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## Arapahoe Community College Syllabus

**Mat 060 Pre-algebra**

**3 credits**

**Instructor:**

**E-Mail:**

**Office Phone:**

**Office:**

**Office Hours:**

**Math Support Room Hours:**

### **Catalogue Description:**

This course includes the vocabulary, basic operations and applications of fractions, mixed numbers, ratio, proportion, percent, and integers. Optional topics include algebraic expressions and the solution of basic first-degree equations and inequalities. A very brief review of whole number and decimal operations and applications may, also, be included.

**Pre-requisite:** Successful completion of Math 030 (grade C or better) or assessment

**Co-requisite:** None

**Text:** Basic College Mathematics, A Real World Approach, Ignacio Bello, 3rd edition.

**Required Course Materials:** Text. MathZone software may be required by your instructor.

**Optional Course Materials:** Videotapes and a cd-rom tutorial for this course are available in the library.

**Calculator:** Calculators are not allowed for this course. Students must be able to perform all related mathematical skills by hand.

### **Grading Criteria:**

#### **Makeup policy:**

#### **Attendance policy:**

#### **Important Dates:**

Last day to drop with refund:

Last day to withdraw without refund:

**Student Success Center for all ACC students:** Peer and professional tutoring in Room M2720 now includes student tutors, math support, and the Writing Center in one location to provide academic assistance for all your classes.

ACC math instructors provide help with concepts, homework, online resources and graphing calculator workshops. Students may watch course related videos and DVDs in

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the library. For information, contact the Student Success Center at 303-797-5669 or email [Mathhelp@arapahoe.edu](mailto:Mathhelp@arapahoe.edu)

**Support Services:** Arapahoe Community College provides accommodations to qualified students with disabilities. To request accommodation, contact Disability Services in M2710 or call (303) 797-5937 v/tty.

### **Academic Honesty Statement**

Arapahoe Community College is committed to academic honesty and scholarly integrity. The

College can best function and accomplish its mission in an atmosphere of the highest ethical standards.

All members of the College community are expected and encouraged to contribute to such an

environment by observing all accepted principles of academic honesty.

Academic dishonesty includes but is not limited to: plagiarism, cheating, fabrication, grade

tampering, misuse of computers and other electronic technology, and facilitating academic

dishonesty. Those found in violation may also be subject to potential disciplinary sanctions under the

Arapahoe Community College Code of Conduct. **OR “Those found in violation of academic honesty will be subject to the following disciplinary actions: \_(teacher discretion)\_\_\_\_\_.”**

**The safety and security of all our students, faculty, staff and visitors is of the utmost importance to the Campus Police Department. We rely on each of you to be an additional set of ears and eyes to help maintain campus safety. Please be diligent in your efforts to report suspicious or unusual behavior or circumstances to the Campus Police Department. Trust your instincts when something doesn't look, seem or feel right and tell someone. The Campus Police can be reached at 303-797-5800 or in M2600 on the second floor behind Information Central. Additional safety information can be found on the website at <http://www.arapahoe.edu/studentsvcs/campuspolice/index.html>**

**Online Course Evaluations:** As this course nears completion, you will have the opportunity to complete a confidential evaluation of the class online. Login instructions will be sent to your 'student.cccs.edu' e-mail address. Your feedback is important, and ensures that ACC continues to offer quality instruction that meets your needs. Please take time to complete the survey – I appreciate your feedback.

**E-mail Communication:** Effective 1/20/09 electronic correspondence from ACC employees will go to your student email account *only*. When you activate your account you can forward emails to an e-mail account that you already have. To activate your student e-mail account, go to <http://www.arapahoe.edu> and click on the “Activate Student E-mail” link. Questions? Please call 303-797-5621.

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### Contact Information for Learning Support Services

<b>Library</b>	<b>M2500 303-797-5090</b>
<b>Technical Support</b>	<b>797-5700 x3199</b>
<b>Writing Center</b>	<b>M2855 303-797-5830</b>
<b>Advising/Counseling</b>	<b>M2010 303-797-5651</b>
<b>Instructional Testing Center</b>	<b>M2280 303-797-5993</b>
<b>Bookstore</b>	<b>M1200 303-797-5676</b>
<b>Computer Lab</b>	<b>M1650 303-797-5907</b>
<b>Tutorial Services</b>	<b>M2710 303.797.5669</b>
<b>Career Center</b>	<b>M2025 303-797-5805</b>
<b>eLearning</b>	<b>303-797-5700 x6700</b>

### Topical Outline:

#### *I. Ratio, Rate and Proportion*

- 4.1 Ratio and Proportion
- 4.2 Rates
- 4.3 World Problems Involving Proportions

#### *II. Percents*

- 5.1 Percent Notation
- 5.2 Percent Problems
- 5.3 Solving Percent Problems Using Proportions
- 5.4 \*Taxes, Interest, Commissions, and Discounts
- 5.5 \*Applications: Percent of Increase or Decrease
- 5.6 \*Consumer Credit  
\*(set up, but do not simplify problems that would require a calculator.)

