



B.S. in Mathematics
Applied Mathematics
MATHBS-MATHAPPL.2014
48-50 credits

Effective Date: 9/2014

Name of Student:		
Student ID #:		Graduation Date
Home Country:	<input type="checkbox"/> IWORK	
Advisor:	Name	Date

The Applied Mathematics track prepares students for careers in government service, industry, areas of research, or gradated study in other fields other than pure mathematics.

Core Requirements **27 Credits**

Course #	Title	Hr.	Prerequisites	Offered	Sem.	Grade
MATH 112	Calculus I	5		F,W,S		
MATH 113	Calculus II	5	MATH 112	F,W		
MATH 214	Multivariable Calculus	5	MATH 113	W,S		
MATH 221	Principles of Statistics	3	MATH 107 or 110	F,W,S		
MATH 301	Foundations of Mathematics	3	MATH 112	F-even, W-even, S-odd		
MATH 334	Differential Equations	3	MATH 214	W-even, S-odd		
MATH 343	Elementary Linear Algebra	3	MATH 112	F-odd, W-odd, S-even		

Applied Cluster (Each student will take a set of courses from one of the following clusters) **12-14 Credits**

PHYS 121/L	General Physics I/Lab	4	MATH 112 and either High School Trigonometry or MATH 111	F,W		
PHYS 220/L	General Physics II/Lab	4	PHYS 121 and completion of MATH 113 recommended	F,W		
PHYS 221/L (mrs 1058)	General Physics III/Lab	4	PHYS 121 and completion of MATH 113 recommended	S		
MATH 321	Mathematical Statistics	3	MATH 214	F		
PSYC 205	Applied Social Statistics	3	PSYC 111 and MATH 107 or equivalent or MATH 110 or equivalent	F,S		
PSYC 305	Social Research Methods	4	PSYC 205	F,W,S		
PSYC 405 (mrs 1157)	Multivariate Statistics	3	PSYC 205 or Permission of Instructor	Variable		
MATH 321	Mathematical Statistics	3	MATH 214	F		
BIOL 112/L	Biology I-Cell and Molecular Biology/Lab	4	Corequisite: Class and Lab	F,W,S		
BIOL 265/L	Molecular and Cellular Biology/Lab	4	BIOL 112/L, CHEM 105/L	F,W		
BIOL 330/L (mrs 1158)	Bioinformatics/Lab	4	BIOL 265/L	S-odd		
(MATH 311**)	Introduction to Numerical Methods	3	MATH 113	Variable		
CIS 202	Object-Oriented Programming I	3	CIS 101	F,W,S		
CS 203	Object-Oriented Programming II	3	CIS 202	F		
CS 301	Algorithms and Complexity	3	CS 203 and CIS 206	W		
CS 320 (mrs 1159)	Introduction to Computational Theory	3	CS 203 and CIS 206	W		
MATH 111	Trigonometry and Analytic Geometry	3	Recommended MATH 110 or proficiency	F,W,S		
MATH 302	Foundations of Geometry	3	MATH 112 or Permission of Instructor	F-odd		
MATH 308	Mathematics Using Technologies	3	MATH 112, 221	S-even		
MATH 377	Secondary Mathematics Teaching Methods	2	MATH 112	F-even		
MATH 490R (mrs 1160)	Mathematics Seminar	2	(none)	S		
4 classes	Subjects in which math is applied as approved by the math department chair	12	Variable	Variable		

Advanced Math Electives (Choose 9 more credits from the following) **Minimum 9 Credits**
 (Other courses may be approved by Math Department Chair)

MATH 311	Introduction to Numerical Methods	3	MATH 113	Variable		
MATH 321	Mathematical Statistics	3	MATH 214	F		
MATH 332	Introduction to Complex Variables	3	MATH 214	W-odd, S-even		
MATH 371	Abstract Algebra I	3	MATH 301	F		
MATH 372	Abstract Algebra II	3	MATH 371	W		
MATH 441	Introduction to Analysis I	3	MATH 214	F		
MATH 442	Introduction to Analysis II	3	MATH 441	W		
MATH 490R	Mathematics Seminar	2		S		

****MATH 311 is required for the Advanced Math Elective for the CS Cluster**

***Must have a minimum of 2.0 cumulative GPA in these courses for graduation.

No more than one "D" grade will be allowed in any 300/400 level courses.



