

## Road Map B.S. in Mathematics: Pure Mathematics option

YEAR 1: FALL			YEAR 1: SPRING		
COURSE	UNITS	PREREQ	COURSE	UNITS	PREREQ
MATH 75 (LD GE B4) <sup>0</sup>	4	CRT/ALEKS PPL	MATH 76	4	MATH 75/(75A&B)
CSCI 40	4	MATH 75 (Conc. OK)	MATH 101 or Free/MATH Elective <sup>2</sup>	3/4	MATH 75/(75A&B) See table below
LD GE A1	3		PHYS 4A/4AL (B1/ B3) <sup>0</sup>	4	MATH 76 (Conc. OK)
LD GE A3	3		LD GE E	3	
<b>TOTAL UNITS</b>	14	(9 GE)	<b>TOTAL UNITS</b>	14/15	(7 GE)

YEAR 2: FALL			YEAR 2: SPRING		
COURSE	UNITS	PREREQ	COURSE	UNITS	PREREQ
MATH 77	4	MATH 76	MATH 81	3	MATH 77
MATH 111	4	MATH 76	MATH Elective <sup>2</sup> or 101	3/4	See table below
MATH Elective <sup>2</sup> or 107	3/4	See table below	LD GE B2	3	
LD GE A2	3		LD GE C1	3	
			HIST 11 or 12 (D1)	3	
<b>TOTAL UNITS</b>	14/15	(3 GE)	<b>TOTAL UNITS</b>	15/16	(9 GE)

YEAR 3: FALL			YEAR 3: SPRING		
COURSE	UNITS	PREREQ	COURSE	UNITS	PREREQ
MATH 152 <sup>1</sup>	4	MATH 77	MATH 151 <sup>1</sup>	4	MATH 111
MATH Elective <sup>2</sup>	3/4	See table below	MATH 191T (in Pure Math)	1	MATH 111 and 152 (Math 152 conc. OK)
LD GE C2	3		MATH Elective <sup>2</sup>	3/4	See table below
LD GE C1/C2	3		LD GE D3	3	
PL SI 2 (D2)	3		FREE Elective	4	
<b>TOTAL UNITS</b>	16/17	(9 GE)	<b>TOTAL UNITS</b>	15/16	(3 GE)

YEAR 4: FALL			YEAR 4: SPRING		
COURSE	UNITS	PREREQ	COURSE	UNITS	PREREQ
MATH 171 <sup>1</sup>	4	MATH 111	MATH Elective <sup>2</sup>	3/4	See table below
Math 198	3	MATH 151, 152, 171	UD GE IB	3	
Free Elective	3		UD GE IC	3	
UD GE ID <sup>0</sup>	3		Free Elective	4	
UD GE MI <sup>0</sup>	3		Free Elective	3	
<b>TOTAL UNITS</b>	16	(6 GE)	<b>TOTAL UNITS</b>	16/17	(6 GE)

<sup>0</sup>3 units of MATH 75 (or MATH 75A) also will satisfy the G.E. Foundation B4 requirement.

<sup>0</sup>PHYS 4AL is not required for this option in the math major. If students wish to include PHYS 4A as a General Education Breadth course, they must also take PHYS 4AL.

<sup>0</sup>Consider taking ANTH 105W (UD GE MI) or ANTH 116W (UD GE ID) to satisfy your upper division Writing Skills Requirements.

<sup>1</sup> It is suggested to take MATH 81 before taking MATH 152.

<sup>1</sup> It is suggested to take MATH 152 and/or MATH 116 before taking MATH 151.

<sup>1</sup> It is suggested to take MATH 161, 128 and/or 165 before taking MATH 171.

<sup>1</sup> It is suggested to take MATH 152 before taking MATH 165.

<sup>2</sup> The following table summarizes the MATH ELECTIVES of the PURE MATH option. Choose MATH 107 or MATH 114; MATH 128 or MATH 172; MATH 161 or MATH 165; MATH 191T, MATH 198, plus one additional MATH elective\*.

Course Number	Course Title	Prereq	Semester
MATH 107	Mathematical Statistics	MATH 77 (concurrently OK)	Fall only
MATH 114	Discrete Structure	MATH 111	Fall only
MATH 128	Applied Complex Analysis	MATH 77	Fall only
MATH 161	Principles of Geometry	MATH 111	Spring only
MATH 165 <sup>1</sup>	Differential Geometry	MATH 77 and MATH 111	Fall only
MATH 172	Intermediate Mathematical Analysis II	MATH 77 and MATH 171	Spring only
MATH 191T	Junior Seminar in Pure Mathematics	MATH 111 and 152 (Math 152 conc. OK)	Spring only
MATH 198	Senior Project	MATH 151, 152, 171	
One Math Elective*			

\*One 3-4 unit mathematics course, upper division or graduate, excluding MATH 100, 133, 134, 137, 138, 139. Special conditions apply for graduate courses; see department advisor. **Students should meet with their academic advisor every semester.**