



CATALOG YEAR 2008-2009

(Please use a separate form for each add/change/delete)

COLLEGE/SCHOOL/SECTION: Arts and Sciences

Current Catalog Page(s) Affected: pp. 86, 104

Course: Add: _____ Delete: _____
(Check all that apply) Change: Number ___ Title ___ SCH ___ Description ___ Prerequisite ___

If new, provide Course Prefix, Number, Title, SCH Value, Description, Prerequisite, Lecture/Lab hours (if applicable), and **student learning outcomes**. If in current catalog, copy and paste the text from the [on-line catalog](#) and indicate changes in red and provide a brief justification.

Program: Add: _____ Change: Attach new/changed Program of Study description and 4-year plan. If in current catalog, copy and paste the text from the [on-line catalog](#) and indicate changes in red.

BA with a Major in Mathematics (See attached / following pages for details and justification.)

Minor: Add: _____ Delete: _____ Change: _____ Attach new/changed minor. If in current catalog, copy and paste the text from the [on-line catalog](#) and indicate changes in red.

Faculty: Add: _____ Delete: _____ Change: _____ Attach new/changed faculty entry. If in current catalog, copy and paste the text from the [on-line catalog](#) and indicate changes in red.

College Introductory Pages: Add information: _____ Change information: _____ Attach new/changed information. If in current catalog, copy and paste the text from the [on-line catalog](#) and indicate changes in red.

Other: Add information: _____ Change information: _____ Attach new/changed information. If in current catalog, copy and paste the text from the [on-line catalog](#) and indicate changes in red.

Approvals:	Signature	Date
Chair Department Curriculum Committee	_____	_____
Chair Department	_____	_____
Chair College Curriculum Committee	_____	_____
Dean	_____	_____

Degree Requirements for the BA with a Major in Mathematics (2007)

- ~~1. **Hours Required:** A minimum of **124** semester credit hours (SCH): 45 hours must be advanced, and fulfillment of degree requirements as specified in the "[Requirements for Graduation](#)" section of this catalog.~~
- ~~2. **University Core Curriculum:** 42 SCH as outlined in the suggested plans and as specified in the "[Requirements for Graduation](#)". MATH [2371](#) must be taken as part of the core.~~
- ~~3. **Major:** 52 SCH and the 3 SCH of Mathematics taken as part of the core. Lower-level requirements include MATH [2413](#), [2414](#), [2415](#) and COSC [1136](#) and COSC [1336](#). Advanced requirements include MATH [3310](#), [3330](#), [3360](#), [3365](#), [4310](#), [4335](#) and 21 SCH with at least 18 SCH from MATH [4305](#), [4315](#), [4330](#), [4340](#), [4345](#), [4350](#), [4355](#), [4360](#), [4395](#).~~
- ~~4. **Minor:** A minimum of 18 SCH from one discipline at least twelve of which must be at the 3000-4000 level. See [Appendix B](#).~~
- ~~5. **Electives:** 12 SCH, at the 3000-4000 level.~~

Degree Requirements for the BA with a Major in Mathematics

- Hours Required:** A minimum of **120** semester credit hours (SCH): 45 hours must be advanced, and fulfillment of degree requirements as specified in the "[Requirements for Graduation](#)" section of this catalog.
- University Core Curriculum:** 42 SCH as outlined in the suggested plans and as specified in the "[Requirements for Graduation](#)". (The course option for Mathematics requirement of the core is MATH [2413](#) Calculus I with 1 SCH excess included in the 40 SCH requirements for the major.) MATH [2371](#) must be taken as part of the Communication's core.
- Major:** 40 SCH (1 SCH excess from MATH [2413](#) taken as part of the core is included here.) Lower-level requirements include COSC [1336](#), [1136](#), MATH [2414](#) and [2415](#). Advanced requirements include MATH [3310](#), [3330](#), [3360](#), [3365](#), [4310](#), [4335](#), [4345](#) and 6 SCH selected from any 4000 level MATH courses.
- Minor:** A minimum of 18 SCH from one discipline at least twelve of which must be at the 3000-4000 level. See [Appendix C](#).
- Liberal Arts Electives:** 12 SCH at least six of which must be at the 3000-4000 level and selected from arts, economics, humanities, natural sciences, and social sciences other than the fields of studies in the major or minor programs, unless seeking a double major.
- Electives:** 8 SCH.

Justifications for changes to the degree requirements for BA in a Major in Mathematics are:

- Comply with legislatively mandated goal to bring the degree program to 120 SCH as requested by the University;
- Provide the students with an academic preparation that is consistent with the liberal arts philosophy of higher education.
- Include the identified QEP Capstone Course as a required course in the program.

BACHELOR OF ARTS MAJOR IN MATHEMATICS (2007)

Following is **one** suggested four-year degree plan. Students are encouraged to see their advisor each semester for help with program decisions and enrollment. Students are responsible for reviewing the **Program of Study**

Requirements:

*See [Appendix A](#) Core Curriculum and Optional Course Information.

