TOPICS (Course Content)		Math 24 Elementary Algebra I						Math 25 Elementary Algebra II								MISSING FROM 82	MISSING FROM 73/83
	23 out of 27 topics in common among Hawaii, HCC, KCC, Kauai and WCC.	HAW	HON	KAP	KAU	WIN	LCC	HAW	HON	KAP	KAU	MAU	WIN	LCC	LCC		
	That is approximately 85% in comon!	24X	24	24	24	24	73	25X	25	25	25	25	25	82	83		
MATH 24 Elementary Algebra I																	
The real number system																	
1	Exponents, order of operations, and inequalities	X	X	X	X	X	X							X			
2	Variables, expressions and equations	X	X	X	X	X	X							X			
3	Real numbers and the number line (WinCC & KauCC include absolute value)	X	X	X	X	X	X							X			
4	Addition, subtraction, multiplication and division of real numbers	X	X	X	X	X	X							X			
5	Properties of real numbers	X	X	X	X	X	X							X			
6	Simplifying expressions	X	X	X	X	X	X							X			
Linear equations and inequalities in one variable																	
7	The addition and multiplication properties of equality	X	X	X	X	X	X							X	X		
8	An introduction to applications of linear equations	X	X	X	X	X	X							X	X		
9	Formulas and applications from geometry	X	X	X	X	X	X							X	X		
10	Applications of percent: mixture, interest	X	X	X	X	X								X			applications
11	Ratios, proportions and variations (WinCC does not cover variations)	X	X	X	X	X										applications	applications
12	The addition and muliplication properties of inequality	X	X	X	X	X	X							X	X		
13	Absolute value equations & inequalities				X											Covered system-wide in Math 103	
Linear equations in two variables																	
14	Graphing linear equations in two variables	X	X	X	X	X	X						X	X	X		
15	The slope of a line	X	X	X	X	X							X	X	X		
16	Order pairs and coordinate system	X	X	X	X	X	X							X	X		
17	Graph equations by plotting points	X	X	X	X	X	X							X	X		
Equations of lines, Inequalities																	
18	Finding equations of a line	X	X	X	X	X							X			Covered system-wide in Math 103	
19	Graphing linear inequalities in two variables	X	X	X	X	X								X			No follow-up in 103/135/140
Linear systems (WinCC does two equations in two variable only)																	
20	Solving systems of linear equations by graphing	X	X	X	X	X								X	X		
21	Solving systems of linear equations by substitution	X	X	X	X	X								X	X		
22	Solving systems of linear equations by elimination	X	X	X	X	X								X	X		
23	Applications of linear systems	X	X	X	X	X								X	X		
24	Solving systems of linear inequalities	X	X	X	X	X								X			No follow-up in 103/135/140
Introduction to Functions (WinCC)																	
25	Determine whether a relation is a function	X	(X)		X	X										Covered system-wide in Math 103	
26	Function Notation	X	(X)		X	X								X	X		
27	Find the domain & range for two kinds of relations	X	(X)		X	X										Covered system-wide in Math 103	
MATH 25 Elementary Algebra II																	
	32 out of 35 in common among Haw, HCC,KCC,Kauai,MCC and WCC																
	That is approximately 91% in common!																
