2015

B.S. in Mathematics 2015 curriculum

Nova Southeastern University

FARQUHAR COLLEGE OF ARTS AND SCIENCES
DEGREE CURRICULUM SHEET | 2015 CATALOG
Bachelor of Science - Mathematics

GENERAL EDUCATION REQUIREMENTS		
Area/Course	**Credits**	**Frequency**
Written Composition		
6 credits at or above COMP 1500		
Open Written Communication	3	
Open Written Communication	3	
Mathematics		
6 credits at or above MATH 1040		
satisfied by Major	3	
satisfied by Major	3	
Arts & Humanities		
6 credits in HIST, ARTS, PHIL, HUMN, LITR, THEA, FILM, MUSC, DANC, WRIT, foreign language		
Open Arts & Humanities	3	
Open Arts & Humanities	3	
Social & Behavioral Sciences		
6 credits in PSYC, SOCL, ANTH, ECN, COMM, GEOG, GEST, INST, POLS		
Open Social & Behavioral Sciences	3	
Open Social & Behavioral Sciences	3	
Science		
6 credits in BIOL, MBIO, CHEM, SCIE, ENVS, PHYS		
satisfied by Major	3	
satisfied by Major	3	
Total General Education Credits	**30**	

MAJOR			
Course		**Credits**	**Frequency**
MATH 2100 Calculus I		4	FW
MATH 2200 Calculus II		4	FW
MATH 2500 Introduction to Advanced Mathematics	*or*	3	WO
CSIS 2050 Discrete Mathematics		3	FW
MATH 3200 Calculus III		4	F
MATH 3300 Introductory Linear Algebra		3	FW
MATH 3400 Ordinary Differential Equations		3	W
MATH 4050 Advanced Calculus I	*or*	3	FE
MATH 4350 Abstract Algebra I		3	FO
MATH 4060 Advanced Calculus II	*or*	3	WO
MATH 4360 Abstract Algebra II		3	WE
Laboratory Science	*Select 8 credits from the following:*		
CHEM 1300 General Chemistry I/Lab		4	FW
CHEM 1310 General Chemistry II/Lab		4	FW
CSIS 2101 Fundamentals of Computer Programming		4	FW
CSIS 3101 Advanced Computer Programming		4	FW
PHYS 2350 General Physics I/Lab		4	FW
PHYS 2360 General Physics II/Lab		4	FW
PHYS 2400 Physics I/Lab		4	FW
PHYS 2500 Physics II/Lab		4	FW
Total Major Credits		**35**	

MAJOR ELECTIVES		
Course	**Credits**	**Frequency**
Select 18 credits of eligible MATH courses at the 3000 or higher level.		
The eligible courses include (but are not limited to) the following:		
MATH 3050 Mathematics and Biology	3	FO
MATH 3260 Combinatorics	3	WE
MATH 3270 Logic	3	WO
MATH 3340 Linear Algebra II	3	WE
MATH 3350 Number Theory	3	WO
MATH 3450 Elementary Differential Geometry	3	WE
MATH 3900 History of Mathematics	3	WE
MATH 4050 Advanced Calculus I*	3	FE
MATH 4060 Advanced Calculus II*	3	WO
MATH 4100 Introduction to Topology	3	WE
MATH 4200 Complex Variables	3	WO
MATH 4300 Numerical Methods	3	WE
MATH 4350 Abstract Algebra I*	3	FO
MATH 4360 Abstract Algebra II*	3	WE
MATH 4400 Partial Differential Equations	3	FO
MATH 4450 Basic Probability	3	WE
MATH 4500 Probability and Statistics	3	F
MATH 4600 Introduction to Applied Mathematics	3	FO
MATH 4700 Applied Cryptography	3	WE
MATH 4900 Special Topics in Mathematics	3	I
MATH 4950 Internship in Mathematics	1-12	W
MATH 4990 Independent Study in Mathematics	1-3	FW
NOTE: The following courses are excluded for credit toward the major:		
MATH 3030 Applied Statistics II		
MATH 4020 Applied Regression Analysis		
MATH 4040 Applied Multivariate Statistical Analysis		
MATH 4080 Introduction to Statistical Computations		
Total Major Elective Credits	**18**	

OPEN ELECTIVES	
take 49 elective credits	49
Total Open Electives Credits	**49**

**Can be counted only once, either as a core course or as a major elective.*

Frequency Key: F-Every Fall; W-Every Winter; FO - Odd Year Fall; FE - Even Year Fall; WO - Odd Year Winter; WE - Even Year Winter

TOTAL CREDITS: 120

last modified 8.2014

FARQUHAR COLLEGE OF ARTS AND SCIENCES
SAMPLE FOUR YEAR CURRICULUM | 2015 CATALOG
Bachelor of Science - Mathematics

Freshman Year			
Fall		**Winter**	
Course	Credits	Course	Credits
Open Written Communication	3	Open Written Communication	3
Open Arts & Humanities	3	Open Arts & Humanities	3
MATH 2100 Calculus I	4	MATH 2200 Calculus II	4
Open Elective	3	MATH 3300 Introductory Linear Algebra	3
		Open Elective	3
Total Credits	**13**	**Total Credits**	**16**
Sophomore Year			
Fall		**Winter**	
Course	Credits	Course	Credits
Open Social & Behavioral Sciences	3	Open Social & Behavioral Sciences	3
Laboratory Science Course	4	Laboratory Science Course	4
CSIS 2050 Discrete Mathematics*	3	MATH 3400 Ordinary Differential Equations	3
MATH 3200 Calculus III	4	Open Elective	3
Open Elective	3	Open Elective	3
Total Credits	**17**	**Total Credits**	**16**
Junior Year			
Fall		**Winter**	
Course	Credits	Course	Credits
MATH 4050 Advanced Calculus I**	3	MATH 4060 Advanced Calculus II***	3
Major Elective	3	Major Elective	3
Open Elective	3	Open Elective	3
Open Elective	3	Open Elective	3
Open Elective	3	Open Elective	3
Total Credits	**15**	**Total Credits**	**15**
Senior Year			
Fall		**Winter**	
Course	Credits	Course	Credits
Major Elective	3	Major Elective	3
Major Elective	3	Major Elective	3
Open Elective	3	Open Elective	3
Open Elective	4	Open Elective	3
		Open Elective	3
Total Credits	**13**	**Total Credits**	**15**

TOTAL CREDITS: 120

**This requirement may also be fulfilled by completing MATH 2500 Introduction to Advanced Mathematics, which is offered Odd Year Winter.*
***This requirement may also be fulfilled by completing MATH 4350 Abstract Algebra I, which is offered Odd Year Fall.*
****This requirement may also be fulfilled by completing MATH 4360 Abstract Algebra II, which is offered Even Year Winter.*

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