#### 1. General Information

College:	Arts and S	Sciences		Department :	Mathematic	:S	
Current Pi	rogram Name	: Mathematic	S	Propose Name:	d Program		
Current Major Name: Mathematics			<b>S</b>	Propose	d Major Name:		
Current Degree Title: BS		BS		Propose	d Degree Title:		
Formal Op	ption: A			Specialty	Field:		
Bulletin (	yr and pgs):	2008-09, p. 133-134	CIP Code:		UK ID#:	н	EGIS CODE:
Accreditin	ng Agency (if	applicable):				Today's Date:	

#### 2. Particular University Studies Requirements or Recommendations for this Program.

	Current	Proposed
I. Mathematics		No change
II. Foreign Language		
III. Inference-Logic		
IV. Written Communication	ENG 104 or Honors	
V. Oral Communication	Suspended through Fall 2009	Suspended through Fall 2009
VI. Natural Sciences		
VII. Social Sciences		1
VIII. Humanities		
IX. Cross-Cultural		
X. USP Electives (3 must be outs	ide	
the student's major)		

To the extent that proposed changes in sections 3 through 8 involve courses offered in another program, please submit correspondence with the program(s) pertaining to the availability of such courses to your students.

- 3. University Graduation Writing Requirement select from approved courses.
- 4. College Depth & Breadth of Study Requirements (if applicable). Include particular courses required/recommended for this program.

Current	Proposed
	No change
	<u> </u>

major or Preprofessional Course Requirements (if appli		· · · · · · · · · · · · · · · · · · ·		
Current		Proposed No chang	*^	
MA 113 MA 114		NO CHAILY	<i>j</i> e	
CS 115				
dit Hours.			:	
Credit Hours Required: Current:	Propose	ed: No	change	
Total Required for   Current:		Proposed	No change	
Graduation:		: · · · · · · · · · · · · · · · · · · ·		
Required by Level:				
Currently: 100: 200:		300:	400-500;	
Proposed: 100: 200:		300:	400-500:	
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<del></del>		
Current Premajor or Preprofessional:		d. Proposed Premajor or Preprofessional:		
Current Field of Concentration:		e. Proposed Field of Concentration:		
Current Division of Hrs between Major Subject & Related Field:		f. Proposed Division of Hrs between Major Subject & Related Field:		
Current Hrs Needed for a Specific Option or		g. Proposed Hrs Needed for a Specific Option/Specialization:		
Specialization:			vspecialization: used Technical or Professional Support	
Current Technical or Professional Support Electives:	of the state of th	Electiv		
Current Minimum Hours of Free or Supportive		-	sed Minimum Hours of Free or Supportive	
Electives:		Electiv	<i>'es:</i>	
ajor or Professional Course Requirements.				
Current		Proposed		
Complete one of the sequences MA 351/3		Complete one of the sequences MA 351/352		
361/362, MA 471G/472G, MA 481G/483G,	. CS/MA 🗀			
321/422, CS/MA 416G and MA/STA 417	/G, MA	CS/MA	416G and MA/STA 4170	
433G/485G;		NA 214	MA 261	
MA 214		MA 214 0	or MA 261	
Additional requirements are unchanged.				
nor Requirements (if applicable).				
Current		Proposed		

9. Rationale for Change(s) – if rationale involves accreditation requirements, please include specific references to those.

Our introductory courses tend to be rather computational at the request of client departments. The goal of our upper division courses is to help students begin to create mathematical arguments. In recent years, mathematics departments across the country have begun to create bridge or transition courses as a way to help students make the transition to upper division course work in the mathematics major.

The department has offered a course, MA 261, Introduction to number theory that serves this role. The course has been targeted at students in the Secondary Education, Mathematics Education major and was never formally integrated into the mathematics major.

This proposal begins this integration by allowing MA 261 to replace MA 214 (Calculus IV, a first course in ordinary differential equations) in our degree requirements.

We do not expect this change to require additional resources. An increase in enrollment in MA 261 should be more or less balanced by a decrease in enrollment in MA 214. Any interested mathematics faculty member is able to teach either course.

The change to the list of sequences is a bow to reality. We have not been able to offer several of these sequences in recent years. They need to be removed from the Bulletin in order to avoid misleading students.

