



B.S. in Mathematics

Applied Mathematics

MATHBS-MATHAPPL.2014 (mrs: 1057/1058)

48-50 credits, incl. 8-12 GE 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 (GenEd)	5		F,W,S		
MATH 113	Calculus II (GenEd)	5	MATH 112	F,W		
MATH 214	Multivariable Calculus	5	MATH 113	W,S		
MATH 221	Principles of Statistics	3	MATH 110 or 106	F,W,S		
MATH 301	Foundations of Mathematics	3	MATH 112	F-even, W-odd*, S-odd		
MATH 334	Differential Equations	3	MATH 214	W-odd*, S-odd		
MATH 343	Elementary Linear Algebra	3	MATH 112	F-odd, W-even*, 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 (GenEd)	4	MATH 112	F,S		
PHYS 122/L	General Physics II & Lab	4	PHYS 121/L	F,S		
PHYS 221/L	General Physics III & Lab	4	PHYS 122/L	W		
MATH 321	Mathematical Statistics	3	MATH 214	F		
PSYC 205	Applied Social Statistics (GenEd)	3	PSYC 111	F,S		
PSYC 305	Research Methods	3	PSYC 205	F,W,S		
PSYC 405	Multivariate Statistics	3	PSYC 205	S		
MATH 321	Mathematical Statistics	3	MATH 214	F		
BIOL 112	General Biology (Majors) (GenEd)	3	(none)	F,W,S		
BIOL 265/L	Molecular & Cellular Biology / Lab	4	BIOL 112, CHEM 105/L	F,W,S		
BIOL 330/L	Bioinformatics / Lab	4	BIOL 265/L	S-odd		
CIS 202	Object-Oriented Programming I	3	CIS 101	F,W,S		
CS 301	Algorithms & Complexity	3	CS 203 & MATH 301	S		
CS 320	Introduction to Computational Theory	3	CS 203 & MATH 301	S		
(MATH 311**)	Numerical Analysis	3	MATH 113	variable		
MATH 111	Trigonometry & Analytic Geometry	3	MATH 110	F,W,S		
MATH 302	Foundations of Geometry	3	MATH 112	F-odd		
MATH 308	Mathematics Using Technologies	3	MATH 112, 221	S-even		
MATH 377	Secondary Math Teaching Methods	2	MATH 112	F-even		
MATH 490R	Mathematics Seminar	2		S		

Advanced Math Electives (Choose 9 more credits from the following) Minimum 9 Credits

**Math 311 is required for Advanced Math Elective for CS Cluster. Other courses may be approved by Math Department Chair.

MATH 311	Numerical Analysis	3	MATH 113	variable		
MATH 321	Mathematical Statistics	3	MATH 214	F		
MATH 332	Introduction to Complex Variables	3	MATH 214	W-even, 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		

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

***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-MATHPURE.2014 (mrs: 1061)
48 credits, incl. 8 GE 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
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<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 (GenEd)	5		F,W,S		
MATH 113	Calculus II (GenEd)	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 334	Differential Equations	3	MATH 214	W-odd*, S-odd		
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 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	Numerical Analysis	3	MATH 113	variable		
MATH 490R	Mathematics Seminar	2		S		
PHYS 121	General Physics I (GenEd)	3	MATH 112 or equivalent	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 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.