MATHEMATICS – Applied Option BS (122 hours)   Effective 2017-2021

NAME	PID	Optional 2nd Major or Minor

FOUNDATIONS

English Comp. and Rhetoric	Foreign Language*		Quant. Reas. (QR)	Lifetime Fitness (LFIT)
	1.	3.	**MATH 231**	(1 hr.)
	2.	4.		

* Through Level 3

APPROACHES

Phys. and Life Sciences (PX/PL)	Social and Behavioral Sciences**	Humanities/Fine Arts
PHYS 104 or 114 or 116 or 118 †	Hist. Analysis (HS):	Vis. & Perf. Arts (VP):
	Soc.Sci../Hist. Analysis (SS/HS):	Literary Arts (LA):
	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		
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	COMP 110 or 116			
MATH 232	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 (check co-and pre-reqs for 383L, 528L, and 529L)			
Non-MATH Natural Sciences (#)				
1.				
2.	**⌧ At least three from 528, 529, 564, 566, 661, 668, the full sequence of 383L+528L+529L**	♦*2.0 OR HIGHER GPA REQUIRED IN MAJOR AND MINOR CORE COURSES* † If taking PHYS 104, must also take PHYS 105; if taking PHYS 116, must also take PHYS117. PHYS 114 and 118 do not require an additional PHYS course. PHYS 118 highly recommended.		
3.				
4.	MATH 347/547* or 577	(#) 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.**		

* Linear Algebra is now MATH 347. Was MATH 547 prior to Fall 2020.

**A current/former major in statistics and analytics (mathematical decision sciences) may substitute STOR 215 for MATH 381.

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 _____	
____ _____	Professional School > 30 _____	Hours deducted _____	
____ _____	Hours in subject (BA) > 45 _____	Hours after this term _____	
____ _____	Total _____	Hours remaining to grad _____	
Requirements subtotal _____		Semesters left _____	
____ _____			
Total _____		**Pending study abroad hours may differ from hours earned.*	

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

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Graduate and Career Opportunities

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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 347/547* or 577
• Three or more mathematics courses numbered above 500. Consider especially MATH 524, 529, 535, and 564

May 11, 2020