

## Mathematics and Statistics Multi-Year Course Rotation for Fall 2023/Spring 2024 and Beyond

<i>Course Number</i>	<i>Course Name</i>	<i>Concentration Requirement</i>	<i>Odd Fall</i>	<i>Even Spring</i>	<i>Even Fall</i>	<i>Odd Spring</i>	<i>Summer</i>
MATH 1010/1010E	Mathematics for Society		X	X	X	X	X
MATH 1110	Algebraic Problem Solving		X	X	X	X	
MATH 1200	Intro to Actuarial Science			X		X	
MATH 1234	Honors Seminar in Mathematics		X		X		
MATH 1410	Structure of Mathematical Systems I		X	X	X	X	X
MATH 1420	Structure of Mathematical Systems II		X	X	X	X	X
MATH 1530/1530E	Elements of Statistics		X	X	X	X	X
MATH 1530H	Element sof Statistics Honors			X		X	
MATH 1550	Statistics and Probability for K-8 Teachers		X	X	X	X	
MATH 1710/1710E	Precalculus Algebra		X	X	X	X	X
MATH 1730	Precalculus		X	X	X	X	X
MATH 1810	Elements of Calculus I		X	X	X	X	
MATH 1910	Calculus I	All	X	X	X	X	X
MATH 1910H	Calculus I Honors		X		X		
MATH 1920	Calculus II	All	X	X	X	X	X
MATH 1920H	Calculus II Honors			X		X	
MATH 2110	Calculus III	All	X	X	X	X	
MATH 3000	Discrete Mathematics	Math Ed		X		X	X
MATH 3010	Introduction to Mathematical Reasoning	All	X	X	X	X	X
MATH 3120	Differential Equations I	Math-Pure and Applied		X		X	
MATH 3130	Differential Equations II	Math-Applied	X		X		
MATH 3450	Linear Algebra	All		X		X	X
MATH 3630	College Geometry	Math Ed		X		X	
MATH 4010*	History of Mathematics	Math Ed		X		X	
MATH 4020	Geometry for Elem. And M.S. Teachers		X		X		
MATH 4030	Problem Solving for Elem. and M.S. Teachers			X		X	
MATH 4100	Teaching Math in Grades K-3		X	X	X	X	
MATH 4110*	Number Theory	Math-Pure, Math Ed	X		X		
MATH 4130*	Financial Mathematics	Act Sci		X		X	
MATH 4140*	Financial Derivatives and Investment Markets	Act Sci	X		X		
MATH 4150	Teaching Math in Grades 4-6		X	X	X	X	
MATH 4160*	Complex Analysis		X				
MATH 4180	Actuarial Mathematics I: Short Term		X		X		
MATH 4200	Math Content and Pedogogy for M.S.	Math Ed		X		X	
MATH 4210*	Topology				X		
MATH/STAT 4240*	Probability	All	X		X		X

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MATH/STAT 4260*	Stochastic Processes		X	X	X	X		
MATH 4280	Actuarial Mathematics II: Long Term			X		X		
MATH 4310*	Machine Learning		X		X			
MATH 4320	Advanced Machine Learning			X		X		
MATH 4321	Intro to Symbolic Computation	Data Science	X	X	X	X		
MATH 4400	Teaching of Secondary School Mathematics	Math Ed	X		X			
MATH 4450*	Mathematical Models	All	X		X			
MATH 4460*	Applied Mathematics	Math-Applied		X		X		
MATH 4500*	Modern Algebra	Math-Pure, Math Ed		X				
MATH 4670*	Numerical Analysis	Math-Applied	X	X	X	X		
MATH 4710*	Real Analysis	Math-Pure				X		
MATH/STAT 4810	Senior Seminar	All	X	X	X	X		
MATH 490H	Ind. Study with High Impact Practices	<b>Offered as needed or requested</b>						
MATH 4900	Selected Topics							
MATH 4910	Topics in Mathematics							
MATH 4950	Special Problems							
STAT 3250	Statistical Methods	Math Ed, Stats, Act Sci	X	X	X	X		
STAT 4120*	Regression Analysis	Stats, Act Sci		X		X	X	
STAT 4125*	The Generalized Linear Model			X		X		
STAT 4130*	Experimental Design	Stats	X		X			
STAT 4140*	Time Series Analysis	Act Sci	X		X			
STAT 4170*	Data Visualization and Exploration	Data Science	X		X			
STAT 4200*	SAS Programming			X		X	X	
STAT 4250*	Mathematical Statistics	Math-Applied, Stats, Act Sci		X				
STAT 4270*	Nonparametric Statistics		X					
STAT 4290*	Predictive Analytics			X		X		

\* Course can be taken by graduate students at the 5000-level