments, projects, and quizzes. You must earn at least 70% combined score in your class lecture.
- Earn a minimum of 60% on the Final Exam (State Exit Test) which is cumulative and must be taken during final exam week on the date and time designated by registrar's office.
  (http://www.mdc.edu/main/finals/)

You will earn a grade of **P** if you did not fulfill **any one** of the four above mentioned requirements.

You will earn a grade of **U** if you earn less than 35% in your lecture class, or stop attending lecture classes or the Study Sessions. Note that a grade of **U** counts against your GPA because it is calculated as an F.

Incomplete

The grade of *I* (*Incomplete*) is given in the rare case that a student is **passing** a class but for some extenuating circumstance is unable to complete the last part (usually the final exam) of the class. ***If you are not passing your class, it is not possible for your instructor to give you an I.*** Note that you will have one full term (Fall or Winter) to complete the requirements of your Incomplete Contract. If you do not complete your requirements in that time, the **I** generally will automatically change to an **F** on your records. The instructor makes the determination as to whether you are eligible for an Incomplete.

MDC Email Account

Students are **required** to activate and use their MDC email account. The MDC account allows students to receive email from their instructors and get notification/announcements or other pertinent information from the College

Important Dates

Class begins	
Weekdays and Evening	T Jan 5
Weekend (Saturday and Sunday)	S Jan 9
First day that Math Lab hours can be accumulated in College Prep. Courses (MAT0002, MAT00020, MAT00024)	T Jan 5
Last day to Withdraw with a Grade of W	W Mar 7
Last day that Math Lab hours can be accumulated in College Prep. Courses (MAT0002, MAT00020, MAT00024)	F Apr 23
Last day of Final Exams	F Apr 30

Holidays M. L. K. Day: S Jan 16. U Jan 17, M Jan 18

Presidents Day: S Feb 13, U Feb 14, M Feb 15

Easter: F Apr 2, S Apr 2, U Apr 3

Miami-Dade Learning Outcomes

As graduates of Miami Dade College, students will be able to:

1. Communicate effectively using listening, speaking, reading, and writing skills.
2. Use quantitative analytical skills to evaluate and process numerical data.
3. Solve problems using critical and creative thinking and scientific reasoning.
4. Formulate strategies to locate, evaluate, and apply information.
5. Demonstrate knowledge of diverse cultures, including global and historical perspectives.
6. Create strategies that can be used to fulfill personal, civic, and social responsibilities.
7. Demonstrate knowledge of ethical thinking and its application to issues in society.
8. Use computer and emerging technologies effectively.
9. Demonstrate an appreciation for aesthetics and creative activities.
10. Describe how natural systems function and recognize the impact of humans on the environment.

Each course taken at the college addresses some of these Learning Outcomes. College The learning activities designed in this course will address outcomes 1, 2, 3, 4, and 8.

MAT0024

Syllabus, Textbook Homework Assignments, and Study Session Activities
Tentative Schedule (16 Week term)

Week	Sect.	Topic	Suggested Homework (odds unless otherwise noted)	Study Session
1	1.2	Symbols and Sets of Numbers	1-27, 41-49, 61-75	Multiplying/Dividing fractions
	1.5	Adding Real Numbers	1-63, 75, 77, 79	Adding/subtracting fractions
2	1.6	Subtracting Real Numbers	1-39, 43-77	**Study skills**: Time Management
	1.7	Multiplying and Dividing Real Numbers	1-37, 43-101	Quiz: Sect 1.2-1.7
3	1.8	Properties of Real Numbers	1-27, 31-83	**Study skills**: Preparing for and taking Exam
	1.4	Introduction to Variable Expressions and Equations	1-41, 47-61, 65-89	Review for Exam # 1
4	===== Departmental Exam # 1 =====			
	2.1	Simplifying Algebraic Expressions	1-17, 21-81	Variables, Expressions
	2.2	The Addition and Multiplication Properties of Equality	1-37, 41-93	
	2.3	Solving Linear Equations	1-65	Solving Equations
5	2.8	Solving Inequalities	1-47, 51-63, 67, 69, 71	**Study skills**: Coping with Stress and Anxiety
	2.4	An Introduction to Problem Solving	1-59	Quiz: Sect 2.1-2.3
	2.5	Formulas and Problem Solving	29-63	
6	2.6	Percent and Mixture Problem Solving	1-61	Percent and Mixtures
	2.7	Further Problem Solving	1-31	
	7.6	Proportions and Ratios	1-19	Review for Exam # 2
	===== Departmental Exam # 2 =====			
7	3.1	The Rectangular Coordinate System	1-31, 39-43	Graphing Equations
	3.2	Graphing Linear Equations	9-53	
	3.3	Intercepts	1-53	Review for Midterm
	3.4	Slope and Rate of Change	1-49, 59-69	
8	===== Departmental Exam # 3 (MIDTERM) =====			
	5.1	Exponents	1-37, 41-55, 61-103	Exponents
9	5.2	Adding and Subtracting Polynomials	1-11, 25-69, 79-89	Adding and Subtracting polynomials
	5.3	Multiplying Polynomials	1-73	Multiplying polynomials
10	5.4	Special Products	1-17, 21-77	Quiz: Sect 5.1-5.4
	5.5	Negative Exponents and Scientific Notation	1-89	Scientific notation
11	5.6	Dividing Polynomials by monomials (only)	1-57	Review for Exam # 4
	===== Departmental Exam # 4 =====			
12	6.1	The GCF and Factor by Grouping	1-85	Factoring out the GCF
	6.2	Factoring Trinomials	1-69	Factoring Trinomials
	6.3	Factoring Trinomials and Perfect Squares	1-93	Quiz: Sect 6.1-6.3

Week	Sect.	Topic	Suggested Homework (odds unless otherwise noted)	Study Session
13	6.4	Factoring Trinomials by Grouping	1-7, 13-53	Factoring expressions completely
	6.5	Factoring Binomials	1-69	
	6.6	Solving Quadratic Equations by Factoring	1-15, 19-81	Chapter 6 Review
		Integrated Exercises		
14	7.1	Simplifying Rational Expressions		Review for Exam # 5
	===== Departmental Exam # 5 =====			
15	10.1	Radical Expressions	1-75	**Study skills**: Preparing for and taking Exam
	10.3	Simplifying Radical Expressions	1-71	Quiz: Sect 10.1-10.4
	10.4	Adding, and Subtracting Radical Expressions	1-33	
16		Review for Final Exam		
	FINAL EXAM (STATE EXIT TEST)			