

FEMALE MATH

Course Syllabus: Winter/Spring 2006

Topics	Description	Class Number
Theory*		
Symbolic Logic	Introduction to the methodology of solving problems <ul style="list-style-type: none"> • simple, compound and conditional statements • truth tables • formal & informal proofs of validity 	3/7, 3/9
Numbers and digits	<ul style="list-style-type: none"> • Introduction to the Real Number System 	3/14
Place Value↓	<ul style="list-style-type: none"> • writing real numbers (using standard, expanded & exponential notations) • evaluating (comparing & ordering) real numbers • identifying significant digits within real numbers • rounding real numbers • multiples of 10 (introduction to scientific notation) 	3/14 3/16
The Number Line↓	<ul style="list-style-type: none"> • introduction to concepts and notation • graphing equalities and inequalities 	3/23
Operations with Real Numbers		
Addition	<ul style="list-style-type: none"> • simple & complex • interpreting and solving word problems/ estimation 	3/21
Subtraction↓	<ul style="list-style-type: none"> • simple & complex 	3/21
Multiplication & Division	<ul style="list-style-type: none"> • simple & complex • times tables (factors & multiples) • perfect squares & square roots • exponents & radicals • order of operations (PEMDAS) 	3/23 3/23
Fractions & Mixed Numbers↓	<ul style="list-style-type: none"> • forms (proper & improper) & mixed numbers • converting (proper to mixed numbers & <i>vice versa</i>) • operations (with same denominators) • operations (with different denominators) 	3/23 3/28, 3/30
Applications‡		
Using a Calculator	<ul style="list-style-type: none"> • converting fractions to decimals and <i>vice versa</i> 	4/4
Percents	<ul style="list-style-type: none"> • basic and complex 	4/4
Measurement ↓	<ul style="list-style-type: none"> • ratios and proportions 1 (gears, unit pricing, etc.) • dimensional analysis & conversion factors: <ul style="list-style-type: none"> ◦English to English ◦metric to metric ◦English to metric and <i>vice versa</i> • using a ruler (English & metric) • using a protractor & compass • ratios and proportions 2 (scale drawings, maps) 	4/4 4/6 4/11
Geometry: Euclidean & Cartesian↓	<ul style="list-style-type: none"> • points, lines, angles, planes & solids • formulæ (perimeter, circumference, area, volume, distance, midpoint, slope, etc) 	4/13, 4/18
Introduction to Algebra↓	<ul style="list-style-type: none"> • manipulating algebraic equations • interpreting and solving algebraic word problems 	4/20
Review↓	<ul style="list-style-type: none"> • preparation for Final • test-taking strategies 	4/25
Final‡		4/27
*no calculators permitted		
‡calculators required		
↓reducing math-anxiety exercises		

FREE classes for women will be held on Tuesday and Thursday, from 5:00 – 9:00 p.m.