

MTH 101 – ALGEBRA FOR COLLEGE STUDENTS

COURSE SECTI	ON: MTH 101 B		
INSTRUCTOR:	Ms. Brittney Ellzey	COORDINAT	Dr. Leticia Oropesa
		PHONE:	284-2116
OFFICE:	UB 433	OFFICE:	UB 515 F
OFFICE HOUR	5: M1-3, W12-3	OFFICE HOUR	S: M/W 3:30PM - 5:00PM; Tu 12:00PM - 1:30PM;
	(in the main lab)		(or by appointment)
Email:	<u>b.ellzey@math.miami.edu</u>	Email:	l.oropesa@math.miami.edu

TEXT: Algebra for College Students (8th edition) by Lial, Hornsby, and McGinnnis

Prerequisite: ALEKS score of 40 or higher or passing grade in MTH 099.

Description: This course covers the fundamentals of college algebra, including algebraic expressions and equations, and an introduction to functions. This course is intended primarily for students in a BA program.

Topics: Review of the real number system and set operations; properties of real numbers; algebraic expressions including: polynomials, factoring, rational expressions, radical expressions, integer and rational exponents; division of polynomials; linear equations and inequalities, including applications; absolute value equations and inequalities; nonlinear inequalities; graphs of linear equations and finding the equation of a line; systems of linear equations in two and three variables with applications; systems of linear inequalities in two-variables; quadratic equations and applications; functions: including linear, quadratic, radical, cubic, and absolute value.

REQUIRED COURSE MATERIALS: Students will be required to use MyMathLab in this course. Homework and other graded assignments will be completed in MyMathLab. For your convenience a MyMathLab access code has been bundled with the textbook and is available at the UM Bookstore.

Students will need to purchase one of the following:

- a) Text bundled with MyMathLab Access code: ISBN: 9780321969231
- b) MyMathLab Student Access Kit: ISBN: 9780321199911

You may also purchase the MyMathLab access code on the MyMathLab website: <u>www.mymathlab.com</u> or <u>http://pearsonmylabandmastering.com</u>.

Your instructor will provide you with the course code that you will need when you are registering for MyMathLab. Purchase of the textbook is optional since all of the textbook pages are included in the MyMathLab access. Feel free to watch the following YouTube Video for tips on getting started and registering: http://www.youtube.com/watch?v=7lqv93pFrWY&list=PL2B3F3F1E35931DD0

NOTEBOOKS: Students are expected to keep an organized notebook for class notes and for homework. Although homework is submitted on-line and graded, it is extremely helpful to have the homework problems worked out in your notebook in order to refer to them when preparing for an exam.

CALCULATOR POLICY: A basic scientific calculator may be used in this course and will be useful in certain chapters of the text. <u>The recommended calculator is the TI 30XIIS.</u> Calculators that are programmable or have graphing or alphanumeric capabilities will <u>NOT</u> be permitted. Calculators on smart phones will <u>NOT</u> be permitted.

GRADING POLICY: Final grades for the course will be based on a total of 1000 points.

EXAMS (600 points): There will be four 50-minute exams during the semester. Each exam will be worth 150 points, contributing 600 points to the total. The dates for the exams are stated in this syllabus.

<u>HOMEWORK (100 points)</u>: Graded homework assignments and periodic quizzes are to be completed in MyMathLab. The student is responsible for checking MyMathLab frequently for upcoming deadlines for these assignments. The work completed in MyMathLab will contribute 100 points to the total.

FINAL EXAM (300 points): The final exam for this course will be a comprehensive, open ended exam and will be worth 300 points.

The grading scale is as follows:	920 - 1000	А
	895 – 919	A-
	880 - 894	B+
	820 – 879	В
	795 – 819	B-
	780 – 794	C+
	720 – 779	С
	695 - 719	C-
	670 – 694	D+
	595 – 669	D
	594 and below	F

BONUS POINTS: Each student may earn <u>up to 30</u> extra points by completing several assignments as determined by the individual instructor.

ATTENDANCE POLICY: Attendance is required and will be recorded daily. Students will be allowed a total of 5 absences. Excessive tardiness will be treated similarly. Your instructor may deduct 5 points for each absence over the permitted 5 absences.

HONOR CODE: The Honor Code will appear on each exam. Students should consult the Undergraduate Bulletin for details of the Honor Code. Any infraction of the Honor Code will result in a grade of "F" for the course and a referral to the Dean of Students.

https://umshare.miami.edu/web/wda/deanstudents/pdf/undergrad_honorcode.pdf

TESTING POLICY: On exam days, students must complete the exam in one sitting. Once the exam has begun, students will not be permitted to leave the classroom, unless they have submitted their exam. NO EXCEPTIONS!

