University Senate Agenda

All meetings are from 3:00 - 5:00 pm in the

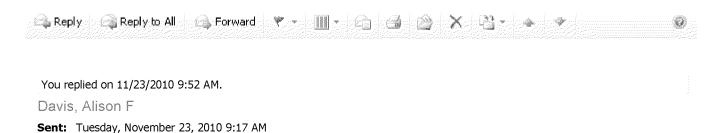
NOTE LOCATION CHANGE

THIS MEETING WILL BE IN THE LEXMARK ROOM, 209 MAIN BUILDING.

Monday, December 13, 2010

- 1. State of the University Address University Senate Chair Lee T. Todd, Jr.
- 2. Minutes and Announcements
- 3. Officer Reports
 - a. Chair
 - b. Vice chair
 - c. Parliamentarian
- 4. Committee Reports
 - a. Senate's Admissions and Academic Standards Committee Alison Davis, Chair
 - Proposed Change to BHS Clinical Leadership and Management pg. 2-9
 - Proposed Change to Progression Requirements for BA Art Studio pg. 10-20
 - Proposed Change to Progression Requirements for BFA Art Studio pg. 21-31
 - Proposed Change to Progression Requirements for BA Art Education pg. 32-42
 - b. Senate's Academic Programs Committee Dan Wermeling, Chair
 - Proposed New PhD in Clinical and Translational Sciences pg. 43-55
 - c. Senate's Academic Organization and Structure Committee Dwight Denison, Chair
 - Proposed New Dept of Science, Technology, Engineering and Math (STEM) Education (College of Education) pg. 56-137
- 5. Academic Calendars
 - a. 2011 2012 Calendar pg. 138-150
 - b. 2013 2014 Calendar, Tentative pg. 151-162
 - c. 2011 2012 Dentistry pg. 163-165
 - d. 2013 2014 Dentistry, Tentative pg. 166-168
 - e. Fall 2011 Law pg. 169
 - f. Spring 2012 Law pg. 170
 - g. Summer 2012 Law pg. 171
 - h. Fall 2013 Law, Tentative pg. 172
 - i. Spring 2014 Law, Tentative pg. 173
 - j. Summer 2014 Law, Tentative pg. 174
 - k. 2011 2012 Medicine pg. 175-178
 - 1. 2013 2014 Medicine, Tentative pg. 179-180
- 6. Implementation of General Education Curriculum (second reading and vote) pg. 181-188

Next Meeting: February 14, 2011



To: Brothers, Sheila C

Dear Sheila,

The Senate's Admissions and Academic Standards Committee voted on four items. The committee includes Alan Nadel, Christopher Feddock, Carl Lee, Raphael Finkel, Lee Meyer and Alison Davis (chair). The following are the results:

4) The motion was for a positive recommendation of the proposed changes to BHS Clinical Leadership and Management (6 yes, 0 no)

Thanks, Alison

*



April 20, 2009

Memorandum

TO: Adrea LaRoche & Sheila Brothers, Senate Council Office

FR: Sharon R. Stewart, Associate Dean for Academic Affairs

RE: Clinical Leadership and Management program change request

Attached please find a program change request for the Clinical Leadership and Management program in the Department of Clinical Sciences, College of Health Sciences. The purpose of the request is to delete the present requirement that students have one year of post-associate degree work experience in a health care setting as a condition for admission. There are several reasons for this request which are highlighted in item #9 of the Request for Change form.

For additional information, please contact: Beth Schulman (3-1100, ext 80565) or Karen Skaff (3-1100, ext 80585).

I. General Information

College: HEALTH SCIENCES Department: CLINICAL SCIENCES

Current Program Name: CLINICAL LEADERSHIP AND MANAGEMENT Proposed Program Name:

Current Major Name: Proposed Major Name:

Current Degree Title: BHS Proposed Degree Title:

Formal Option: Specialty Field:

Bulletin (yr and pgs): 2008-2009, p. 223 CIP Code: UK ID #: HEGIS CODE:

Accrediting Agency (if applicable): n/a Today's Date: 3-3-09

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

Current Proposed

1. Mathematics

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

VIII. Humanities

IX. Cross-Cultural

X. USP Electives (3 must be outside 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

5. Premajor or Preprofessional Course Requirements (if applicable).

	Current		Proposed	
6. C	redit Hours.			
a.	Credit Hours Required:	Current:	Proposed:	
b.	Total Required for Graduation:	Current:	Proposed:	
c.	Required by Level: Currently: 100: Proposed: 100:	200: 200:	300: <i>300</i> :	400-500: 400-500:
d.	Current Premajor or Preprofess	ional:	d. Proposed Premo	ajor or Preprofessional:
e.	Current Field of Concentration	•	e. Proposed Field	of Concentration:
	Current Division of Hrs betwee Related Field: Current Hrs Needed for a Spec Specialization:	•	& Related Field: g. Proposed Hrs N Option/Specializ	eeded for a Specific ation:
h.	Current Technical or Profession	nal Support Electives:	h. Proposed Techn Electives:	ical or Professional Support
i.	Current Minimum Hours of Fre Electives:	ee or Supportive		um Hours of Free or Supportive
7. 1	Major or Professional Course Req	uirements.		
	Current		Proposed	
8. N	vlinor Requirements (if applicable)	.		
	Current		Proposed	
			V - F	
P P f	Program faculty would like to programs have clinical experience or students interested in the control of the co	mission includes one yea eliminate that admission e/practicums within their tinuity of their higher ed	r of post-associate degree work n requirement because: (1) st r core curriculum, and (2) this a ucation goals. Faculty believe	experiences to those. experience in a health care setting. udents in health-related associate degree requirement creates an unnecessary barrier they would better serve the needs of their UK's BHS Program in Clinical Leadership

and Management upon graduation from a community/technical college. In addition, it is expected that this change will increase

student enrollment.

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

Current YEAR 1 - Fall	Hours	Proposed YEAR 1 - Fall	Hours
(i.e. "BIO 103")	(i.e. "3")		
Current Total, Year 1 Fall	16	Proposed Total, Year 1 Fall:	
YEAR I - Spring		YEAR 1 – Spring	
· · · · · · · · · · · · · · · · · · · ·	e e e e e e		
	1		
·			
Current Total, Year 1 Spring:		Proposed Total, Year 1 Spring:	
YEAR 2 - Fall	1 7	YEAR 2 – Fall	
		† 	
	•		
Current Total, Year 2 Fall:		Proposed Total, Year 2 Fall:	
YEAR 2 - Spring		YEAR 2 - Spring	
· · · · · · · · · · · · · · · · · · ·			
Current Total, Year 2 Spring:		Proposed Total, Year 2 Spring:	

10. Semester Plans, continued.

Current Hours Proposed Hours YEAR 3 - Fall YEAR 3 - Fall Current Total, Year 3 Fall: Proposed Total, Year 3 Fall: YEAR 3 - Spring YEAR 3 - Spring Current Total, Year 3 Spring: Proposed Total, Year 3 Spring: YEAR 4 - Fall YEAR 4 - Fall Current Total, Year 4 Fall: Proposed Total, Year 4 Fall: YEAR 4 - Spring YEAR 4 - Spring Current Total, Year 4 Spring: Proposed Total, Year 4 Spring:

Proposed Total Hours:

Current Total Hours:

REQUEST FOR CENTER TO DESIGN MODEL PROCESS.

13.	Within (the department, who should be contac	led for further	information about th	e proposed	program change?	
	Name:	ELIZABETH D SCHULMAN	Phone:	3-1100, X80565	Email:	elizabethschulman@uky.edu	_
14. 3	Signatures	of Approval.		A (4 a		~ 2-	_
	3/3	5/09 X	aven	O. Skall.	Th.) (SHO)	2
		E of Approval by artment Faculty	printed name	*	eported by	Department Chair	Agg atme
	4/20	109	Sharon.	Stewart	,	Thoras X Ken	SI
_		E of Approval by ollege Faculty	printed name		Reported	by College Dean	Signature
	11/	3/2009			,		
_		E of Approval by graduate Council	printed name	Report	ed by Unde	ergraduate Council Chair	Signature
-		E of Approval by	printed name	Rep	orted by G	aduate Council Chair	signature
	5	iduato Council 19 09 H	etch And	Prince		Little Mal	_
_	Heal	E of Approval by th Care Colleges uncil (HCCC)	printed name	Reported t	ny Health C	are Colleges Council Chair	sagnatur-
-		E of Approval by enate Council		Reported b	y Office of	the Senate Council	
-		of Approval by the iversity Senate		Reported by	the Office	of the Senate Council	

"If applicable, as provided by the University Senate Rules

Rev 7/08

Application Process and Requirements

The admissions process begins with an application to the University of Kentucky by December 1 for spring enrollment and August 1 for fall enrollment. Application must also be made directly to the CLM program. The CLM program uses rolling admissions once applicants are accepted by the University as a degree seeking student. Criteria for admission to the program includes an Associate Degree, with a minimum 2.0 GPA. Academic advising and information about admissions is available from:



You replied on 11/23/2010 9:52 AM.

Davis, Alison F

Sent: Tuesday, November 23, 2010 9:17 AM

To: Brothers, Sheila C

Dear Sheila,

The Senate's Admissions and Academic Standards Committee voted on four items. The committee includes Alan Nadel, Christopher Feddock, Carl Lee, Raphael Finkel, Lee Meyer and Alison Davis (chair). The following are the results:

1) The motion was for a positive recommendation of the proposed changes to BA Art Studio (6 yes, 0 no)

Thanks, Alison

Y

1. General information									
College: Fine Arts			Departmer	it: <u>D</u>	<u>epartment</u>	of Art			
Current Major Name:	Art Studio		Propos	ed Mo	ajor Name	e: <u>no cha</u> ng	<u>:e</u>		
Current Degree Title:	Bachelor of Art		Propos	sed De	gree Title:	: <u>no chang</u>	<u>:e</u>		
Formal Option(s):			Proposed F	ormai	l Option(s)): 			
Specialty Field w/in Formal Option:			Proposed S w/in Form	•	•				
Date of Contact with As	ssociate Provost f	or Academic	: Administrat	lon¹:	11-4-09				
	<u>2009, 214-</u> <u>215</u>	CIP Code ¹ :	50.0702			Today's	Date:	11-2-09	
Accrediting Agency (if a	applicable): <u>Na</u>	tional Assoc	ciation of Sch	ools o	f Art and]	<u>Design</u>			
Requested Effective Da	ite: Semest	ter following	3 approval.	OR		Specific Date	e ² : <u>Fal</u>	<u>ll 2010</u>	
Dept. Contact Person:	Rae Goodwin		Phone:	<u>455-6</u>	<u>461</u>	Email:	rae.go	odwin@uk	y.edu
2. University Studies Re	equirements or R	ecommenda	ations for this	s Prog	ram.				
		Current				oposed			
I. Mathematics						<u>change</u>			
II. Foreign Langua	age	-			<u>no</u>	<u>change</u>			
III. Inference-Logic	С				<u>no</u>	<u>change</u>			
IV. Written Comm	nunication	ENG 104 or	Honors		<u>no</u>	change			
V. Oral Communic	cation	Suspended	through Fall	2009	Su	spended thro	ough Fa	II 2009	
VI. Natural Scienc	es				no	<u>change</u>			
VII. Social Science	·s	-			no	change			
VIII. Humanities					<u>no</u>	<u>change</u>			
IX. Cross-Cultural					<u>no</u>	change		٠	
X. USP Electives (outside the stude					<u>no</u>	<u>change</u>			
3. Explain whether the another department/p	proposed change	es to the pro Signature L	ogram (as de: og must inclu	scribe de ap	d in sectio proval by	ns 4 to 12) in	nvolve d	courses off al departm	ered by ent(s).
	this program char								

4. Explain how satisfaction of the University Graduation Writing Requirement will be changed.

Prior to filling out this form, you MUST contact the Associate Provost for Academic Administration (APAA). If you do not know the CIP code, the

⁽APAA) can provide you with that during the contact, ² Program changes are typically made effective for the semester following approval. No program will be made effective until all approvals are received.

	Current	Proposed	
	Standard University course offering.	Standard University course offering. List: no change	
	List: any course that satisfies the University	THE CONTRACT OF THE CONTRACT O	
pa usas			
	Graduation Writing Requirement		
	Specific course – list:	Specific course) – list:	
5. List	t any changes to college-level requirements that must be	e satisfied.	
,	Current	Proposed	
		Standard college requirement.	
Ĺ	A Standard Conege requirement.	Standard Conege requirements	
	List: Music, Theatre and/or Arts Administration	List: <u>no change</u>	
j Ng	(6cr) plus 39 hours at 300-level or above		
į	Specific required course – list:	Specific course – list:	
6. List	t pre-major or pre-professional course requirements tha	it will change, including credit hours.	
(Current	Proposed	
		see attached	
_			
7. List	the major's course requirements that will change, inclu	ding credit hours.	
		Proposed	
		see attached	
	es the pgm <u>require</u> a minor AND does the proposed <u>change</u> (es," indicate current courses and proposed changes belo		o
,, ,		Proposed	
	Current	rioposeu	
	!	· ·	
If "Y	es the proposed change affect any option(s)? /es," indicate current courses and proposed changes belo specialties, if any.		No
,•	Current	Proposed	

in a related field?	m requirements for number of ones, and proposed changes below.	credit hrs	outside the m	ajor subject	☐ Yes 🔀 No
Current		Proposed	i		
	m requirements for technical or ses and proposed changes below		onal support e	lectives?	☐ Yes ⊠ No
Current		Proposed			
	ninimum number of free credit ourses and proposed changes be		support electiv	ves?	☐ Yes ⊠ No
Current		Proposed	.	· · · ·	
13. Summary of changes in re	quired credit hours:				
Cradit Hayra of Dron	maior or Propressorional Course	r•	Current 20	Proposed <u>19</u>	
	najor or Preprofessional Course:	>.	<u>20</u> <u>34</u>	<u>19</u> 34	
•	b. Credit Hours of Major's Requirements:			<u>94</u> <u>0</u>	
:	c. Credit Hours for Required Minor:d. Credit Hours Needed for a Specific Option:			<u>o</u>	
	e of Major Subject in Related Fie	ıld.	<u>0</u> <u>9</u>	<u>9</u>	
	e of Major Subject in Related Fie nnical or Professional Support Ele		<u>0</u>	· <u>@</u>	
				<u>~</u> 6	
_	urs of Free/Supportive Electives		<u>6</u>		
h. Total Credit Hours F	lequired by Level:	100: 200:	13 7	$\frac{\underline{16}}{\underline{4}}$	
		300:	39 minimum	<u>39 minimu</u>	<u>"</u>
		400-500:.	100	<u>I</u>	
i. Total Credit Hours F	tequired for Graduation:		<u>120</u>	<u>120</u>	
14. Rationale for Change(s) that.	 if rationale involves accredita 	ation requ	uirements, ple	ease include spec	ific references to
see attached					
15. List below the typical sem separate sheet for each option	ester by semester program for t n.	the major	. If multiple o	ptions are availab	ole, attach a
YEAR 1 – FALL: (e.g. "BIO 103; 3 credits")	see attached	YEAR	1 – SPRING:	see attached	
YEAR 2 - FALL :	see attached	YEAR	2 – SPRING:	see attached	İ

YEAR 3 - FALL:	no change	YEAR 3 - SPRING:	no change
YEAR 4 - FALL:	no change	YEAR 4 - SPRING:	no change

Signature Routing Log

neral Information:

Current Degree Title and Major Name:

Bachelor of Art in Art Studio

Proposal Contact Person Name:

Rae Goodwin

Phone: 455-6461

Email:

rae.goodwin@uky.edu

INSTRUCTIONS:

Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

Internal College Approvals and Course Cross-listing Approvals:

Reviewing Group	Date Approved	Contact Person (name/phone/email)	Signature
Department of Art	12/8/05	Ben Withes 7-4013 bwithersonk	Bouldelas
College of Fine Arts	12/14/07	R. SHAY /	26
		1 1	

External-to-College Approvals:

Council	Date Approved	Signature	Approval of Revision ³
Undergraduate Council	3/30/2010	The state of the s	
Graduate Council		4 1	
Health Care Colleges Council			
Senate Council Approval	***	University Senate Approval	

³ Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council.

Attachment to Request for Change in Undergraduate Program Bachelor of Art in Art Studio Submitted November 2009

6. Premajor or Preprofessional Course Requirements:

Current Premajor Requirements

Progression Requirement

Students must have earned at least a 2.8 grade point average in the pre-major foundation sequence to progress from pre-major to major status.

Art Studio Foundations	Hours
1. A-S 101 (taken first semester)	1
2. Choose two of the following:	
A-H 104 Introduction to African Art	3
A-H 105 Ancient Through Medieval Art	3
A-H 106 Renaissance Through Modern Art	3
3. A-S 102 Visual Exploration I	3
A-S 103 Visual Exploration II	4
A-S 200 Studio I	3
A-S 215 Studio II	3
Subtotal: Premajor Hours	20

Pre-Major Foundation Exhibition.

Each first year student in the Foundation Program must participate in an annual exhibition to occur late each spring semester. Students will submit one work of their own selection from their first year's work for the exhibition, present it professionally, and provide an accompanying artist's statement.

Proposed Premajor Requirements

Progression Requirement

Aut Ctudio Foundations

Students must have earned at least a letter grade of C in each of the pre-major foundation courses to progress from pre-major to major status.

Art Studio Foundations	Hours
1. A-S 101 Art Studio Foundation Seminar	1
(taken first semester)	
2. Choose one of the following:	
A-H 102 Introduction to Asian Art	
A-H 104 Introduction to African Art	3
A-H 105 Ancient Through Medieval Art	3

A-H 106 Renaissance Through Modern	n Art3
A-S 001 Foundation Exhibition	0
A-S 102 Two-Dimensional Surface	
A-S 103 Three-Dimensional Form	
A-S 130 Drawing	
A-S 200 Digital Art, Time and Space	
Subtotal: Premajor Hours	19

Pre-Major Foundation Exhibition

Each first year student in the Foundation Program must participate in an annual exhibition to occur late each spring semester. Students will submit one work of their own selection from their first year's work for the exhibition, present it professionally, and provide an accompanying artist's statement. Participation in this exhibition is required and is tracked in A-S 001, Foundation Exhibition.

7. Major Course Requirements:

Current Major Requirements

Entrance Portfolio

Students who desire to declare an Art Studio major will demonstrate their progress in the Foundations Program and commitment to advanced undergraduate study through a mandatory portfolio review. The portfolio is to include up to 12 works of art, selected to include examples from each of the pre-major foundation courses and to also include art works that can be varied according to the student's current proposed direction. These should be presented in a professional format and include a CD of properly identified images, an artist's statement, a résumé, & a self-evaluation of student's progress. Students will deliver the portfolio to the art department office (207 FA) on the stipulated deadline and collect it (207 FA) with the faculty assessment on the deadline stipulated.

- 1. ART 191 Art Professions (two credit hours required)
- 2. A-S 201 Studio Core Seminar (one credit hour)
- 3. Twenty-four hours of studio courses at or above the 300 level, 12 hours of which must be in a single discipline (e.g., painting, sculpture, printmaking, etc.) In addition, majors are to complete one course from each of the three following categories:
 - 2-D category options (3 credit hours):

Painting I (A-S 310)

Printmaking I (A-S 320)

Fiber I (subtitled surface design)

3-D category options (3 credit hours):

Beginning sculpture (A-S 255)

Ceramics I (A-S 370)

Fiber I (subtitled structures & mixed media)

Photography/New Media options (3 credit hours):

Attachment to Request for Change in Undergraduate Program Bachelor of Art in Art Studio

Page 3 of 5

Photography I (A-S 380) New Media I (A-S 345 or A-S 346 or A-S 347)

- 4. At least six hours of art history at or above the 300 level
- 5. A-S 490 Senior Seminar (one credit hour; taken during the final semester of study)
- 6. Participation in a Graduating Seniors' Exhibition
- 7. At least 9 hours in work related to but outside the major department.

Subtotal: Major Hours43

Proposed Major Requirements

Entrance Portfolio

Students who desire to declare an Art Studio major will demonstrate their progress in the Foundations Program and commitment to advanced undergraduate study through a mandatory portfolio review. The portfolio is to include up to 12 works of art, selected to include examples from each of the pre-major foundation courses and to also include art works that can be varied according to the student's current proposed direction. This portfolio will be created as a part of Studio Core Seminar (A-S 201.) These should be presented in a professional format and include a CD of properly identified images, an artist's statement, a résumé, & a self-evaluation of student's progress. Students will deliver the portfolio to the art department office (207 FA) on the stipulated deadline and collect it (207 FA) with the faculty assessment on the deadline stipulated.

- 1. ART 191 Art Professions (2 credit hours required)
- 2. A-S 201 Studio Core Seminar (1 credit hour)
- 3. A-S 331 Exploration of Human Form (3 credit hours)
- 4. 24 credit hours of studio courses at or above the 300 level. As a part of those 24 hours: 12 credit hours must be in a single discipline (e.g., painting, sculpture, printmaking, etc.) and 9 credit hours from the categories below (*one* course from *each* of the three following categories during the sophomore year, or equivalent):

Category One Options (3 credit hours):

Painting I (A-S 310) Printmaking I (A-S 320) Fiber I (A-S 350)

Category Two Options (3 credit hours):

Introduction to Sculpture (A-S 355)

Ceramics I (A-S 370)

Category Three Options (3 credit hours):

Photography I (A-S 380)

InterMedia Options: Web Design (A-S 345) or Video (A-S 346) or Circuits and Bits (A-S 348)

- 5. At least 6 credit hours of art history at or above the 300 level
- 6. A-S 490 Senior Seminar (1 credit hour; taken during the final semester of study)
- 7. Participation in a Graduating Seniors' Juried Exhibition
- 8. At least 9 credit hours in work related to but outside the major. Choice of this related work must be approved by the student's advisor. Courses which are used to fulfill University Studies requirements may also be used to fulfill this related work, when appropriate.

Subtotal: Major Hours43

14. Rationale for Changes

The proposed program builds upon an initial revision of the program submitted last academic year and provides an even greater coherency, a higher degree of program accountability, and introduces greater rigor aimed at professionalizing majors at an earlier stage in their undergraduate careers. It is more in line with programs offered at our benchmark institutions and modernizes the timing, administration and language of the structure, course offerings and course content.

The faculty believe that this Program Change will allow us to attract more serious, committed students and be more competitive with other benchmark studio programs. We believe serious students will find the structure and clearly labeled content attractive and will experience the benefits of the program coherency for their development as artists. For the same reason, we expect that the program may ultimately attract a higher quality applicant. In both cases, we expect the new curriculum to help increase our retention rates and, gradually, rebuild our enrollments.

15. List below the typical semester-by-semester program for a major.

Semester 1 (16cr): A-S 101 Art Studio Foundation Seminar (1cr) A-S 102 Two-Dimensional Surface (3cr) A-S 130 Drawing (3cr) Select one course from the following: A-H 102, A-H 104, A-H 105, A-H 106 (A-H 106 is required in the Foundation year.) (3cr) USP (3cr) USP (3cr)

A-S 001 Foundation Exhibition (0cr)

A-S 103 Three-Dimensional Form (3cr)

A-S 200 Digital Art, Time and Space (3cr)

Select one course from the following:

A-H 102, A-H 104, A-H 105, A-H 106 (A-H 106 is required in the Foundation year.) (3cr)

USP (3cr)

USP (3cr)

Semester 3 (15cr):

A-S Studio Core - category option (3cr) or A-S 331 Exploration of Human Form (3cr)

A-S Studio Core-category option (3cr)

A-H option (3cr)

USP (3cr)

USP (3cr)

Attachment to Request for Change in Undergraduate Program
Bachelor of Art in Art Studio

Page 5 of 5

Semester 4 (16cr):

A-S 201 Studio Core Seminar (1cr)

A-S Studio Core - category option (3cr) or A-S 331 Exploration of Human Form (3cr)

A-S Studio Core - category option (3cr)

A-H option (3cr)

USP (3cr)

USP (3cr)

Semester 5,6,7 and 8 remain the same, with no changes requested. Art Studio majors are able to complete this degree in four years.



