

CATALOG YEAR 2008-2009

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

COLLEGE/SCHOOL/SECTION: Arts and SciencesCurrent Catalog Page(s) Affected: pp. 91, 120

**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.

**BS 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	_____	_____

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**Degree Requirements for the BS 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 1103, and "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:** 58 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 27 SCH at least 24 of which must be selected from any 4000 level MATH courses, excluding MATH 4390.~~
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:** 6 SCH, at the 3000-4000 level.~~

**Degree Requirements for the BS with a Major in Mathematics**

1. **Hours Required:** A minimum of **120** semester credit hours (SCH): 45 hours must be advanced, and fulfillment of degree requirements as specified in the 1103, and "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". (The course option for Mathematics requirement of the core is MATH 2413 Calculus I with 1 SCH excess included in the 55 SCH requirements for the major.) MATH 2371 must be taken as part of the Communication's core.
3. **Major:** 55 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 21 SCH MATH courses at least 18 SCH of which must be selected from any 4000 level MATH courses, excluding MATH 4390.
4. **Minor:** A minimum of 18 SCH from one discipline at least twelve of which must be at the 3000-4000 level. See Appendix C.
5. **Electives:** 5 SCH.

**Justifications for changes to the degree requirements for BS with a Major in Mathematics are:**

1. Comply with legislatively mandated goal to bring the degree program to 120 SCH as requested by the University.
2. Include the identified QEP Capstone Course as a required course in the program.

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## BACHELOR OF SCIENCE 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	<u>English Composition I</u>		3	ENGL	1302	<u>English Composition II</u>		3
HIST	1301	<u>The U.S. to 1877</u>		3	HIST	1302	<u>The U.S. Since 1877</u>		3
MATH	2413	<u>Calculus I</u>		4	MATH	2414	<u>Calculus II</u>		4
-	-	<u>Natural Science*</u>		4	-	-	<u>Natural Science*</u>		4
-	-	<u>Activity/Wellness*</u>		1	-	-	-		-
<b>Total</b>				<b>15</b>					<b>14</b>
SOPHOMORE YEAR					SOPHOMORE YEAR				
COSC	1136	<u>Fundamentals of Programming Lab</u>		1	MATH	3330	<u>Differential Equations</u>		3
COSC	1336	<u>Fundamentals of Programming</u>		3	MATH	3360	<u>Statistics</u>		3
ENGL	-	<u>Survey of Literature*</u>		3	MATH	3365	<u>Discrete Mathematics</u>		3
MATH	2371	<u>Communications in Math</u>		3	PSCI	2306	<u>American State Govt</u>		3
MATH	2415	<u>Calculus III</u>		4	-	-	<u>Visual/Performing Arts*</u>		3
PSCI	2305	<u>American National Govt</u>		3	-	-	-		-
<b>Total</b>				<b>17</b>					<b>15</b>
JUNIOR YEAR					JUNIOR YEAR				
MATH	4335	<u>Advanced Calculus</u>		3	MATH	4310	<u>Abstract Algebra</u>		3
MATH	3310	<u>Linear Algebra</u>		3	MATH	-	<u>MATH Elective</u>		3
-	-	<u>Soc/Behavioral Science*</u>		3	MATH	-	<u>Advanced Math Elective<sup>+</sup></u>		3
-	-	<u>Minor Curriculum**</u>		3	MATH	-	<u>Advanced Math Elective<sup>+</sup></u>		3
-	-	<u>Minor Curriculum**</u>		3	MATH	-	<u>Adv Minor Curriculum**</u>		3
-	-	<u>Advanced Elective</u>		3	-	-	-		-
<b>Total</b>				<b>18</b>					<b>15</b>
SENIOR YEAR					SENIOR YEAR				

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MATH -	<del>Advanced Math Elective<sup>†</sup></del>	<del>3</del>	MATH -	<del>Advanced Math Elective<sup>†</sup></del>	<del>3</del>
MATH -	<del>Advanced Math Elective<sup>†</sup></del>	<del>3</del>	MATH -	<del>Advanced Math Elective<sup>†</sup></del>	<del>3</del>
MATH -	<del>Advanced Math Elective<sup>†</sup></del>	<del>3</del>	MATH -	<del>Advanced Math Elective<sup>†</sup></del>	<del>3</del>
-	<del>Advanced Elective</del>	<del>3</del>	-	<del>Adv Minor Curriculum**</del>	<del>3</del>
-	<del>Adv Minor Curriculum**</del>	<del>3</del>	-	<del>Adv Minor Curriculum**</del>	<del>3</del>
<b>Total</b>		<b>15</b>	-		<b>15</b>

**TOTAL SEMESTER CREDIT HOURS: 124**

<sup>†</sup>Math Electives, select 27 SCH at least 24 which must be from any 4000-level math courses, and excluding MATH 4390.