SUPPLEMENTAL INSTRUCTION: The **MATH LAB** is located in the **LEARNING COMMONS** on the first floor of the Richter Library. Tutoring is available to all students enrolled in this course. Tutors are available at the Math Lab on a walk-in basis. You can find more information, along with hours of operation for the Math Lab at: <u>http://www.math.miami.edu/resources/math-laboratory/</u>

Individual tutoring for this course is also available through the **Camner Center for Academic Resources**. The Camner Center is located in Suite 2400 of the Whitten University Center. Tutors at the Camner Center are available by appointment. The Camner Center will also offer tutoring at the **Learning Commons** during designated hours. Please check <u>http://camnercenter.miami.edu/index.html</u> for more information.

ELECTRONIC DEVICES IN THE CLASSROOM: All electronic devices must be <u>turned off</u> in the classroom at all times. This includes cell phones, smart watches, iPods, iPhones, iPads or other tablets, Blackberries, any MP3 player, etc. The use of laptops or other tablet may be allowed during certain classroom activities as determined by the instructor. ABSOLUTELY NO ELECTRONIC OR SMART DEVICES WILL BE ALLOWED DURING EXAMS.

ACADEMIC CALENDAR AND FINAL EXAM SCHEDULE: Please refer to the links below for important dates for this semester.

UNIVERSITY ACADEMIC CALENDAR: <u>https://umshare.miami.edu/web/wda/registrar/calendars/Fall%202017.pdf</u>

FINAL EXAM SCHEDULE: http://cdn.miami.edu/wda/registrar/Documents/Finals/fall-2017-final-exam-schedule.pdf

REPORTING OF ACADEMIC PROGRESS: Midterm Academic Deficiency Reports for undergraduate students will be reported according to the University calendar. Undergraduate students whose performance is unsatisfactory (D or F) will be notified through **GradesFirst**.

FINAL EXAM :

GROUP FINAL EXAM – MTH101 ALL SECTIONS: THURSDAY, DECEMBER 7th, 2017: 8:00 PM TO 10:30 PM

MAKEUP POLICY:

Any student who cannot take an exam on the specified date for a legitimate and documented reason must NOTIFY HIS/HER INSTRUCTOR IN ADVANCE and make necessary arrangements to take the exam prior to the date in question. If an emergency occurs on the day of the exam, you MUST CONTACT YOUR INSTRUCTOR IMMEDIATELY. No exams will be given after the specified test date, if the student waits until the next class meeting to notify the instructor of the emergency.

If you will be missing any class for any religious holy day, you must notify your instructor during the first week of classes. Please refer to the Undergraduate Bulletin for the University policy on observance of Religious Holy Days.

http://bulletin.miami.edu/general-university-information/undergraduate-academic-procedureinformation/course-information/class-attendance-absences/class-attendance-absences.pdf



MTH 101 – Algebra for College Students

TEXT: ALGEBRA FOR COLLEGE STUDENTS by Lial, Hornsby, and McGinnis (8th Edition)

CHAPTER R: REVIEW OF THE REAL NUMBER SYSTEM (ALL SECTIONS)

Operations with real numbers; properties of real numbers; algebraic expressions; exponents and roots; order of operations

CHAPTER 1: LINEAR EQUATIONS, INEQUALITIES, AND APPLICATIONS (ALL SECTIONS)

Linear equations and applications; linear inequalities and applications; set operations and compound inequalities; equations and inequalities involving absolute values

CHAPTER 2: GRAPHS, LINEAR EQUATIONS, AND FUNCTIONS (ALL SECTIONS)

The rectangular coordinate system; graphs of linear equations; finding the equation of a line; linear inequalities in two variables; introduction to functions

CHAPTER 3: SYSTEMS OF LINEAR EQUATIONS (SECTIONS 1, 2, 3)

Systems of linear equations in two or three variables with applications

CHAPTER 4: EXPONENTS, POLYNOMIALS, AND POLYNOMIAL FUNCTIONS (ALL SECTIONS)

Properties of exponents; operations on polynomials; graphs of polynomial functions; division of polynomials

CHAPTER 5: FACTORING (ALL SECTIONS)

Greatest common factor; factoring by grouping; general methods of factoring; solving polynomial equations by factoring with applications

CHAPTER 6: RATIONAL EXPRESSIONS AND FUNCTIONS (SECTIONS 1 - 5)

Rational expressions; complex fractions; solving equations involving rational expressions and applications

CHAPTER 7: ROOTS, RADICALS, AND ROOT FUNCTIONS (ALL SECTIONS)

Radical expressions and graphs; rational exponents; operations on radical expressions; solving equations involving radicals; complex numbers

CHAPTER 8: QUADRATIC EQUATIONS AND INEQUALITIES (SECTIONS 1 - 3, 5)

Solving quadratic equations by the square root method, completing the square, and the quadratic formula, including applications; equations of quadratic form; nonlinear inequalities

CHAPTER 9: ADDITIONAL GRAPHS OF FUNCTIONS AND RELATIONS (SECTION 2)

Graphs of quadratic functions