## Math 256-51628 Topics Before Algebra

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| **Semester/Year: Fall 2015****Units: 3****Course ID: winter87947****Location: SOC 31****Office Hrs:** Tues 9-10am, Wed 12-1pm  | **Instructor**: Kelly Winter **Office Location:** FEM 1L**Phone number:** (559) 260-7051 **Email**: kelly.winter@reedleycollege.edu **Virtual Office Hr**: Thur 9-10am via email or MML |
| **Length:** 9 weeks (Oct. 19 – Dec. 18)**Schedule**All classes meet on Monday, Wednesday and FridayTime: 8:00am to 9:50am | **Final Exam:** Wednesday, Dec. 16th 8am to 9:50am |

**Course Description**

This course is an introduction to some of the key concepts covered in Beginning Algebra (e.g., solving equations, graphing, word problems) which are typically difficult for MATH 101 students. This course is designed for the student who has successfully completed MATH 250 or achieved required score on placement exam but does not feel confident enough in his/her skills to be able to take on the fast pace of a traditional MATH 201 class.

**Prerequisite:** none

**Student Learning Objectives:**

*Upon completion of this course, students will be able to:*

1. Apply the order of operations and rules of exponents to integers.
2. Simplify and evaluate algebraic expressions.
3. Apply the addition and multiplication properties of equality to solve linear equations in one variable.
4. Factor out the greatest common factor in an algebraic expression
5. Generate a table of solutions and graph ordered pairs for linear equations and inequalities.

**Objectives:**

*In the process of completing this course, students will:*

1. Use a number line to derive the rules for addition of positive and negative numbers.
2. Simplify and evaluate algebraic expressions.
3. Differentiate between an expression and an equation.
4. Identify monomials, binomials, trinomials and polynomials.
5. Identify and combine like terms in simplifying polynomials.
6. Add, subtract and multiply polynomials.
7. Solve linear equations in one variable.
8. Setup a table of solutions for linear equations and inequalities in two variables and graph those solutions

**Required Text**

The required text is: Tom Carson, PREALGEBRA, 4th edition.

Reading of the corresponding chapters will be required.

Homework assignments will be posted at [www.pearsonmylabandmastering.com](http://www.pearsonmylabandmastering.com) (MyMathLab)

**Other Course Materials/Technology**

Our class will rely heavily on the use of online materials. To access our course materials and homework assignments, you will need to log in to MyMathLab. If you have purchased a new textbook, it has an access code included. If you purchased your textbook used, you will need to purchase an access code to use this site. If needed, you can purchase an access code in the campus bookstore or you can purchase it on the website using a credit card or paypal. If you purchased an access code for Math 250 you will not need a new access code. You will be able to register for the new course without being prompted to purchase a new access code. **Access to MyMathLab is a requirement for this course. A scientific calculator is a requirement for the course.** A phone, ipod, ipad, computer, or other device will not be allowed during a test.

**Assignments & Tests**

All homework assignments will be completed online at MyMathLab. Homework assignments will be due each week by **Sunday 11:59pm** **or the night before an exam**, and will cover topics discussed during the previous week. I will do my best to maintain the pace as laid out in the schedule below. That being said, depending on how quickly or slowly we progress through the material, I reserve the right to adjust homework due dates as needed. Any changes to due dates will always be announced in class.

**Makeup Work/Late Assignments**

As policy, I will not accept late homework assignments. If there are **extraordinary** circumstances that are out of your control that require you to access and submit your homework after the due date, alternatives will be considered. In nearly all cases it is possible to plan ahead of time, contact me, and make arrangements. Notifying me the following day that you were unable to complete the assignment is not acceptable.

**Assignment Point Values**

| ***Assignment*** | ***Value*** |
| --- | --- |
| Homework and Quizzes | 20% |
| Chapter Exams (15% each exam) | 60% |
| Final Exam | 20% |

**Final Grades**

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| --- | --- |
| ***Letter Grade*** |  ***%*** |
| A | 91.5-100 |
| A- | 89.5-91.4 |
| B+ | 87.5-89.4 |
| B | 81.5-87.4 |
| B- | 79.5-81.4 |
| C+ | 77.5-79.4 |
| C | 71.5-77.4 |
| C- | 69.5-71.4 |
| D+ | 67.5-69.4 |
| D | 61.5-67.4 |
| D - | 59.5-61.4 |
| F | 0-59.4 |
| UW | Attended little or not at all |

**Grading Policies/Rubrics**

You will be able to monitor your grade on MyMathLab as I will be posting all of your scores (online and offline activities) online.

**ACADEMIC DISHONESTY**

Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences.

**Cheating** is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another’s work, supplying one’s work to another, giving or receiving copies of examinations without an instructor’s permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

**Plagiarism** is a specific form of cheating: the use of another’s words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify the contributors to work done in collaboration, submitting duplicate work to be evaluated in different courses without the knowledge and consent of the instructors involved, or failing to observe computer security systems and software copyrights. Incidents of cheating and plagiarism may result in any of a variety of sanctions and penalties, which may range from a failing grade on the particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.

*NOTE: If you have a verified need for an academic accommodation or materials in alternate media (i.e, Braille, large print, electronic text, etc.) per the Americans with Disabilities Act or section 504 of the Rehabilitation act please contact me as soon as possible.*

*Please refer to SCCCD polies for guidance on all matters relating to this course.*

**Course Outline:**

1. Operations with signed numbers
	1. Negative numbers
	2. Adding, subtracting, multiplying and dividing signed numbers
	3. Commutative and associative properties
	4. Powers of signed numbers
2. Order of Operations and Evaluating Expressions
	1. Order of operations
	2. Evaluating expressions through substitution
	3. Evaluating expressions that use grouping symbols
3. Simplifying Algebraic Expressions
	1. First rule of exponents
	2. Simplifying products of factors
	3. The distributive rule
	4. Removing grouping symbols
	5. Like terms
	6. Full simplification
4. Equations
	1. Solutions by means of addition/subtraction
	2. Solutions by means of multiplication/division
	3. Solutions involving full simplification
5. Exponents
	1. Rules involving positive exponents
	2. Rules involving negative exponents
6. Adding, Subtracting, and Multiplying Polynomials
7. Factoring
	1. Prime factorization
	2. Greatest common factor
8. Multiplying and Dividing Fractions
9. Graphing
	1. The rectangular coordinate system
	2. Graphing lines
	3. Slope and equations of lines

**Course Schedule**

Oct 19 - 23: Syllabus, Review of Integers, and Review of Order of Operations

Oct 26 - 30: Chapter 3: Expressions and Polynomials (3.1, 3.2, 3.3, 3.4)

Nov 2 - 6: Chapter 3 continued: (3.5, 3.6 and Review)

Nov 9 - 13: Chapter 3 Test Monday

**Holiday—Veterans Day, no class Wednesday**

Chapter 4: Equations: (4.1, 4.2)

Nov 16 - 20: Chapter 4 continued: Equations (4.3, 4.4, 4.5 and Review)

Nov 23 - 27: Chapter 4 Test Monday

 Chapter 9: Graphs (9.2)

 **Holiday—Thanksgiving, no class Friday**

Nov 30 - Dec 4: Chapter 9: Graphs (9.3, Slope and Slope-Intercept Form)

Dec 7 - 11: Chapter 9 Test Monday, Final Review Wed. & Fri.

Dec 14 - 18: Review and study

 Monday class is 9-10:50am due to final schedule

 **Comprehensive FINAL EXAM on Wednesday, Oct 16th 8-9:50am**