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## BACHELOR OF SCIENCE 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
<b>FRESHMAN YEAR</b>			<b>FRESHMAN YEAR</b>		
ENGL 1301	<a href="#">English Composition I</a>	3	ENGL 1302	<a href="#">English Composition II</a>	3
HIST 1301	<a href="#">The U.S. to 1877</a>	3	HIST 1302	<a href="#">The U.S. Since 1877</a>	3
MATH 2413	<a href="#">Calculus I</a>	4	MATH 2414	<a href="#">Calculus II</a>	4
	<a href="#">Natural Science*</a>	4		<a href="#">Natural Science*</a>	4
	<a href="#">Activity/Wellness*</a>	1			
<b>Total</b>		<b>15</b>			<b>14</b>
<b>SOPHOMORE YEAR</b>			<b>SOPHOMORE YEAR</b>		
COSC 1136	<a href="#">Fundamentals of Programming Laboratory</a>	1	MATH 3330	<a href="#">Differential Equations</a>	3
COSC 1336	<a href="#">Fundamentals of Programming</a>	3	MATH 3360	<a href="#">Statistical Analysis</a>	3
ENGL	<a href="#">Survey of Literature*</a>	3	MATH 3365	<a href="#">Discrete Mathematics</a>	3
MATH 2371	<a href="#">Communications in Mathematics</a>	3	PSCI 2306	<a href="#">American State Govt</a>	3
MATH 2415	<a href="#">Calculus III</a>	4		<a href="#">Visual/Performing Arts*</a>	3
PSCI 2305	<a href="#">American National Govt</a>	3			
<b>Total</b>		<b>17</b>			<b>15</b>
<b>JUNIOR YEAR</b>			<b>JUNIOR YEAR</b>		
MATH 4335	<a href="#">Advanced Calculus</a>	3	MATH 4310	<a href="#">Abstract Algebra</a>	3
MATH 3310	<a href="#">Linear Algebra</a>	3	MATH	<a href="#">MATH Elective<sup>1</sup></a>	3
	<a href="#">Soc/Behavioral Science*</a>	3	MATH	<a href="#">Advanced Math Elective<sup>1</sup></a>	3
	<a href="#">Minor Curriculum**</a>	3	MATH	<a href="#">Advanced Math Elective<sup>1</sup></a>	3
	<a href="#">Minor Curriculum**</a>	3	MATH	<a href="#">Adv Minor Curriculum**</a>	3
<b>Total</b>		<b>15</b>			<b>15</b>
<b>SENIOR YEAR</b>			<b>SENIOR YEAR</b>		
MATH	<a href="#">Advanced Math Elective<sup>1</sup></a>	3	MATH 4345	<a href="#">Complex Variables</a>	3

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MATH	<a href="#">Advanced Math Elective</a> <sup>1</sup>	3	MATH	<a href="#">Advanced Math Elective</a> <sup>1</sup>	3
MATH	<a href="#">Advanced Math Elective</a> <sup>1</sup>	3	MATH 3195	Seminar (Free Elective)	1
MATH 3195	Seminar (Free Elective)	1		<a href="#">Adv Minor Curriculum</a> **	3
	<a href="#">Adv Minor Curriculum</a> **	3		<a href="#">Adv Minor Curriculum</a> **	<u>3</u>
	Elective	<u>3</u>			
<b>Total</b>		<b>16</b>			<b>13</b>

**TOTAL SEMESTER CREDIT HOURS: 120**

<sup>1</sup>Math Electives, select 21 SCH MATH 3000-4000 level MATH courses at least 18 SCH of which must be from any 4000 level MATH courses, excluding MATH 4390.