

# Math 023 Essentials of Algebra I Course Syllabus – Spring 2013 (T/R First 8 Weeks)

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Office Hours: MON/WED 3:30-5 HM2220 and 8-9PM HM 2306

TUES 3:30-5 HM2306 and THURS 12:30-2 HM2306

Course #-Section: Math 023-23C Room #: HM2252

Days: **T/R** Times: **9:30-12:20** 

MyMathLab (MML) Website: <a href="https://www.pearsonmylabandmastering.com">www.pearsonmylabandmastering.com</a> MML Course ID: <a href="mailto:trumbull50676">trumbull50676</a>

## COURSE OUTLINE OF RECORD

PREREQUISITES: IVYT 101 First Year Seminar or IVYT 120 New Student Seminar and demonstrated competency through appropriate assessment (COMPASS ALG 24-34 or PALG 55-100 and ALGE 15-23; or ACCUPLACER 60-120 ARITH), or a grade of "C" or better in MATH 015 Fundamentals of Algebra I or MATH 044 Mathematics.

COREQUISITES: IVYT 101 First Year Seminar or IVYT 120 New Student Seminar

**DEPARTMENT:** Academic Skills Advancement **CREDIT HOURS:** 3

CONTACT HOURS: Lecture: 3

DATE OF LAST REVISION: Spring, 2012

EFFECTIVE DATE OF THIS REVISION: Fall, 2012

**CATALOG DESCRIPTION:** Reviews signed numbers and basic linear equations. Concentrates on integer exponents, scientific notation, linear equations and inequalities, literal equations, polynomial operations, polynomial factoring, graphing linear equations, and applications.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course, the student will be expected to:

- 1. Perform mathematical operations on integers using the order of operations.
- 2. Simplify expressions.
- 3. Solve linear equations and inequalities.
- 4. Solve literal equations.
- 5. Add, subtract, and multiply polynomial expressions and divide a polynomial by a monomial.
- 6. Factor polynomials, including perfect square trinomials, difference of two squares, sum and difference of cubes, trinomials, and four-term polynomials.
- 7. Use and calculate slope.
- 8. Graph linear equations using t-tables, intercepts, and slope-intercept form.

- 9. Write linear equations given a graph, or two ordered pairs, or an equation of a parallel or perpendicular line and a point.
- 10. Translate verbal expressions into algebraic symbols and vice-versa.
- 11. Apply the properties of integer exponents, including scientific notation.
- 12. Evaluate expressions and formulas.
- 13. Solve percent problems.
- 14. Use relevant mathematical language, laws, and notations appropriately.
- 15. Solve a variety of application problems in the above areas.
- 16. Use a scientific calculator proficiently as related to coursework.
- 17. Use computer technology which may include the Internet, e-mail, or computer software to enhance the course objectives.

COURSE CONTENT: Topical areas of study include-

Signed numbers Polynomial operations
Linear equations Polynomial factoring

Integer exponents and scientific notation Graphs of linear equations

Linear inequalities Applications

Literal equations

# **REQUIRED TEXT & MATERIALS**

- 1. Text: <u>Beginning and Intermediate Algebra 5e</u>, by Martin-Gay & MyMathLab Student Access Kit (ISBN: 9780321729361)
- 2. Notebook or binder
- 3. Scientific Calculator: We recommend Casio fx-115 or 300 or Texas Instruments TI-30XS. **Graphing and cell phone calculators are not permitted. Calculators are not allowed until after Test 2.** You must be able to show all work.

#### **Course Communication**

Ivy Tech Community College instructors are committed to responding to students within two business days. Use only ivytech.edu email through Campus Connect.

#### **ASSIGNMENTS & GRADING**

#### **Due Dates & Deadlines**

The Syllabus and Course Calendar are tools to help students understand the course, expectations, and deadlines. Deadlines are also indicated in the Homework tab of MyMathLab. Students should check the calendar frequently for deadlines and to be aware of what to expect next. Deadlines are subject to change.