B.S. in Mathematics
MATHBS.2012 (mrs 197)
48 credits

Effective Date:8/2012

Name of Student:		
Student ID #:		Graduation Date
Home Country:	<input type="checkbox"/> IWORK	
Advisor:	Name	Date

The Mathematic major prepares students for careers in teaching, government service, industry, and research, or graduate study in mathematics.

Math 308, Math 490R, and additional courses in Computer Science, Physics, and Chemistry are strongly recommended.

Core						48 Credits
<i>Course #</i>	<i>Title</i>	<i>Hr.</i>	<i>Prerequisites</i>	<i>Offered</i>	<i>Sem.</i>	<i>Grade</i>
MATH 112	Calculus I	5		F,W,S		
MATH 113	Calculus II	5	MATH 112	F,W		
MATH 214	Multivariable Calculus	5	MATH 113	W,S		
MATH 301	Foundations of Mathematics	3	MATH 112	F-even, W-odd*, S-odd		
MATH 321	Mathematical Statistics	3	MATH 214	F		
MATH 332	Introduction to Complex Variables	3	MATH 214	W-even*, S-even		
MATH 343	Elementary Linear Algebra	3	MATH 112	F-odd, W-even*, S-even		
MATH 371	Abstract Algebra I	3	MATH 301	F		
MATH 372	Abstract Algebra II	3	MATH 371	W		
MATH 334	Differential Equations	3	MATH 214	W-odd*, S-odd		
MATH 441	Introduction to Analysis I	3	MATH 214	F		
MATH 442	Introduction to Analysis II	3	MATH 441	W		
Choose 6 Credits from the Following						
MATH 490R	Mathematics Seminar	2		S		
PHYS 121	General Physics I	3	MATH 112 and either High School Trigonometry or MATH 111	F,S		
PHYS 122	General Physics II	3	PHYS 121	F,S		
PHYS 221	General Physics III	3	PHYS 121	W		
CIS 202	Object-Oriented Programming	3	CIS 101	F,W,S		
Total Credits Mapped for Graduation:						

**Even-year or Odd-year listing of Winter courses determined by course start-date.*

Must have 2.0 average in these required courses for graduation.

No more than a “D” grade will be allowed in any 300/400 level courses.



B.S. in Mathematics
MATHBS-MATHPURE.2014 (mrs 1061)
48 credits

Effective Date: 9/2014

Name of Student:		
Student ID #:		Graduation Date
Home Country:	<input type="checkbox"/> IWORK	
Advisor:	Name	Date

The Pure Mathematics track prepares students for careers in teaching, government service, industry, and research, or graduate study in mathematics. Math 308, Math 490R, and additional courses in Computer Science, Physics, and Chemistry are strongly recommended.

Core Requirements							42 Credits
Course #	Title	Hr.	Prerequisites	Offered	Sem.	Grade	
MATH 112	Calculus I	5		F,W,S			
MATH 113	Calculus II	5	MATH 112	F,W			
MATH 214	Multivariable Calculus	5	MATH 113	W,S			
MATH 301	Foundations of Mathematics	3	MATH 112	F-even, W-even, S-odd			
MATH 321	Mathematical Statistics	3	MATH 214	F			
MATH 332	Introduction to Complex Variables	3	MATH 214	W-odd, S-even			
MATH 334	Differential Equations	3	MATH 214	W-even, S-odd			
MATH 343	Elementary Linear Algebra	3	MATH 112	F-odd, W-odd, S-even			
MATH 371	Abstract Algebra I	3	MATH 301	F			
MATH 372	Abstract Algebra II	3	MATH 371	W			
MATH 441	Introduction to Analysis I	3	MATH 214	F			
MATH 442	Introduction to Analysis II	3	MATH 441	W			
Mathematics Electives (Choose 6 credits from the following)							6 Credits
(Other courses may be approved by the Math Department Chair)							
MATH 311	Introduction Numerical Methods	3	MATH 113	Variable			
MATH 490R	Mathematics Seminar	2		S			
PHYS 121	General Physics I	3	MATH 112 and either High School Trigonometry or MATH 111	F,W			
PHYS 220	General Physics II	3	PHYS 121 and completion of MATH 113 recommended	F,W			
PHYS 221	General Physics III	3	PHYS 121 and completion of MATH 113 recommended	S			
CIS 202	Object-Oriented Programming I	3	CIS 101	F,W,S			
Total Credits Mapped for Graduation:							

Must have a minimum 2.0 cumulative GPA in these courses for graduation.

No more than one “D” grade will be allowed in any 300/400 level courses.