

LIST OF SPECIAL INTEREST GROUPS

Secondary Education (21 credits)				
✓	Course	Title	Cr	Gr
Required Courses The MATH courses may be used to fill major elective requirements in the B.S. in Mathematics				
	MATH 325	Abstract Algebra★	3	
	SEFE 270	Educational Measurements in Education★	3	
	CEDP 248	Human Development and Education★	3	
Choose at least ONE of the MATH courses (3 credits)				
	MATH 304	Geometric Structures★	3	
	MATH 307	Mathematical Statistics I★	3	
	MATH 320	Theory of Numbers★	3	
Choose at least THREE courses from the list below (9 credits)				
	SEFE 280	Cultural Minorities★	3	
	SEFE 329	Elements of instruction★	3	
	SEFE 375	Language Across the Secondary Curriculum★	3	
	SEFE 380	History and Philosophy★	3	
	CEDP 250	Adolescent Psychology	3	
	CEDP 342	Educational Psychology	3	
	CPSC 212	Computers in Education★	3	
	PHIL 313	Symbolic Logic★	3	
	PHIL 351	Philosophy of Natural Science★	3	
	ENVS 440	Science, Technology, & the Environment★	3	
	SPED 100	Intro to Special Education★	3	

Actuarial Science (21 credits)				
✓	Course	Title	Cr	Gr
Required Courses The MATH courses may be used to fill major elective requirements in the B.S. in Mathematics				
	MATH 307	Mathematical Statistics I★	3	
	MATH 308	Mathematical Statistics II★	3	
	ECON 201	Principles of Macroeconomics	3	
	ECON 202	Principles of Microeconomics	3	
OR	ACCT 205	Accounting for Decision Makers	3	
	ACCT 209	Fundamentals of Accounting		
Choose at least TWO courses from the list below (6 credits)				
	ACCT 210	Fundamentals of Accounting II★	3	
	ECON 302	Microeconomic Analysis★	3	
	ECON 312	Critical Choices in Health Care Policy★	3	
	ECON 318	Intermediate Statistical Analysis★	3	
	FIN 320	Managerial Finance★	3	
	FIN 321	Investments★	3	
	FIN 323	Financial Markets and Institutions★	3	
	FIN 328	Long Term Financial Mgmt★	3	
	FIN 329	Principles of Insurance★	3	

Chemistry (21 credits)				
✓	Course	Title	Cr	Gr
Required Courses The MATH courses may be used to fill major elective requirements in the B.S. in Mathematics				
AND	CHEM 107	General Chemistry I★	3	
	CHEM 111	General Chemistry I Lab★	1	
AND	CHEM 108	General Chemistry II★	3	
	CHEM 112	General Chemistry II Lab★	1	
	MATH 301	Differential Equations I★	3	
Choose at least ONE of the two below (3 credits)				
OR	MATH 302	Differential Equations II★	3	
	MATH315	Numerical Mathematics★	3	
Choose ONE of the following sequences (7 credits)				
AND	CHEM 201	Organic Chemistry I★	3	
	CHEM 211	Organic Chemistry I Lab★	1	
	CHEM 202	Organic Chemistry II★	3	
AND	CHEM 301	Physical Chemistry I★	3	
	CHEM 321	Physical Chemistry I Lab★	1	
	CHEM 302	Physical Chemistry II★	3	
AND	CHEM 200	Fund. of Organic Chemistry★	3	
	CHEM 350	Analytical Chemistry★	3	
	CHEM 351	Analytical Chemistry Lab★	1	
Community Health (21 credits)				
✓	Course	Title	Cr	Gr
Required Courses The MATH courses may be used to fill major elective requirements in the B.S. in Mathematics				
	MATH 307	Mathematical Statistics I★	3	
	MATH 308	Mathematical Statistics II★	3	
	HSAF 210	Principles of Community Health	3	
	HSAF 312	Data Mngmt for Health Science★	3	
	HSAF 313	Biostatistics★	3	
Choose at least ONE of the two below (3 credits)				
	HSAF 309	Introduction to Study of Disease★	3	
	HSAF 311	International Health★	3	
Choose at least ONE of the two below (3 credits)				
	HSAF 406	Hlth Measurement & Evaluation★	3	
	HSAF 410	Epidemiology★	3	

Computer Science (21 credits)				
✓	Course	Title	Cr	Gr
Required Courses The MATH courses may be used to fill major elective requirements in the B.S. in Mathematics				
	CPSC 150	Adv. Programming Principles★	3	
Choose at least TWO courses from the list below (6 credits)				
	MATH 301	Differential Equations I★	3	
	MATH 307	Mathematical Statistics I★	3	
	MATH 315	Numerical Mathematics★	3	
	MATH 325	Abstract Algebra I★	3	
Choose at least FOUR courses from the list below (12 credits)				
	CPSC 323	Data Base Systems★	3	
	CPSC 370	Assembly Language and Machine Organization★	3	
	CPSC 374	Algorithms and Data Structures★	3	
	CPSC 376	Programming Languages★	3	
	CPSC 378	Theory of Computation★	3	
	CPSC 456	Intro to Computer Graphics★	3	
	CPSC 476	Artificial Intelligence★	3	
	CPSC 478	Analysis of Algorithms★	3	

Continued on next page...

