Sonoma State University
Department of Mathematics and Statistics

Updated 12.12.22 rc

Name _____

PROGRESS TOWARD COMPLETION OF MAJOR
B.A. with concentration in Pure Mathematics

Prerequisites and semesters offered follow the course. S=Spring; F=Fall; every semester if not listed.

Required Courses

Core:		**Met**	**Do**
Math 161 – Differential and Integral Calculus I (GE B4)	4		
Math 180 – Computing for Math/Science (161; F)	2		
Math 211 – Differential and Integral Calculus II (161)	4		
Math 220 – Reasoning and Proof (161 and (one subsequent math class or CS 242));	4		
Math 241 – Linear Algebra with Applications in Differential Equations (211)	4		
Math 340 – Real Analysis I (220 and (241 or 261); F)	4		
Concentration:			
Math 261 – Multivariable Calculus (211)	4		
Math 306 – Number Theory (142 or 220; S) **or** Math 308 – Geometry (142 or 220; S)	4		
Math 320 – Abstract Algebra I (220; F)	4		
Math 322 – Linear Algebra (220 and 241; S)	4		
Two of:			
Math 440 – Real Analysis II (340; S odd years)	4		
Math 418 – Topology (340; S odd years)	4		
Math 460 – Complex Analysis (261 and 340; S even years)	4		
Math 420 – Abstract Algebra II (320; S even years)	4		

Total units in pure mathematics program **46 (incl. 8 in GE)**

NOTE: Even though it is possible to complete this major with only 24 upper division units, **ALL** students are required to complete a **minimum of 40 upper division units,** including GE, the major, and electives, for graduation.