Davis, Alison F

Sent: Tuesday, November 23, 2010 9:17 AM

Brothers, Sheila C

Dear Sheila,

The Senate's Admissions and Academic Standards Committee voted on four items. The committee includes Alan Nadel, Christopher Feddock, Carl Lee, Raphael Finkel, Lee Meyer and Alison Davis (chair). The following are the results:

2) The motion was for a positive recommendation of the proposed changes to BFA Art Studio (6 yes, 0 no)

Thanks, Alison

•

1. General Information	
Rollege: Fine Arts	Department: Department of Art
Current Major Name: <u>Art Studio</u>	Proposed Major Name: <u>no change</u>
Current Degree Title: Bachelor of Fire	ne Art Proposed Degree Title: no change
Formal Option(s):	Proposed Formal Option(s):
Specialty Field w/in Formal Option:	Proposed Specialty Field w/in Formal Options:
Date of Contact with Associate Provost	for Academic Administration ¹ : <u>11-4-09</u>
Bulletin (yr & pgs): 2009, 215	CIP Code ¹ : <u>50.0702</u> Today's Date: <u>11-2-09</u>
Accrediting Agency (if applicable): Na	ational Association of Schools of Art and Design
Requested Effective Date: Semes	ter following approval. OR Specific Date ² : <u>Fall 2010</u>
Dept. Contact Person: Rae Goodwin	Phone: 455-6461 Email: rae.goodwin@uky.edu
2. University Studies Requirements or F	decommendations for this Program.
	Current Proposed
I. Mathematics	<u>no change</u>
II. Foreign Language	<u>no change</u>
III. Inference-Logic	no change
IV. Written Communication	ENG 104 or Honors <u>no change</u>
V. Oral Communication	Suspended through Fall 2009 Suspended through Fall 2009
VI. Natural Sciences	<u>no change</u>
VII. Social Sciences	no change
VIII. Humanities	<u>no change</u>
IX. Cross-Cultural	<u>no change</u>
 USP Electives (3 must be outside the student's major) 	no change
3. Explain whether the proposed chang another department/program. Routing	es to the program (as described in sections 4 to 12) involve courses offered by Signature Log must include approval by faculty of additional department(s).
All required for this program cha	nge to the Foundations Program courses are offered in the Department of Art.
4. Explain how satisfaction of the Univ	ersity Graduation Writing Requirement will be changed.
Current	Proposed

Prior to filling out this form, you MUST contact the Associate Provost for Academic Administration (APAA). If you do not know the CIP code, the

⁽APAA) can provide you with that during the contact.

Program changes are typically made effective for the semester following approval. No program will be made effective until all approvals are received.

:	Standard University course offering.	Standard University course offering List: no change	i,
	List: any course that satisfies the University		
	Graduation Writing Requirement		
	Specific course – list:	Specific course) – list:	a de seço de como de c
5. Lis	st any changes to college-level requirements that must b	e satisfied.	
		Proposed Standard college requirement.	
	List: Music, Theatre and/or Arts Administration	List: <u>no change</u>	
	(6cr) plus 45 hours at 300-level or above		
· · · · · · · · · · · · · · · · · · ·	Specific required course – list:	Specific course – list:	
6. Li	st pre-major or pre-professional course requirements the Current see attached	at will change, including credit nours. Proposed <u>see attached</u>	
7. Lis	t the major's course requirements that will change, inclu	iding credit hours.	
	Current see attached	Proposed see attached	
8. Do	es the pgm <u>require</u> a minor AND does the proposed <u>change</u> 'Yes," indicate current courses and proposed changes belo	e affect the required minor? N/A	Yes No
IT		Proposed	
If '	pes the proposed change affect any option(s)? Yes," indicate current courses and proposed changes beloospecialties, if any.	N/A www.including credit hours, and also specia	Yes 🔀 No alties and
		Proposed	

10. Does the change affect pgm in a related field? If so, indicate current courses	a requirements for number of and proposed changes below.	f credit hrs	outside the ma	ijor subject	Yes No
Current		Proposed			. Consequence and the second s
11. Does the change affect pgm	n requirements for technical es and proposed changes belo	or professio w.	onal support ele	ectives?	☐ Yes ⊠ No
Current		Proposed	l		
12. Does the change affect a m If "Yes," indicate current co	inimum number of free credi urses and proposed changes	it hours or s below.	support elective	es?	☐ Yes ⊠ No
Current		Proposed	l		
13. Summary of changes in req	uired credit hours:				
a. Credit Hours of Pren	najor or Preprofessional Cours	ses:	Current <u>20</u>	Proposed <u>19</u>	•
b. Credit Hours of Majo	or's Requirements:		<u>51</u>	<u>51</u>	
c. Credit Hours for Req	uired Minor:		<u>o</u> .	<u>0</u>	
d. Credit Hours Needed for a Specific Option:			<u>0</u>	<u>o</u>	
e. Credit Hours Outside	e of Major Subject in Related	Field:	9	<u>9</u>	
f. Credit Hours in Technical or Professional Support Electives:		<u>0</u> .	<u>0</u>		
g. Minimum Credit Ho	urs of Free/Supportive Electiv	es:	<u>6</u>	<u>6</u>	
h. Total Credit Hours R		100: 200: 300: 400-500:	13 8 45 minimum 1	<u>16</u> <u>8</u> 45 minimu 1	<u>m</u>
i. Total Credit Hours R	equired for Graduation:		<u>120</u>	<u>120</u>	
14. Rationale for Change(s) that.	– if rationale involves accrec	litation req	uirements, ple	ase include spe	ific references to
see attached					
15. List below the typical semons separate sheet for each option		or the major	r. If multiple op	otions are availa	ole, attach a
YEAR 1 - FALL:	see attached	YEAR	1 – SPRING:	see attached	
(e.g. "BIO 103; 3 credits") YEAR 2 - FALL:	see attached	YEAR	2 – SPRING:	see attached	-

YEAR 3 - FALL:	no change	YEAR 3 - SPRING:	no change
YEAR 4 - FALL:	no change	YEAR 4 - SPRING:	no change

Signature Routing Log

Caneral Information:

Current Degree Title and Major Name:

Bachelor of Fine Art in Art Studio

Proposal Contact Person Name:

Rae Goodwin

Phone: 455-6461

Email:

rae.goodwin@uky.edu

INSTRUCTIONS:

Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

Internal College Approvals and Course Cross-listing Approvals:

	Reviewing Group	Date Approved	Contact Person (name/phone/email)	Signature
	Department of Art	12/08/2009	Bern Withers /7-4013/bwithers@uky.e	du Barlelille
	College of Fine Arts	12/4/09	R. SAHARY	Jens)
(

External-to-College Approvals:

Date Approved	Signature	Approval of Revision ³
3/30/2010	Diy	
		.
	University Senate Approval	; : : !
	Approved 3/30/2010	Approved 3/30/2010 Signature

³ Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council.

Attachment to Request for Change in Undergraduate Program Bachelor of Fine Art in Art Studio Submitted November 2009

6. Premajor or Preprofessional Course Requirements:

Current Premajor Requirements

Progression Requirement

Students must have earned at least a 2.8 grade point average in the pre-major foundation sequence to progress from pre-major to major status.

Art Studio Foundations	Hours
1. A-S 101 (taken first semester)	1
2. Choose two of the following:	
A-H 104 Introduction to African Art	3
A-H 105 Ancient Through Medieval Art	3
A-H 106 Renaissance Through Modern Art	3
3. A-S 102 Visual Exploration I	3
A-S 103 Visual Exploration II	4
A-S 200 Studio I	
A-S 215 Studio II	3
Subtotal: Premajor Hours	

Pre-Major Foundation Exhibition.

Each first year student in the Foundation Program must participate in an annual exhibition to occur late each spring semester. Students will submit one work of their own selection from their first year's work for the exhibition, present it professionally, and provide an accompanying artist's statement.

Proposed Premajor Requirements

Progression Requirement

Students must have earned at least a letter grade of C in each of the pre-major Foundation courses to progress from pre-major to major status.

Art Studio Foundations	Hours
1. A-S 101 Art Studio Foundation Seminar	1
(taken first semester)	
2. Choose one of the following:	
A-H 102 Introduction to Asian Art	
A-H 104 Introduction to African Art	3
A-H 105 Ancient Through Medieval Art	3

A-H 106 Renaissance Through Modern Art	3
A-S 001 Foundation Exhibition	0
A-S 102 Two-Dimensional Surface	
A-S 103 Three-Dimensional Form	
A-S 130 Drawing	
A-S 200 Digital Art, Time and Space	
Subtotal: Premajor Hours	19

Pre-Major Foundation Exhibition

Each first year student in the Foundation Program must participate in an annual exhibition to occur late each spring semester. Students will submit one work of their own selection from their first year's work for the exhibition, present it professionally, and provide an accompanying artist's statement. Participation in this exhibition is required and is tracked in A-S 001, Foundation Exhibition.

7. Major Course Requirements:

Current Major Requirements

Entrance Portfolio

Students who desire to declare an Art Studio major will demonstrate their progress in the Foundations Program and commitment to advanced undergraduate study through a mandatory portfolio review. The portfolio is to include up to 12 works of art, selected to include examples from each of the pre-major foundation courses and to also include art works that can be varied according to the student's current proposed direction. These should be presented in a professional format and include a CD of properly identified images, an artist's statement, a résumé, & a self-evaluation of student's progress. Students will deliver the portfolio to the art department office (207 FA) on the stipulated deadline and collect it (207 FA) with the faculty assessment on the deadline stipulated.

- 1. ART 191 Art Professions (2 credit hours required)
- 2. ART 291 BFA Practicum (2 credit hours required)
- 3. A-S 201 Studio Core Seminar (1 credit hour)
- 4. 36 credit hours of studio courses at or above the 300 level, according to the student's committee-approved plan of study. As part of this 36 credit hour requirement, majors are to complete *one* course from *each* of the three following categories during the sophomore year (or equivalent):
 - 2-D category options (3 credit hours):

Painting I (A-S 310)

Printmaking I (A-S 320)

Fiber I (subtitled surface design)

3-D category options (3 credit hours):

Beginning sculpture (A-S 255)

Ceramics I (A-S 370)

Fiber I (subtitled structures & mixed media)

Photography/New Media options (3 credit hours):

Attachment to Request for Change in Undergraduate Program
Bachelor of Fine Art in Art Studio

Page 3 of 5

Photography I (A-S 380) New Media I (A-S 345 or A-S 346 or A-S 347)

- 5. At least 9 credit hours of art history at or above the 300 level
- 6. A-S 490 Senior Seminar (1 credit hour; taken during the final semester of study)
- 7. Presentation of a one-person senior exhibition for final approval by a studio faculty review committee.
- 8. At least nine hours in work related to but outside the major program. Choice of this related work must be approved by the student's advisor. Courses which are used to fulfill University Studies requirements may also be used to fulfill this related work, when appropriate.

Subtotal: Major Hours 60

Proposed Major Requirements

Entrance Portfolio

Students who desire to declare an Art Studio major will demonstrate their progress in the Foundations Program and commitment to advanced undergraduate study through a mandatory portfolio review. The portfolio is to include up to 12 works of art, selected to include examples from each of the pre-major foundation courses and to also include art works that can be varied according to the student's current proposed direction. These should be presented in a professional format and include a CD of properly identified images, an artist's statement, a résumé, & a self-evaluation of student's progress. Students will deliver the portfolio to the art department office on the stipulated deadline and collect it with the faculty assessment on the deadline stipulated.

- 1. ART 191 Art Professions (2 credit hours required)
- 2. A-S 201 Studio Core Seminar (1 credit hour)
- 3. A-S 331 Exploration of Human Form (3 credit hours)
- 4. ART 291 BFA Practicum (2 credit hours required)
- 5. 36 credit hours of studio courses at or above the 300 level, according to the student's committee-approved plan of study. As part of this 36 credit hour requirement, majors are to complete *one* course from *each* of the three following categories during the sophomore year (or equivalent):

Category One Options (3 credit hours):

Painting I (A-S 310) Printmaking I (A-S 320) Fiber I (A-S 350)

Category Two Options (3 credit hours):

Introduction to Sculpture (A-S 355)

Ceramics I (A-S 370)

Category Three Options (3 credit hours):

Photography I (A-S 380)

InterMedia Options: Web Design (A-S 345) or Video (A-S 346) or Circuits and Bits (A-S 348)

- 6. At least 9 hours of art history at or above the 300 level
- 7. A-S 490 Senior Seminar (1 credit hour; taken during the final semester of study)

Attachment to Request for Change in Undergraduate Program Bachelor of Fine Art in Art Studio

Page 4 of 5

8. Participation in a Graduating Seniors' Exhibition, reviewed by a faculty committee

9. At least 9 hours in work related to but outside the major. Choice of this related work must be approved by the student's advisor. Courses which are used to fulfill University Studies requirements may also be used to fulfill this related work, when appropriate.

Subtotal: Major Hours60

14. Rationale for Changes

The proposed program builds upon an initial revision of the program submitted last academic year and provides an even greater coherency, a higher degree of program accountability, and introduces greater rigor aimed at professionalizing majors at an earlier stage in their undergraduate careers. It is more in line with programs offered at our benchmark institutions and modernizes the timing, administration and language of the structure, course offerings and course content.

The faculty believe that this Program Change will allow us to attract more serious, committed students and be more competitive with other benchmark studio programs. We believe serious students will find the structure and clearly labeled content attractive and will experience the benefits of the program coherency for their development as artists. For the same reason, we expect that the program may ultimately attract a higher quality applicant. In both cases, we expect the new curriculum to help increase our retention rates and, gradually, rebuild our enrollments.

15. List below the typical semester by semester program for a major.

Semester 1 (16cr):

A-S 101 Art Studio Foundation Seminar (1cr)

A-S 102 Two-Dimensional Surface (3cr)

A-S 130 Drawing (3cr)

Select one course from the following:

A-H 102, A-H 104, A-H 105, A-H 106 (A-H 106 is required in the Foundation year.) (3cr)

USP (3cr)

USP (3cr)

Semester 2 (15cr):

A-S 001 Foundation Exhibition (0cr)

A-S 103 Three-Dimensional Form (3cr)

A-S 200 Digital Art, Time and Space (3cr)

Select one course from the following:

A-H 102, A-H 104, A-H 105, A-H 106 (A-H 106 is required in the Foundation year.) (3cr)

USP (3cr)

USP (3cr)

Semester 3 (15cr):

A-S Studio Core - category option (3cr) or A-S 331 Exploration of Human Form (3cr)

A-S Studio Core-category option (3cr)

A-H option (3cr)

USP (3cr)

USP (3cr)

Semester 4 (16cr):

A-S 201 Studio Core Seminar (1cr)

A-S Studio Core - category option (3cr) or A-S 331 Exploration of Human Form (3cr)

A-S Studio Core - category option (3cr)

A-H option (3cr)

USP (3cr)

USP (3cr)

Semester 5,6,7 and 8 remain the same, with no changes requested. Art Studio majors are able to complete this degree in four years.



You replied on 11/23/2010 9:52 AM.

Davis, Alison F

Sent: Tuesday, November 23, 2010 9:17 AM

To: Brothers, Sheila C

Dear Sheila,

The Senate's Admissions and Academic Standards Committee voted on four items. The committee includes Alan Nadel, Christopher Feddock, Carl Lee, Raphael Finkel, Lee Meyer and Alison Davis (chair). The following are the results:

3) The motion was for a positive recommendation of the proposed changes to BA Art Education (6 yes, 0 no)

Thanks, Alison

•

1. General Information	
College: Fine Arts	Department: <u>Department of Art</u>
Current Major Name: Art Education	Proposed Major Name: <u>no change</u>
Current Degree Title Bachelor of Ar Education	t in Art Proposed Degree Title: no change
Formal Option(s):	Proposed Formal Option(s):
Specialty Field w/in Formal Option:	Proposed Specialty Field w/in Formal Options:
Date of Contact with Associate Provost	for Academic Administration ¹ : <u>11-4-09</u>
Bulletin (yr & pgs): 2009, 213	CIP Code ¹ : 13.1302 Today's Date: 11-2-09
Accrediting Agency (if applicable): N	ational Association of Schools of Art and Design
Requested Effective Date: Semes	ster following approval. OR Specific Date ² : Fall 2010
Dept. Contact Person: Rae Goodwin	Phone: 455-6461 Email: rae.goodwin@uky.edu
2. University Studies Requirements or f	Recommendations for this Program.
	Current Proposed
I. Mathematics	<u>no change</u>
II. Foreign Language	<u>no change</u>
III. Inference-Logic	no change
IV. Written Communication	ENG 104 or Honors no change
V. Oral Communication	Suspended through Fall 2009 Suspended through Fall 2009
VI. Natural Sciences	no change
VII. Social Sciences	no change
VIII. Humanities	no change
IX. Cross-Cultural	no change
X. USP Electives (3 must be outside the student's major)	<u>no change</u>
3. Explain whether the proposed chang another department/program. Routing	es to the program (as described in sections 4 to 12) involve courses offered by Signature Log must include approval by faculty of additional department(s).
	nge to the Foundations Program courses are offered in the Department of Art.
	ersity Graduation Writing Requirement will be changed. Proposed
Current	FIUDUSEU

¹ Prior to filling out this form, you MUST contact the Associate Provost for Academic Administration (APAA). If you do not know the CIP code, the (APAA) can provide you with that during the contact.

² Program changes are typically made effective for the semester following approval. No program will be made effective until all approvals are

received.

Standard University course offering. List: any course that satisfies the Universit Graduation Writing Requirement	Standard University course offering List: no change	7.	
Specific course – list:	Specific course) – list:		٠
5. List any changes to college-level requirements that must	be satisfied.		
Current Standard college requirement. List: Music, Theatre and/or Arts Administration (6cr) plus 39 hours at 300-level or above	Proposed Standard college requirement. List: no change		
Specific required course – list:	Specific course – list:		
6. List pre-major or pre-professional course requirements the	hat will change, including credit hours.		
Current see attached	Proposed <u>see attached</u>		
7. List the major's course requirements that will change, inc	luding credit hours.		
Current see attached	Proposed see attached		
8. Does the pgm require a minor AND does the proposed changes be Current Courses and proposed changes be	ge affect the required minor? \(\sum \text{N/A}\) How. Proposed	☐ Yes D	⊠ No
		-	
9. Does the proposed change affect any option(s)? If "Yes," indicate current courses and proposed changes be subspecialties, if any.	N/A low, including credit hours, and also speci-	two-boot	⊠ No
Current	Proposed		
10. Does the change affect pgm requirements for number of in a related field? If so, indicate current courses and proposed changes below.		☐ Yes [⊠ No
Current	Proposed		
11. Does the change affect pgm requirements for technical If so, indicate current courses and proposed changes belo		Yes	⊠ No
Current	Proposed		
12. Does the change affect a minimum number of free cred If "Yes," indicate current courses and proposed changes		Comment Yes	⊠No

Current	posed	

13. Summary of changes in required credit hours:

a.	Credit Hours of Premajor or Preprofessional Courses		Current <u>0</u>	Proposed 19
b.	Credit Hours of Major's Requirements:		87-89	<u>69-71</u>
C.	Credit Hours for Required Minor:		<u>0</u>	<u>o</u>
d.	Credit Hours Needed for a Specific Option:		<u>0</u>	<u>o</u>
e.	Credit Hours Outside of Major Subject in Related Fie	ld:	0	<u>o</u>
¥.	Credit Hours in Technical or Professional Support El	ectives:	<u>0</u>	<u>o</u>
g.	Minimum Credit Hours of Free/Supportive Electives		<u>6</u>	6
h.	Total Credit Hours Required by Level:	100: 200: 300: 400-500:	24 15 39 minimum 8	<u>25</u> <u>10</u> <u>39 minimum</u> <u>8</u>
i.	Total Credit Hours Required for Graduation:		120 minimum	120 minimum

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

see attached

15. List below the typical semester by semester program for the major. If multiple options are available, attach a separate sheet for each option.

YEAR 1 - FALL: (e.g. "BIO 103; 3 credits")	see attached	YEAR 1 – SPRING:	
YEAR 2 - FALL :	see attached	YEAR 2 – SPRING:	see attached
YEAR 3 - FALL:	see attached	YEAR 3 - SPRING:	see attached
YEAR 4 - FALL:	see attached	YEAR 4 - SPRING:	see attached

Signature Routing Log

General Information:

Current Degree Title and Major Name:

Bachelor of Art in Art Education

Proposal Contact Person Name:

Rae Goodwin

Phone: 455-6461

Email:

rae.goodwin@uky.edu

INSTRUCTIONS:

Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

Internal College Approvals and Course Cross-listing Approvals:

Reviewing Group	Date Reviewing Group Approved Contact Person (name/phone/email)		Signature	
Department of Art	12/08/2009	Ben Withas / 7-4013	/bwithersoury	eda Baralely
College of Fine Arts	12/4/09	E. SHORY	/	Pas
		/	1	
)		/	1	

External-to-College Approvals:

Council	Date Approved	Signature	Approval of Revision ³
Undergraduate Council	3/2/2010	Sharon Gill Ditter Sharrotti, or tedesgraduse by Sharot Gill Ditter Sharrotti, or tedesgraduse behavior, and sighted brillia.	
Graduate Council			
Health Care Colleges Council			
Senate Council Approval		University Senate Approval	

Comments:

³ Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council.

6. Premajor or Preprofessional Course Requirements:

Current Premajor Requirements

Currently there are no Premajor requirements listed for this program. Previously required courses were listed as lower and upper division with a requirement that 60 credit hours be taken before applying to the Teacher Education Program (TEP.)

Proposed Premajor Requirements

Progression Requirement

Students must have earned an overall minimum GPA of 2.5 to progress from pre-major to major status.

Art Education Foundations	Hours
A-H 105 Ancient Through Medieval Art	3
A-H 106 Renaissance Through Modern Art	3
A-S 001 Foundation Exhibition	0
A-S 101 Art Studio Foundation Seminar	1
(taken first semester)	
A-S 102 Two-Dimensional Surface	3
A-S 103 Three-Dimensional Form	3
A-S 130 Drawing	3
A-S 200 Digital Art, Time and Space	3
•	
Subtotal: Premajor Hours	19

Pre-Major Foundation Exhibition

Each first year student in the Foundation Program must participate in an annual exhibition to occur late each spring semester. Students will submit one work of their own selection from their first year's work for the exhibition, present it professionally, and provide an accompanying artist's statement. Participation in this exhibition is required and is tracked in A-S 001, Foundation Exhibition.

7. Major Course Requirements:

Current Major Requirements

Professional and Art Education Requirements	Hours
COM 181 Basic Public Speaking	3
*PSY 100 Introduction to Psychology	
EDP 202 Human Development and Learning	
EDP 203 Teaching Exceptional Learners in Regular Classrooms	3
EPE 301 Education in American Culture	. 3
EDC 362 Field Experiences in Secondary Education	. 1-3

Page 2 of 6

Subtotal: Professional and Art Education Hours	9-41
*Students must complete PSY 100 in addition to six hours of USP Social Sc	iences.
A-E 579 Arts and Humanities in Art Education	2
A-E 578 Art in Elementary Schools	2
A-E 577 Art in Secondary Schools	. 2
A-E 576 Art in Middle Schools	2
EDC 342 Student Teaching in Art	12
EDL 401 The Professional Teacher: Legal Perspectives	Name of the last o
EDC 317 Introduction to Instructional Media	1

Continuous Assessment in the Art Education Program

Students' progress through the art education programs is continuously monitored, assessed, and reviewed. In addition to regular evaluation in conjunction with their program course work and field placements, students will be assessed three times in their art education program:

- 1. Entry into the Teacher Education Program (TEP). Students must apply to the TEP program and demonstrate that they have earned at least 60 credit hours and meet the criteria put forth by the College of Education by filling out the College of Education TEP application form. Upon meeting those criteria, applicants then have a portfolio review and interview with art education faculty to determine entry into the program.
- 2. Mid-Level review. No later than the semester prior to student teaching, students will demonstrate that they meet the criteria put forth by the art education faculty by submitting the materials required for review by the art education faculty.
- 3. Final assessment upon completion of student teaching. The final assessment is made by the two cooperating public school teachers who supervise the student, and by the observation assessments of the University student teaching supervisor.

Area of Concentration in Art	
Area A. Art History and Appreciation	Hours
1. Lower Division (Select two of the following	
courses: ART 100, A-H 105, A-H 106)	6
2. Upper Division (two 300-level of above	
A-H courses)	6
3. ART 191 Art Professions	4
Subtotal: Area A Hours	. 16
Area B. Art Studio	
1. Lower Division (all of the following courses))
A-S 102 Visual Exploration I	3
A-S 103 Visual Exploration II	4
A-S 200 Studio I	3
A-S 215 Studio II	3
A-S 255 Studio III	3
2. Upper Division Hours (all of the following c	ourses)
A-S 310 Painting I	3

Page 3 of 6

A-S 320 Printmaking I or
A-S 321 Printmaking II3
A-S 370 Ceramics3
3. Studio electives (Need not be upper division. Regular
and/or independent course work may be selected from
one of from several studios)
Subtotal: Area B Hours32
Area of Concentration Hours48

State Mandated Testing and the Kentucky Teacher Internship

Successful completion of the examinations required by the Kentucky Education Professional Standards Board is a precondition for the granting of a teaching license (certificate). See www.kyepsb.net/ for the current list of PRAXIS examination requirements for P-12 Art certification. Upon being recommended for a Kentucky Teaching License (certificate), a candidate will be issued a Kentucky Letter of Eligibility for the Kentucky Teacher Internship Program. Upon employment in a Kentucky P-12 school, the candidate will receive a one-year license to practice as a fully qualified intern Art teacher. After successfully completing the internship year, the candidate will be eligible for a regular Kentucky Professional Teaching License (certificate). Information concerning licensure in other states is available from the office of Academic Services and Teacher Certification in the College of Education.