** See [Appendix C](#) for approved list of minors and requirements.

FALL	HOURS	SPRING	HOURS
FRESHMAN YEAR		FRESHMAN YEAR	
ENGL 1301 English Composition I	3	ENGL 1302 English Composition II	3
HIST 1301 The U.S. to 1877	3	HIST 1302 The U.S. Since 1877	3
MATH 2413 Calculus I	4	MATH 2414 Calculus II	4
- Natural Science*	4	- Natural Science*	4
- Activity/Wellness*	1	- Visual/Performing Arts**	3
Total	15	-	17
SOPHOMORE YEAR		SOPHOMORE YEAR	
ENGL - Survey of Literature*	3	MATH 3330 Differential Equations	3
COSC 1136 Fundamentals of Programming Lab	1	MATH 3360 Statistical Analysis	3
COSC 1336 Fundamentals of Programming	3	MATH 3365 Discrete Mathematics	3
MATH 2374 Communications in Math	3	PSCI 2306 American State Government	3
MATH 2415 Calculus III	4	- Minor Curriculum*	3
PSCI 2305 American National Govt	3	-	-
Total	17	-	15
JUNIOR YEAR		JUNIOR YEAR	
MATH 4335 Advanced Calculus	3	MATH - Advanced Math Elective¹	3
MATH 3310 Linear Algebra	3	MATH 4310 Abstract Algebra	3
- Soc/Behavioral Science*	3	- Adv Minor Curriculum**	3
- Minor Curriculum**	3	- Advanced Elective	3
MATH - Advanced Math Elective¹	3	- Advanced Elective	3
Total	15	-	15
SENIOR YEAR		SENIOR YEAR	

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MATH	-	<u>Advanced Math Elective</u> [†]	3	MATH	-	<u>Advanced Math Elective</u> [†]	3
MATH	-	<u>Advanced Math Elective</u> [†]	3	MATH	-	<u>Advanced Math Elective</u> [†]	3
MATH	-	<u>Advanced Math Elective</u> [†]	3	-	-	<u>Advanced Elective</u>	3
	-	<u>Adv Minor Curriculum</u> **	3		-	<u>Adv Minor Curriculum</u> **	3
	-	<u>Advanced Elective</u>	3		-	<u>Adv Minor Curriculum</u> **	3
Total			15	-			15

TOTAL SEMESTER CREDIT HOURS: 124

[†]Advanced Math Electives, select 21 SCH with at least 18 SCH from MATH 4305, 4315, 4330, 4340, 4345, 4350, 4355, 4360, 4395.

Actual degree plans may vary depending on availability of courses in a given semester.

Some courses may require prerequisites not listed.

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BACHELOR OF ARTS MAJOR IN MATHEMATICS

Following is **one** suggested four-year degree plan. Students are encouraged to see their advisor each semester for help with program decisions and enrollment. Students are responsible for reviewing the **Program of Study**

Requirements.

*See [Appendix A](#) *Core Curriculum and Optional Course Information.*

** See [Appendix C](#) for approved list of minors and requirements.

FALL	HOURS	SPRING	HOURS
FRESHMAN YEAR		FRESHMAN YEAR	
ENGL 1301 English Composition I	3	ENGL 1302 English Composition II	3
HIST 1301 The U.S. to 1877	3	HIST 1302 The U.S. Since 1877	3
MATH 2413 Calculus I	4	MATH 2414 Calculus II	4
	4	Natural Science*	4
	1	Visual/Performing Arts**	3
Total	15		17
SOPHOMORE YEAR		SOPHOMORE YEAR	
ENGL Survey of Literature*	3	MATH 3330 Differential Equations	3
COSC 1136 Fundamentals of Programming Laboratory	1	MATH 3360 Statistical Analysis	3
COSC 1336 Fundamentals of Programming	3	MATH 3365 Discrete Mathematics	3
MATH 2371 Communications in Mathematics	3	PSCI 2306 American State Government	3
MATH 2415 Calculus III	4	Minor Curriculum*	3
PSCI 2305 American National Govt	3		
Total	17		15
JUNIOR YEAR		JUNIOR YEAR	
MATH 4335 Advanced Calculus	3	MATH 4310 Abstract Algebra	3
MATH 3310 Introduction to Linear Algebra	3	Elective	3
Soc/Behavioral Science*	3	Elective	3
Minor Curriculum**	3	Adv Minor Curriculum**	3
Liberal Arts Elective²	3	Liberal Arts Elective²	3
Total	15		15
SENIOR YEAR		SENIOR YEAR	

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MATH	Advanced Math Elective ¹	3	MATH	4345	Complex Variables	3
MATH	Advanced Math Elective ¹	3	MATH	3195	Seminar (Free Elective)	1
	Advanced Liberal Arts Elective ²	3			Advanced Liberal Arts Elective ²	3
	Adv Minor Curriculum **	3			Adv Minor Curriculum **	3
MATH	3195	Seminar (Free Elective)			Adv Minor Curriculum **	<u>3</u>
Total						13

TOTAL SEMESTER CREDIT HOURS: 120

¹Advanced Math Electives: select 6 SCH from any 4000 level MATH courses.

² **Liberal Arts Electives:** select from (at least 6 SCH from 3000-4000 level) arts, economics, humanities, natural sciences, and social sciences other than the fields of studies in the major or minor programs, unless seeking a double major.

*Actual degree plans may vary depending on availability of courses in a given semester.
Some courses may require prerequisites not listed.*