#### **Exams**

Students will need to complete the exam within the allotted time. The exams will be graded within 2-3 days and posted to the grade book in MyMathLab. All work should be shown neatly on the exam or scrap paper that must be attached to the exam.

#### **Evaluation Procedures:**

% of Grade	<b>Grading Scale:</b>	
11%	90-100%	SA
11%	80-89%	SB
11%	70-79%	SC
11%	60-69%	SD
11%	0-59%	SF
20%	Stopped Attending	SFW
25%		
100%		
	11% 11% 11% 11% 11% 20% 25%	11% 90-100% 11% 80-89% 11% 70-79% 11% 60-69% 11% 0-59% 20% Stopped Attending 25%

#### **General Information**

- 1. <u>Attendance is required</u>. Students are expected to attend class session in full. Students are responsible for all class notes, materials and assignments, whether absent or present.
- 2. **One-on-one tutoring is available in the Center for Academic Excellence**. Call 480-4262 to make an appointment in Harshman 1610.
- 3. Students may access MyMathLab from anywhere that has an Internet connection by logging onto <a href="http://pearsonmylabandmastering.com/">http://pearsonmylabandmastering.com/</a>. You may work on homework, quizzes and practice tests outside of class.
- 4. Grades are maintained online in MML in the grade book tab. Students are responsible to track their progress.
- 5. Tests are the confidential property of Ivy Tech Community College and may not be kept by students.
- 6. A course grade of C or higher is required to progress to the next course after MATH 023. Students who do not meet this standard are encouraged to retake the placement exam. If the score is sufficient, students may progress to program-level courses, regardless of the grade earned in Math 023.
- 7. Class Rules
  - a. No children are permitted in classrooms, hallways, or study areas
  - b. No personal electronic devices other than calculators may be used in class
    - i. Cell phones must be set to silent
    - ii. Cell phones may not be used as calculators
    - iii. Music players may not be used in class
  - c. You may not receive assistance on tests
  - d. No food or beverages allowed in the classroom

- 8. <u>Make-up tests require the instructor's approval in writing in advance</u> and will be granted in documentable, emergency situations. A maximum of one makeup test will be allowed. (This does not state that everyone gets one make up test. It states that no one may make up more than one test). Make-up tests must be completed within 2 class sessions after the original test date.
- 9. Tests, once taken and graded, are the property of Ivy Tech Community College and are confidential. Tests must be returned to the instructor before leaving the room.

#### **COLLEGE POLICIES**

### **Academic Honesty Statement**

The College is committed to academic integrity in all its practices. The faculty value intellectual integrity and a high standard of academic conduct. Activities that violate academic integrity undermine the quality and diminish the value of educational achievement. Cheating on papers, tests, or other academic works is a violation of College rules. No student shall engage in behavior that, in the judgment of the instructor of the class, may be construed as cheating. This may include, but is not limited to, plagiarism or other forms of academic dishonesty such as the acquisition without permission of tests or other academic materials and/or distribution of these materials and other academic work. This includes students who aid and abet as well as those who attempt such behavior.

# **Copyright Statement**

Students shall adhere to the laws governing the use of copyrighted materials. They must insure that their activities comply with fair use and in no way infringe on the copyright or other proprietary rights of others and that the materials used and developed at Ivy Tech Community College contain nothing unlawful, unethical, or libelous and do not constitute any violation of any right of privacy.

#### **ADA Statement**

Ivy Tech Community College seeks to provide reasonable accommodations for qualified individuals with documented disabilities. If students need an accommodation because of a documented disability, please contact the Office of Disability Support Services at least 30 days before the start of the semester (if possible).