Polynomials and Exponents																	
1	Adding and subtracting polynomials						X	X	X	X	X	X	X	X			
2	Rules for exponents					x	X	X	X	X	X	X	X	X	X		
3	Multiplying polynomials						X	X	X	X	X	X	X	X	X		
4	Special products						X	X	X	X	X	X	X	X	X		
5	Dividing polynomials						X	X	X	X	X	X	X	X	X		
6	Scientific notation					x	X	X	X	X	X	X	X			calculator?	
Factoring and Applications																	
7	Factors, greatest common factor						X	X	X	X	X	X	X	X	X		
8	Factor by grouping							X	X	X	X	X	X	X	X		
9	Factoring trinomials						X	X	X	X	X	X	X	X	X		
10	Factoring difference or squares						X	X	X	X	X	X	X	X	X		
11	Factoring sum and difference of cubes							X	X	X	X	X	(X)	X	X		
12	Solving quadratic equations by factoring						X	X	X	X	X	X	X	X	X		
13	Applications of quadratic equations						X	X	X	X	X	X	X	X	X		
14	Solving polynomial equations by factoring								X	X	X	X	X	X	X		
Rational Expressions																	
15	Writing expressions in lowest terms							X	X	X	X	X	X	X	X		
16	Evaluating expressions							X	X	X	X	X	X	X	X		
17	Multiplying and dividing rational expressions							X	X	X	X	X	X	X	X		
18	Finding least commom denominator							X	X	X	X	X	X	X	X		
19	Adding and subtracting rational expressions							X	X	X	X	X	X	X	X		
20	Complex fractions							X	X	X	X	X	X	X	X		
21	Solving equations with rational expressions							X	X	X	X	X	X	X	X		
22	Applications of rational equations							X	X	X	X	X	X		X	applications	
23	Excluded points							X	X	X	X	X	X	X	X		
Roots and Radicals																	
24	Evaluating roots						X	X	X	X	X	X	X	X	X		
25	Multiplying and dividing radical equations						X	X	X	X	X	X	X	X	X		
26	Adding and subtracting radical equations						X	X	X	X	X	X	X	X	X		
27	Rationalizing the denominator						X	X	X	X	X	X	X	X	X		
28	Simplifying radical expressions						X	X	X	X	X	X	X	X	X		
29	Solving radical expressions							X	X	X	X	X	X			Covered system-wide in Math 103	
30	Rational exponents								X		X		X	X	X		
31	Excluded points							X	X	X	X	X	X			Covered system-wide in Math 103	
Quadratic Equations																	
32	Solving quadratic equations by square root property						X	X	X	X	X	X	X	X	X		
33	Completing the square							X	X	X	X	X				Covered system-wide in Math 103	
34	Solving quadratic equations by quadratic formula						X	X	X	X	X	X	X	X	X		
35	Graphing quadratic equations in two variables (WinCC & Hon CC include finding the vertex & intercepts)							X	X	X	X	X	X	X	X		

Kauicc Math 25 covers additional materials
Math 24X HawCC = KapCC = Hon CC = WinCC
Math 25X HawCC = KapCC = HonCC = WinCC

OBJECTIVES (Competencies)	Math 24 Elementary Algebra I								Math 25 Elementary Algebra II							
	HAW	HON	KAP	KAU		LEE	MAU	WIN	HAW	HON	KAP	KAU		LEE	MAU	WIN
	24X	24	24	24X	24	24		24	25X	25	25	25X	25	25	25	25
MATH 24 Elementary Algebra I																
Upon successful completion of MATH 24, the student should be able to:																
Translate word phrases into algebraic expressions.																
Use the order of operations to find the value of algebraic expressions.																
Identify whole numbers, integers, rational numbers, irrational numbers, and real numbers.																
Find the absolute value, additive inverse, and multiplicative inverse of a real number.																
Perform the basic operations (add, subtract, multiply,and divide) with signed rational numbers.																
Identify the following properties: commutative, associative, identity, inverse, distributive.																
Identify terms , like terms, and numerical coefficients in a polynomial.																
Solve linear equations and inequalities in one variable.																
Solve a formula for a specified variable.																
Write and solve ratios and proportions including those from word problems.																
Plot an ordered pair and state the quadrant in which it lies.																
Graph linear equations and inequalities by point plotting, the intercept method, and the slope-intercept method.																
Write the equation of a line given two points or the slope and y-intercept or the slope and a point on the line.																
Solve linear systems of equations or inequalities in tow variables by algebraic and graphic methods.																
Use linear systems to solve word problems.																
MATH 25 Elementary Algebra II																
Upon successful completion of MATH 25, the student should be able to:																
Identify and use the laws of exponents to simplify expressions with integral exponents.																
Use scientific notation in calculations.																
Add, subtract, multiply, and divide polynomials in one or two variables.																
Factor the greatest common factor from a polynomial expression.																
Factor a polynomial of four terms by grouping.																
Factor general trinomials ax2+bx+c, where a, b, and c are integers.																
Recognize and factor the difference of two squares.																
Recognize and factor a perfect square trinomial.																
Write rational expressions in lowest terms.																
Add, subtract, multiply, and divide algebraic fractions.																
Solve equations containing rational expressions.																
Solve word problems that lead to equations containing rational expressions including indirect variation.																
Identify a given radical as rational, irrational, or not real.																
Evaluate a radical expression.																
Simplify a radical expression.																
Add, subtract, multiply, or divide radical expressions.																
Solve equations containing radicals.																
Solve word problems that lead to equations containing radical expressions.																
Solve a quadratic equation with integral coefficients by factoring.																
Solve equations of the form (ax+b)2, using the square root property of equations.																
Complete the perfect trinomial square given a partial trinomial.																
Use the quadratic formula to solve quadratic equations.																