Proposed Major Requirements

Professional and Art Education Requirements (no changes)
Subtotal: Professional and Art Education Hours......39-41

Continuous Assessment in the Art Education Program

Students' progress through the art education programs is continuously monitored, assessed, and reviewed. In addition to regular evaluation in conjunction with their program course work and field placements, students will be assessed three times in their art education program:

- **1. Teacher Education Program (TEP)** Students who desire to declare an Art Education major will demonstrate their progress in the Foundations Program and commitment to advanced undergraduate study through an application to the TEP. In this application students must demonstrate that they have earned at least 60 credit hours and meet the criteria put forth by the College of Education by filling out the College of Education TEP application form. Upon meeting those criteria, applicants then have a portfolio review and interview with art education faculty to determine entry into the program.
- **2. Mid-Level review** No later than the semester prior to student teaching, students will demonstrate that they meet the criteria put forth by the art education faculty by submitting the materials required for review by the art education faculty.
- **3. Student Teaching** The final assessment is made by the two cooperating public school teachers who supervise the student, and by the observation assessments of the University student teaching supervisor.

Page 4 of 6

Subtotal: Major Hours	69-71
Area of Concentration in Art Hours	30
Art Studio electives	6
A-S 331 Exploration of Human Form	3
A-S 370 Ceramics	
A-S 355 Introduction to Sculpture	
A-S 320 Printmaking I or A-S 321 Printmaking II	
A-S 310 Painting I	
4. All of the following courses:	
3. Two Art History courses at or above the 300 le	
2. A-S 201 Studio Core Seminar	

State Mandated Testing and the Kentucky Teacher Internship (no changes)

14. Rationale for Changes

The proposed changes aligns the requirements in the Area of Concentration in Art in the Art Education undergraduate degree with the new Foundations Program approved by the Art Studio faculty in the Department of Art. The Art Education program is built on a discipline-based approach therefore, it is important that the requirements and expectations of Art Education align with those in Art Studio. The Art Studio faculty believe that the new Foundation Program provides greater coherency, a higher degree of program accountability, and introduces greater rigor aimed at professionalizing majors at an earlier stage in their undergraduate careers.

By aligning the Art Education Concentration in Art requirement with the Foundation in Art Studio, the faculty seek to stress the expectation of equal treatment for students in both degree programs and to facilitate students who wish to double major.

The Progression requirement in the Foundation Program will facilitate a four-year graduation for all majors because it will ensure that they complete all pre-major art studio courses during their first year.

These changes will support the University's goal of increasing retention and graduation rates. The Department of Art currently has the lowest retention rate in the College. One of the reasons for the low retention rate may be that nearly 50% of art majors declare the major as upper classmen (juniors, seniors). These late-comer students tend to take courses out of sequence and do not benefit from the coherence of the program and the progressive development it could provide. The required freshman seminar (A-S 101) is designed to orient first year students within the university, college, and departmental structure and present to them the opportunities and requirements of the various degrees. In this way, we hope to better inform our students, ease their transition from high school to college, and facilitate their entry into our degree programs. Likewise, the required sophomore seminar (A-S 201) is designed to prepare students for the precise requirements of the various entry portfolios such as the Teacher Education Program (TEP) interviews required for entry into the Art Education major.

Page 5 of 6

The faculty believe that this Program will allow us to attract more serious, committed students and be more competitive with other benchmark studio programs. We believe serious students will find the structure attractive and will experience the benefits of the program coherency for their development as artists. For the same reason, we expect that the program may ultimately attract a higher quality applicant. In both cases, we expect the new curriculum to help increase our retention rates and, gradually, rebuild our enrollments.

15. List below the typical semester-by-semester program for a major.

Semester 1 (16cr):

A-S 101 Art Studio Foundation Seminar (1cr)

A-S 102 Two-Dimensional Surface (3cr)

A-S 130 Drawing (3cr)

A-H 105 Ancient Through Medieval Art (3cr)

COM 181 Basic Public Speaking (3cr)

USP (3cr)

Semester 2 (16cr):

A-S 001 Foundation Exhibition (0cr)

A-S 103 Three-Dimensional Form (3cr)

A-S 200 Digital Art, Time and Space (3cr)

ART 191 Art Professions (1cr)

A-H 106 Renaissance Through Modern Art (3cr)

PSY 100 Introduction to Psychology (3cr)

USP (3cr)

Semester 3 (16cr):

A-S 310 Painting I (3cr)

A-S 320 Printmaking I or A-S 321 Printmaking II (3cr)

ART 191 Art Professions (1cr)

A-H 300 level (3cr)

EDP 202 Human Development and Learning (3cr)

USP (3cr)

Semester 4 (16cr):

A-S 201 Studio Core Seminar (1cr)

A-S 355 Introduction to Sculpture (3cr)

A-S 331 Exploration of Human Form

A-H 300 level (3cr)

EDP 203 Teaching Exceptional Learners in Regular Classrooms (3cr)

USP (3cr)

Semester 5 (18cr):

TEP Review

EPE 301 Education in American Culture (3cr)

A-S 370 Ceramics (3cr)

Page 6 of 6

USP (3cr)

USP (3cr)

A-S Elective (3cr)

USP (3cr)

Semester 6 (12cr):

EDC 362 Field Experiences in Secondary Education (1cr)

EDC 317 Introduction to Instructional Media (1cr)

A-E 577 Art in Secondary Schools (2cr)

A-E 579 Arts and Humanities in Art Education (2cr)

USP (3cr)

USP (3cr)

Semester 7 (14cr):

A-E 576 Art in Middle Schools (2cr)

A-E 578 Art in Elementary Schools (2cr)

EDL 401 The Professional Teacher: Legal Perspectives (1cr)

USP (3cr)

USP (3cr)

A-S Elective (3cr)

Semester 8 (15cr)

EDC 342 Student Teaching in Art (12cr)

USP (3cr)

Art Education majors are able to complete this degree in four years.

Brothers, Sheila C

From: Wermeling, Daniel

Sent: Thursday, November 11, 2010 12:24 PM

To: Kelly, Thomas
Cc: Brothers, Sheila C
Subject: CTS PhD review

Dear Tom: The Senate APC committee reviewed the proposal for a PhD in Clinical and Translational Science. The committee unanimously approved the proposal. However, we thought the proposal might benefit from a couple of friendly edits. Could you please send a slightly edited version to Sheila to take forward? Matters to edit:

- 1. We recognize the proposal has been floating through the process for some time. However, there are named individuals who are no longer with the University. Please review the proposal and correct the names or remove names but keep the title/position.
- 2. The admissions section of the document could be more inclusive and I think this notion follows your intention. We thought you should mention or have more emphasis on the Health Care Colleges versus the naming of degrees. The graduate programs will evolve and you would benefit from allowing these students with professional degrees from previous education to be considered eligible for consideration. An additional inclusive statement I have seen used in other proposals, which adds flexibility, is: Students may also be admitted to the program with consent of the Director of Graduate Studies.

We hope that these comments are helpful. Please forward a final copy to Sheila for the next step.

Thank you, Dan

Daniel Wermeling, Pharm.D., FCCP, FASHP Associate Professor University of Kentucky Room 225 College of Pharmacy 789 South Limestone St. Lexington, KY 40536-0596

Office: 859-323-7499

Alcomed Cell: 859-221-4138

FAX: 859-323-0069 email: dwermel@uky.edu

(Suggestions already incorporated into this proposal, but without track changes.)

UNIVERSITY SENATE REVIEW AND CONSULTATION SUMMARY SHEET

<u>Proposal Title:</u> PhD in Clinical and Translational Science Name/email/phone for proposal contact: Thomas Kelly, PhD /thkelly@uky.edu/ (859) 323-5206

Instruction: To facilitate the processing of this proposal please identify the groups or individuals reviewing the proposal, indentify a contact person for each entry, provide the consequences of the review (specifically, approval, rejection, no decision, and vote outcome, if any) and please attach a copy of any report or memorandum developed with comments on this proposal.

Reviewed by: (Chairs, Directors, Faculty Groups, Faculty Councils, Committees, etc.)	Contact person Name (phone/email)	Consequences of Review:	Date of Proposal Review	Review Summary Attached? (yes or no)
Dept. of Behavioral Science Faculty	Thomas H. Kelly, PhD (3-5206/thkelly@uky.edu)	Approved	3/13/09	No
Co.Medici Ne Cu priculum Committee	C DARREIL JENNINGS m. b. 7-5286 Cdjenn Quky. edu	L. Ven Myeny	4/20/09 W	No
C. o. Medicine Faculty Council	Jennifer Bruzckner PL.D. 3.5261 Jennifer Bruzekner Cuky.	App 20124 Annifly	5/19/09	Νο
C. p. medici u a Dzav	JAY A. Perman, m. D. 3-6582 japerm 2 Romail. uky. odu	Varjeu	5/22/09	ИО
Acce	Heidi Anderson 3-6589	Litti Mafele	6-16-19	

MEMORANDUM

DATE: October 29, 2009

TO: David Randall

University Senate Council

FROM: Jeannine Blackwell, Dean

The Graduate School

RE: New Ph.D. in Clinical and Translational Science

Graduate voted to approve the proposal for a new Ph.D. in Clinical and Translational Science at its meeting on October 29, 2009.

A few comments from the Graduate School:

- 1. The program requests that the Graduate School waive the requirement of the GRE, since all students admitted to the new program are required to have a terminal professional doctoral degree (M.D., D.M.D., D.D.S., Pharm. D., D.O., D.N.P., D. Sc., or D. P.H.). The Graduate School regularly waives the requirement for those possessing such a terminal doctoral degree. We will do so on this case as well.
- 2. The program requests that the Graduate School accept the prior professional degree substitute for 18 hours of the 36 credit Ph.D. minimum requirement. This is in line with our current practice of substituting an earned master's degree for 18 credits toward the doctorate. It is also in line with the amount of shared coursework accepted for the dual degree program M.D./Ph.D., which is also one year of residence credit, or the equivalent of 18 credits. We will accept the previous professional degree in lieu of 18 credits toward the requirement.
- 3. The Graduate School currently has a requirement that 3 of the four members of a doctoral advisory committee be from the student's doctoral program. However, the Graduate School waives this requirement frequently in the case of interdisciplinary degrees (such as Nutritional Sciences or the several programs in pharmacological sciences). We will waive the 3 member rule for CTS students when there is an argument to be made for an interdisciplinary committee

REQUEST FOR A NEW PROGRAM

Degree title: PhD in Clinical & Translational Science

Major title: Option: Major code in SAP:

Primary College: Medicine

CIP Code: 51.9999 Health Professions and Related Clinical Sciences, Other

Accrediting Agency: N/A

Contacts: Thomas H. Kelly thkelly@uky.edu 323-5206

I. Abstract

The goal of the PhD in Clinical and Translational Science (CTS) program is to improve the health of the citizens of the Commonwealth of Kentucky and the nation by training professionals with terminal professional health care degrees to conduct clinical and translational science research. CTS is an academic discipline that focuses on acceleration of the translation of basic science advances to tangible improvements in public health. The primary target audience for the PhD in CTS program will be exceptional health professionals (e.g., physicians, nurses, dentists, pharmacists, public health professionals) committed to furthering their academic research careers in CTS. The program includes a curriculum providing education in the core competencies of CTS; advanced interdisciplinary education and research training tailored to the research interests and career objectives of the exceptional scholar; and mentored research training. The primary emphasis of mentored research training is to permit scholars to create well-reasoned original research contributions to the discovery of clinical health knowledge and its application. The PhD in CTS will support the development of the next generation of innovative, productive, and transformative researchers and leaders in CTS who will support the translation of discovery into improved patient care and delivery of evidence-based health care to the Commonwealth of Kentucky and to the nation.

II. Program Description

a) Background: Research developments over the past thirty years have resulted in unparalleled advances in basic science discovery within the health sciences. Over this same time frame, the pace of translation of new discoveries into innovations in health care, and the rate of diffusion of new evidence-based health care interventions into communities throughout Kentucky and the nation have remained modest and well below the remarkable rate of advancement in basic science discovery. CTS improves the effectiveness and efficiency by which basic science discovery is translated into improved health care and by which new evidence-based health care innovations are provided to the citizens of the Commonwealth of Kentucky and the nation.

The essential criteria of an academic discipline include (1) a unique field of action; (2) a

defining body of knowledge; (3) active areas of research; (4) intellectually rigorous training and education; and (5) the cultivation of a discipline-specific attitude or ethos. The unique field of action for CTS is the mindset and activities that expand existing and generate new interfaces between basic, clinical, community, and population investigations. It is only at these interfaces where translation is achieved as evidenced by the launching of new collaborations and scientific directions. While derived from the basic and clinical sciences, the defining body of knowledge that emerges for the discipline of clinical and translational science centers on the skills required to engage and promote its particular field of action, namely interface generation and exploitation. This unique skill set includes boundary-spanning strategies in communication, team building, and community engagement. In this regard, the discipline of clinical and translational science can be thought of as a "horizontal" discipline that cuts across the territorial boundaries of its traditional parent disciplines with the broader goal to coordinate and synthesize in contrast to "vertical" specialties with a focus narrowed to specific anatomical areas, techniques, or methodologies. The discipline of clinical and translational science abounds with active areas of research opportunities and programs which often originate at the interface between the traditional disciplines of the basic and clinical sciences. The intellectually rigorous training and education in CTS seeks to establish a multidisciplinary and transdisciplinary mind set which will enable problems to be solved, even if they have never been encountered before. The mental discipline of CTS is promoted and perpetuated by (1) a defined curriculum with didactic and experiential components; (2) clear and accessible career development pathways, and (3) the emergence of an academic home. Members of a discipline commonly have an ethos and set of attitudes which set them apart from those of other disciplines. The ethos or "guiding beliefs" of a discipline become apparent through activities that exemplify the discipline's unique field of action and defining body of knowledge. The ethos that defines the discipline of clinical and translational science is evident in activities that emphasize the intersections and interfaces between its parent disciplines, namely basic and clinical science, and its overlay of multidisciplinary and transdisciplinary perspectives as evidenced by the emphasis on communication, team building, and community engagement. The Department of Behavioral Science has accepted the opportunity and responsibility to provide training in this new discipline.

The Department of Behavioral Science was formally established in the College of Medicine in 1959. Since 1960, the department has provided basic, clinical and behavioral science instruction for students in the College of Medicine, as well as interdisciplinary health-related clinical research training to students enrolled in many graduate programs on campus (e.g., Anthropology, Communication, Education, Psychology, Martin School, Nursing, Nutritional Sciences, Rehabilitation Science, Sociology, and Social Work). Since its inception, the Department of Behavioral Science has provided intellectually rigorous training and education and has the requisite experience and necessary faculty resources to establish a new PhD program focused on the academic discipline of CTS.

In 2008, an administrative Center for Clinical and Translational Science (CCTS) was established at the University of Kentucky and charged with creating an integrated academic discipline of clinical and translational science at the University of Kentucky. Partial financial support for the Center came through the Office of the Provost. Additional resources for program expansion and enhancement are being pursued through a grant application to the

National Institutes of Health in response to a request for applications to establish academic units to support clinical and translational science (PI: Associate Provost for Clinical and Translational Science). The aims of the UK CCTS are to 1) promote the circularity of translation – from bench to bedside to community and back again; 2) nurture ongoing research and incubate new research ideas; 3) facilitate the conduct of and training in all aspects of CTS; 4) build public trust that lays the foundation for durable community partnerships, and 5) identify and disseminate nationally-relevant paradigms in interdisciplinary outreach engagement. The Department of Behavioral Science, in collaboration with the CCTS, will serve an active role in the research training of CTS scholars.

UK has significant strength in its existing health-related graduate programs and associated curricula addressing key academic content areas of relevance to clinical and translational science (e.g., Nursing, Pharmacy Practice & Science, Health Sciences, Rehabilitation Sciences, Epidemiology & Biostatistics, Psychology, Communication). In recognition of these existing strengths and resources, the academic discipline of clinical and translational science at the University of Kentucky will be established both through creating a new interdisciplinary graduate program (e.g., the PhD in CTS) and by integrating CCTS training resources and opportunities with existing health-related graduate programs.

The Department of Behavioral Science is establishing a PhD in CTS to support intellectually rigorous research education, training, and career development of CTS scholars at the University of Kentucky. The program will train exceptional professionals or professional scholars committed to leading interdisciplinary CTS research teams and/or sustaining independent research programs that promote innovation and new discovery in health care. As a clinical research department within the College of Medicine with a strong academic foundation of interdisciplinary clinical and translational research training, the Department of Behavioral Science has the expertise and resources to administer the PhD in Clinical & Translational Science. The department has not previously had a formal graduate training program. The department consists of 30 core and 18 jointly appointed faculty members engaged in CTS research and training, with focused excellence in risk-related behaviors. cancer and aging, representing academic training from disciplines of Experimental Psychology, Social Psychology, Clinical Psychology, Clinical Ethics, Epidemiology, Anthropology, Human Development, Sociology, and Social Work. This department has consistently been the top NIH-funded behavioral science department in the nation (\$13M in direct annual funding in FY08). Department faculty members collaborate with faculty from virtually every other academic department in the College of Medicine. Faculty members have joint appointments with basic and social science departments across campus. Department faculty in the last year served as chair, co-chair or dissertation committee member for 81 graduate students. Department faculty members regularly teach upper level graduate courses. Departmental funds and faculty research grants are supporting 23 graduate students in this academic year. The Department has a Director of Graduate Studies serving on committees of the Graduate School. Behavioral Science serves as a central focus of interdisciplinary clinical and translational science education and research training in the medical center and in graduate education at UK. The Department has a primary role in medical student teaching. The Department collaborates in graduate education and research with the Departments of Psychiatry, Psychology, Anatomy and Neurobiology, Anthropology, Counseling and

Educational Psychology, Kinesiology and Health Promotion, Pharmacology, Sociology, and with the Colleges of Nursing, Communication and Pharmacy, and with programs in Gerontology and the Nutritional Sciences. In effect, the Department of Behavioral Science serves an active role in the interdisciplinary clinical and translational science education and research training of professional students and advanced graduate students from Medicine, Dentistry, Nursing, Allied Health Professions, Pharmacy, Clinical Psychology, Counseling Psychology, Health, Social and Experimental Psychology, Anthropology, Sociology, Social Work, Educational Psychology, Gerontology, Communication and Public Health.

The PhD in CTS is an interdisciplinary training program. Scholars enrolled in the PhD in Clinical and Translational Science will have completed terminal professional training in interdisciplinary programs, and the curriculum reflects the rigorous training (e.g., medicine, dentistry, pharmacy, nursing, public health) that scholars will have completed prior to enrolling in the program. All entering scholars will complete a common 12-credit curriculum to establish core competencies in CTS. They will then complete a tailored curriculum of interdisciplinary courses designed to meet their research interests and career trajectories. This approach is both feasible and functional because of the rigorous training scholars will have already completed in their professional programs.

The PhD in CTS will not compete with existing graduate training programs. Health-related professionals with career interests that are aligned with the academic content of existing programs will be counseled to complete graduate training by enrolling in existing programs. The PhD in CTS will be marketed to those scholars with interdisciplinary research interests and career trajectories that expand beyond the boundaries of existing graduate programs.

- b) Admissions: Admission to the program is generally limited to 1) applicants with terminal health professional degrees with appropriate domestic licensure to practice professionally, and 2) students in the MD/PhD Combined Studies program. Other students may apply to the program with consent of the Director of Graduate Studies. Scholars desiring admission into the PhD in CTS program will be required to apply to the Graduate School and to the Department of Behavioral Science. To obtain admission, applicants are required to meet the PhD admission standards of the Graduate School. We request that all applicants to this program having a terminal health professional degree, or are enrolled in the combined MD/PhD program be exempt from the GRE requirement. Applicants must be formally admitted by the Admissions Committee of the CCTS/Department of Behavioral Science.
- c) Program of Study: Each scholar will have a PhD Advisory Committee that will play a prominent role in coordinating the curriculum, research training and career development of the scholar in the program. A faculty member in the Department of Behavioral Science who is a full member of the graduate faculty will serve as a primary or co-mentor on each scholar's PhD Advisory committee. Other members of the PhD Advisory Committee will be selected based on their abilities to support elements of the interdisciplinary research interests and career trajectories of the scholar. Committee membership will be determined based on the scholar's interdisciplinary research interests rather than on specific departmental affiliation.

The standard pre-qualifying residency requirement of the Graduate School is a minimum of 36 credit hours of coursework. We request that a prior terminal health professional degree

substitute for 18 of this 36-hour requirement. All enrolled students would still be required to complete 18 credit hours of coursework, consisting of:

- 12 credit hours of core CTS research competency-based coursework;
- a minimum of 6 hours of tailored coursework developed in consultation with the major professor and advisory committee.

The post-qualification curriculum consists of:

 2 credit hours of Dissertation Residency Credit coursework (BSC-767, currently under review) completed during consecutive semesters for a minimum of two semesters until the student has successfully defended the dissertation;

Core CTS competency-based coursework (12 credit hours)

The curriculum is designed to establish knowledge-based and skill-based competencies in communication; professionalism; critical thinking and synthesis of knowledge, planning, management and assessment; and leadership in five areas: 1) CTS methods and technologies, 2) scientific knowledge, 3) measurement and statistics, 4) research integrity (research ethics and responsible conduct of research), and 5) collaboration and team building. These competencies are required of all CTS scholars, regardless of level of training or academic concentration.

BSC 731/CPH 669: Methods and Technologies in CTS (3 credits)

This overview course is designed to introduce scholars to the major CTS methods and technologies; enable scholars to interpret and evaluate research findings using these methods and technologies; enhance appreciation for multidisciplinary approaches to CTS; and enhance interdisciplinary vocabulary. The course will consist of presentations followed by open discussion. Topics include experimental, survey and qualitative research methods; community engagement/participatory research; cultural sensitivity; proteomics; genomics; imaging; translation of basic research; clinical trials; epidemiology; health behavior models; extending evidence-based treatments to the community; and health services utilization. Assignments will include readings and experiential opportunities using CTS methods and technologies.

BSC 732/CPH 670: Interdisciplinary Protocol Development (2 credits)

This course is designed to orient scholars to leadership and teamwork processes involved in clinical and translational research and to train scholars to function effectively in team settings. Teams will be composed of scholars from different disciplines with a designated principal investigator. Each team will develop a conceptual model for an integrated multidisciplinary research proposal, in response to an existing NIH Request For Application. Each team member will be responsible for developing one component of the protocol. The course objectives are to understand the role of leadership and teamwork in multidisciplinary clinical and translational research; contribute effectively to a multidisciplinary team engaged in clinical research protocol development; apply knowledge of the responsible conduct of research, statistics and CTS methodologies and technologies to protocol development; and model professional clinical and translational teamwork.

BSC 733/CPH 671: Seminar in Clinical & Translational Science (1 credit)

This seminar series serves as a training and career development resource for all CTS faculty and scholars. This seminar series includes cutting-edge CTS research presentations by faculty; 'works-in-progress' presentations by scholars designed specifically to offer constructive peer-review support and feedback from the CTS community; and professional development presentations.

CPH 665: Ethical Issues in Clinical Research (3 credits)

Based on NIH guidelines for responsible conduct of research, this course will present ethical and regulatory guidelines for conducting clinical research. Topics include institutional protection; regulation of human and animal research; subject recruitment/retention; vulnerable populations; research ethics; placebo and washout issues in clinical trials; ethics; ;genetic research; tissue/DNA banking; data ownership/sharing; misconduct; mentoring; and conflict of interest.

STA 580: Biostatistics (3 credits)

This course will present descriptive statistics; hypothesis testing; paired and unpaired t-tests; ANOVA; contingency tables; log rank test; and regression with biostatistics applications. Note: STA 570 or equivalent course can be substituted.

