

MATHEMATICS – Applied Option BS (122 hours) Effective 2017		
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.	MATH 231 or 241	(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, 668, the full sequence of MATH 383L, MATH 528L, and MATH 529L			
Non-MATH Natural Sciences (#)		♦ 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 here. MATH 535/STOR 435 and STOR 555 are strongly recommended. *A current/former major in statistics and analytics (mathematical decision sciences) may substitute STOR 215 for MATH 381.		
1.				
2.	† with at least three from 528, 529, 564, 566, 661, 668, the full sequence of 383L+528L+529L			
3.	MATH 547 or 577			
4.				

Remaining courses after this term: ____ Foundations ____ Approaches ____ Connections ____ Supplemental ____ (hrs C ____) ____ (hrs C ____) ____ (hrs C ____) Requirements subtotal ____ Total	Hours to be deducted: Repeated courses HSFL Online courses > 24 Other Professional School > 30 Hours in subject (BA) > 45 Total	Hours Tally: Hours to date: Hours in progress Pending Study Abroad* Subtotal Hours deducted Hours after this term Hours remaining to grad Semesters left <i>*Pending study abroad hours may differ from hours earned.</i>	Notes:
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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
- MATH 522
- MATH 577
- MATH 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 454, 526, 551, 553
- 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