Economics (21 credits)				
✓	Course	Title	Cr	Gr
Required Courses The MATH courses may be used to fill major elective requirements in the B.S. in Mathematics				
	ECON 201	Principles of Macroeconomics	3	
	ECON 202	Principles of Microeconomics	3	
Choose TWO of the MATH courses (6 credits)				
	MATH 301	Differential Equations I★	3	
	MATH 307	Mathematical Statistics I★	3	
	MATH 308	Mathematical Statistics II★	3	
	MATH 315	Numerical Mathematics★	3	
Choose at least ONE of the two courses from the list below (3 credits)				
OR	ECON 301	Macroeconomic Analysis★	3	
	ECON 302	Microeconomic Analysis★	3	
Choose at least TWO additional 300-400 level Economics Course (6 credits)				
	ECON_		3	
	ECON_		3	

Finance (21 credits)				
✓	Course	Title	Cr	Gr
Required Courses The MATH courses may be used to fill major elective requirements in the B.S. in Mathematics				
	ACCT 209	Fundamentals of Accounting I	3	
	FIN 320	Managerial Finance★	3	
	FIN 321	Investments★	3	
Choose TWO of the MATH courses (6 credits)				
	MATH 301	Differential Equations I★	3	
	MATH 307	Mathematical Statistics I★	3	
	MATH 308	Mathematical Statistics II★	3	
	MATH 315	Numerical Mathematics★	3	
Choose at least ONE of the following pairs of courses (6 credits):				
AND	FIN 329	Principles of Insurance★	3	
	FIN 421	Portfolio Theory★	3	
AND	FIN 420	Finance Seminar★	3	
	FIN 421	Portfolio Theory★	3	
AND	FIN 327	Mgmt of Working Capital★	3	
	FIN 328	Long Term Finance Mgmt	3	
AND	FIN 427	International Financial Mgmt★	3	
	FIN 328	Long Term Finance Mgmt★	3	
AND	FIN 323	Financial Markets & Institutions★	3	
	FIN 304	Money and Banking★	3	

Geology (20-21 credits)				
✓	Course	Title	Cr	Gr
Required Courses The MATH courses may be used to fill major elective requirements in the B.S. in Mathematics				
AND	EGEO 101	Physical Geography	3	
	EGEO 111	Physical Geography Lab	1	
AND	EGEO 102	Historical Geography	3	
	EGEO 112	Historical Geography Lab	1	
	EGEO 201	Earth Materials	3	
Choose at least TWO of the MATH (6 credits)				
AND	MATH 301	Differential Equations I★	3	
	MATH 302	Differential Equations II★	3	
AND	MATH 307	Mathematical Statistics I★	3	
	MATH 308	Mathematical Statistics II★	3	
Choose at least ONE courses from the list below (3-4 credits)				
	EGEO 231	Aerial Photograph Interpretation★	3	
	EGEO 241	Geomorphology★	3	
	EGEO 242	Glacial Geology★	3	
	EGEO 327	Structural Geology★	3	
	EGEO 360	Intro to Hydrology★	3	
	EGEO 362	Stratigraphy★	3	
	EGEO 451	Geochemistry★	4	

Mathematics Graduate School (21 credits)				
To help better prepare students for graduate school				
✓	Course	Title	Cr	Gr
Required Courses (6 Credits) The MATH courses may be used to fill major elective requirements in the B.S. in Mathematics				
	MATH 320	Number Theory★	3	
Choose one of the following:				
	MATH 326	Abstract Algebra II★	3	
	MATH 403	Elementary Topology★	3	
	MATH 406	Intermediate Analysis★	3	
	MATH 407	Complex Variables★	3	
Additional 15 Credits				
		Three hour independent study thesis	3	
Choose at least TWO of the following Courses (6 credits) May not be used to fulfill Mathematics B.S. elective requirements				
	CPSC 374	Algorithms and Data Structures★	3	
	CPSC 378	Theory of Computation★	3	
	CPSC 478	Analysis of Algorithms★	3	
	PHIL 313	Symbolic Logic★	3	
	PHIL 351	Philosophy of Natural Sciences★	3	
	PHY 331	Methods of Theoretical Physics★	3	

Philosophy (21 credits)				
✓	Course	Title	Cr	Gr
Required Courses The MATH courses may be used to fill major elective requirements in the B.S. in Mathematics				
	PHIL 113	Introduction to Logic	3	
	PHIL 313	Symbolic Logic★	3	
	PHIL 351	Philosophy of Natural Science★	3	
Choose at least TWO other Philosophy Courses (6 credits)				
	PHIL_		3	
	PHIL_		3	
Choose TWO of the MATH courses (6 credits)				
	MATH 304	Geometric Structures★	3	
	MATH 320	Number Theory★	3	
	MATH 325	Abstract Algebra★	3	