Tailored Coursework (minimum of 6 credits)

The tailored curriculum will be designed to provide training needed for the scholar to lead interdisciplinary CTS research teams and/or sustain independent research programs that promote innovation and new discovery. The curriculum will also provide advanced interdisciplinary training to support the development of research skills and expertise tailored to the interests and career trajectory of the individual scholar.

Since all scholars will have completed rigorous basic science training within their professional programs, they will already have acquired a solid academic foundation. Career development for these scholars will be optimized by taking graduate-level courses selected to expand and support their research interests and career trajectories. By nature, interdisciplinary research involves the application of academic knowledge and research methodologies from two or more disciplines. It is expected that the scholar's major professor and PhD Advisory Committee will work with the scholar to identify appropriately tailored courses and other experiences needed for the scholar to acquire the breadth and depth of knowledge and expertise needed to produce well-reasoned original interdisciplinary research contributions to the discovery of clinical health knowledge and its application. Examples of tailored curricula are provided in an appendix. The tailored portion of the curriculum must be pre-approved by the Department of Behavioral Science Director of Graduate Studies.

Mentored Research Training

Mentored research training is the primary emphasis of the interdisciplinary PhD in CTS program. A major professor (i.e., primary mentor), with the support of a PhD Advisory Committee, will oversee research training and career development. Members of the PhD

Advisory Committee will be selected based on their abilities to support elements of the interdisciplinary research interests and career trajectories of the scholar. The membership of the PhD advisory committee must meet established graduate school requirements. The advisory committee will oversee and evaluate the scholar's progress in the PhD program. The committee will complete annual evaluations of the scholar's progress towards the degree that will include considerations of coursework, research, and career development. It should be noted that research data to be used toward the PhD in CTS must be new data generated while enrolled in the PhD in CTS program – data generated for a research portion of a prior completed terminal degree will not be permitted to be used toward the PhD in CTS. The primary mentor, with input from other members of the advisory committee, will submit annual evaluations to the DGS in May of each year. The DGS will incorporate feedback from other members of the department (e.g., course coordinators) and provide candidates with annual written evaluations.

Qualifying/Final Examination

The advisory committee will also conduct qualifying and final examinations. The qualifying examination will consist of both written and oral components. The content of the examination will be tailored to match the scholar's coursework and research interests and will be designed to evaluate the scholar's level of interdisciplinary scholarship and competence in CTS. The written components of the qualifying exam will typically consist of a prepared document (e.g., the intellectual elements of a grant application, such as a K-type career development award or an R-type grant application, or a review paper formatted as a peer-reviewed manuscript) along with written responses to content-based questions prepared by members of the advisory committee. The oral component will typically consist of the presentation and defense of the prepared document and responses to oral content-based questions posed by the advisory committee. Successful completion of the CTS PhD final examination will be contingent upon the scholar's completion and presentation (written and oral) of well-reasoned research that contributes clinically significant publishable CTS knowledge.

III. Resources needed and available for the program

This proposed program will require no additional resources in terms of finances, faculty, or facilities. All didactic courses are currently being taught by existing faculty. There are enough seats in the core and elective courses to accommodate increased scholar enrollment due to creation of this program. The CCTS career development office will have a primary role in identifying and recruiting faculty with requisite expertise to serve on PhD Advisory committees and mentor the research training and career development of scholars. A faculty member in the Department of Behavioral Science who is a full member of the graduate faculty will serve as a primary or co-mentor on the PhD Advisory committee and will coordinate interdisciplinary collaboration and training expectation among the Advisory committee.

IV: Academic Program Approval Checklist

01: Are more Kentuckians ready for postsecondary education?

- A. Entrance requirements: all prospective scholars must either have professional degrees (MD, DMD, DDS, PharmD, DNP, DrPh) or be participating in dual-degree programs within an existing professional training program.
- B. Transfer requirements: N/A
- C. Recruitment Plans: This is an additional degree program for scholars possessing terminal professional degrees, and recruitment for this program will target professionals and professional scholars on campus through the Center for Clinical and Translational Science.

02: Are more students enrolling?

- A. Program demand: Professionals who wish to conduct clinical and translational research will benefit from advanced research training. Anticipated number of scholars is approximately eight per year.
- B. Detailed recruiting plans: see 01.C above
- C. Equity: This program will not discriminate on the grounds of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, marital status, age, veteran status, or physical disability

03: Are more students advancing through the system?

- A. Time to graduation: It is anticipated that most scholars will complete training on a full-time basis with career development support. Research career development support is available intramurally (e.g., College of Medicine Physician Scientist and Clinician Scholar Programs) or extramurally (e.g., institutional or individual career-development fellowships). It is anticipated that full-time scholars will complete the PhD portion of the program in 3 to 4 years. Scholars completing the program on a part-time basis will do so in 4 to 6 years. Scholars participating in a dual-degree program typically complete both professional and PhD training in a 7-year period.
- B. Practicum experience: All scholars will work under close supervision of a primary mentor and a PhD advisory committee on research projects that all agree will lead to a dissertation and to further career development opportunities.
- C. Reason for offering the program: Education, training and career development are the cornerstones of the emerging academic discipline of clinical and translational science (CTS). A principal objective of the interdisciplinary PhD program is to provide education, training and career development support for professional scholars and faculty at UK. The program will train the next generation of clinical and translational scholars who will provide academic innovation, productivity, and transformations in research and leadership in all areas of academic health, as well as bring competencies in clinical and translational research to their professional practices in their community practices, thereby enhancing the infrastructure for conducting responsible research in our Kentucky communities and translating evidence-based interventions to the citizens of the Commonwealth in a more efficient manner. This education program will be a key element of the education, training and career development functions of the newly established CCTS and further the University's efforts to integrate with the national consortium of clinical and translational science centers sponsored by the NIH.

- D. Delivery. Plans are being made to offer all of the core CTS Competency courses using a distance-based platform. Courses and training opportunities focused on core competencies required of all CTS scholars, regardless of academic focus, will be available through distance-learning platforms recognizing the needs of the adult learner. However, the primary focus of this program is mentored research training that, by necessity, must be tailored to the needs of the individual scholar.
- E. Collaborative Efforts. There are no such plans at this point in time.

04. Are we preparing Kentuckians for life and work?

- A. How does the program prepare Kentuckians for life and work? This program is designed to provide individuals committed to leading interdisciplinary CTS research teams and/or sustaining independent research programs that promote innovation and new discovery.
- B. Accreditation expectations. No formal accreditation is needed for this program. However, there are ongoing efforts at the national level to standardize the competencies needed for clinical and translational research, and this program will incorporate national standards as they become available.
- C. Are their licensure, certification, or accreditation requirements for graduates of this program? No
- D. Expected degree productivity: five per year

05. Are Kentucky's communities and economy benefiting?

- A. External Advisory Groups: The CCTS has an External Advisory Committee which will review and offer advice on this degree program.
- B. Employment expectations: This degree program will provide expanded research training for scholars with terminal professional degrees (MD, DDS, PharmD); it is designed to establish the next generation of innovative, productive, and transformative researchers and leaders in CTS. The interdisciplinary training program is designed to enhance opportunities for professionals to engage in and lead programs of clinical and translational research. Program graduates will have the opportunity to find employment in academic, clinical, and industrial settings requiring both professional and research opportunities and expectations.
- C. Other benefits. This degree program is designed to increase the clinical research skills of our junior faculty and professional scholars. It should be viewed as an integral part of the university's quest for top 20 research status.
- D. Specific benefits. See above.

Appendix Representative Tailored Curricula

1. For a professional scholar interested in examining genetic markers among a selected group of cancer patients, the committee might develop a curriculum that includes:

BCH 608 Biomolecules and Molecular Biology IBS 603 Cell Biology MI 604 Experimental Genetics CPH 664 Design and Analysis of Clinical Trials.

2. For a scholar interested in health-services utilization among Alzheimer's patients, the curriculum might include basic and/or applied biostatistics and/or epidemiology courses, such as:

CPH 632 Mixed Models in Public Health CPH 711 Chronic Disease Epidemiology ANA 780 Mechanisms of Neurologic Disease NUR 914 Population-Based Health Care Delivery.

Brothers, Sheila C

From: Swanson, Hollie

Sent: Tuesday, December 07, 2010 8:07 AM

To: Denison, Dwight V Cc: Brothers, Sheila C

Subject: RE: STEM proposal approved by SAOSC

From: Denison, Dwight V

Sent: Monday, December 06, 2010 12:59 PM

To: Swanson, Hollie

Subject: FW: STEM proposal approved by SAOSC

Hollie,

As you see from this email the SAOSC committee approved the STEM department proposal for advancement to the Senate Council. We ask a few clarifications of the proposal but none of them are significant enough to delay the advancement of proposal. Let me know if you need anything else from me.

-Dwight

Dwight V. Denison, PhD
Professor of Public and Nonprofit Finance
Director of Graduate Studies, MPA and MPP programs
Martin School of Public Policy and Administration
University of Kentucky
415 Patterson Office Tower
Lexington KY 40506

Email: dwight.denison@uky.edu

Phone: 859.257.5742

From: Denison, Dwight V

Sent: Monday, December 06, 2010 12:27 PM

To: Wilhelm, Jennifer; Swanson, Hollie; Brothers, Sheila C

Cc: Denison, Dwight V; 'Bill Smith'; Debski, Elizabeth A; Ederington, Josh; Farrell III, Herman D; Jasper, Samuel J; Lee,

Brian D; Maynard, Leigh; Saatman, Kathryn; Scutchfield, Douglas

Subject: STEM proposal approved by SAOSC

Jennifer,

I appreciate you and your colleagues attending the SAOSC meeting this morning. The STEM department proposal was approved to advance to the Senate Council. However, we ask that you modify the proposal to reflect a few points that came up in our discussion this morning before going to the full Senate.

- 1. In table 1 please list faculty rank (not just junior /senior)
- 2. In Figure 2, list the chair position but not your name in the chart and indicate that the position will be filled following college protocols. The same would be true for any other position were a name is "proposed". Alternatively you could footnote the chart stating the individuals for indicated positions have been discussed (proposed) but the actual appointment would follow college protocols.
- 3. Provide a statement summarizing the points made in our meeting about the roles and responsibilities of joint faculty. For example, joint faculty will have input on curriculum issues related to their expertise and may be appointed to STEM faculty search committees.
- 4. The points on page 51-52 are important. We suggest that these points be moved up as an appendix to the main document with a brief statement of the context and then identify who (Dean, chair, provost? Etc.) is responding to the questions.

Congratulations on a very fine proposal and let me know if you have questions on these four points.

Sincerely, Dwight

Dwight V. Denison, PhD
Professor of Public and Nonprofit Finance
Director of Graduate Studies, MPA and MPP programs
Martin School of Public Policy and Administration
University of Kentucky
415 Patterson Office Tower
Lexington KY 40506

Email: dwight.denison@uky.edu

Phone: 859.257.5742

Proposal for a STEM Education Department within the College of Education

We propose to form a Department of Science, Technology, Engineering, and Mathematics [STEM] Education within the University of Kentucky [UK] College of Education. First and foremost, our proposed department aims to increase and retain Commonwealth and national participation of individuals in the STEM pipeline pre-K through their time in the workforce. Ultimately, our efforts will help fulfill the recent efforts made by President Lee Todd when he joined three other university leaders – University of Kansas' Chancellor Bernadette Gray-Little, University System of Maryland's Chancellor and UK alumnus Brit Kirwan, and University of Colorado's Chancellor Philip P. DiStefano – in presenting President Obama with a letter (see letter and media documents in Appendix C, page 29) signed by leaders from 79 public research universities "to substantially increase the number and diversity of high-quality science and mathematics teachers we prepare, and to build better partnerships among universities, community colleges, school systems, state governments, business and other stakeholders." To achieve these ambitious and urgent goals requires the concerted efforts of those with a common vision who share focused, relevant expertise in STEM education.

The proposed Department will expand and enhance STEM Education at UK and for the Commonwealth in significant ways. Along with strengthening teacher preparation programs already in place (e.g., Elementary, Middle School, Master's with Initial Certification, and Advanced Master's in STEM Education) in continued collaboration with the Department of Curriculum and Instruction, the STEM Education Department will build new bachelor's and doctoral programs in science, technology, engineering, and/or mathematics education. Our proposal is directly in line with President Barack Obama's "Educate to Innovate" initiative and his movement to reduce the national shortage of science and mathematics teachers. We believe we can take center stage and serve as a model for other universities in moving the "Educate to Innovate" project forward.

In addition, the new department will lead the Commonwealth in STEM Education research by attracting graduate students as well as future STEM faculty researchers pursuing cutting edge research in these disciplines. We seek to help position the UK College of Education alongside its peers nationally with respect to STEM education research, doctoral education, and STEM teacher education, especially at the undergraduate level. Our plan is to become the top program for preparing future STEM Education faculty members, researchers, and both undergraduate and graduate students. Immediately upon becoming a department, we will submit an undergraduate degree program, which will give STEM and STEM Education majors the opportunity to be certified to teach within four years. This opportunity currently does not exist at UK. Over the long term, the creation of a PhD within the STEM Education Department would be nationally ground-breaking and place UK on the cutting edge among benchmarks. Given the national shortage of PhD graduates to fill vacant faculty positions in STEM education disciplines, UK has the strong potential to fill an important market niche. Thus, we believe this proposal supports UK's Top 20 goals. This effort would increase the number of doctorates that UK produces and would elevate productivity in the College of Education.

Why a Science, Technology, Engineering, and Mathematics Department?

Since the launch of Sputnik and the passing of the National Defense Education Act of 1958 in its wake (Carney, Chubin, & Malcom, 2008), the U.S. government and non-government organizations have continued to increase their funding of endeavors meant to improve K-20 STEM education, mostly with the ultimate goal of swelling the pipeline of individuals that will, eventually, grow the national STEM workforce (Carney et al., 2008; Kuenzi, 2008). More recent reports such as *A Nation At Risk* (National Commission on Excellence in Education, 1983) and *Rising Above the Gathering Storm* (Committee on Science, Engineering, and Public Policy, 2006) have kept the concern for STEM education reform paramount in the nation's psyche. In recent years, the principal federal agencies charged with distributing funds meant to improve STEM education have been The National Institutes of Health (NIH) and The National Science Foundation (NSF) (Kuenzi, 2008).

Given the main focus of many of these grants and others' required attention to broader *impacts* concerning society at large, the current reality for many postsecondary faculty is that if they wish to compete for federal funding in the current economic climate they need to demonstrate involvement in K-20 STEM education improvement endeavors. This is an especially salient reality for faculty working at research universities where the pressure to secure federal funding is at its greatest and the carrot of funding is especially motivating of faculty (Holley, 2009; Rhoten, 2004). This reality often requires interdisciplinary collaborations, across the natural and social sciences as well as within these umbrella areas. Still, economic realities are just a set of motivations driving interdisciplinary faculty collaborations and the common passions and goals regarding an envisioned collaboration can serve as powerful motivators too (Eddy, 2010). Regardless of the initial motivations, successful interdisciplinary collaborations can allow for great strides with respect to STEM education reform in allowing for postsecondary environments to foster greater understanding of, and solutions for, inadequately addressed by single disciplines' knowledge and practices (Aram, 2004; Holley, 2009; Lattuca, 2001; see also Caruso & Rhoten, 2001).

To help UK meet the call to be more entrepreneurial

None of our benchmark institutions are forming STEM Education departments, precisely one of the reasons why UK should. As President Lee Todd, the provost, and various other stakeholders have endorsed, UK must find ways to be entrepreneurial, lest it be outcompeted or rendered less relevant. According to Schuster and Finkelstein's pivotal work (2006), major changes across the academy nationally are occurring more rapidly than at any other time since the birth of higher education. These changes are driven, mostly, by technological advances and demands of the market. To compete, UK must be open to changes to better meet the need of its citizenry in the modern environment, including changes regarding the restructuring of faculty work in way that capitalizes on market forces (Schuster & Finkelstein, 2006).

To better secure leadership of STEM education research and teaching resides with those trained in STEM education

"The cultural implications of an autonomous interdisciplinary program are significant for an institution. Such programs are afforded the independence granted to traditional colleges and disciplines; they are also granted the autonomy to determine academic policies, faculty hiring, student admissions, and curricular decisions" (Holley, 2009, p. 93). Most research at universities is externally supported (Slaughter & Leslie, 1997) and secured grants now serve as a main organizing factor at research universities, just behind the institution itself and the department (Geiger, 2004; Holley, 2009). Besides the obvious affordances granted an academic department at a university, and including the means to control external research dollars, our proposed STEM Education department will allow for greater oversight of STEM Education, and all that this encompasses, by those that have been training in STEM Education. We recognize the necessary and incredibly important involvement of others in the STEM Education initiative and, in fact, plan to organize our department with its joint appointments of faculty from Arts & Sciences, PIMSER, and Engineering. We also recognize the necessity to secure STEM Education as a department within the College of Education since it is intimately connected to other social sciences through institutional structure at the University of Kentucky.

To better focus on undergraduate and graduate student learning

Recognizing the need to prepare students for their "modern interdisciplinary futures" (Holley, 2009), interdisciplinary programs of study are being offered at most institutions of higher education. Yet interdisciplinary programs move beyond a simply economic model regarding student benefits. They also allow for greater student-centered pedagogy; this occurs with respect to engaging students in practices and knowledge that unite disciplines and in meeting students' interests in their education pursuits, allowing for more wellrounded, practical, education applicable in an ever-changing world (Haynes, 2002; Holley, 2009). More universities, including our benchmarks, now encourage students' codevelopment of interdisciplinary majors. These include the Program In Individualized Studies at the University of Washington, the Gallatin School of Individualized Studies at New York University, the University of Alabama's New College, and the Interdisciplinary Studies Program at Michigan State. Students in these programs work with an advisor or committee in planning their interdisciplinary program of study that cater to student interest, with, of course, faculty being responsible for making sure student focus is appropriately broad and measurable. Ongoing assessment is measured often in portfolios and culminating projects (Holley, 2009). A department made up of faculty with background in STEM and STEM teacher education within their areas of training, and supported by the structures of a department, secures informed assessment of interdisciplinary, and even transdisciplinary, student work.

Theoretical Framework of the Science, Technology, Engineering, and Mathematics Education Department

All endeavors will be framed with a transdisciplinary design. We define *transdisciplinary* as engagement, investigation, innovation, and praxis addressing present-day issues and problems in a way that explicitly highlights discipline commonalities while respecting disciplinary expertise and practice within and across STEM (Thompson Klein et al., 2001; Nicolescu, 2002).

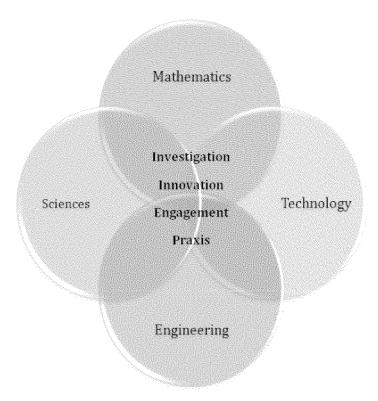


Figure 1: Transdisciplinary approach uniting UK STEM Education Department endeavors

How can we foster these much-needed interdisciplinary and transdisciplinary collaborations with respect to STEM education with the current academic and financial realities in mind? Some of our benchmark institutions are attempting to figure this out, such as The University of Wisconsin–Madison, Duke University, the University of Southern California, and the Pennsylvania State University, who all have an explicit goal to hire interdisciplinary faculty. Some do so as *cluster hires*, or groups of faculty with promise of informing an interdisciplinary topic but still with main affiliation within a department (Holley, 2009; Sa, 2008). While such practice has promise to work within the historical structure of the postsecondary institutions and the all-powerful department, an improvement to this tactic is undoubtedly the creation of a transdisciplinary department, with all the protections and affordances, to its students and faculty, that departments allow.

Our unique, timely, and focused department will be grounded in our college-wide framework of *Research and Reflection for Learning and Leading* and related to national accreditation standards through NCATE (National Council of Accreditation of Teacher

Education). Our department-specific framework is guided by standards and recommendations from the following:

- National Research Council,
- American Association for the Advancement of Science,
- National Academy of Engineering and the American Society for Engineering Education,
- International Society for Technology in Education, and
- National Council of Teachers of Mathematics.

All six organizations stress an understanding of central discipline specific concepts as well as those that unite the disciplines, such as, the tools of inquiry, the importance of professional values/ethics, skills in the use of technology, and a commitment to multicultural competence and awareness.

Science, Technology, Engineering, and Mathematics Education Department Long-Range Plans

There are three phases to our proposed STEM Education Department plan. Below is an overview of each of the three Phases with discussions of each following.

Phase 1 (Immediate upon establishment of Department)

- The establishment of a STEM Education Department within the College of Education.
- The movement of eight education faculty (see Table 1) from the Curriculum and Instruction Department to the new unit of STEM Education.
- The transfer of the current undergraduate mathematics and science secondary education programs, the Advanced Master of Science in STEM Education program, and the Master of Arts in Education (with initial certification) in mathematics and science programs from the Department of Curriculum and Instruction to the STEM Education Department. (see Table 3)

Phase 2 (February 2011 – February 2012)

- The development, approval, and implementation of a new undergraduate certification program (called "STEM PLUS") where undergraduate students can major in STEM Education and a content area with secondary teaching certification in one or more state-certifiable STEM subjects in just 4 years. In addition, a standalone STEM Education major will be created to allow for greater flexibility and multiple pathways towards becoming a STEM teacher. These options currently do not exist for potential secondary mathematics, science, and/or computer science teachers.
- The establishment of no cost joint appointments between faculty from the Colleges of Arts & Sciences, Engineering, and Education.

Phase 3 (March 2012 – March 2013)

 The development, approval, and implementation of a new STEM Education doctoral program. (Prior to the development of this doctoral program, PhD students are enrolled in the Interdisciplinary Educational Science program housed at the College level.)

Phase One Discussion

Currently our STEM Education faculty consists of nine faculty lines. We have four faculty members in mathematics education, Xin Ma, Margaret Mohr-Schroeder, Molly Fisher, and Christa Jackson. Xin Ma is 50% in the Department of Curriculum and Instruction and 50% in the Department of Educational, School, and Counseling Psychology. Upon approval of the STEM Education Department, his appointment would change to 50% in the Department of STEM Education and 50% in the Department of Educational, School, and Counseling Psychology. Our four science education faculty members include, Jennifer Wilhelm, Rebecca McNall Krall, Jana Bouwma-Gearhart, and Christine Schnittka. In addition, we have one open senior mathematics education regular title faculty line.

Our STEM Education faculty is strong in both content and pedagogical content knowledge with five faculty members holding bachelors and master's degrees in the content areas of physics, engineering, mathematics, and biology and doctorates in mathematics, mathematics/science, and science education. Content and Research Expertise as well as area of teaching (currently and future) are listed in Table 1 below. All of the faculty vitas can be accessed online at: http://education.uky.edu/EDC/content/faculty. For specific current Curriculum and Instruction courses, the future of these courses, and how it will impact Curriculum and Instruction programs please see the Appendix A, page 21.

As Regular Title Tenure and Tenure-Track Faculty, all of our teaching loads are 2-2.

