

SCHEDULE of COURSE OFFERINGS, POST-CALCULUS, UPPER LEVEL, and MATH HONORS

Like all academic departments, Mathematics determines its course schedule for each individual semester based on predicted need, funding, faculty availability, and classroom considerations. Therefore the timing and frequency for some courses are not rigidly fixed. The table below includes some of the most commonly taken courses and the standard semesters in which they are usually offered. PC indicates post-calculus, and U indicates upper level.

Course Number & Title			Fall	Spring	Summer
MATH:0100	Basic Algebra I		✓	✓	✓
MATH:0300	Basic Geometry		✓	✓	✓
MATH:1000	First Year Seminar		✓	✓	
MATH:1005	College Algebra		✓	✓	✓
MATH:1010	Trigonometry		✓	✓	
MATH:1020	Elementary Functions		✓	✓	✓
MATH:1120	Logic of Arithmetic		✓	✓	
MATH:1130	Theory of Arithmetic		✓		
MATH:1140	Geometry for Elementary Teachers		✓	✓	✓
MATH:1240	Finite Mathematics			✓	
MATH:1340	Mathematics for Business		✓	✓	✓
MATH:1350	Quantitative Reasoning for Business		✓	✓	✓
MATH:1440	Math for the Biological Sciences		✓	✓	✓
MATH:1460	Calculus for the Biol. Sciences		✓	✓	✓
MATH:1550	Engineering Math I: Single-Var. Calc.		✓	✓	✓
MATH:1560	Eng. Math II: Multi-Variable Calculus		✓	✓	
MATH:1850	Calculus I		✓	✓	✓
MATH:1860	Calculus II		✓	✓	✓
MATH:2150	Foundations of Geometry	PC		✓	
MATH:2550	Eng. Math III: Matrix Algebra	PC	✓	✓	✓
MATH:2560	Eng. Math IV: Differential Equations	PC	✓	✓	✓
MATH:2700	Introduction to Linear Algebra	PC	✓	✓	✓
MATH:2850	Calculus III	PC	✓	✓	
MATH:2995	Introduction to Research Opportunities	PC		✓	
MATH:3550	Eng. Math V: Vector Calculus	PC	✓	✓	
MATH:3600	Intro. to Ordinary Diff. Equations	PC	✓	✓	✓
MATH:3720	Introduction to Abstract Algebra	PC	✓	✓	✓
MATH:3770	Fund. Props. Spaces & Functions I	PC	✓	✓	
MATH:3800	Elementary Numerical Analysis	PC	✓	✓	✓
MATH:4120	History of Mathematics	PC	✓	✓	✓

NOTE: MATH: 3700, 3750, 4010, and 4020 require graduate standing, and duplicate some undergraduate courses. Hence, they are not open to undergraduate students. MATH:3995-3997 are not listed, since they have variable topics and some are individual studies with instructors. None of these 7 courses are considered post-calculus or upper level for undergraduates.

Many upper-level courses numbered 3900, 4000-4900 are offered only once per year.
 PC indicates post-calculus, U indicates upper level, and H indicates eligible for Math Honors.
 Check ISIS for the alternate prerequisites using Engineering Math courses in the tables below.

Course Number & Title			Fall	Spring	Prerequisites
MATH 3900	Introduction to Math Research	PC, U		✓	MATH:1860 & 2700
MATH:4040	Matrix Theory	PC, U		✓	MATH:2700
MATH:4050	Introduction to Discrete Mathematics	PC, U	✓		MATH:1860 & 2700
MATH:4060	Discrete Mathematical Models	PC, U		✓	MATH:2700
MATH:4080	Elementary Theory of Numbers	PC, U	✓		MATH:1860 & 2700
MATH:4090	A Rigorous Intro. to Abstract Algebra	PC, U, H		✓	MATH:3720
MATH:4200	Complex Variables	PC, U	✓		MATH:2850
MATH:4210	Foundations of Analysis	PC, U, H		✓	MATH:3770
MATH:4250	Introduction to Financial Mathematics	PC, U	✓		MATH:2850 or STAT:3120
MATH:4500	Intro. to Differential Geometry I	PC, U	✓		MATH:2850 & 2700
MATH:4510	Intro. to Differential Geometry II	PC, U		✓	MATH:4500
MATH:4610	Continuous Mathematical Models	PC, U	✓		MATH:3600
MATH:4740	Large Data Analysis	PC, U			MATH:2700, CS:1210 & STAT:2010 or 2020
MATH:4820	Optimization techniques	PC, U		✓	MATH:2700, 2850 & 3800

All first year math graduate courses are open to advanced undergraduates. Please make sure to talk to your advisor and the instructor before you register for these courses.

Course Number & Title			Fall	Spring	Prerequisites
MATH:5000	Abstract Algebra I	PC, U, H	✓		MATH:3720 or 4090
MATH:5010	Abstract Algebra II	PC, U, H		✓	MATH:5000
MATH:5200	Introduction to Analysis I	PC, U, H	✓		MATH:3770 or 4210
MATH:5210	Introduction to Analysis II	PC, U, H		✓	MATH:5200
MATH:5400	General Topology	PC, U, H	✓		MATH:3770 or 4210
MATH:5410	Introduction to Smooth Manifolds	PC, U, H		✓	MATH:2700, 2850 & 5400
MATH:5600	Nonlinear Dynamics with Num. Met.	PC, U, H	✓		MATH:3600 & (MATH:3770 or 4210)
MATH:5700	Partial Diff. Equations with Num. Meth.	PC, U, H		✓	MATH:2850 & 3600 & (MATH:3770 or 4210)
MATH:5800	Num. Analy.: Nonlinear Eq. Approx. Th	PC, U, H	✓		MATH:2700 & 2850
MATH:5810	Num. Analy.: Diff Eq. & Linear Algeb.	PC, U, H		✓	MATH:2700, 2850 & 3600

This is not a complete list of MATH courses. The courses MATH:5900 or higher are not included, since they are primarily for graduate students.