

## Tentative Mathematics Offerings: Fall, 2023 through Spring, 2025

Updated February, 2023

	Course	Course Name	Core prereq 2000/2020		Fall '23	Spring '24	Fall '24	Spring '25	
Introductory statistics	Math 1300	Biostatistics			1	1	1	1	
	Math 1400	Scientific statistics			1			1	
Calculus	Math 1600	Differential calculus			1	1	1	1	
	Math 1700	Integral calculus			2	1	2	1	
	Math 1750	Intermediate integral calculus			1	1	1	1	
	Math 1800	Multivariate calculus			3	2	3	2	
Core major courses	Math 2000	Linear algebra			2	2	2	2	
	Math 2020	Math reasoning			2	2	2	2	
Algebra and applications	Math 2301	Intermediate Linear Algebra	✓	✓			1		
	Math 2502	Cryptography	✓	✓	1			1	
	Math 2602	Groups	✓	✓			1		
	Math 3602	Advanced groups	✓	✓				1	
	Math 2702	Rings and fields	✓	✓	1				
	Math 3702	Advanced rings	✓	✓		1			
Analysis	Math 2303	Complex analysis				1			
	Math 3303	Advanced complex analysis	✓	✓			1		
	Math 2603	Analysis	✓			1	1		
	Math 3603	Advanced analysis	✓	✓				1	
Geometry and topology	Math 2404	Geometry	✓			1			
	Math 3204	Topology	✓	✓					
	Math 3404	Advanced geometry	✓	✓	1				
Statistics and machine learning	Math 2606	Statistics				1		1	
	Math 2805	Machine learning	✓	✓			1		
	Math 3606	Advanced statistics	✓	✓	1	1			
Combinatorics and probability	Math 2601	Combinatorics	✓	✓					
	Math 2206	Probability			1		1	1	
Differential equations and modeling	Math 1808	Biomathematics						1	
	Math 2208	Differential equations	✓		1	1	1	1	
	Math 3108	Advanced modeling	✓	✓		1			
	Math 3208	Advanced dynamics	✓	✓			1		
	Math 3209	Partial differential equations	✓	✓				1	
Operations research	Math 2109	Optimization	✓					1	
	Math 2209	Numerical methods	✓			1			
	Math 3109	Optimal control	✓	✓	1				
Please refer to the Bowdoin course catalogue for prerequisites other than Math 2000 and Math 2020. The Mathematics Department reserves the right to make schedule changes as needed.									
					Introductory	9	6	8	7
					Core	4	4	4	4
					Major	7	9	8	9
					Overall	20	19	20	20