Physics (20-22 credits)				
✓	Course	Title	Cr	Gr
Required Courses The MATH courses may be used to fill major elective requirements in the B.S. in Mathematics				
	PHYS 211	General Physics I★	4	
	PHYS 212	General Physics II★	4	
	PHYS 213	General Physics III★	4	
Choose TWO of the MATH courses (6 credits)				
	MATH 301	Differential Equations I★	3	
	MATH 302	Differential Equations II★	3	
	MATH 315	Numerical Mathematics★	3	
	MATH 407	Complex Variables★	3	
Choose at least ONE course from the following (3 credits)				
	PHYS 314	Engineering Mechanics I: Statics★	3	
	PHYS 315	Engineering Mechanics II: Dynamics★	3	
	PHYS 325	Analog & Digital Electronics★	3	
	PHYS 331	Mathematical Methods of Physics★	3	
	PHYS 371	Physical Optics★	3	
	PHYS 381	Advanced Physics Laboratory★	2	
	PHYS 411	Modern Physics★	4	

Continued on next page...

Pre-Masters of Business Administration (21 credits)				
✓	Course	Title	Cr	Gr
Required Courses The MATH courses may be used to fill major elective requirements in the B.S. in Mathematics				
	ACCT 209	Fundamentals of Accounting I	3	
	ACCT 210	Fundamentals of Accounting II★	3	
	MATH 307	Mathematical Statistics I★	3	
Choose ONE of the MATH courses (3 credits)				
	MATH 301	Differential Equations I★	3	
	MATH 308	Mathematical Statistics II★	3	
	MATH 315	Numerical Mathematics★	3	
Choose at least THREE course from the following (9 credits)				
	ECON 201	Principles of Macroeconomics	3	
	ECON 202	Principles of Microeconomics	3	
	ECON 318	Intermediate Statistical Analysis★	3	
	FIN 320	Managerial Finance★	3	
	MGMT 251	Organizational Behavior	3	
	MRKT 230	Principles of Marketing	3	

Psychology (22 credits)				
✓	Course	Title	Cr	Gr
Required Courses The MATH courses may be used to fill major elective requirements in the B.S. in Mathematics				
	PSYC 105	Introduction to Psychology	3	
	PSYC 221	Research Methods and Statistical Applications I★	3	
	PSYC 325	Intro to Experimental Psych★	3	
	PSYC 326	Experimental Psych Lab★	1	
	MATH 307	Mathematical Statistics I★	3	
Choose ONE of the MATH courses (3 credits)				
	MATH 301	Differential Equations I★	3	
	MATH 308	Mathematical Statistics II★	3	
Choose at least TWO course from the following (6 credits)				
	PSYC 210	Psychology in Business and Industry★	3	
	PSYC 306	Intro to Psychological Testing★	3	
	PSYC 338	Cognitive Psychology★	3	
	PSYC 421	Research Methods and Statistical Applications II★	3	

Sociology (21 credits)				
✓	Course	Title	Cr	Gr
Required Courses The MATH courses may be used to fill major elective requirements in the B.S. in Mathematics				
	SASW 201	Principles of Sociology	3	
	SASW 317	Statistical Methods★	3	
	SASW 318	Research Methods★	3	
	MATH 307	Mathematical Statistics I★	3	
	MATH 308	Mathematical Statistics II★	3	
Choose at least TWO course from the following (6 credits)				
	SASW 273	American Corrections★	3	
	SASW 304	Urban Sociology★	3	
	SASW 309	Health and Society★	3	
	SASW 321	Minority Groups★	3	
	SASW 323	Deviant Behavior★	3	
	SASW 330	Collective Behavior★	3	
	SASW 333	Crime, Justice and Society★	3	
	SASW 339	Sex Roles and Society★	3	
	SASW 340	Social Inequality★	3	
	SASW 342	Sociology of Aging★	3	
	SASW 345	Juvenile Delinquency★	3	

Statistics (22 credits)				
✓	Course	Title	Cr	Gr
Required Courses The MATH courses may be used to fill major elective requirements in the B.S. in Mathematics				
	MATH 152	Elementary Statistics I★	3	
	MATH 252	Introduction to Regression★	3	
	MATH 307	Mathematical Statistics I★	3	
	MATH 308	Mathematical Statistics II★	3	
Choose one of the following Three sequences				
1.				
	HSAF 312	Data Mgmt for Hlth Services★	3	
	HSAF 313	Biostatistics★	3	
OR	CPSC 323	Data Base Systems★	3	
	CPSC 358	Simulation★	3	
2.				
	PSYC 221	Research Methods & Statistical Applications I★	3	
	PSYC 421	Research Methods & Statistical Applications II★	3	
OR	CPSC 323	Data Base Systems★	3	
	CPSC 358	Simulation★	3	
3.				
	CPSC 323	Data Base Systems★	3	
	CPSC 358	Simulation★	3	
OR	BIOL 325	Biometry★	3	
	ECON 318	Intermediate Statistical Analysis★	3	