Table 1: STEM Education Department Faculty Expertise

STEM EDUCATION FACULTY	CONTENT EXPERTISE	RESEARCH EXPERTISE	CURRENT COURSES TAUGHT IN DEPT. OF C&I	COURSES TO BE TAUGHT IN DEPT. OF STEM ED
Jana Bouwma- Gearhart, Ph.D., Assistant Professor	Biology, Chemistry, Genetics, Bacteriology, Evolution	Motivation In Teaching and Learning, Educator Professional Development, Modeling-based Inquiry, Mixed Methods Methodology, Qualitative Methodology, Evaluation	Graduate STEM Education and Biology Content Classes, Secondary Science (MIC) Methods	Graduate STEM Education and Biology Content Classes, STEM PLUS courses, Secondary Science (MIC) Methods
Molly Fisher, Ph.D., Assistant Professor	Mathematics, Technology	Mathematics Teacher Retention, Teacher Stress and Burnout	Elementary Mathematics Methods, Graduate STEM Education Classes	Elementary Mathematics Methods (service course), Graduate STEM Education Classes
Christa Jackson, Ph.D., Assistant Professor	Mathematics, Chemistry	Equity in Mathematics Education, Issues of Social Justice, Qualitative Methods with Emphasis in Ethnography	Graduate STEM Education Courses, Elementary Mathematics Methods Class, Advanced Elementary Methods	Graduate STEM Education Courses, Assessment & Equity in STEM Education (STEM PLUS), Elementary Mathematics Methods (service course), Advanced Elementary Methods

STEM EDUCATION FACULTY	CONTENT EXPERTISE	RESEARCH EXPERTISE	CURRENT COURSES TAUGHT IN DEPT. OF C&I	COURSES TO BE TAUGHT IN DEPT. OF STEM ED
Rebecca McNall Krall, Ph.D., Associate Professor	Biology, Environmental Science	Preservice/ Inservice Teacher Education, Scientific Knowledge for Teaching, Distance Learning, Integration of Educational Technology in Science Instruction	Graduate STEM Education Classes, Elementary Science Methods, Advanced Elementary Science Methods	Graduate STEM Education Classes, Elementary Science Methods (service course), Advanced Elementary Science Methods
Xin Ma, Ph.D., Full Professor	Mathematics, Statistics	Attitude and Motivation In Mathematics, Comparative International Education Systems, Advanced Quantitative Methods	Graduate Mathematics Education Classes, Middle Level Mathematics Methods	Graduate Mathematics Education Classes, Middle Level Mathematics Methods (service course)
Margaret Mohr- Schroeder, Ph.D., Assistant Professor	Mathematics, Biology	Mathematics Knowledge for Teaching, Preservice Teacher Education, Quantitative, Mixed Methods Methodology, Assessment, Educational Technology	Graduate STEM Education Classes, Secondary Mathematics Methods (MIC), Survey of Secondary Mathematics Curriculum	Graduate STEM Education Classes, Secondary Mathematics Methods (MIC), STEM PLUS courses

STEM EDUCATION FACULTY	CONTENT EXPERTISE	RESEARCH EXPERTISE	CURRENT COURSES TAUGHT IN DEPT. OF C&I	COURSES TO BE TAUGHT IN DEPT. OF STEM ED
Christine Schnittka, Ph.D., Assistant Professor	Mechanical Engineering, Physics	Engineering Design-based Science Education, Educational Technology	Graduate STEM Education Courses, Elementary and Middle Level Science Methods	Graduate STEM Education Courses, Elementary Science Methods (service course), Middle Level Science Methods (service course)
Jennifer Wilhelm, Ph.D., Associate Professor	Physics, Mathematics	Project-based Instruction, Physics and Mathematics Education, STEM Integration	Graduate STEM Education Classes	Graduate STEM Education Classes, STEM PLUS courses

Four faculty members will be at the senior level (Jennifer Wilhelm, Xin Ma, Rebecca McNall Krall, and future senior level mathematics education hire) and have full time graduate faculty status, enabling them to chair doctoral committees, or act as committee co-chairs with other junior faculty members within the department. All of the junior faculty members have part-time graduate faculty status enabling them to serve on committees and/or co-chair committees with a senior faculty member. Several of the proposed department junior faculty members have already had many experiences co-chairing doctoral committees. Currently we have twenty active doctoral students chaired and/or co-chaired by STEM Education faculty (see Table 2 below).

Table 2. Active STEM Education Doctoral Students and their Faculty Advisors

Advisor Name	Student	
Ron Atwood (Professor Emeritus)	Diane Johnson (Science Education)	
Rebecca McNall Krall	Ashlie Beals (Science Education	
	Antoinette Davis (Mathematics Education)	
	Anushka Karkelanova (Mathematics Education)	
	Amber Sullivan (Mathematics Education)	
Xin Ma	April Pilcher (Mathematics Education)	
	Darlene Nelson (Mathematics Education)	
	Karen Heavin (Mathematics Education)	
	Lori Powell (Mathematics Education)	
	Michael Osborne (Mathematics Education)	
	Amy Green (Mathematics Education)	
	David Little (STEM Education)	
W	Jamie-Marie Wilder (Mathematics Education)	
Margaret Mohr-Schroeder	Robin Magruder (Mathematics Education)	
	Ramona Birch (Mathematics Education)	
	Robin McClaran (Mathematics Education)	
	Tonja Hudson (Mathematics Education)	
Jennifer Wilhelm	Jodi Mills (STEM Education)	
Jennifer Wilhelm & Jana Bouwma- Gearhart	Jennifer Collins (Science Education)	
Jennifer Wilhelm & Molly Fisher	Jennifer Ferguson (STEM Education)	

Administrative Structure of the Science, Technology, Engineering, and Mathematics Education Department

Within the new department structure (see Figure 2 below), there will only be the need to add the administrative duties of a department chair and a director of graduate studies to faculty members' current loads. These two positions will be filled following typical College of Education and University procedures. Within the current administrative structure of the College of Education and its Teacher Education Unit (TEP), there exists Program Faculties, which govern each specific program within the TEP. Specifically for STEM Education, there exists Program Faculties for Science Education and Mathematics Education. Each Program Faculty is chaired by a faculty member within the program; Jana Bouwma-Gearhart is the current Program Faculty Chair for Secondary Science Education and Margaret Mohr-Schroeder is the current Program Faculty Chair for Secondary Mathematics Education. These positions and administrative duties operate in place of "Directors of Undergraduate Studies". (For more information about the Program Faculty Structure see: http://education.uky.edu/ADeanASTC/). Drs. Bouwma-Gearhart and Mohr-Schroeder have been Program Faculty Chairs of Science and Mathematics, respectively, since their arrivals

to UK, three- and five-years ago, respectively. Therefore, this would not represent any additional administrative load to them as junior faculty members. Molly Fisher and Christine Schnittka are co-directors of the STEM Education Lab within the *Kentucky P20 Innovation Lab* (http://p20.education.uky.edu/). They have been in this position for one year, therefore this would not represent any additional administrative load to them as junior faculty members. None of the current eight faculty members hold specific administrative duties within the current Department of Curriculum and Instruction except for Jana Bouwma-Gearhart and Margaret Mohr-Schroeder. However, since their programs for which they are Program Faculty Chairs will be transferred to the new STEM Education Department, there will be no administrative effect on the current Department of Curriculum and Instruction. (For details on the effect of resources and administrative duties within the remaining Department of Curriculum & Instruction please see Dean O'Hair's responses in Appendix B, page 27).

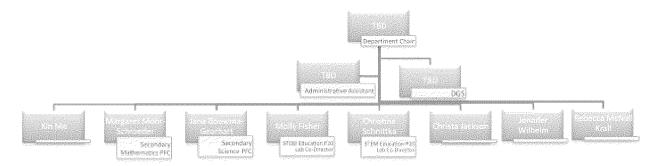


Figure 2. Administrative Hierarchical Chart

There are eleven committees within the College of Education in which the future Department of STEM Education would gain representation. Of these eleven committees, currently four of our eight faculty are members. There would be additional service requirements in terms of representation on these committees. The faculty DOEs would be adjusted to reflect this.

Program Structure within Science, Technology, Engineering, and Mathematics Department

Within the current structure of the Department of Curriculum and Instruction, there are 13 active degree programs at the undergraduate and graduate level. With the formation of the new STEM Education Department, five of these existing programs would be transferred to the new department. Table 3 below summarizes the current programs and enrollment and which programs would be transferred.

Table 3. Current Programs and Enrollment

Current Department of Curriculum and Instruction (2009-2010 enrollment)*	Future Department of STEM Education
Bachelor's in Elementary Education (495)	Elementary Education Mathematics and Science Methods as service courses
Master's In Elementary Education (13)	Advanced Elementary Mathematics and Science Methods as service courses
Undergraduate Secondary Education – English (101)	N/A
Ed.D. – Instruction and Administration (62)	N/A
Master's in Instructional System Design (9)	N/A
Undergraduate Secondary Education – Mathematics Education (66)	Will Transfer (66)
Bachelor's in Middle School Education (88)	Middle Grades Mathematics and Science Methods as service courses
Master's in Middle School Education (2)	N/A
Undergraduate Secondary Education – Science Education (22)	Will Transfer (22)
Master's Secondary Education (64) [includes Advanced Master's and MIC program]	Will Transfer MIC Mathematics (7), MIC Science (6), and Advanced Master's in STEM Education Programs (0)
Alternative Mathematics and Science Certification Program (0)	Will Transfer (0)
Undergraduate Secondary Education – Social Studies Education (157)	N/A
TOTAL Students (09-10): 1,079	TOTAL Students based on 09-10: 101 (9.4% of C&I)

^{*}Most current available data

This chart does not include the twenty above-mentioned Ph.D. students. The program they are enrolled in is housed at the College level. They will continue in their current program of studies.

Phase Two Discussion

On February 1, 2011, the STEM Education Faculty will submit an innovative undergraduate secondary certification program (called *STEM PLUS – Preparing Leaders for rUral/Urban Schools*). STEM PLUS program participants will earn a Bachelors of Science in Education with a double major in STEM Education and their content major (i.e., mathematics, physics, chemistry, biology, earth science, physical science, computer science) with secondary teaching certification (grades 8-12) in one or more state-certifiable STEM subjects in just 4 years. In addition, a proposal for a STEM Education major will be submitted that will allow College of Arts and Sciences and College of Engineering students to add on secondary mathematics, science, and/or computer science certification to their current degree program (See page 79 for Dean Lester's support, both theoretically and financially, of the

undergraduate certification options involving computer science and engineering students and courses). The STEM Education major will serve as the secondary major within their Arts and Sciences or Engineering degree program. There currently does not exist an undergraduate certification option for secondary mathematics, science or computer science students at UK. This degree program and major will allow for greater flexibility and multiple pathways towards becoming a STEM teacher.

There will be two undergraduate secondary education programs transferred to the proposed STEM Education Department in science and mathematics. Although these are Bachelor Degree programs, they do not lead to certification. A student who is within this program must continue on to the Master's with Initial Certification (MIC) program in order to be certified. However, data from the past 10 years of these two undergraduate programs have revealed that over 60% of the graduates do not go on to the MIC program. A majority of graduates decide to pursue alternative certification routes from other colleges or universities such as Eastern Kentucky University, Morehead State University, Georgetown College, and Northern Kentucky University. The main reason for these students pursuing their certification elsewhere is the financial burden of an intensive, full-time, one calendar year, Master's degree program such as the MIC. The STEM PLUS program will replace the existing secondary mathematics and science undergraduate programs. Current students in the undergraduate mathematics and science education programs (99 total) will have the option of transferring into the STEM PLUS program or finishing out their current program which does not lead to certification. If they choose to finish out their current program, we will continue to advise and foster them into the MIC Mathematics and Science Program. In early discussions with students, juniors and seniors (approximately 35) were interested in finishing out their current programs and the remaining students were interested in transferring to the new program when it became available. Future STEM PLUS students will be the result of recruiting high school students to become STEM teachers and choose UK to pursue their bachelor's degree and certification. We will utilize an Introduction to STEM Education Course, UK Admissions Office, websites, brochures, and other additional media means to recruit for the STEM PLUS Program and STEM Education Major Option. Figure 3 below represents graduation rates for the current programs and projected graduation rates (highlighted in yellow) for the STEM PLUS program.

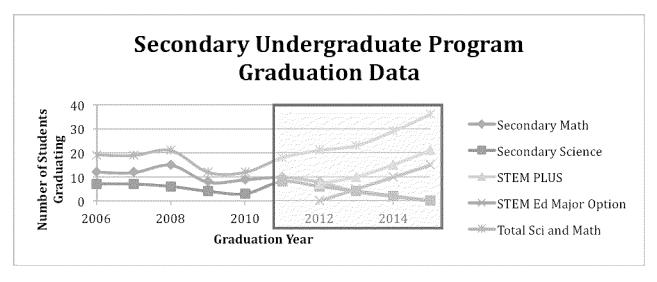


Figure 3. Current and Projected Secondary Undergraduate Program Graduation Data

UK is a member of the *Science and Mathematics Teacher Imperative* (SMTI) and *The Learning Collaborative* (TLC), initiated by President Lee Todd and sponsored by the Association of Public and Land-Grant Universities (APLU). SMTI/TLC commits to "transform middle and high school science, technology, engineering and mathematics (STEM) education by preparing a new generation of world-class science and mathematics teachers." The SMTI Initiative includes 125 public research universities—including 12 university systems. As part of the initiative, UK had to commit to increasing the number of STEM teachers the university produces. President Todd and College of Education Dean Mary John O'Hair committed to tripling the number of secondary STEM teachers produced by 2014 (see media clippings in Appendix D, page 39). Figure 4 below shows the current number of certified middle school and high school mathematics and science teachers graduating from UK. The highlighted yellow section represents the projected growth as a result of our undergraduate STEM Education Initiatives within our proposed new STEM Education Department. This tripling of numbers will help to meet the demand for highly qualified STEM teachers in secondary classrooms.

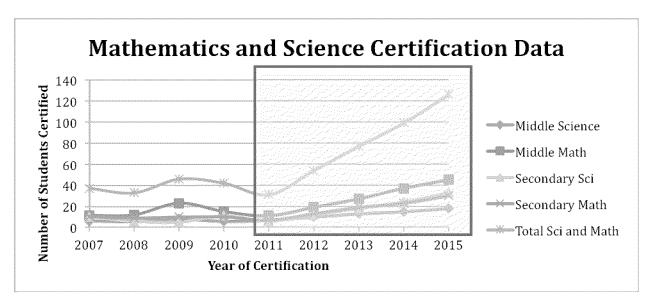


Figure 4. Current and Projected Mathematics and Science Certification Data

The lack of highly qualified mathematics and science teachers in middle and high school classrooms in the United States is a crisis that is well established. For example, unqualified teachers (i.e., out-of-field teachers) teach about 56% of high school students taking physical science and 27% taking mathematics. These percentages are magnified in high-poverty areas. Students enrolled in high minority schools have less than a 50% chance of having a science or mathematics teacher who has both a degree and license in the discipline taught (Darling-Hammond, 1999). Judy Jeffrey, a leader in the National Council of Chief State School Officers and the director of the Iowa State Department of Education, says, "In any given year, I have more openings for physics teachers than I can fill because I can't find highly qualified teachers in this field." This is compounded with the attrition of K – 12 teachers. Over the coming decade, approximately two-thirds of K – 12 teachers will either retire or leave the workforce. Of that, about 200,000 are secondary mathematics and science teachers (COSEPUP, 2007). The shortage of science and mathematics teachers is evident in the American Association for Employment in Education (AAEE) 2007 report, *Educator Supply and Demand in the United States* (see Figure 5 below).

4.5 4.5 4.6 4.11 4.08 4.05 4.05 4.11 4.08 4.05 4.05 4.05 4.05 4.05 4.05 4.05

Science Chemistry

Science Physics

Earth/Physical Science Science General

AAEE Estimates of Relative Demand for Teachers by Subject Area on a Five Point Scale in 2007 (1=Considerable Surplus, 5=Considerable Shortage)

Figure 5. Relative Demand for STEM Teachers by Subject Area

Science Biology

Math

Composite Score

At the state level, the Kentucky Department of Education annually compiles a list of certification shortage areas based on data provided by the Education Professional Standards Board (EPSB). Mathematics and science certification areas have been on the list since its inception in the 1990's. A review of the emergency issuances during the 2009-2010 school year indicates the reason for this inclusion. During this school year, the last for which there is a full year's set of data, the EPSB issued a total of 461 emergency certificates to districts in Kentucky. Of that number, 123 certificates were in the areas of biology, chemistry, physics, earth/space science (all grades 8-12), mathematics (grades 8-12), middle school science (grades 5-9), and middle school mathematics (grades 5-9). (see Executive Director Phil Rogers' letter of support, page 73)

The shortage and lack of qualified mathematics and science teachers has had a detrimental effect on the job market. A 2007 *Jobs for the Future* report remarks that three-quarters of students in America are not prepared for college studies in mathematics, science, engineering, and technology. Thus, employers are left to remediate gaps in knowledge and skills, as students are unable to apply their science education in a STEM work environment. Furthermore, according to a National Association of Manufacturers survey, 51% of employers state their graduates are "deficient in math and science" (Foster, 2010). If the U.S. is to be a leader in engineering, technology, and innovation in the global market, the state of science and mathematics education must be reversed.

We believe the addition of the STEM PLUS undergraduate degree program and the STEM Education Major Option will help to address state and national STEM teacher shortages. These two options, in addition to the current MIC Mathematics and Science Programs, will help to meet the SMTI/TLC commitment of tripling our STEM teachers and help meet the demand for more STEM teachers in the Commonwealth. The current draft of the STEM PLUS program has been vetted through the following departments: Mathematics, Biology, Physics, Chemistry, Civil Engineering, Mechanical Engineering, Chemical Engineering, Electrical Engineering, and Computer Sciences. All of the department chairs whole-heartedly embraced and approved the STEM PLUS initiative and the option of adding a second major to their current degree programs. In addition, Deans Lester and Kornbluh, Colleges of Engineering and Arts and Sciences, respectively, are supportive of the proposed programs and pathways.

Joint Appointments

Capitalizing on the significant contributions of our historical partnerships with faculty from the Colleges of Engineering and Arts and Sciences at UK, we plan to take these collaborations to a new level towards meeting the needs of our students who should graduate with expertise in both STEM content and STEM pedagogy. To this end, we plan to have no cost joint appointments within our proposed STEM Education Department for select STEM faculty in the Colleges of Arts & Sciences and Engineering, such as PIMSER outreach professors. Likewise, the content departments plan to grant reciprocal no-cost joint appointments to the STEM Education Department. The expectations of these joint appointments might include but not be limited to activities such as joint teaching, program development, grant writing, committee service, and research. Voting rights will be conferred to jointly appointed individuals to address curricula and programmatic changes and faculty hires.

Phase Three Discussion

Beginning in March 2012, the STEM Education Department will build upon the current redesigned STEM Education master's program and doctoral offerings in mathematics and science education to create a unique doctoral program for graduate students to pursue a PhD in science education, technology education, engineering education, and/or mathematics education. Our enrollment of Ph.D. students specializing in mathematics, science, and/or STEM education is 20 (see Table 2). We plan to increase this number by a factor of 2 by 2015. By 2015, seven of the eight current STEM Education faculty will have gone through the promotion and tenure process. The potential addition of these faculty members at the senior level in addition to the no-cost joint appointments will provide the capacity to chair the projected doctoral student growth.

Final Thoughts

Presently, we are aware of only two institutions that have STEM Education Departments (Old Dominion and University of Massachusetts – Dartmouth). None of our benchmark institutions are forming STEM Education departments, precisely one of the reasons why UK should. STEM is no longer simply an acronym for Science, Technology, Engineering, and

Mathematics; it represents not only disciplinary focus, but also a unification of the disciplines. It is its own entity and is much greater than the sum of its parts. UK needs to position itself now as the leader for STEM Education in the Commonwealth. We are formally requesting our new STEM Education Department will have a proposed January 2011 start date. The time is right, the people are here, and we are ready to make an immediate impact on innovation, investigation, engagement, and praxis in STEM Education.

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APPENDIX A

Current Courses Taught by STEM Education Faculty in Curriculum and Instruction and Future Courses Taught in STEM Education

There are currently 96 courses on record within the Department of Curriculum and Instruction. Twenty (21%) of these courses are taught by STEM Education Faculty Members. The following courses would be transferred to the STEM Education Department under "SEM" (as approved by registrar's office) and remain the responsibility of the STEM Education Faculty Members. Courses taught within set programs such as the MIC, Elementary, and Middle School Programs will continue to be coordinated with the Program Faculty Chair as usual. (see table 4). No existing Curriculum and Instruction courses will be cut or planned to be cut. Table 5 represents new courses to be created within the new STEM Education Department to meet the needs of STEM PLUS, current certification programs, and our graduate students. See "Forecasted STEM Education Course Offering" (table 6) for future course offerings.

Table 4: Current Curriculum and Instruction Courses and the Future of the Course

Course Number and Title	Responsible Faculty	Future of the Course	
EDC 328: Teaching Science in the Elementary School	Christine Schnittka and/or Rebecca McNall Krall	SEM 328: Will continue to be taught as a service course to the Elementary Education Program	
EDC 337: Teaching Mathematics in Elementary Schools	Molly Fisher and/or Christa Jackson	SEM 337: Will continue to be taught as a service course to the Elementary Education Program	
EDC 345: Teaching Mathematics in the Middle School	Xin Ma	SEM 345: Will continue to be taught as a service course to the Middle School Program	
EDC 348: Teaching Science in the Middle School	Christine Schnittka or Jana Bouwma-Gearhart	SEM 348: Will continue to be taught as a service course to the Middle School Program	
EDC 421: Survey of Secondary Mathematics Curriculum	Margaret Mohr-Schroeder	SEM 421: This course will go through a major course change and become the first methods course in the STEM PLUS Program. It will be taught by Margaret Mohr-Schroeder, Jennifer Wilhelm, and/or Jana Bouwma-Gearhart.	

Course Number and Title	Responsible Faculty	Future of the Course	
EDC 603: Curriculum and Instruction in STEM Education	All STEM Education Faculty	SEM 603: This course was created by the STEM Education Faculty in Spring 2010 for use in the Advanced Master's STEM Education Program and the doctoral program	
EDC 604: History of STEM Education	All STEM Education Faculty	SEM 604: This course was created by the STEM Education Faculty in Spring 2010 for use in the Advanced Master's STEM Education Program and the doctoral program	
EDC 613: Effective Use of Technology for Modeling- Based Inquiry in STEM Education	All STEM Education Faculty	SEM 613: This course was created by the STEM Education Faculty in Spring 2010 for use in the Advanced Master's STEM Education Program and the doctoral program	
EDC 631: Mathematics Pedagogy in the Secondary School	Margaret Mohr-Schroeder	The methods course for the MIC Program; will continue as SEM 631	
EDC 634: Science Pedagogy in the Secondary School	Jana Bouwma-Gearhart	The methods course for the MIC Program; will continue as SEM 634	
EDC 670: Advanced Study in the Teaching of Elementary School Mathematics	Molly Fisher or Christa Jackson	SEM 670: Course is taken by graduate students in elementary, middle, STEM Education, and doctoral programs	
EDC 674 Advanced Studies in Teaching Elementary School Science	Rebecca McNall Krall	SEM 674: This course was created by the STEM Education Faculty in Spring 2010 for use in the Elementary, Middle, Advanced Master's STEM Education Program and the doctoral program	

Course Number and Title	Responsible Faculty	Future of the Course	
EDC 701: History of Mathematics Education	Molly Fisher or Xin Ma	SEM 701: Course is taken by graduate students in Advanced Master's STEM Education Program and doctoral program	
EDC 702: Theoretical Foundations of Mathematics Education	Xin Ma or Margaret Mohr- Schroeder	SEM 702: Course is taken by graduate students in Advanced Master's in STEM Education Program and doctoral program	
EDC 703: Advanced Research in Mathematics Education	Xin Ma	SEM 703: Course is taken by graduate students in Advanced Master's in STEM Education Program and doctoral program	
EDC 704: Designing Project- Based Environments in STEM Education	Jennifer Wilhelm	SEM 704: This course was created by the STEM Education Faculty in Spring 2010 for use in the Advanced Master's STEM Education Program and the doctoral program	
EDC 706: Research in STEM Education	All STEM Education Faculty	SEM 706: This course was created by the STEM Education Faculty in Spring 2010 for use in the Advanced Master's STEM Education Program and the doctoral program	
EDC 708: Engineering in STEM Education	Christine Schnittka	SEM 708: This course was created by the STEM Education Faculty in Spring 2010 for use in the Advanced Master's STEM Education Program and the doctoral program	

Course Number and Title	Responsible Faculty	Future of the Course
EDC 746: Subject Area Instruction in the Secondary School	Margaret Mohr-Schroeder and Jana Bouwma-Gearhart	EDC/SEM 746: This course is the student teaching credit for students in the MIC Program. In addition, there is a seminar built within the course. This course will not be transferred, but rather the course will be crosslisted as EDC/SEM 746.
EDC 770: Special Topics in STEM Education	All STEM Education Faculty	SEM 770: This course was created by the STEM Education Faculty in Spring 2010 for use in the Advanced Master's STEM Education Program and the doctoral program

 ${\it Table 5: Courses \ to \ be \ created \ in \ the \ STEM \ Education \ Department}$

Courses to be Created	Responsible Faculty	Reason
SEM 110: Introduction to STEM Education (2 hrs)	All STEM Education Faculty	This will be the introductory course to STEM Education and will be used as a recruiting tool for increasing our potential pool of STEM teachers. It will be a required course within STEM PLUS and will contain a field experience component.
SEM 422: STEM Methods II (3 hrs)	Jennifer Wilhelm, Margaret Mohr-Schroeder, and/or Jana Bouwma-Gearhart	The second in a sequence of two methods courses for the STEM PLUS program. Specific sections will be created based on the current student population.
SEM 423: Assessment and Equity in STEM Education (2 hrs)	Christa Jackson, Margaret Mohr-Schroeder, Jennifer Wilhelm, or Jana Bouwma- Gearhart	A required course within the STEM PLUS Program. Taken concurrently with SEM 435.