#### *III. Measurement and the Metric System*

- 7.1 Length: U.S. System
- 7.2 Length: The Metric System
- 7.3 Length: U. S. to Metric and Metric to U.S. Conversions
- 7.4 Area: U.S., Metric, and Conversions
- 7.5 Volume (Capacity): U.S., Metric, and Conversions
- 7.6 Weight and Temperature: U.S. , Metric and Conversions

#### *IV. The Real Numbers*

- 9.1 Addition and Subtraction of Integers
- 9.2 Multiplication and Division of Integers
- 9.3 The Rational Numbers
- 9.4 Order of Operations

#### *V. Introduction to Algebra*

- 10.1 Introduction to Algebra
- 10.2 The Algebra of Exponents
- 10.3 Scientific Notation
- 10.4 Solving Linear Equations
- 10.5 Applications: Word Problems

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<b>After successful completion of this course the student should be able to:</b>			
No.	Competency	Comp Code	Eval Code
1	Demonstrate knowledge and usage of ratio and proportion.	B	W
2	Demonstrate knowledge and usage of percent.	B	W
3	Demonstrate knowledge and usage of integers.	B	W
4	Demonstrate knowledge and usage of algebraic expressions.	B	W
5	Demonstrate knowledge and usage of basic first-degree equations and inequalities.	B	W
6	Demonstrate knowledge and usage of measurement, area, and perimeter.	B	W

**Competency Code:**

**B = Basic Skill**  
**G = General Occupational Skill**  
**S = Specific Occupational Skill**

**Evaluation Code:**

**A = Authentic**  
**W = Written**  
**O = Oral**  
**PF = Portfolio**

15 week schedule:

Day 1: Syllabus, 4.1, 4.2	Day 2: 4.3
Day 3: 5.1, 5.2	Day 4: 5.3
Day 5: 5.4, 5.5	Day 6: 5.6
Day 7: Review	Day 8: Chapter 4 & 5 Exam
Day 9: 7.1	Day 10: 7.2
Day 11: 7.3	Day 12: 7.4
Day 13: 7.5	Day 14: 7.6
Day 15: Chapter 7 Exam	Day 16: 9.1
Day 17: 9.2	Day 18: 9.3
Day 19: 9.4	Day 20: Chapter 9 Review
Day 21: Chapter 9 Exam	Day 22: 10.1
Day 23: 10.2	Day 24: 10.3
Day 25: 10.4	Day 26: 10.5
Day 27: Chapter 10 review	Day 28: Chapter 10 Exam
Day 29: Review for final	Day 30: Final

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10 week schedule

Day 1: Syllabus, 4.1, 4.2	Day 2: 4.3, 5.1
Day 3: 5.2, 5.3	Day 4: 5.4, 5.5
Day 5: 5.6	Day 6: Chapter 4 & 5 Exam
Day 7: 7.1, 7.2	Day 8: 7.3
Day 9: 7.4, 7.5	Day 10: 7.6
Day 11: Chapter 7 Exam	Day 12: 9.1, 9.2
Day 13: 9.3, 9.4	Day 14: Chapter 9 Exam
Day 15: 10.1, 10.2	Day 16: 10.3, 10.4
Day 17: 10.5	Day 18: Chapter 10 Exam
Day 19: Review for final	Day 20: Final Exam

8 week schedule

Day 1: Syllabus, 4.1, 4.2	Day 2: 4.3, 5.1
Day 3: 5.2, 5.3	Day 4: 5.4, 5.5
Day 5: 5.6, review	Day 6: Chapter 4 & 5 Exam
Day 7: 7.1, 7.2	Day 8: 7.3, 7.4
Day 9: 7.5, 7.6	Day 10: 9.1, 9.2
Day 11: 9.3, 9.4	Day 12: Chapter 7 & 9 Exam
Day 13: 10.1, 10.2	Day 14: 10.3, 10.4
Day 15: 10.5, review	Day 16: Final Exam