

## TRINITY WASHINGTON UNIVERSITY

### ACADEMIC DEGREE PROGRAM: Mathematics

Program Chair: K. Luse

#### Curriculum map to PLOs

Courses Mapped to Student Learning Outcomes 2015-2016

PROGRAM LEARNING OUTCOMES								
Student who complete BS in Mathematics degree program will be able to:								
	Graph and describe properties of a variety of functions (including trigonometric, exponential, logarithmic, polynomial, and rational)	Define and apply fundamental concepts of calculus (including limits, continuity, differentiability, and integration)	Solve problems and applications in a variety of advanced mathematical courses	Use technology to enhance/complement problem solving	Apply concepts of set theory to understand and prove concepts of mathematics	Apply axiomatic approaches to the development of mathematics	Read, understand, and formulate proofs in mathematics	Communicate complex mathematics orally and in writing
Courses counting towards the Mathematics BS degree:								
Math 125: Calculus I	Introduced	Introduced	Introduced					
Math 225: Calc II	Developed	Developed	Introduced					

	Graph and describe properties of a variety of functions (including trigonometric, exponential, logarithmic, polynomial, and rational)	Define and apply fundamental concepts of calculus (including limits, continuity, differentiability, and integration)	Solve problems and applications in a variety of advanced mathematical courses	Use technology to enhance/complement problem solving	Apply concepts of set theory to understand and prove concepts of mathematics	Apply axiomatic approaches to the development of mathematics	Read, understand, and formulate proofs in mathematics	Communicate complex mathematics orally and in writing
Math 301: Linear Algebra			Developed					Introduced
Math 315: Math. Prob. and Stats			Developed					Introduced
Math 325: Multi-variable Calculus	Mastered	Mastered	Introduced					Introduced

	Graph and describe properties of a variety of functions (including trigonometric, exponential, logarithmic, polynomial, and rational)	Define and apply fundamental concepts of calculus (including limits, continuity, differentiability, and integration)	Solve problems and applications in a variety of advanced mathematical courses	Use technology to enhance/complement problem solving	Apply concepts of set theory to understand and prove concepts of mathematics	Apply axiomatic approaches to the development of mathematics	Read, understand, and formulate proofs in mathematics	Communicate complex mathematics orally and in writing
Math 327: Differential Equations			Developed					Introduced
Math 331: Intro to Abstract Math					Introduced		Introduced	Developed
Math 371: History of Mathematics							Developed	Developed

	Graph and describe properties of a variety of functions (including trigonometric, exponential, logarithmic, polynomial, and rational)	Define and apply fundamental concepts of calculus (including limits, continuity, differentiability, and integration)	Solve problems and applications in a variety of advanced mathematical courses	Use technology to enhance/complement problem solving	Apply concepts of set theory to understand and prove concepts of mathematics	Apply axiomatic approaches to the development of mathematics	Read, understand, and formulate proofs in mathematics	Communicate complex mathematics orally and in writing
Math 403: Abstract Algebra I					Developed	Introduced	Developed	Developed
Math 431: Real Analysis I					Mastered	Developed	Mastered	Developed
Math 435: Geometry				Developed	Mastered	Developed	Mastered	Developed
CMSC 111: Intro to computer programming				Introduced				
Math 499: Senior Seminar							Mastered	Mastered

