Courses

## **New Course Form**

**Request Tracking** 

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			(*denotes r	equired fie	lds)			
1. Gene	ral Information							
a.	* Submitted by the College of:ARTS & SC	IENCES		Submissi	on Date: 12/1/2015			
	* Department/Division: Mathematics		U		5			
Б. С.			1					
	* Contact Person Name:		Uwe Nagel	Email:	uwe.nagel@uky.edu	Phone:	7-6793	
	* Responsible Faculty ID (if different from	n Contact)		Email:		Phone:		
d.	* Requested Effective Date: OSemeste	er followin	g approval OR  oS	pecific Term	Year 1 Fall 2016			
e.					1			
	Should this course be a UK Core Course If YES, check the areas that apply:	? (Yes (	€No					
	Inquiry - Arts & Creativity	Comp	osition & Communic	ations - II				
	Inquiry - Humanities	Quant	tative Foundations					
	Inquiry - Nat/Math/Phys Sci	Statist	ical Inferential Reas	oning				
	Inquiry - Social Sciences	U.S. C	itizenship, Commun	itv. Diversitv				
	Composition & Communications - I		Dynamics					
		_	2 9 110 11100					
2. Desig	nation and Description of Proposed Co	ourse.						
a.	* Will this course also be offered through	Distance I	_earning? OYes 4	-••No				
b.	* Prefix and Number: MA 665 001							
C.	* Full Title: Rings and Modules							
d.	Transcript Title (if full title is more than 40	character	s):					
e.	To be Cross-Listed $^2$ with (Prefix and Nur	nber):						
f	* Courses must be described by at least of	one of the	meeting patterns be	low Include	number of actual con	tact hours	$\frac{3}{2}$ for each meeting p	attern type
	3 Lecture		ratory <sup>1</sup>		Recitation		Discussio	
	Indep. Study	Clini			Colloquium		Practicum	I
	Research	Resi	dency		Seminar		Studio	
	Other	f Other, Ple	ease explain:					
g.	<ul> <li>* Identify a grading system:</li> <li>Letter (A, B, C, etc.)</li> <li>Pass/Fail</li> <li>Medicine Numeric Grade (Non-medica)</li> <li>Graduate School Grade Scale</li> </ul>	l students	will receive a letter o	grade)				
h.	* Number of credits: 3							
i.	* Is this course repeatable for additional of If YES: Maximum number of credit hours:		⊖Yes•No					

j.	* Course Description for Bulletin:
	This graduate course is a continuation of MA 661. Topics include modules over principal ideal domains, localization, primary decomposition, associated prime ideals, classes of rings and modules such as Noetherian rings and Dedekind domains, tensor and exterior products, exact sequences and resolutions, ideals and varieties, Hilbert's Nullstellensatz.
k	Prerequisites, if any:
к.	MA 561 and MA 661 or consent from instructor.
I.	Supplementary teaching component, if any: OCommunity-Based Experience Service Learning Both
* Wil	this course be taught off campus? OYes No
If YE	S, enter the off campus address:
Freq	uency of Course Offering.
a.	* Course will be offered (check all that apply): SFall Spring Summer Winter
b.	* Will the course be offered every year? •Yes No
	If No, explain:
* Are	
	facilities and personnel necessary for the proposed new course available?  •Yes No explain:
	facilities and personnel necessary for the proposed new course available? • Yes No
If No,	facilities and personnel necessary for the proposed new course available? • Yes No
If No,	facilities and personnel necessary for the proposed new course available?  •YesONo explain:
If No,	facilities and personnel necessary for the proposed new course available? explain: at enrollment (per section per semester) may reasonably be expected? 10
If No,	facilities and personnel necessary for the proposed new course available? •Yes_No explain: at enrollment (per section per semester) may reasonably be expected? 10 sipated Student Demand.
If No,	facilities and personnel necessary for the proposed new course available?  • Yes No explain:  at enrollment (per section per semester) may reasonably be expected? 10 tipated Student Demand.  * Will this course serve students primarily within the degree program? • Yes No
If No,	facilities and personnel necessary for the proposed new course available? •Yes_No explain: at enrollment (per section per semester) may reasonably be expected? 10 tipated Student Demand. * Will this course serve students primarily within the degree program? •Yes_No * Will it be of interest to a significant number of students outside the degree pgm? _Yes_No
If No, * Wh Antic a. b.	facilities and personnel necessary for the proposed new course available? •Yes_No explain: at enrollment (per section per semester) may reasonably be expected? 10 sipated Student Demand. * Will this course serve students primarily within the degree program? •Yes_No * Will it be of interest to a significant number of students outside the degree pgm? _Yes_No
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If No,	facilities and personnel necessary for the proposed new course available?
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If No, ★ Wh Antic a. b. ★ Che ♥ Tra ■ Re ■ Ncc Cour a.	facilities and personnel necessary for the proposed new course available? ●Yes_No explain: at enrollment (per section per semester) may reasonably be expected? 10 ipated Student Demand. * Will this course serve students primarily within the degree program? ●Yes_No * Will the of interest to a significant number of students outside the degree pgm? ●Yes_No If YES, explain: bet the category most applicable to this course: additional – Offered in Corresponding Departments at Universities Elsewhere latively New – Now Being Widely Established ty Yet Found in Many (or Any) Other Universities se Relationship to Program(s). * Is this course part of a proposed new program? ●Yes ●No

## 10. Information to be Placed on Syllabus.

a. \* Is the course 400G or 500? OYes No

If YES, the *differentiation for undergraduate and graduate students must be included* in the information required in **10.b**. You must include: (i) identification o additional assignments by the graduate students; and/or (ii) establishment of different grading criteria in the course for graduate students. (See SR 3.1.4.)

b. 🗹\* The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable, fro

10.a above) are attached.

Rev 8/09

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