## 10. List below the typical semester by semester program for a major.

Current	Hours	Proposed Hours
YEAR 1 - Fall	·	YEAR 1 - Fall
ENG 104 (i.e. "BIO 103")	4 (i.e. "3")	
Foreign Language 101	4	
MA 113 + MA 193	5	
USP SS	3	
Current Total, Year 1 Fall	16	Proposed Total, Year 1 Fall:
YEAR 1 – Spring		YEAR 1 – Spring
Foreign Language 102	4	That is oping
USP HU	3	
MA 114 + MA 194	5	
CS 115	3	
CO 113	<u> </u>	
Current Total, Year 1 Spring:	15	Proposed Total, Year 1 Spring:
YEAR 2 - Fall		YEAR 2 – Fall
Foreign Language 201	3	IEAR 2 - Pall
MA 213	4	
CS 215	4	
PHY 231	4	
PHY 241	1	
Current Total, Year 2 Fall:	15	Proposed Total, Year 2 Fall:
YEAR 2 - Spring		YEAR 2 – Spring
Foreign Language 202	3	
MA 214	3	MA 214 or MA 261
MA 322	3	
(PHY 232 - USP NS)	4	
(PHY 242 - A&S Lab)	1	
Company The Later of Company	15	Dynamical Total Voga 2 Cavings
Current Total, Year 2 Spring:	13	Proposed Total, Year 2 Spring:

## 10. Semester Plans, continued.

Current	Hours	Proposed	Hours
YEAR 3 - Fall		YEAR 3 - Fall	120470
USP HU/2nd Tier Writing	3		
(ECO 201 USP SS)	3		†
300+ MA Core Course	3		
Elective	3		<del>                                     </del>
Elective	3		<b>+</b>
, .			
Current Total, Year 3 Fall:	15	Proposed Total, Year 3 Fall:	
* * * *			
YEAR 3 - Spring	11.1	YEAR 3 - Spring	
USP Cross Cultural / A&S	3		
(ECO 202 - A&S SS)	3		
300 + MA Core Course	3		
Science/Math Elective	3		
A&S NS	3		
Current Total, Year 3 Spring:	15	Proposed Total, Year 3 Spring:	
YEAR 4 – Fall		VIIAD 4 II. II	T
		YEAR 4 - Fall	
300+ MA course MA Sequence Course	3		ļ
Elective			ļ
	3		
Elective	3		
Elective	3		
Current Total, Year 4 Fall:	15	Proposed Total, Year 4 Fall:	
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u> </u>
YEAR 4 - Spring		YEAR 4 - Spring	T
300+ MA Course	3		
MA Sequence Course	3 .		
Elective	3		
Elective	3	1	
Elective	3	1	
Current Total, Year 4 Spring:	15	Proposed Total, Year 4 Spring:	
Current Total Hours	·	Proposed Total Hours:	

12.	Requested effective date for char	nges (term/year): Fall / 2009	
12	Yelishin the department who char	ould be contacted for further information about the proposed program change?	
13.		Phone; Email:	
	Name:	Phone: Binan.	
14.	Signatures of Approval.		•
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	DATE of Approval by	printed name Reported by Department Chair	signatu
	Department Faculty		re .
	11/21/08	Leonidas Bachas Illeuckon	
-	DATE of Approval by	printed name Reported by College Dean	signatu
	College Faculty		re
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	Undergraduate Council	princed harrie hoperada ay chaol graduate comme	re
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	Graduate Council		
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_	*DATE of Approval by	printed name Reported by Health Care Colleges Council	signatu
	Health Care Colleges	Chair	re
	Council (HCCC)		
_		Day to the Office of the County County	
	*DATE of Approval by	Reported by Office of the Senate Council	
	Senate Council		
-	*DATE of Approval by	Reported by the Office of the Senate Council	
	the University Senate		

\*If applicable, as provided by the *University Senate Rules*.

Rev 7/08

# ARTS AND SCIENCES EDUCATIONAL POLICY COMMITTEE INVESTIGATOR REPORT

http://www.as.uky.edu/working/collegiate-governance/education-policy-committee/proposals/default.aspx

INVE	ESTIGATING AREA: Natural & Math. Sci. COURSE, MAJOR, DEGREE of ROGRAM: MA BS.
DAT	E FOR EPC REVIEW: Nov. 21, 2008 CATEGORY: NEW CHANGE DROP
orde and cour	TRUCTIONS: This completed form will accompany the course application to the Graduate/Undergraduate Council(s) in report to avoid needless repetition of investigation. The following questions are included as an outline only. Be as specific as brief as possible. If the investigation was routine, please indicate this. The term "course" is used to indicate one se, a series of courses or a program, whichever is in order. Return the form to Leonidas Bachas Associate Dean, 275 terson Office Tower for forwarding to the Council(s). ATTACH SUPPLEMENT IF NEEDED.
1.	List any modifications made in the course proposal as submitted originally and why.
2.	If no modifications were made, review considerations that arose during the investigation and the resolutions.
3.	List contacts with program units on the proposal and the considerations discussed therein.
4.	Additional information as needed.
5.	A&S Area Coordinator Recommendation:
	APPROVE, APPROVE WITH RESERVATION, OR DISAPPROVE
6.	A&S Education Policy Committee Recommendation:
	APPROVE, APPROVE WITH RESERVATION, OR DISAPPROVE
	F. James Heller
7.	11/21/08 Date:
	A&S Educational Policy Committee, Natural & Mathematical Sciences Area Coordinator  Jim Holler, jim.holler@uky.edu 257-5884