

MATHEMATICS – Applied Option BS (122 hours) Effective 2016		
NAME	PID	Optional 2 nd Major or Minor

FOUNDATIONS

English Comp. and Rhetoric	Foreign Language* HSFL(s) _____	Quant. Reas. (QR)	Lifetime Fitness (LFT)
	1. _____	3. _____	(1 hr.)
	2. _____	4. _____	

* Through Level 3

APPROACHES

Phys. and Life Sciences (PX/PL)	Social and Behavioral Sciences**	Humanities/Fine Arts
	Hist. Analysis (HS):	Vis. & Perf. Arts (VP):
	Soc.Sci./Hist. Analysis (SS/HS):	Literary Arts (LA):
PHYS 104 or 114 or 116 or 118 †	Soc.Sci./Hist. Analysis (SS/HS):	Phil. Reasoning (PH):

**From at least two different departments

CONNECTIONS

Communication Int. (CI)	Quant. Int. (QI) or 2nd Quant. Reas. (QR)	Experiential Ed. (EE)	Global Issues (GL)
	MATH 232 or 283		
US Diversity (US)	North Atlantic World (NA)	World before 1750 (WB)	Beyond the NA (BN)

MAJOR/MINOR/ELECTIVES

ADDITIONAL REQUIREMENTS	MATHEMATICS (Applied) ♦ Core Requirements (10 Courses)			
MATH 231 or 241	COMP 110 or 116			
MATH 232 or 283	MATH 381*			
MATH 233	MATH 383			
PHYS 104 or 114 or 116 or 118 †	MATH 521			
PHYS 105 or 117 †	Five of MATH 522, 523, 524, 528, 529, 535, 548, 564, 566, 661, or 668. with at least three from 528, 529, 564, 566, 661, or 668.			
Non-MATH Natural Sciences (#)				
1. _____				
2. _____				
3. _____	MATH 547 or 577			
4. _____				
		♦ 18 hours ≥ C (not C-) required in MATH courses numbered above 520. † If taking PHYS 104, must also take PHYS 105; if taking PHYS 116, must also take PHYS 117. PHYS 114 and 118 do not require an additional PHYS course. PHYS 118 highly recommended. (#) Four or more courses in the Division of Natural Sciences and Mathematics, (beyond the General Education requirements) but not taken in the Mathematics department. STOR 555 can be counted for this requirement. *A current/former major in Mathematical Decision Sciences may substitute STOR 215 for MATH 381. MATH 535/STOR 435 and STOR 555 are strongly recommended.		

Remaining courses after this term:	Hours to be deducted:	Hours Tally:	Notes:
____ Foundations _____	Repeated courses _____	Hours to date: _____	
____ Approaches _____	HSFL _____	Hours in progress _____	
____ Connections _____	Online courses > 24 _____	Pending Study Abroad* _____	
____ Supplemental _____	Other _____	Subtotal _____	
____ (hrs C _____) _____	Professional School > 30 _____	Hours deducted _____	
____ (hrs C _____) _____	Hours in subject (BA) > 45 _____	Hours after this term _____	
____ (hrs C _____) _____	Total _____	Hours remaining to grad _____	
Requirements subtotal _____		Semesters left _____	
Total _____			
		<i>*Pending study abroad hours may differ from hours earned.</i>	

This tally assumes successful completion of presently enrolled courses (not AB or IN), and it does not account for all possible overlaps

Graduate and Career Opportunities

B.A. or B.S. degree with a major in mathematics, suggestions for pure mathematics:

These courses provide a solid theoretical understanding of central mathematics and excellent preparation for graduate study in mathematics or the mathematical sciences.

- MATH 521 and 522
- MATH 577 and 578
- Enough upper-level mathematics courses to satisfy the degree requirements

Those planning graduate study in mathematics or the mathematical sciences may consider taking some of MATH 653, 676, 680, or subsequent courses.

B.S. degree with a major in mathematics, suggestions for mathematical biology:

For students interested in careers or further study in mathematical life sciences.

- BIOL 101 and CHEM 101 or CHEM 102
- At least one of BIOL 201, 202, 205
- At least two of BIOL 452, 454, 526, 551
- MATH 521
- One of MATH 522, 523, 528, 566
- One of MATH 534, 548, 578
- MATH 547 or 577
- Three or more mathematics courses numbered above 500. Consider especially MATH 524, 529, 535, and 564

B.A. degree with a major in mathematics, suggestions for mathematical economics:

Suitable for students planning to go on to graduate school in economics or a related area, or pursue a career in economics, business, or finance. *Note: With three more ECON courses numbered above 400, the requirements for the B.A. in economics could also be satisfied.*

- ECON 101, 410, 420
- At least two of ECON 510, 511, 520, 570
- MATH 521
- At least three of MATH 522, 524, 535, 550, 555, 564, 565
- Either MATH 535/STOR 435 and STOR 555, or ECON 400 and 570
- MATH 547 or 577

B.A. degree with a major in mathematics, suggestions for future high school teachers:

- MATH 231 or 241, 232 or 283, 233, 381, and 383
- At least one of MATH 515, 534, 535, 548, 550
- MATH 521
- MATH 533
- MATH 547 or 577
- MATH 551
- STOR 155
- The Supplemental General Education requirement
- Eighteen hours of C or better (not C-) in MATH 233, 381, 383, or MATH courses numbered above 500