Courses to be Created	Responsible Faculty	Reason
SEM 435: STEM Student Teaching in the Secondary School (10 hrs)	Jennifer Wilhelm, Margaret Mohr-Schroeder, and/or Jana Bouwma-Gearhart	Student credit for student teaching experience. Will include 4 observations, midterm and final assessment reviews, and final project review.
SEM 501: Teaching Internship (1-12 hours)		This course is a supervised practice teaching course under competent leadership. It is part of the Alternative Certification Program in Mathematics and Science and also serves as a general practicum course for students in special circumstances. It can be taken by undergraduate and graduate students.
SEM 767: Dissertation Residency Requirement	DGS/Advisor	Residency credit of dissertation research after the qualifying exam. Students may register for this course in the semester of the qualifying examination. A minimum of two semesters are required as well as continuous enrollment (Fall and Spring) until the dissertation is completed and defended.
SEM 781: Independent Study in STEM Education	All STEM Education Faculty/Consent of DGS	An independent study course for graduate students.

			able 6: <i>Proj</i> i	ected STEA	1 Educati	on Departn	nent Cours	Table 6: Projected STEM Education Department Courses Schedule				
	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016
EDC 328: Teaching Science in the Elementary School	2 sections - Becky Krall & Chris Schnittka	2 sections - Becky Krall & Chris Schnittka	2 sections - Becky Krall & PTI or GA	2 sections - Becky Krall & Chris Schnittka	2 sections - Becky Krall & GA	2 sections - Becky Krall & Chris Schnittka	2 sections - Becky Krall & Chris Schnittka	2 sections - Becky Krall & Chris Schnittka	2 sections - Chris Schnittka & GA	2 sections - Becky Krall & Chris Schnittka	2 sections - Becky Krall & GA	2 sections - Becky Krall & Chris Schnittka
EDC 337: Teaching Mathematics in the Elementary School	2 sections - Christa Jackson & Bev Dean	2 sections - Christa Jackson & Molly Fisher	2 sections - Christa Jackson & Molly Fisher	2 sections - Christa Jackson & Molly Fisher	2 sections - Christa Jackson & GA	2 sections - Christa Jackson & Molly Fisher	2 sections - Christa Jackson & Molly Fisher	2 sections - Christa Jackson & Molly Fisher	2 sections - Christa Jackson & GA	2 sections - Christa Jackson & Molly Fisher	2 sections - Christa Jackson & Molly Fisher	2 sections - Christa Jackson & Molly Fisher
EDC 345: Teaching Mathematics in the Middle School	Xin Ma		Christa Jackson		Xin Ma		Christa Jackson		Xin Ma		Christa Jackson	
EDC 348: Teaching Science in the Middle School	Christine Schnittka		Christine Schnittka		Christine Schnittka		Christine Schnittka		Christine Schnittka		Christine Schnittka	
EDC 421: Survey of Secondary Mathematics Curriculum	Margaret Mohr- Schroeder		Margaret Mohr- Schroeder		Margaret Mohr-		Margaret Mohr- Schroeder		Margaret Mohr-		Margaret Mohr-	
EDC 603: Curriculum and	Molly Fisher		Molly Fisher		Schroeder Molly Fisher		Molly Fisher		Schroeder Molly Fisher		Schroeder Molly Fisher	
Instruction in STEM Education EDC 604: History of STEM Education		Jennifer Wilhelm				Jennifer Wilhelm				Jennifer Wilhelm		
EDC 613: Effective Use of Technology for Modeling-Based Inquiry in STEM Education			Becky Krall			Becky Krall			Becky Krall			Becky Krall
EDC 631; Mathematics Pedagogy in Margaret Mohr- the Secondary School	Margaret Mohr- Schroeder		Margaret Mohr- Schroeder		Margaret Mohr- Schroeder		Margaret Mohr- Schroeder		Margaret Mohr- Schroeder		Margaret Mohr- Schroeder	
EDC 634: Science Pedagogy in the Secondary School	Jana Bouwma- Gearhart		Jana Bouwma- Gearhart		Jana Bouwma- Gearhart		Jana Bouwma- Gearhart		Jana Bouwma- Gearhart		Jana Bouwma Gearhart	
EDC 670: Advanced Study in the Teaching of Elementary School Mathematics		Molly Fisher		Molly Fisher		Molly Fisher		Molly Fisher		Molly Fisher		Molly Fisher
EDC 674: Advanced Studies in Elementary Science	Becky Krall		Chris Schnittka		Becky Krall		Becky Krall		Becky Krall		Becky Krall	
EDC 701: History of Mathematics Education	Molly Fisher				Molly Fisher				Molly Fisher			
EDC 702: Theoretical Foundations of Mathematics Education		Xin Ma				Xin Ma				Xin Ma		
EDC 703: Advanced Research in Mathematics Education			Xin Ma				Xin Ma				Xin Ma	
EDC 704: Designing Project- Enhanced Environments in STEM Education				Jennifer Wilhelm				Jennifer Wilhelm				Jennifer Wilhelm
EDC 706: Research in STEM Education			Jana Bouwma- Gearhart			Jana Bouwma- Gearhart			Jana Bouwma- Gearhart			Jana Bouwma- Gearhart
EDC 708: Engineering in STEM Education		Chris Schnittka			Chris Schnittka			Chris Schnittka			Chris Schnittka	
EDC 746: Subject Area Instruction in the Secondary School (Mathematics)		Margaret Mohr- Schroeder		Margaret Mohr- Schroeder		Margaret Mohr- Schroeder		Margaret Mohr- Schroeder		Margaret Mohr- Schroeder		Margaret Mohr- Schroeder
EDC 746: Subject Area Instruction in the Secondary School (Science)		Jana Bouwma- Gearhart		Jana Bouwma- Gearhart		Jana Bouwma- Gearhart		Jana Bouwma- Gearhart		Jana Bouwma- Gearhart		Jana Bouwma- Gearhart
EDC 770: Special Topics in STEM Education: <i>Insert Topic</i>	Jana Bouwma- Gearhart											
		2		A refer to	Need	Need Additional Courses:	ses:	2		3:11:0		
THIS DOES NOT INCLUDE 1		Decky N		Decky N Chris S	Jana B-G	Christa J	Jana B-G	Sin M	Curista	Decky N Chris S	Jana B-G	Christa J
ADDITIONAL LINE THAT WAS HELD THIS YEAR DUE TO BUDGET. 1 IN				Xin M		Margaret M-S		Christa J		Christa J		Margaret M-S
MATHEMATICS.				Christa J Jana B-G				Jana B-G Margaret M-S		Jana B-G Margaret M-S		
				Margaret M-S								

APPENDIX B

These questions, posed by the remaining C&I Faculty, were answered by Dean Mary John O'Hair in Spring 2010.

The following are questions generated by faculty who will be remaining in Curriculum and Instruction:

- 1. How will the budget be impacted? How will the allocation of funding change? The C&I budget will not be impacted. New dollars will be allocated to the STEM department to fund department chair stipend, an administrative assistant, TAs, and operating expenses.
- 2. How much money comes to the department through STEM faculty? If that money is moved to STEM education, how will this impact staffing, TA allocation, etc.?
 - No funds would be moved from C&I to the STEM department.
 - The current operating expenses would remain in C&I; new operating expenses for the STEM department would be provided by the Provost's Office.
 - Grants and contracts awarded to STEM faculty would go to the new STEM department.
 We anticipate that establishment of the STEM department will lead to additional grants and contracts in the STEM disciplines. Incentive funds generated by faculty members are associated with the faculty members earning the funds.
 - I encourage C&I faculty members to be actively engaged in securing grants and contracts. Incentive funds from these grants and contracts would remain in C&I.
 - As in previous years, the travel budget would be based on \$1,400 per faculty member, which comes from the college budget. In the past, C&I faculty members have received \$350 from departmental funds to supplement the college's \$1,400 allocation. This additional amount will remain for faculty in C&I. The STEM department would establish its own policy related to any additional travel money to supplement the college allocation.
- 3. Generally, does the change impact space, TAs, and staff assistants?
 - An attempt will be made to locate all STEM faculty in a central location. Since most are
 already in TEB, the plan is to relocate faculty in DH to TEB. C&I could benefit from the
 move since faculty office space would open up when STEM faculty are relocated.
 - The C&I department would not lose TA lines. Commitments from the President's Office and development funds will be used to create new TA lines in the STEM department.
 - No change will occur to the number of staff assistants in C&I. The Provost's Office has committed to funding a staff assistant in the new STEM department.
- 4. Will faculty be teaching the science and mathematics courses embedded in EDC programs? Yes.
- 5. Who will take on supervision duties? Supervision responsibilities will continue as they currently are. Mathematics education and science education faculty who teach in the elementary and middle school methods blocks will continue to supervise practicum students during their field placements.

- 6. Who will be program chair for mathematics education and science education? The Mathematics and Science Education Program Faculty has been divided into two program faculties: the Mathematics Education Program Faculty and the Science Education Program Faculty. Margaret Mohr-Schroeder will chair the Mathematics Education Program Faculty and Jana Bouwma-Gearhart will chair the Science Education Program Faculty.
- 7. Who will serve as advisors, and how will that be allocated? If an advising proposal that is under review by the Provost's Office is not fully funded, advising for students who have been admitted to TEP or upper division status will be advised as in the past. The faculty in Mathematics Education would advise students in mathematics education; faculty in Science Education would advise students in science education.
- 8. Who will serve on committees (this is more about representatives from the STEM Education department)? The STEM department would have representation on college-level committees and be treated as other departments in the college in this regard. Faculty from the content disciplines in Arts and Sciences who would have joint appointments in STEM could serve on doctoral committees. Given recent hires in mathematics education and science education, there will be sufficient faculty in the STEM department to serve on program faculties, including the Elementary Education and Middle School Program Faculties.
- 9. Will we keep all 8.5 TA lines currently allocated to C&I? Yes.
- 10. What is the future of lecturer lines in C&I? Currently we have one as the MIC coordinator and one as the middle school coordinator. Ms. Vicki Vance has coordinated the elementary student teaching for a number of years, but is retiring in June. Will we be able to hire someone into Ms. Vance's position? Lecturer lines are established as needs arise throughout the college. The lines do not "belong" to a specific department. Salaries to fund the lecturer lines come from vacant faculty lines. The lecturer line for the MIC program will continue into the 2010-2011 academic year because the college was not able to search for the MIC position; however, a successful search was conducted for the middle school position and that lecturer line will not be available to C&I for the coming year. The department will be able to hire an individual to replace Ms. Vance for the upcoming year.



Science and Mathematics Teacher Imperative

January 6, 2010

President Barack Obama The White House 1600 Pennsylvania Avenue Washington, D.C. 20500

Dear Mr. President:

We write to salute your leadership and determination to revolutionize science, technology, engineering, and mathematics (STEM) education and to convey our commitment to contributing significantly to this noble goal.

As you have so eloquently stated, if we as a nation do not prepare one of the world's most educated, and scientifically and mathematically literate workforces, then we have no chance of continuing to be one of the world's most secure and competitive economies.

To educate our students to compete effectively in the global economy, we need to prepare the world's best science and mathematics teachers. As the institutions with, by far, the largest cohorts of the most capable undergraduate science, mathematics and engineering students, public research universities have a critical role to play in preparing the number and quality of teachers the nation requires. Over the past several decades, our large public research institutions have all too often stood aside and not participated as we can—and must—to the critical need for highly qualified science and mathematics teachers.

Discovery from research stimulates excitement and enthusiastic attention from young people. Learning by doing research at major research universities teaches science in the way that mere rote learning cannot. One of the needs now is to teach science in a different and more meaningful way—by prompting students to learn how to find the answers—and, perhaps more important, how to ask the questions. Even at the most basic level, teachers prepared at research universities have the opportunity to understand the world through their own explorations and thus become significantly more effective in their teaching craft. Decades of research on how people learn, studies of environments that support student learning, and successful models of teacher professional development, advocate for such approaches.

Many of our institutions have demonstrated that a whole university (colleges of science and education working together) can cast science and mathematics teaching as the critical and noble profession that it is for young people to consider.

1307 New York Avenue, NW, Suite 400, Washington, DC 20005-4722 · 202.478.6040 · fax 202.478.6046 · www.aplu.org

As presidents of major public universities, we are newly resolved to address this national challenge. We offer as a new major contribution to your Administration's efforts, our commitment to the **Science and Mathematics Teacher Imperative** (SMTI).

We deliberately define this effort as an <u>Imperative</u>. We do not take this lightly, simply issuing a statement or report, expecting others to implement. For this sustained effort, our pledge is to substantially increase the number and diversity of high-quality science and mathematics teachers we prepare, and build better partnerships among universities, community colleges, school systems, state governments, business, and other stakeholders.

Preparing more than 7,500 mathematics and science teachers annually, we are presently 121 public research universities across 41 states—including 11 university systems. We launched this new and powerful effort about a year ago, making it the nation's largest such initiative.

While each of our efforts reflects the needs in our particular states for science and mathematics teachers, and acknowledges intense fiscal challenges, 39 institutions and several systems are today committing to at least doubling the number of teachers they prepare. (A chart of our individual commitments is included below.) Together, our institutions committing to SMTI will strive to increase the number of new science and mathematics teachers we prepare to more than 10,000 annually by 2015, for an accumulated 7,500 new teachers over the five years from what we would have prepared.

We and our colleagues on science, mathematics and education faculties participating in SMTI are inspired and driven by a "can-do" attitude:

- Faced with a plethora of "one-off" innovative, exemplary and dedicated programs across the
 country over the past decade by universities in Texas, California, North Carolina, Georgia
 and Colorado with no common driving force or learning community, we created SMTI to
 serve as a convener and coordinating vehicle.
- Finding the nation lacks a comprehensive source of information about effective programs and
 practices to prepare science and mathematics teachers—we are developing one. Our "Analytic
 Framework," funded by grants from the Carnegie Corporation of New York and the National
 Science Foundation (NSF) will enable institutional benchmarking and the identification of
 exemplar practices, supported by evidence.
- Reaching the preparation of 10,000 new teachers annually by 2015 will require more effective institutional sharing and taking to scale exemplar practices. Such scaling has not been accomplished in the past due to a lack of effective dissemination of information, collaborative leadership and coordination, the absence of a coherent model of change, and an academic desire not to repeat anyone else's ideas. SMTI will document leading practices and, working in partnership with participating public research universities; other universities; school systems; state, local and federal governments; as well as the business community, we will greatly extend the impact of locally proven practices to major regions, underserved populations and demographically similar locations.
- Recognizing that enhancing the priority of teacher preparation at individual universities is key, we have teamed with the American Physical Society in an NSF funded Math and Science Partnership to study conditions that promote change in a test group of 26 universities.

- Realizing the strength in learning across universities, SMTI encompasses many approaches.
 Our coalition of institutions has lead participants in major science and mathematics teacher preparation reform programs. For example:
 - APLU institutions have awarded more than half the NSF Noyce Scholarships to their students since the program began.
 - Eleven of the fifteen UTeach sites, including the originator, the University of Texas, Austin, are SMTI participants.
 - Nine of the twelve NSF funded Physics Teacher Education Coalition (PhysTEC) sites participate in SMTI.

In sum, we are committed to addressing this critical national need for more and better science and mathematics teachers. Through the Science and Mathematics Teacher Imperative we have come together to learn from leading innovative programs, define and assess the quality of our efforts, understand how to better partner with school systems, and challenge ourselves to improve relentlessly our activities.

Mr. President, we ask that you and your Administration continue to provide dedicated leadership to the nation to address these critical concerns in new ways, forming new collaborations. We seek enhanced opportunities to work with your Executive Office on an overall approach, as well as federal agencies. We note for example that your Secretary of Education would like to make his Department a science and mathematics "powerhouse" and we would like an opportunity to help make that happen. The National Science Foundation has been seeking new ways to better integrate research and education, and assisting universities in developing a robust scholarship of science education. The Department of Energy is recognizing the urgent need to support science education, if our citizenry is to understand why and how we might seek more sustainable economy.

And finally, Mr. President, we seek your sustained challenge to us to be more creative, more innovative, and more dedicated in addressing these national challenges. We hope that each time you turn back to us with further encouragement over the course of the next several years; we are working more closely with leaders of your Administration to define how we might better meet our mutual national objectives to retain our high U.S. quality of life and global leadership.

Respectfully,

Andrew Hugine, Jr. President

Alabama A&M University

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George J. Gogue President Auburn University Lois B. DeFleur President

Binghamton University, SUNY

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Robert W. Kustra President Boise State University

Milton A. Gordon President California State University. Fullerton

anthony a Smuch

Anthony A. Frank President Colorado State University

Mark B. Rosenberg

President Florida International University

Mark P. Becker President Georgia State University

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Gregory L. Geoffroy President Iowa State University Carol Castion the

Carol A. Cartwright President Bowling Green State University

Matthew Goldstein Chancellor City University of New York System, The

David & Shorton

David J. Skorton President Cornell University

Thomas K. Wetherell President Florida State University

Q O. K.

C. Alvin Bowman President Illinois State University

Golden Haughert

JoAnn W. Haysbert President

Langston University

John D. Welty President California State University, Fresno

James F. Barker President Clemson University

Claibrine D.Smith

Claibourne D. Smith Acting President Delaware State University

alen G. Merten

Alan G. Merten President George Mason University

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Chancellor Indiana University-Purdue University

Carolynf. Mahoney

Carolyn R. Mahoney President

Lincoln University

Michael V. Martin Chancellor

Louisiana State University

Son Ole

Susan A. Cole President Montclair State University

E. Moden Sec

E. Gordon Gee President Ohio State University, The

Richard I. McCormich

Richard L. McCormick President Rutgers, The State University of New Jersey

Ann Wasser Had

Ann Weaver Hart President Temple University

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Mark G. Yudof President University of California

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Gregory H. Williams President University of Cincinnati La An King S

Lou Anna K. Simon President Michigan State University

Manuel T Parkers

Manuel T. Pacheco Interim President New Mexico State University

Topos

George Pernsteiner President Oregon University System

Nancy Limpher Chancellor

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R. Bowen Loftin Interim President Texas A&M University

Linda P. Katehi Chancellor University of California, Davis

Philip P. DiStefano

Chancellor University of Colorado at Boulder Glenn D. Mroz President Michigan Technological University

John D. Hayon

John D. Hacger President Northern Arizona University

Lokan Spanier

Graham B. Spanier President Pennsylvania State University, The

David L. Chicoine
President
South Dakota State University,
The

Dr. B. Sippen

John B. Simpson
President
University of Buffalo, SUNY

Timothy P. White Chancellor

University of California, Riverside

M. Roy Wilson Chancellor University of Colorado at Denver



M. Gran Mellin

M. Duane Nellis

University of Idaho

President

Allen L. Sessoms President University of the District of Columbia

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Michael F. Adams President University of Georgia

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Champaign

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University of Kentucky

University of Memphis

President

President

Interim Chancellor

University of Illinois, Urbana-

Kenu Khatov_

Renu Khator Chancellor University of Houston

Sally Mason President University of Iowa, The

Robert A. Kennedy President University of Maine

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Jan War

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Brady J. Destan

Brady J. Deaton Chancellor University of Missouri Leo E. Morton Chancellor City

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James B. Milliken President University of Nebraska

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University of New Mexico

Milton D. Glick President University of Nevada, Reno

Philip L. Dubois Chancellor University of North Carolina at Charlotte

Mark a Nardenberg

Mark A. Nordenberg Chancellor University of Pittsburgh

Francisco & Cyarren

Francisco G. Cigarroa Chancellor University of Texas System, The

Mark A. Emmert

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Erroll B. Davis Chancellor

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Donald L. Beggs President

Wichita State University

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James W. Abbott President University of South Dakota

Michael K. Young President

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James P. Clements
President
West Virginia University

David R. Hopkins President Wright State University Danish

James D. Spaniolo President University of Texas at Arlington

Daise Mark Fagel

Daniel M. Fogel President University of Vermont

Thomas Buchanan President University of Wyoming

Charles W. Steger President Virginia Polytechnic Institute

& State University

John En Denni

John M. Dunn President

Western Michigan University

Attachment – Universities Intending to Double Science and Mathematics Teachers Prepared (chart)



Science & Mathematics Teacher Imperative

The Association of Public and Land-grant Universities (A·P·L·U) launched the Science and Mathematics Teacher Imperative in November 2008 to increase the number and diversity of high-quality middle and high school science and mathematics teachers in the United States. To meet this goal, SMTI works to galvanize university leadership to action, strategically improve teacher preparation, develop a teacher personnel needs assessment tool, and expand the number of teachers prepared annually at public research universities.



Universities Intending to Double Science and Mathematics Teachers Prepared

Science & Mathematics Teacher Imperation		
Systems	Number of teachers produced*	Number of teachers to be produced*
California State University System**	768	1536
University of California System**+	188	376
University System of Maryland	106	374
Institutions		
University of Georgia	91	206
Arizona State University	70	162
California State University, Fullerton**	54	154
Georgia State University	46	150
University of North Carolina at Charlotte	70	148
University of Houston	43	140
San Francisco State University**	62	134
University of Maryland College Park	31	130
Colorado State University	33	11/
California State University, Fresno*	38	103
University of South Carolina - Columbia	24	82
California Polytechnic State University, San Luis Obispo**	13	80
Northern Arizona University	33	80
University of Texas at Arlington	38	76
University of South Florida	31	75
University of North Texas	30	70
Virginia Tech	20	63
The University of Memphis	27	60
University of Cincinnati	29	60
University of Kansas	16	60
Florida State University	28	58
University of Wyoming	23	55
Ball State University	26	53
Florida International University	6	52
South Dakota State University	16	51
Boise State University	15	50
University of Colorado Denver	21	50
University of New Mexico	25	50
University of Colorado at Boulder	20	45
University of Illinois at Chicago	20	43
University of Tennessee, Knoxville	20	40
Wichita State University	16	40
University of Utah	14	36
University of Missouri - Kansas City	13	35
University of Idaho	13	34
University of Kentucky	13	32
The University of Montana	10	31
New Mexico State University	15	30
University of the District of Columbia	1	30
Cornell University	14	28
Indiana University-Purdue University Indianapolis	10	20
North Dakota State University	8	16
Alabama A&M University	5	15

Charts were updated on March 12, 2010 to include the following universities with the intent to double the number of science and mathematics teachers they prepare: Arizona State University, South Dakota State University, North Dakota State University, and the University of the District of Columbia.

- +The University of California System's number of teachers credentialed was corrected. [Note: In 2003, the University of California produced 366 (or 38%) of the science & mathematics majors who went on to obtain a teacher credential by an institution that year in California. Through their CalTeach program, the UC System goal is to reach 1,000 teachers by 2011.]
- *For "Number of Teachers Produced", institutions chose the year, usually 2006-2009, in which to report the number of science and mathematics teachers they produced. For "Number of Teachers to be Produced", institutions chose the year, usually 2011-2015, in which to report the number of science and mathematics teachers that they intend to produce.
- **Institutions which reported the "Number of Teachers Produced" for 2003.

APPENDIX D

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UK president Todd to meet with

Herald-Leader Staff Report

University of Kentucky President Lee T. Todd Jr. will be part of a delegation of university leaders who will meet with President Barack

Obama on Wednesday and pledge to help reduce the nation's deficit of math and science teachers.

Todd and three others are scheduled to deliver to Obama a letter signed by 79 university leaders in which they pledge to "substantially increase the number and diversity of highquality science and mathematics teachers we prepare," as well as to work closely with other universities, colleges, school systems, state governments and businesses to develop those teachers.

Specifically, 39 institutions and three university systems — including UK — say they plan to at least double the number of math and science teachers who graduate by 2015, according to the Association of Public and Land-grant Universities.

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The other three university leaders joining Todd in delivering the letter to Obama will be Kansas University's chancellor Bernadette Gray-Little, University System of Maryland's chancellor William "Brit" Kirwan, and University of Colorado chancellor Philip P. DiStefano.

The meeting will take place as part of the White House's "Educate to Innovate" campaign, in which Obama will honor science and math teachers from across the country.

Obama also is expected to announce that

companies, foundations and science and engineering societies will be involved in the efforts to bolster math and science education, according to a news release from the White House.





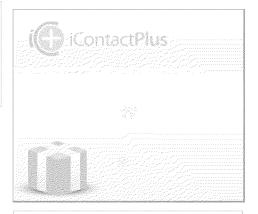
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News briefs: Jan. 6

UK president Todd to meet with Obama

Lexington: University of Kentucky President Lee T. Todd Jr. will be part of a delegation of university leaders who will meet with President Barack Obama on Wednesday and pledge to help reduce the nation's deficit of math and science teachers.