## **Breathe easy**

Ivy Tech–Northeast is committed to providing a healthy, comfortable and productive environment for the students, faculty and staff of this campus. The use or sale of any tobacco product is prohibited on collegeowned, operated, or leased property or vehicles at any time. The policy applied to all Ivy Tech–Northeast facilities and grounds, regardless of location. Smoking, including the use of an e-cigarette, shall not be permitted in any enclosed space and is also prohibited outdoors on all college campus property, including parking lots. This policy applies to all students, faculty, staff and visitors. **Tickets and fines will be issued to violators.** 

#### **IVY Tech Growing Greener**

Ivy Tech Community College is committed to a comprehensive sustainability plan. We ask everyone to participate in energy conservation and recycling. The recycling bins in classrooms and offices are for single-stream recycling (clean dry paper/cardboard, plastic containers, aluminum & tin/steel cans and glass). Empty the liquid from all containers before depositing. Materials that cannot be recycled should be placed in garbage cans. Turn off lights when leaving a room.

# Library

The Ivy Tech Library is available to students on and off campus, offering full text journals, books, and other resources essential for course assignments. The Library can be accessed from the Library tab in Blackboard or from the Library tab in Campus Connect.

#### Withdrawal

To withdraw from this course, students are responsible for completing an official withdrawal form with the registrar or withdraw online. **Note:** Withdrawing from class may affect or cancel financial assistance. Students receiving financial assistance should check with the financial aid office before withdrawing. **The last day to withdraw from this course is Friday, February 22, 2013.** 

# **Right of Revision**

The college reserves the right to change any statements, policies or scheduling as necessary. Students will be informed promptly of any and all changes.

# Course Calendar - 16 Sessions - T/R - First 8 Weeks

# College Holidays (No Classes):

Monday, January 21 - Martin Luther King, Jr. Holiday

	Session	Day-date	Chapter & Section Numbers	Pages
Wk				
1	1	T - 1/15	Chapter 1 Review of Real Numbers - Sections 1.1-1.2	1-16
			Chapter 1 - Sections 1.3-1.4	16-35
2	2	R - 1/17	Chapter 1 - Sections 1.5-1.6	35-51
			Chapter 1 - Sections 1.7-1.8	51-68
3	3	T - 1/22	Chapter 1 - Activity, Vocabulary, Highlights, Review & Chapter Test	68-75
			Test #1 - Chapter 1 Real Numbers	
4	4	R - 1/24	Chapter 2 Equations, Inequalities, Problem Solving - Sections 2.1-2.2	76-95
			Chapter 2 - Sections 2.3-2.4	95-114
5	5	T - 1/29	Chapter 2 - Sections 2.5-2.6	115-137
		-	Chapter 2 - Sections 2.7-2.8	138-157
6	6	R - 1/31	Chapter 2 - Activity, Vocabulary, Highlights, Review & Chapter Test	157-167
			Chapter 3 Graphs and Introduction to Functions - Sections 3.1-3.2	168-193
			Chapter 3 - Sections 3.3-3.4	194-217
7	7	T - 2/05	Test #2 - Chapter 2 Equations, Inequalities, Problem Solving	

			Chapter 3 - Section 3.5-3.6	217-238
8	8	R - 2/07	Chapter 3 - Activity, Vocabulary, Highlights, Review & Chapter Test	238-248
9	9	T - 2/12	Test #3 - Chapter 3 Graphs and Introduction to Functions	
			Chapter 5 Exponents and Polynomials - Sections 5.1	306-317
10	10	R - 2/14	Chapter 5 - Sections 5.2	318-330
			Chapter 5 - Sections 5.3-5.4	330-344
11	11	T - 2/19	Chapter 5 - Sections 5.5-5.6	344-359
			Chapter 5 - Activity, Vocabulary, Highlights, Review & Chapter Test	364-372
12	12	R - 2/21	Test # 4 - Chapter 5 Exponents and Polynomials	
			Chapter 6 Factoring Polynomials - Sections 6.1	373-382
13	13	T - 2/26	Chapter 6 - Sections 6.2-6.3	382-397
			Chapter 6 - Sections 6.4	397-402
14	14	R - 2/28	Chapter 6 - Sections 6.5	402-412
			Chapter 6 - Activity, Vocabulary, Highlights, Review & Chapter Test	430-438
15	15	T - 3/05	Test #5 - Chapter 6 Factoring Polynomials	
			Final Review	
16	16	R - 3/07	Final Exam Parts I and II	

Note: At the discretion of the Instructor the schedule may vary.