- **Text:** Pre-algebra, K. Elayn Martin Gay, fourth edition
- **Course Description:** Course focuses on basic arithmetic and pre-algebra skills. Topics include whole numbers, fractions, decimals, signed numbers, proportions, percents, algebraic expressions and equations, elements of geometry and statistics.
- **Measurements**: Quizzes and homework 15%, tests- 15% each, and the final exam 25 %. Make up exam will be available only for one missed exam and only if prior arrangements are made with me. You won't be able to make up quizzes. Your final exam grade can be counted twice; it can replace your lowest or missed test grade.
- Grading: A 94-100; A- 90-93; B+ 87-89; B 83-86; B- 80-82; C+ 77-79; C 73-76; C- 70-72; D+ 67-69; D 63-66; D- 60-62; F below 60
- Attendance: Attendance is extremely important. Your attendance, participation in classroom work and preparation for each class is required and is essential to your success in the course.
- Homework: Homework will be assigned at the end of each class. You have to do all odd numbered problems after each section. You are expected to do your homework regularly. Sometimes you will be asked to hand it in.

Support Services: Tutorial services. Peers. Meeting with me for an extra help.

Office Hours: M and W, 2:00 p.m. – 3:30 p.m., T, 4:30 p.m. – 5:30 p.m., Room 204, Thames Valley Campus, phone 885-2375 E-mail <u>lalikhanova@trcc.commnet.edu</u> Check your e-mail regularly for test/quiz/homework announcements. Check you email and WebCT Vista for class cancellations.

Disabilities

- Statement:Students with disabilities, who may require special<br/>accommodations and support services, are encouraged to notify:
  - 1. Chris Scarborough, who is coordinating services to students with disabilities.
  - 2. The instructor during the first two weeks of class.

### COURSE CONTENT AND COURSE OUTCOME.

Chapter 1 Whole numbers. Introduction to Algebra Sec. 1.8,1.9

<u>Outcomes</u>: Upon completion student must able to:

- 1. Evaluate exponential expressions.
- 2. Use the order of operations rule.
- 3. Evaluate algebraic expressions.
- 4. Translate sentences into variable expressions.
- Chapter 2 Integers Sec. 2.1-2.5

<u>Outcomes</u>: Upon completion student must be able to

- 1. Identify integers, opposite numbers.
- 2. Find the absolute value of a number.
- 3. Add, subtract, multiply, and divide integers.
- 4. Use the order of operations rule to evaluate algebraic expressions for integer values of variables.

### **TEST (Chapters 1, 2)**

Chapter 3 Equations

Sec. 3.1-3.5

Outcomes: Upon completion student must be able to:

- 1. Use properties of numbers to combine like terms, multiply expressions, and simplify them.
- 2. Use additional and multiplication property of equality to solve equations.
- 3. Solve linear equations in one variable.
- 4. Solve problems.

## TEST (Chapter 3)

# Chapter 4 Fractions

Sec. 4.1-4.8

Outcomes:

Upon completion student must be able to:

- 1. Identify the numerator and the denominator of a fraction.
- 2. Identify proper, improper fractions, mixed numbers, and equivalent fractions.
- 3. Compare the fractions.
- 4. Factor the numbers.
- 5. Add, subtract, multiply, divide fractions, and mixed numbers.
- 6. Simplify complex fractions. Solve equations containing fractions.

Chapter 5	Decimals. Sec. 5.1-5.8	
<u>Outcomes</u> :	<ul> <li>Upon completion student must be able to:</li> <li>1. Know the meaning of place value for a decimal, write decimals in standard form.</li> <li>2. Compare decimals.</li> <li>3. Write decimals as fraction, and fractions as decimals.</li> <li>4. Round decimals.</li> <li>5. Add, subtract, multiply, divide decimals.</li> <li>6. Evaluate expressions containing decimals.</li> <li>7. Solve equations containing decimals.</li> <li>8. Understand the concept for square root.</li> </ul>	
	TEST (Chapters 4, 5)	
Chapter 6	Ratio and Proportion Sec. 6.1-6.4	
<u>Outcomes</u> :	<ul><li>Upon completion student must be able to:</li><li>1. Simplify ratios, rates.</li><li>2. Write and solve proportions.</li><li>3. Use proportions for problem solving.</li></ul>	
Chapter 7	Percent Sec. 7.1-7.6	
<u>Outcomes</u> :	<ul> <li>Upon completion student must be able to:</li> <li>1. Understand the meaning of percent.</li> <li>2. Perform conversions of percents, decimals, and fractions.</li> <li>3. Solve percent problems with percent equation, and with the percent proportions.</li> </ul>	
	TEST (Chapters 6, 7)	
Chapter 9	Geometry and Measurement Sec. 9.3-9.4	
<u>Outcomes</u> :	<ul><li>Upon completion student must be able to:</li><li>1. Find perimeter, area of some figures.</li><li>2. Find volumes of some solids.</li></ul>	

# FINAL EXAM

Homework. This is a guide only. The assignments may vary.

Sec 1.8	p.85	1 – 89 odd
Sec 1.9	р. 93	1 – 59 odd
Sec 2.1	p. 117	1 – 95 every other odd
Sec 2.2	p. 125	7 – 89 eoo
Sec 2.3	p.133	1 – 71 eoo
Sec 2.4	p. 143	39 – 109 eoo
Sec 2.5	p.153	1 – 91 odd
Sec 3.1	p. 177	23 – 77 eoo
Sec 3.2	p. 185	25 – 61 odd
Sec 3.3	p.195	33 – 91 odd
Sec 3.4	p.205	17 – 67 odd
Sec 3.5	p.213	1 – 43 odd
Sec 4.1	p. 241	33 – 97 eoo
Sec 4.2	p.255	9 – 61 eoo
Sec 4.3	p.267	31 – 85 odd
Sec. 4.4	p. 281	1 – 45 odd
Sec 4.5	p. 293	1 – 93 eoo
Sec 4.6	p.305	35 – 51 odd
Sec 4.7	p. 315	27 – 53 odd
Sec 4.8	p.331	41 – 107 eoo
Sec 5.1	p. 369	1 – 83 eoo
Sec 5.2	p. 382	27 – 85 eoo
Sec 5.3	р. 395	25 – 53 odd
Sec 5.4	p. 406	21 – 59 odd
Sec 5.5	p. 419	35 – 59 odd
Sec 5.6	p.426	33 – 71 odd
Sec 5.7	p. 435	1 – 41 odd
Sec 5.8	p. 441	1 – 47 odd
Sec 6.1	p. 461	1 - 49 odd
Sec 6.2	p.467	1 – 45 odd
Sec 6.3	р. 479	1 – 53 eoo
Sec 6.4	p. 489	1 – 43 eoo
Sec 7.1	р. 523	1 – 115 eoo
Sec 7.2	р. 535	1 – 43 eoo
Sec 7.3	р. 545	1 – 35 eoo
Sec 7.4	р. 555	1 – 47 eoo
Sec 7.5	р. 565	1 – 21 odd
Sec 7.6	р. 575	11 – 31 odd
Sec 9.3	p. 711	1 – 43 eoo
Sec 9.4	р. 723	1 – 59 eoo