

BA/BS in Mathematics Curriculum Map

Courses and Activities Mapped to BA/BS in Mathematics Outcome Set - 2012

Objective 1: Use and construct logical arguments Students will learn to use and construct logical arguments.				Objective 2: Communicate mathematics effectively Students will communicate mathematics effectively.				Objective 3: Ready to use mathematical skills post-bac Students will demonstrate that they are ready to use their mathematical skills in a post-baccalaureate position.	
Outcome 1.1: Students will construct direct proofs.	Outcome 1.2: Students will construct proofs by contradiction	Outcome 1.3: Students will construct proofs by induction.	Outcome 1.4: Students will construct examples/counterexample Students will construct examples and counterexamples.	Outcome 2.1: State mathematical results accurately Students will state mathematical results accurately for a research problem.	Outcome 2.2: Conduct an independent investigation Students will conduct an independent investigation of their problem.	Outcome 2.3: Oral presentation of research Students will make an oral presentation of their research report that is accessible to their peers.	Outcome 2.4: Written report of research Students will make a detailed written report of their research.	Outcome 3.1: Prepared to pursue graduate studies in math Students will demonstrate mastery of undergraduate mathematics that will allow them to pursue graduate studies in the mathematical sciences.	Outcome 3.2: Prepared to pursue careers utilizing knowledge Students will demonstrate mastery of mathematics and related content that will allow them to pursue careers utilizing their knowledge.

Courses and Learning Activities									
MATH 122 Analytic Geometry	I	I	I		I	I	I		
MATH 131 Calculus I	I	I	I		I	P	I		
MATH 132 Calculus II	P	P	P		P	P	P		I
MATH 231 Calculus III	P	P	P		P	R	P		I
MATH 380 Intro to Abstract Mathematics			I				P		I

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MATH 410 Intro to Analysis							P			P	P
MATH 412 Abstract Linear Algebra					P	P	R			P	P
MATH 413 Linear Algebra 1					P	P	R			P	P
MATH 320 Discrete Mathematics	P	P	P		P	R	P				P
MATH 323 College Geometry	R	P	P		R	P	P			P	
MATH 333 Differential Equations	R	R	R		R	R	P				
MATH 341 Probability and Statistics	P	R	R		R	R	P			P	P
MATH 411 Theory of Numbers						P	P			R	R

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MATH 430 Real Variables I							R			R	R
MATH 431 Complex Variables							R			R	R
MATH 441 Theory of Probability	R	R	R		R	P	R			R	R
MATH 490 Topics in Mathematics	R	R	R		R	R	R			R	R

Legend: I Introduced P Practiced R Reinforced

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