Todd and three others are scheduled to deliver to Obama a letter signed by 79 university leaders in which they pledge to "substantially increase the number and diversity of highquality science and mathematics teachers we prepare," and work with other schools, state governments and businesses to develop those teachers.

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Specifically, 39 institutions and three university systems — including UK — say they plan to at least double the number of math and science teachers who graduate by 2015, according to the Association of Public and Land-grant Universities.

Ruling on tobacco restrictions

Bowling Green: A federal judge overturned two of the marketing restrictions in a new tobacco law, including a ban on color and graphics in most tobacco advertising. Several tobacco makers sued in August to

block the restrictions, and U.S. District Judge Joseph McKinley in Bowling Green agreed that two violated tobacco companies' free speech rights.

Congress could have exempted certain types of colors and images instead of banning all color and graphics in advertising that children might see, McKinley ruled. He also said the U.S. Food and Drug Administration can't bar anyone from saying the agency's regulation of tobacco makes it safe.

But he upheld most of the new marketing restrictions, including a ban on tobacco companies sponsoring athletic, social and cultural events or offering free samples or branded merchandise. McKinley's ruling, recorded Tuesday, also upholds a requirement that warning labels cover half the packaging on each tobacco product.

The Family Smoking Prevention and Tobacco Control Act, signed into law in June, lets the FDA limit but not ban nicotine. It also lets the agency ban candy flavorings and marketing claims such "low tar" and "light," require warnings be emblazoned over carton images, regulate what goes into tobacco products and publicize those ingredients.

Paper seeks Nunn records

Attorneys for the Courier-Journal have filed a motion to vacate an agreed protective order in the murder case against former state Rep. Steve Nunn.

According to a motion filed Tuesday, the newspaper wants to intervene "solely for the purpose of asserting its and the public's constitutional and common law rights of access to court records and its constitutional right to gather news." The Herald-Leader will join the Courier-Journal's filing.

The agreed protective order, filed Dec. 21, is in reference to items in the commonwealth's inventory and four items of evidence from Lexington police. The order does not provide details Page 40





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UK is part of national push for more math and science teachers

By Ryan Alessi - ralessi@herald-leader.com

Amid a growing national awareness of the need for more math and science teachers, the University of Kentucky promised to triple the number of educators it produces in those fields over the next five years.

UK President Lee T. Todd Jr. delivered the pledge Wednesday to President Barack Obama as Obama announced new efforts in science, math and technology education.

COLUMNISTS CRIME EDUCATION POLITICS

"We must admit, we are now being outpaced by our competitors," Obama said, adding that the United States ranks 21st in science education and 25th in math globally. "That's not acceptable."

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Basic skills are barrier to success for many 2year college students Todd said he spoke briefly with Obama when delivering a letter in which leaders of 121 public universities pledged to increase the number of new math and science teachers to 10,000 from 7,500 by 2015.

At UK, 11 science and 12 math teachers are expected to graduate in May from its one-year program for a master's degree in secondary education with initial teaching certification.

UK leaders hope to increase those numbers to 33 and 36, respectively, by 2015 by encouraging primary and high school students to choose math and science education and by creating more spots in the master's program, said Mary John O'Hair, the dean of UK's college of education. UK also is focusing on professional development for current math and science teachers, she said.

O'Hair recently hired a new professor to bring the math and science education faculty to eight.

The pledge to cultivate more teachers is only part of the equation.

Todd and three other university leaders urged U.S. Department of Education Secretary Arne Duncan and other administration officials to focus more federal funds to continue programs that work rather than jumping from one pilot teaching program to another.

"It's all hands on deck — that's how Arne Duncan put it to us," Todd said. "One thing we told Duncan was that we really need you all to be pushing these careers from the top. We have parents who are telling their students that the (math and science) jobs are all going out of the country, so why should you go into those fields?"

And Todd said he told executives from technology companies such as Intel and Texas Instruments that they should use marketing to encourage more young people to go into math and science fields; he cited the ExxonMobil TV commercials featuring golfer Phil Mickelson, whose teaching academy focuses on math and science.

In addition, Todd has a key role with a national initiative called the Science and Mathematics Teacher Imperative.

That organization is compiling a catalog of teaching techniques, programs and approaches used to reach out to students.



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UK is part of national push for more m...

Also Wednesday, Obama honored more than 100 math and science e9cators with teaching awards, including two from Kentucky.

They are Kristen Jarboe, who teaches mathematics intervention for primary through third grade at Elkhorn Elementary School in Franklin County, and Keri Dowdy, a fourth grade science teacher at Sedalia Elementary School in Graves County.

Reach Ryan Alessi at (859) 231-1303.





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hman56 wrote on 01/07/2010 07:07:11 AM:

If I ever run for anything, remind me to tout education, public safety, new sidewalks, and free everything for everybody.

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hman56 wrote on 01/07/2010 07:04:40 AM:

Stinkykitty, I don't think it was the ring he kissed.

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frommars859 wrote on 01/06/2010 09:29:05 PM:

don't know what happened to the comments on the first article that was postbut my question is...exactly what is being proposed by Dr Todd??? Sounds like PR and BS to me.

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UK pledges to not be left behind in school: Will increase number of math, science teachers

January 19, 2010 by News Staff · Leave a Comment



By Genevieve Adams

UK is stepping up to a national challenge to multiply the number of math and science teachers.

Earlier this month, UK President Lee Todd traveled to Washington D.C. to deliver a letter to President Barack Obama addressing the shortage of secondary education math and science teachers. Todd pledged for Kentucky to be a role model for the rest of the nation to further the Science, Technology, Engineering, and Mathematics Education Coalition.

Secondary mathematics education chairwoman Margaret Schroeder said UK is taking the initiative to increase funding for education programs. She hopes this pledge will improve the quality and quantity of math and science teachers.

"This year, we had an increase of 10 percent enrollment in mathematics and 400 percent enrollment in science,†Schroeder said. "The numbers for next year look even more promising, with possible increases in mathematics of 60 percent or more and science improving by as much as 50 percent.â€

Schroeder isn't the only one who has high hopes for change in UK's program. Education major David Little said he believed UK's education program is in need of change.

"What has always been the case is that education changes every year because the needs and strengths of our youth change every year,†Little said. "This state of change in the real-world arena of teaching will undoubtedly always be reflected in the modification of current educational theory.â€

However, curriculum changes and increased funding won't solve this issue if the number of students wanting to teach math and science is scarce, Little said. Economically, teaching isn't the most appealing future for most college students.

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"The best and the brightest individuals from STEM fields tend to look for employment outside of education for economic reasons, as well as fewer demands and responsibilities tied to other jobs,†Little said. "While it is nationally recognized that teaching and education are extremely important in this country ‹ very little is being done to entice highly qualified individuals into the field.â€

Kentucky's plan of action began with an undergraduate program that was recently introduced to allow students to get their teaching certificate in one year. This would increase the number of students going straight into teaching and also allow those who can't afford further schooling to become qualified teachers, Schroeder said.

"It is an excellent program, particularly for career changers and those graduating with non-education content BA's, because the program is designed to take only one calendar year,†Schroeder said. "For the past five years, we have had 99.9 percent job placement rate in the Master's programs for our graduates and that's a testament to our quality all by itself.â€

Little said the goal of the pledge is easy to recognize, but not so easy to attain.

"The solution to this is simple in theory but hard in practice; we must work towards making education as attractive an employment option as everything else that's within the reach of STEM majors,†Little said.

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November 19, 2010

Office of the Dean 103 Dickey Hall Lexington, KY 40506-0017

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Dr. Hollie Swanson Chair, Senate Council University of Kentucky Dr. Kumble Subbaswamy
Provost
University of Kentucky

Dear Dr. Swanson and Dr. Subbaswamy:

On behalf of the College of Education, I fully support the faculty's proposal to create a new STEM Education Department in the College of Education. I share the STEM faculty concern as well as the general public that the United States ranks 21st in science education and 25th in mathematics globally. Nationally, almost 30 percent of students in their first year of college are forced to take remedial science and/or mathematics classes because they are not prepared to take college-level courses. At UK, 11.6 percent of the first-year students in the 2008-2009 cohort (latest data available) scored below the readiness standard in mathematics. Ensuring an adequate supply of well-prepared and highly effective STEM teachers is critically important to our nation's economic prosperity and well-being.

My decision to support the new department is based on strong support from the College of Education faculty who voted unanimously at its May 2010 meeting to support the establishment of a new STEM Education Department. In addition, faculty support is strong across UK as represented by support letters from Physics and Astronomy, Mathematics, Chemistry, Biology, and Engineering. Our students, as well as the Commonwealth of Kentucky, are in need of pioneering interdisciplinary STEM education efforts such as the faculty have proposed. These efforts represent a fundamental shift from research-driven, discipline-bound knowledge production to research that is problem-driven, highly interdisciplinary, and applied.

STEM Education currently resides in the Department of Curriculum and Instruction. The department has a very broad portfolio, offering undergraduate degrees in Elementary, Middle School, and Secondary Education and graduate programs in Elementary, Middle School, and Secondary Education, Reading, and Instructional Systems Design. The faculty of the College and I have concluded that the centrality of STEM Education in the development of an educated workforce in the 21st Century dictates that the College adopt a more targeted focus on STEM Education, beyond that which is possible in a highly variegated department. In a word, STEM Education needs its own curricular and administrative infrastructure.

Administrative costs of the new STEM Education Department represent less than two percent of UK's total investment in STEM Education educational efforts (i.e., senior and junior mathematics, science, and engineering education professors, outreach professors, etc.). As a



result of the university-level commitment to STEM Education, the Provost committed to a recurring expense of \$24,626 for the new department chair's stipend and benefits. In January 2010, Dr. Todd delivered a letter to President Obama at the White House in which 79 public research universities pledged to increase the number of mathematics and science teachers from 7,500 to 10,000 by 2015. Within the state of Kentucky, during the 2009-2010 school year, the Education Professional Standards Board issued 123 emergency certificates in the areas of biology, chemistry, physics, earth/space science (grades 8-12), mathematics (grades 8-12), middle school science (grades 5-9), and middle school mathematics (grades 5-9) (please see enclosed letter from Dr. Phillip Rogers, Executive Director of the Education Professional Standards Board). At UK last year, 11 science and 10 mathematics teachers graduated from our one-year, master's degree program in secondary education with initial teaching certification. Currently, this is the only secondary education program in science and mathematics at UK that leads to teacher certification. The new STEM Education Department pledges to significantly increase the number of teachers and provides additional proposed pathways to create options for potential secondary mathematics and science teachers at the undergraduate level as highlighted in the proposal under Phase 2.

The new STEM Education Department would serve as the focal point to significantly increase the recruitment, preparation, and retention of highly qualified STEM teachers. In addition, the new department would improve significantly student success in P-12 mathematics and science by (1) providing ongoing, internationally-recognized best practices in professional development to practicing teachers and school leaders; (2) conducting extensive educational research on learning; and (3) translating research findings into innovative practices that emphasize higher order thinking and other 21st Century Skills.

To succeed in this new information-based and highly technological society, all students need to develop their capabilities in STEM to levels much beyond what was considered acceptable in the past. I commend and support the faculty's vision to increase substantially the number and diversity of highly qualified science and mathematics teachers and believe a new STEM Education Department will unite our efforts as a university to help us achieve this important goal.

Sincerely,

Mary John O'Hair Dean and Professor

Mary John O'Hari



August 11, 2010

Dr. Hollie Swanson, Chair Faculty Senate University of Kentucky College of Arts and Sciences

Office of the Dean 213 Patterson Office Tower Lexington, KY 40506-0027 Phone: (859) 257-8354

Fax: (859) 323-1073 www.as.uky.edu

Dear Chair of the Faculty Senate:

I strongly support the establishment of the new STEM education department in the College of Education. Faculty in physics and astronomy, chemistry, mathematics, and biology also support the new department's formation, as evidenced by the enclosed departmental letters of support. Faculty members in these departments have a rich history of collaboration with mathematics and science education faculty through their participation in Teacher Education Program Faculties in the College of Education and through funded research projects, such as the Appalachian Math and Science Partnership, Noyce grants, and a Toyota Foundation award.

Faculty view the new department as an opportunity for undergraduates to work seamlessly between their A&S departments and the new STEM education department. This department will ensure that our students graduate with strong content and teaching certificates, and are ready to meet state and national demands for highly qualified science and math teachers. This new department is designed to meet the demands through a student-centered, personalized learning system.

In addition to better prepared pre-service teachers, the new STEM education department will serve as a focal point for UK to (1) deepen the content knowledge and inquiry-based teaching skills of practicing science and math teachers; (2) strengthen collaborative STEM research across A&S, Education, and Engineering and translate research findings into responsive practices; and (3) develop meaningful learning experiences for school leaders, policy-makers, parents and community members.

I support the creation of the STEM education department and look forward to future collaborations.

Yours,

Mark Lawrence Kornbluh

Dean

College of Arts and Sciences



August 11, 2010

Dr. Mary J. O'Hair, Dean College of Education University of Kentucky 103 Dickey Hall CAMPUS 0017 Office of the Dean College of Engineering 351 Ralph G. Anderson Building Lexington, KY 40506-0503

859-257-1687 859-257-8827 fax 859-323-4922

www.engr.uky.edu

Dear Dean O'Hair:

It gives me a great deal of pleasure to support the proposal by the College of Education to create a new Department of STEM Education. I cannot think of a more important initiative for the University to undertake than to expand the cadre of science, math, and engineering teachers in the high schools throughout Kentucky.

In our discussions over the past year, I have emphasized how important this initiative is for the future of the state. Kentucky remains mired near the bottom nationally in the per capita production of STEM graduates. In engineering, Kentucky graduates only half the number of bachelor's degrees per capita as the nation, and it remains far below the productivity of the seven contiguous states. Kentucky's engineering degree productivity is but two-thirds that of West Virginia!

Kentucky's educational system has made enormous strides in many areas since the passage of the landmark Kentucky Educational Reform Act in 1990. Unfortunately, STEM education is not one of the areas in which the state has made progress. If the next twenty years are to see marked improvement in the ability of Kentucky high school graduates to pursue undergraduate and graduate work in science, math, or engineering, a new cadre of teaching professionals must be prepared. The University of Kentucky is the only institution statewide that can marshal the resources across a broad array of academic programs to make an impact throughout the state. The Department of STEM Education will be the foundation for this effort.

I commend you and your faculty for undertaking this administrative restructuring and pledge my support in making this initiative successful.

Sincerely,

Thomas W. Lester

Dean



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May 13, 2010

Dear Dean O'Hair.

I am writing to recommend the formation of a Science, Technology, Engineering, and Mathematics [STEM] Education Department. Our proposed Department will expand and enhance STEM Education at the University of Kentucky and for the Commonwealth in significant ways. Along with strengthening teacher preparation programs already in place in continued collaboration with the Department of Curriculum & Instruction, the STEM Education Department will build new bachelor's, master's, and doctoral programs in science, technology, engineering, and/or mathematics education. In addition, the new department will lead the Commonwealth in STEM Education research by attracting graduate students, future STEM faculty researchers pursuing progressive research, and funding to support research in these disciplines. Our plan is to become the top program, notably still in a college of Education, for preparing future STEM Education faculty members, researchers, undergraduate and graduate students. Over the long term, the creation of a PhD within the STEM Education Department would be nationally groundbreaking and place UK on the cutting-edge among benchmarks. Given the national shortage of PhD graduates to fill vacant faculty positions in STEM education disciplines, UK has the strong potential to fill an important market niche.

When I arrived at University of Kentucky a year ago, I came to find out that we had only one doctoral student in Science Education and a few more doctoral students in Mathematics Education. I, along with my colleagues, wished to create more innovative, STEM focused options for our current graduate students and future graduate students. We developed a master's-level degree program for the College of Education's redesigned Master of Science degree. This program was purposefully crafted as a STEM master's degree with new courses developed by the STEM Education faculty. I designed and developed two; they are *Designing Project-enhanced Environments in STEM Education* and *History of STEM Education*. As a result of this new graduate focus, we have already seen the number of our graduate students pursuing doctorates in science and mathematics education increase. Once a STEM Education Department is in place, we will proceed to create a doctoral program in STEM Education.

My personal research focus and interest have always involved the design and implementation of project-enhanced, interdisciplinary learning environments. In my case, 'interdisciplinary' is primarily concerned with the productive integration of a) mathematics and science; b) mathematics, science, and technology; or c) mathematics, science, and engineering. This research interest has been instrumental in how I teach both undergraduate and graduate classes. With this focus, I have written many research papers that report investigations concerning how people understand science and mathematics concepts as they participate in project work that demands the integration of multiple content areas. Some example projects, which are inherently interdisciplinary and fruitful for contextualized student learning, include studies of motion and rate of change; sound waves and trigonometry; and the moon's motion, the moon's phases and spatial geometry. It should be noted that I include and mentor doctoral students extensively in my research. I am a strong believer in giving doctoral students the

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opportunity and the experience of STEM education research, which includes assisting in research design, data collection, manuscript writing, and paper presenting. I have published and presented on numerous occasions with my doctoral students while a professor at Texas Tech University (TTU). I want to continue this tradition and focus at the University of Kentucky and this can only happen if we build and bring STEM Education to the forefront.

When I arrived at my previous institution (TTU), there was not a focused mathematics and science graduate program of study and there were only a total of three doctoral students pursuing research in the areas of mathematics or science education. I wished to build a Science and Mathematics Education Program and that was exactly what my colleagues and I did. I served as the Science and Mathematics Education (SMED) Program Chair (2007 – 2009) and helped to grow our numbers to nearly thirty by the time I left Texas Tech. I expect similar and possibly even better results can happen at UK with the establishment of a STEM Education Department.

When I was a faculty member at Texas Tech University, I focused my grant writing efforts on STEM Education funding and was able to land nearly \$6 million dollars of external funding. I received a \$3 million grant from the Greater Texas Foundation entitled "Middle School Math and Science (MS)²: Understanding by Design"; a National Science Foundation GK-12 (\$2,723,642) Award (2008-2013) entitled "Building Bridges: Integrating Mathematics, Science, Engineering Education on the South Plains": a NASA-IDEAS (\$44,001) Award (2006-2008) entitled "Cratering Analysis for REAL: Investigating Craters in the Solar System," and an American Education Research Association (\$25,000) Award (2003-2005) with support from the U. S. Department of Education's Institute of Education Sciences (AERA/IES) entitled "Moon Journals: Students Forging New Mathematical and Literacy Identities". All of these externally funded grants involved designing and implementing project-enhanced learning in STEM environments. In doing so, I have worked with colleagues across campus from the Colleges of Engineering and Art & Sciences, as well as colleagues within my own College of Education. While at UK, I have worked with the Colleges of Arts & Sciences, Agriculture, and Engineering in pursuit of external funding. I believe that by becoming a STEM Education Department, this process will be more targeted and streamlined. Funding agencies will take notice of our forward thinking ideas and our targeted initiatives.

In closing, the University of Kentucky has recently committed to President Obama to "substantially increase the number and diversity of high-quality science and mathematics teachers we prepare, and to build better partnerships among universities." Committing to such ambitious and warranted goals demands strong, organized, and aggressive actions, and can only be done with a shared vision. We, the STEM Education faculty at UK, have such a vision; we can create the right opportunities and experiences through focused STEM Education undergraduate and graduate programs and targeted STEM funding in a timely, synergistic manner.

Sincerely,

Jennifer Wilhelm, PhD

Associate Professor of Science/Math Education

Partnership Institute of Mathematics and Science Education

Reform (PIMSER) Outreach Professor

College of Education



College of Education Curriculum and Instruction 335 Dickey Hall Lexington, Kentucky 40506-0017 859 257-4661 fax 859 257-1602

November 17, 2010

To: UK University Senate

I am writing you to confirm general support from the Department of Curriculum and Instruction for the movement of STEM to organize into a new academic department within the College of Education and the University of Kentucky. In an effort to be as transparent as possible in providing the requested details related to this proposed departmental reorganization, I hope to respond to queries made regarding this proposal from the University Senate. As a disclaimer, I must indicate that I arrived at the University of Kentucky in July as the newly appointed department chair in the Department of Curriculum and Instruction. I was superficially aware of the discussions underway related to the STEM proposal while I participated in the interview process last spring but was not familiar with any details associated with this proposal. With that limitation acknowledged in connection to my first letter of support, in this letter I will attempt to provide more detail related to questions about this proposal.

It appears from C&I faculty meeting minutes from last year that the initial discussion of the STEM department possible realignment was at the December, 2009 meeting. Minutes from this meeting indicate a review of the history of the STEM discussions that occurred in COE and across the UK campus. General concerns and advantages for this departmental realignment are listed in the minutes. For example, the concerns noted were, "The impact to Curriculum and Instruction, Teaching loads, Legal and ethical questions about advertising for positions in Curriculum and Instruction, then moving the newly hired faculty to the STEM department, The number of tenured faculty in the STEM department." The advantages listed in the minutes included, "A separate STEM department will bring in more money. The science and math education graduate programs will expand, benefitting the entire college, Students will be better prepared for a changing job market." As you can see, little in the way of detail related to these issues is apparent in the recorded minutes. An additional meeting was held in the spring to provide C&I faculty with an opportunity to vote on a silent ballot related to the STEM department proposal. This vote was conducted by Dr. Mary Shake who was serving as the interim chair of C&I at the time. This resulted in a 20-5 vote in favor of the change. I am not able to address why the COE vote was unanimous as that vote was conducted by the Dean, although that vote was conducted some time following the departmental vote.

In order to capture what C&I faculty were thinking related to their vote last spring, I invited them to write me anonymous letters describing their rationale. This invitation was extended in the November 12th C&I faculty meeting. I extended this invitation since I had no record, given the silent ballot used last year, on who voted either for the proposed STEM department or against it. As a result of this invitation, I received one anonymous letter and five signed letters. I will present summary information from these six letters to attempt to capture faculty reflections on this process. Five of the faculty indicated in their letters that they voted for the creation of the STEM department. One indicated that they had voted against the proposal. There was apparent variation present in the rationale that faculty applied to arrive at their particular votes. Some indicated that the STEM faculty clearly demonstrated the benefits of this new department and that there is evidence that this is a strong national trend to develop such departments. Additionally, organizing



such a focused department should increase the number of students in these programs and facilitate a greater success rate in funding by external sources. There was also a perception that the creation of a STEM department would generally benefit the University of Kentucky, There also seemed to be a perception that the process was a bit rushed last year and that they would have preferred more time to discuss this change. However, connected to that concern was a nearly unanimous view that both C&I and STEM would benefit by moving forward with this proposal. One concern raised in a faculty letter was a question of the rationale for having a separate STEM department that would still have programs in the ELED, Middle Level, and Secondary teacher education programs. This raises a potential challenge for C&I in how to staff these programs. However, initial conversations between myself and Dr. Wilhelm have established a process to ensure that an equitable resolution for this and other transition challenges will be resolved. Even though we have anticipated this challenge, in our conversations, it seemed premature to make final plans for articulation until we have received official approval to proceed. Once approval is provided, we will establish a subcommittee of faculty from both C&I and STEM to look at how to facilitate the details of the change to ensure program continuity with and effort to ensure no negative programmatic side effects on our combined students. It was also noted that for new programs established in STEM, the CPE and KPSB would need to provide approval. STEM faculty are committed to working through this approval process in a timely fashion. There was also a concern expressed in several of the meetings last year about how this change might impact the resource base for C&L I have attached correspondence received from the Dean to C&I faculty responding to this and other questions. The Dean's office would need to address the specifics related to funding for C&I and STEM.

While the summary comments listed above represent letters from the six faculty choosing to provide me with information, it seems to be quite consistent with what I have heard informally from faculty since my arrival at UK. The general view expressed in all of the letters is that both STEM and C&I faculty are anxious to move forward with this proposal and allow each unit to maximize the opportunities to refine their programs and focus their research within the revised contexts.

Sincerely,

Parker C. Fawson, Ed.D.

Professor of Literacy

Editor, Literacy Research and Instruction

Chair, Curriculum and Instruction

College of Education University of Kentucky

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The following are questions generated by faculty who will be remaining in Curriculum and Instruction:

- 1. How will the budget be impacted? How will the allocation of funding change? The C&I budget will not be impacted. New dollars will be allocated to the STEM department to fund department chair stipend, an administrative assistant, TAs, and operating expenses.
- 2. How much money comes to the department through STEM faculty? If that money is moved to STEM education, how will this impact staffing, TA allocation, etc.?
 - No funds would be moved from C&I to the STEM department.
 - The current operating expenses would remain in C&I; new operating expenses for the STEM department would be provided by the Provost's Office.
 - Grants and contracts awarded to STEM faculty would go to the new STEM department.
 We anticipate that establishment of the STEM department will lead to additional grants and contracts in the STEM disciplines. Incentive funds generated by faculty members are associated with the faculty members earning the funds.
 - I encourage C&I faculty members to be actively engaged in securing grants and contracts. Incentive funds from these grants and contracts would remain in C&I.
 - As in previous years, the travel budget would be based on \$1,400 per faculty member, which comes from the college budget. In the past, C&I faculty members have received \$350 from departmental funds to supplement the college's \$1,400 allocation. This additional amount will remain for faculty in C&I. The STEM department would establish its own policy related to any additional travel money to supplement the college allocation.
- 3. Generally, does the change impact space, TAs, and staff assistants?
 - An attempt will be made to locate all STEM faculty in a central location. Since most are
 already in TEB, the plan is to relocate faculty in DH to TEB. C&I could benefit from the
 move since faculty office space would open up when STEM faculty are relocated.
 - The C&I department would not lose TA lines. Commitments from the President's Office and development funds will be used to create new TA lines in the STEM department.
 - No change will occur to the number of staff assistants in C&I. The Provost's Office has committed to funding a staff assistant in the new STEM department.
- 4. Will faculty be teaching the science and mathematics courses embedded in EDC programs? Yes.
- 5. Who will take on supervision duties? Supervision responsibilities will continue as they currently are. Mathematics education and science education faculty who teach in the elementary and middle school methods blocks will continue to supervise practicum students during their field placements.

- 6. Who will be program chair for mathematics education and science education? The Mathematics and Science Education Program Faculty has been divided into two program faculties: the Mathematics Education Program Faculty and the Science Education Program Faculty. Margaret Mohr-Schroeder will chair the Mathematics Education Program Faculty and Jana Bouwma-Gearhart will chair the Science Education Program Faculty.
- 7. Who will serve as advisors, and how will that he allocated? If an advising proposal that is under review by the Provost's Office is not fully funded, advising for students who have been admitted to TEP or upper division status will be advised as in the past. The faculty in Mathematics Education would advise students in mathematics education; faculty in Science Education would advise students in science education.
- 8. Who will serve on committees (this is more about representatives from the STEM Education department)? The STEM department would have representation on college-level committees and be treated as other departments in the college in this regard. Faculty from the content disciplines in Arts and Sciences who would have joint appointments in STEM could serve on doctoral committees. Given recent hires in mathematics education and science education, there will be sufficient faculty in the STEM department to serve on program faculties, including the Elementary Education and Middle School Program Faculties.
- 9. Will we keep all 8.5 TA lines currently allocated to C&I? Yes.
- 10. What is the future of lecturer lines in C&I? Currently we have one as the MIC coordinator and one as the middle school coordinator. Ms. Vicki Vance has coordinated the elementary student teaching for a number of years, but is retiring in June. Will we be able to hire someone into Ms. Vance's position? Lecturer lines are established as needs arise throughout the college. The lines do not "belong" to a specific department. Salaries to fund the lecturer lines come from vacant faculty lines. The lecturer line for the MIC program will continue into the 2010-2011 academic year because the college was not able to search for the MIC position; however, a successful search was conducted for the middle school position and that lecturer line will not be available to C&I for the coming year. The department will be able to hire an individual to replace Ms. Vance for the upcoming year.



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November 19, 2010

To Whom It May Concern:

I am writing this letter in support of the establishment of a new STEM Department in the College of Education. This is an important opportunity that would situate our College and the University as a national leader focused on a timely and critical educational issue. In fact, to my knowledge, there are only two such STEM Departments in existence nationally. As the University seeks to attain a position as a "Top 20" university, it seems that a new STEM Department would only help leverage our status toward this goal.

Based on President Todd's recent remarks regarding the need for increased numbers of highly qualified K-12 STEM educators in Kentucky, I feel that the College would be remiss to not move forward with creating a separate department, which would provide the opportunity for an increased emphasis on STEM education in conjunction with preservice and in-service teacher preparedness in these areas.

I do not feel that the separation of our STEM faculty from the Department of Curriculum and Instruction would impose any hardships on our department or current programming. I will continue to pursue opportunities to collaborate with and engage in integrated projects with our STEM faculty in which we can work together to improve our current programs while planning additional, innovative approaches to teacher preparation. For example, Dr. Wilhelm and I are planning the submission of an NSF grant that would integrate science and literacy curriculum from a problem-based learning approach. Additionally, we are exploring new program ideas designed to attract military veterans from engineering battalions at Fort Knox and Fort Campbell to enter the teaching field at the middle and/or high school level as part of the P20 College & Career Readiness Lab HOMEFRONT: Honoring Our Military through Education: Flexible Recruitment of New Teachers Initiative.

I strongly believe that the development of a new STEM Department fits well within the goals of the Strategic Plans for our College and Department. Through greater, national visibility as one of only a small number of Colleges with a dedicated department for STEM education, our College will be positioned as a national leader in this area. This

increased visibility and recognition is certain to result in opportunities for the recruitment of doctoral students and access to external funding that would augment the capacity of the College "to increase the numbers of teachers it prepares to help address critical shortages in the high-need fields of science and mathematics" (Department of Curriculum and Instruction Strategic Plan, 2006-09).

Sincerely,

Laurie A. Henry, Ph.D.

Janin A Hy

Co-Director, P20 College & Career Readiness Lab Assistant Professor of Early Adolescent Literacy



Dr. Jennifer Wilhelm
Department of Curriculum & Instruction
College of Education
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Dear Jennifer,

Lam writing to support the proposal for you and other colleagues who specialize in areas related to Mathematics and Science Education to form a STEM department which is separate from Curriculum & Instruction (C & I) where you currently reside. As a faculty member in the C & I department and director of the field experience program for Teacher Education, I am acutely aware of the importance of highlighting the STEM areas at this juncture. Clearly, this is a time of radical transformation for our P-12 schools with the mandate to better prepare students to succeed in this highly technological, interconnected world. I believe it is vitally important for the College of Education to lead efforts to improve mathematics and science instruction, which is a key component in that transformation. Helping teachers implement strategies that emphasize real-world, problem-based learning will take considerable resources. My understanding is that having a STEM department in the College will enhance the possibility of securing funds and mobilizing the resources needed to do the job.

I hope my comments prove helpful as the proposal moves through the approval process.

With best wishes,

Sharon Brennan Ed.D

Associate Professor and Director



College of Education Curriculum and Invitorition 335 Dickey Hall Lexington, Kentucky 40506-0017 859 257-4661 fax 859 257-1602 www.nkw.cdu

August 9, 2010

Mary John O'Hair, PhD, Professor, and Dean College of Education University of Kentucky

Dear Dr. O'Hair:

I am writing this letter to offer my support for the establishment of the STEM education department in the College of Education. Although for various reasons the new department will not be my primary department, I have been a supporter of this innovation since the time when Dr. Richard Millman was the interim chair of the Department of Curriculum and Instruction. I believe this is an indication of educational leadership of UK for the state of Kentucky and beyond.

I am sure good arguments have been made in plenty on the importance of the new department. Here I offer my personal experience. Part of my graduate studies at the University of British Columbia was carried out in a department called Mathematics and Science Education, a good initial effort of the now STEM education. My experience in that department was beneficial as the whole department operated its research and teaching around common and unique issues in the two school subjects more closely related than any others. Realizing and thinking about the common and unique issues in mathematics and science education brought doctoral students to a special position to understand both mathematics education in relation to science education and science education in relation to mathematics education. Unfortunately, to my disappointment, such an emphasis (even connection) was very much lost later when the Department of Mathematics and Science Education was combined with another department to form the Department of Curriculum Studies.

It is my hope that the new STEM department operates in a similar philosophy realizing that these two school subjects are both closely connected with each other and substantively unique from each other. Such a direction will, I believe from my own first-hand experience, benefit research and teaching in the new department.



Please feel free to contact me for more discussion.

Sincerely,

Xin Ma, PhD and Professor

Spencer Fellow of the (U.S.) National Academy of Education

(Former) Canada Research Chair



Dr. Mary John O'Hair Dean, College of Education 103 Dickey Hall University of Kentucky Lexington, KY 40506-0017

May 18, 2010

Dear Dean O'Hair.

I am writing in support of the proposed Science, Technology, Engineering, and Mathematics (STEM) Education Department in the College of Education. I believe this department has the potential for giving national prominence to the University of Kentucky in the area of K-12 teacher education in the STEM fields, as well as highlight the university's focus on professional development in STEM Education and research on strategies for improving the teaching and learning in STEM education.

During my tenure at the university, I have been a faculty member within the Department of Curriculum and Instruction. Although this arrangement has worked well in terms of elementary and middle level teacher education programs, little focus has been given to mathematics or science education, two areas of great need in schools today. Further, indirect funding from external funding agencies (e.g., National Science Foundation, US Department of Education) has been distributed across the department, leaving few funds to purchase materials and resources for the science and mathematics teacher education programs. This was a bit frustrating when considering the amount of resources brought into the department through external funding sources by mathematics and science education faculty.

The formation of the STEM Education Department offers many opportunities for collaboration among STEM Education faculty as well as faculty from STEM disciplines. The history of STEM Education faculty collaborations with faculty within the College of Arts and Sciences is rich with local, state, and regional professional develop programs in science and mathematics for K-12 teachers, graduate programs in mathematics, and partnerships with state education representatives to develop standards-based instructional materials. The organization of the STEM Education Department will provide a more focused group within the College of Education to continue these collaborations. Additional programs also will focus on modeling pedagogies for teaching science, technology, mathematics and engineering concepts, offering authentic learning experiences for K-12 teachers within these fields to foster understanding of how STEM concepts apply to real world/authentic practices in the field, and develop programs to improve the teaching of STEM concepts in institutions of higher education.

Curriculum and Instruction 335 Dickey Hali - Lexington, Kentucky 49506-0017 (859) 257-4861 - fax (859) 257-1602 www.uky.edu The newly approved STEM Education graduate program is the first program developed under the auspices of the new department. The program offers teachers and other individuals with expertise in one or more STEM fields opportunities to extend their learning in their domain, or to develop a broad background in STEM education while earning a master's of science degree. In addition, I am beginning preliminary work developing a master's level program in math and science education for elementary and middle level teachers. Such a program will target teachers in grades 4-7, grades levels that correspond to state accountability tests, and thus of great interest for school districts within the region. In addition, I am in the preliminary stages of developing a collaborative project for teachers in grades four thought eight in collaboration with a scientist at Eastern Kentucky University. The project will begin as a professional development program focusing on a comparison of ecological issues in Kentucky and Madagascar culminating in a possible study trip to Madagascar.

Although such programs could be part of a larger STEM education program, the new department provides faculty more focus on developing such programs, and supports a community of researchers in STEM Education. As the faculty meet to discuss department issues, other topics of interest also are discussed, such as writing projects, grant opportunities, and collaboration opportunities. In addition, faculty within the STEM Education Department also have formed a writing group that meets monthly during the school year to critique manuscripts members are preparing for publication. The writing group provides another opportunity for faculty members to collaborate, assist each other in developing scholarly writing, and develop ideas for new research and writing projects.

In summary, I am delighted with the development of the STEM Education Department and look forward to its beginning in the 2010-2011 school year.

Sincerely,

Rebecca McNall Krall, Ph.D.

Phone: 257-2176

Email: rebecca.krall@uky.edu



College of Education Curriculum and Instruction 355 Dickey Hall Lexington, KY 40506

859 257-4661

May 13, 2010

Dear Dean O'Hair:

I am writing to express my interest in joining the potential new Department of Science, Technology, Engineering, and Mathematics [STEM] Education. As Mathematics Program Faculty Chair in the present Department of Curriculum and Instruction, I believe the formation of this new department is timely and of the utmost importance. It will help create a specialized focus on STEM Education at the University of Kentucky, allowing for more innovative approaches to teacher education and research in its associated fields. The investment in research on teaching and learning the new department would offer will inform the development and enhancement of STEM curricula and pedagogical approaches—a prominent need based on nationally recognized issues. In turn, investment in the new department's research and programming could lead to increased numbers of science, technology, engineering, and mathematics teachers as well as STEM teacher educators, both of which will fulfill needs in Kentucky.

I believe my mathematics content expertise and current externally funded projects in investigating mathematics knowledge for teaching, geometry knowledge for teaching, and formative assessments for secondary mathematics teachers will contribute to making UK and the College of Education a national leader in STEM Education. My P20 engagement - including Family Math Nights, Big Blue Council of Teachers of Mathematics, and partnerships with Fayette County Mathematics – and my representation of UK on numerous state committees will contribute to the ever-expanding partnership base at the University of Kentucky.

The goals of the STEM Education department represent the kind of P20 engagement our college currently states as its mission, and meshes perfectly with my research and goals for working at UK. Together, I believe we can bring our content expertise and national-level projects to bear on Kentucky reform and make a difference as a STEM Education department.

Sincerely-

Margaret J. Mohr-Schroeder, Ph.D.

Magaretoflohr Schooder, M.D.

Dream · Challenge · Succeed

May 16, 2010

To Whom It May Concern,

This letter conveys my intention to become a member of the newly forming department of science, technology, engineering, and mathematics (STEM) education at the University of Kentucky. Lintend to begin working in this department as soon as possible.

The new department will allow for numerous opportunities for me, professionally, as well as for my new department colleagues. Most notable will be the concentrated efforts that will allow us to help meet our ambitious goals to significantly increase our numbers of highly-qualified, highly-effective certified K-12 science and mathematics teachers. As a new department we intend to strengthen current teacher certification programs as well as to create new ones with a focus on research-confirmed best teaching and learning practices that unify the STEM disciplines.

This focus will carry over into our graduate programs, including a new PhD program in STEM education, one of only a few of its kind. The cumulative expertise of the proposed STEM education department faculty group promises to foster doctoral graduates of exceptional quality. We aim to help alleviate the shortage of postsecondary STEM education faculty currently needed to effectively train the practicing and potential K-20 educators of tomorrow. The potential of the formation of a new STEM education department, alone, has already been an effective recruiting tool for strong PhD candidates; I am already working with two new students (to being, officially, in fall 2010) in planning joint research regarding STEM teaching and learning at the postsecondary level. I am confident that our newly formed department will help our faculty to better secure external funding monies to help support our graduate students, as well as attract and support postdoctoral researchers, and to become one of the top producers of STEM education research in the country.

I wholeheartedly endorse the proposed STEM education and will do my best work to see its success as a leader in STEM education for the Commonwealth, the nation, and internationally. I humbly request the support of the various entities here to assist and subsidize its immediate creation.

Sincerely.

Dr. Jana Bouwma-Gearhart

Assistant Professor of Curriculum and Instruction

June Bonsone-Sahut

Secondary Science Education

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Comvolum and Instruction 355 Dickey Hall Lexington, KY 40506

869 757 466 t

May 15 2010

Dear Dean O'Hair.

When my appointment at the University of Kentucky began last summer, I did not realize I would quickly become an inaugural member of one of the first STEM Education departments in the United States. When I began, I knew I was drawn to my colleagues in mathematics and science education, but I assumed it was because of our similar content interests. I quickly realized that they were as driven and passionate as I am about improving awareness of STEM related fields and training teachers to become successful STEM educators. This common passion has driven us closer throughout this past year.

In my first year at the University of Kentucky, I have collaborated to write an NSF grant, assisted in creating a master's degree program in STEM Education, designed a graduate level course in STEM Education curriculum, written a proposal to become the co-director of a P20 STEM Innovation Lab, and offered feedback in the STEM Plus undergraduate degree program for future teachers in STEM fields. All of this was in collaboration with my STEM Education colleagues. Additionally, our relationships with the STEM related departments in the College of Arts and Sciences and College of Engineering has helped increase my personal contacts in other colleges and I look forward to working closely with our colleagues in those colleges.

I am excited about the increased collaboration and productivity our STEM Education department will produce and I fully devote my support to this endeavor. Since moving to Kentucky, I have gained friendships, but more importantly in higher education, I have made colleagues for life. As a team within the Curriculum and Instruction department, we are dynamic and driven; as our own department, we will be unstoppable.

Sincerely,
Mally W. Jisher

Molly H. Fisher, PhD



Dr. Mary John O'Hair Dean, College of Education University of Kentucky Lexington, KY 40506

Dear Dean O'Hair.

Charleso of Education Charlesolum and Instruction 335 Dickey Hulf Lexington, Kentucky 40506-0017 859 257-4661 for 859 257-4602

May 16, 2010

I came to the University of Kentucky because it seemed to be a place that would value my work integrating engineering design and digital technology tools into science teaching and learning. Thankfully, my first year here has demonstrated that UK is such a place. For the past 30 years, STEM education has been at the core of who Lam, and to find an academic home for my pursuits with like-minded people has been very fulfilling.

It was often an isolating thing to be one of those "science math geeks" growing up-delighting in owning the first personal computer on the street back in the late 1970s, rebuilding my car engine as a teenager, leaving high school early to take calculus at the university in town, being the only female in my graduating class of mechanical engineering majors. When I eventually became a science teacher at a girls' middle school, my mission was to encourage all my students to collaborate and find their own inner engineer- to tinker, invent, take-apart, build, re-build, and apply their newfound math and science skills to solving everyday problems with the other students in their class.

Working with my new science and math education colleagues at UK has helped me experience the sense of collaboration I hoped to instill in my students. With them I find a special place where I am not a "science math geek" in isolation, but the member of a team that includes teachers in the community, members of PIMSER, and engineering faculty across the street. The STEM fields are unique, with a special language and culture of their own. While I value the contributions of faculty in other disciplines, there is a special underlying understanding amongst those involved in STEM education initiatives. To work together in our own department, I think, would only strengthen the mission we collaboratively share.

I fully support the creation of the Department of Science, Technology, Engineering and Math Education at the University of Kentucky- but not just because it's good for bringing in grant money, not just because it's good for reaching out to colleagues in other colleges on campus, not just because it's part of the larger STEM initiative to increase the number of science and math teachers who are technologically literate, and not just because it seems likely to help UK reach Top 20 status. I support the creation of the STEM Education department because it will help me be more productive and focused as I work with a team of amazing scholars who speak my language and share my goals.

Sincerely,

Christine Schnittka, Ph.D.

Assistant Professor, Science Education





Curriculum and Instruction 355 Dickey Hall Lexington, KY 40506 859 257-4661

July 1, 2010

Dear Dean O'Hair,

When I was interviewed for the Assistant Professor of Elementary/Middle School Mathematics Education position at the University of Kentucky, I was informed of the plans of creating a new STEM Education Department. Soon after my interview, I researched universities that promoted a STEM emphasis in their Colleges of Education. Needless to say, the number of universities with this focus was limited, and no university had a STEM Education Department. I am excited to be a faculty member of an innovative and cutting-edge department.

After I accepted the position at the University of Kentucky, my new STEM Education colleagues in mathematics and science education have been very supportive. I know during this short period of time, I have gained important friendships with individuals whom I will collaborate with to develop a strong department that will be recognized worldwide. I am thrilled to be part of this team in the College of Education.

Sincerely,

Christa D. Jackson, PhD

Christa D. Jackson



May 10, 2010

Professor Jennifer Wilhelm
Department of Curriculum and Instruction
College of Education
University of Kentucky
Lexington, KY 40506-0017

859 257-6722 fax 859 323-2846

Department of Physics & Astronomy 177 Chemistry-Physics Building Lexington, KY 40506-0055

www.pa.uky.edu

Dear Professor Wilhelm.

On behalf of the faculty of the UK Department of Physics & Astronomy, I am writing to strongly endorse your proposal to establish a STEM Department in the UK College of Education.

The dearth of qualified physics teachers at all K-12 levels, and especially in secondary schools, is a well-known national problem that has risen to the level of a crisis in Kentucky. Our Department has long recognized this problem, but has never had the resources to address it, or even to contribute to its solution. The problem has an obvious, tangible impact on both our undergraduate and graduate programs in physics and astronomy, as well as on the ability of the state to improve the technical sophistication of its workforce, and to attract and grow high tech industries.

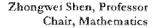
For the proposed STEM Department to address this problem, it will need not only strong administrative support, but also support from faculty in the STEM departments of A&S. Our Department is eager to pursue joint and adjunct appointments of faculty and new departmental curricula as required to ensure that future KY physics teachers have the core content knowledge required to be effective in the classroom. We would also like to pursue a dual major option, in which students in our recently proposed revised BA program would simultaneously seek an education degree and initial certification through the proposed STEM Department.

In summary, we fully support your proposal for a new STEM Department in the College of Education, and look forward to working with College of Education faculty to advance physics and astronomy education at UK and throughout the Commonwealth.

Sincerely,

Mighael Cavagnero, Chair

UK Department of Physics & Astronomy





Department of Mathematics 721 Patterson Office Tower Lexington, Kentucky 40506-0027 (859) 257-6794, FAX (859) 257-4078 zshen2@email.uky.edu

April 6, 2010

Dr. Jennifer Wilhelm Department of Curriculum & Instruction 335 Dickey Hall University of Kentucky Lexington, KY 40506-0017

Dear Dr. Wilhelm:

I am writing to indicate the support from the Department of Mathematics for the formation of the new Department of Science, Technology, Engineering and Mathematics Education in the UK College of Education.

The department sees this as a very positive step in the enhancement of programs to prepare teachers of secondary mathematics for the state of Kentucky. There has been a long-time partnership between the Department of Mathematics and the College of Education in this program to prepare teachers of mathematics.

We see this as an opportunity for faculty from both departments to work together to help plan and implement new and better plans for the preparation of secondary mathematics teachers. Faculty from the Mathematics department have been helping in many ways with programs in Curriculum and Instruction as have faculty from C & I helped with planning and preparation of the courses that our future teachers need to be highly-qualified as they complete this program.

The department is very interested in the possibility of a new program for preparing more mathematics teachers through a 4-year program. We strongly support such a move. We hope that when such a program is implemented we will be able to work with the STEM Education department to make it possible that those students who are majoring in mathematics will be able do so while still getting their certification to teach mathematics in the secondary schools.

Likewise, while we foresee the opportunity for these undergraduate students to work seamlessly between our two departments, it is a very good idea to have the opportunity for our interested faculty to be able to work seamlessly with both departments. In this direction we are very interested in the plan to have joint appointments (5%) between the STEM Education Department and the Mathematics Department. We hope that the STEM Education department would take under advisement for certain mathematics faculty members, such as Paul Eakin, Carl Lee, and David Royster, to hold a 5% appointment within the STEM Education Department. At the same time the Mathematics department

is willing to entertain the proposal that certain mathematics education faculty, such as Margaret Mohr-Schroeder, Molly Fisher, and Christa Jackson might hold a similar appointment within the Mathematics Department. Having these joint appointments would more forcibly indicate to internal and external units the commitment and help to ensure successful and productive collaborations. Collaborations might include but not be limited to activities such as joint teaching, program development, grant writing, committee service, and research.

Again, we support the creation of this STEM Education department and look forward to working with you and this department in the future.

Sincerely,

Zhongwei Shen Professor and Chair



Department of Chemistry Chemistry-Physics Building Lexington, KY 40506-0055 859 257-4741 fax 859 323-1069

www.chem.uky.edu

September 1, 2010

Jennifer Wilhelm College of Education University of Kentucky

Dear Dr. Wilhelm:

I write as Chair of the Department of Chemistry to indicate our Department's support for the establishment of a STEM Education Department within the College of Education.

The Department of Chemistry is concerned about the nationwide shortage in qualified teachers who could teach chemistry at the high school level. As a result many students are not exposed to quality chemistry instruction in high school and may shy away from pursuing degrees in STEM disciplines at the College level. It has been our experience that several of these students are often under-prepared when taking our introductory chemistry courses.

The proposed STEM Education Department would help educate more and better prepared STEM teachers. Moreover, it would provide a collaborative environment for research in STEM education. A number of faculty members from our department are interested in participating in the research mission of the newly formed department. Consequently, the Department of Chemistry supports the establishment of a STEM Education Department.

Sincerely,

Mark S. Meier Professor and Chair Department of Chemistry



8 September 2010

Dr. Jennifer Wilhelm
Dr. Rebecca McNall Krall
University of Kentucky
College of Education
Dept. Education Curriculum and Instruction
114 Taylor Education Bldg.
Campus 0001

Dear Dr. Wilhelm and Dr. Krall,

We write to express our enthusiastic support of the initiative to establish a Department of Science, Technology, Engineering, and Mathematics (STEM) Education within the College of Education at UK. We fully appreciate the need for secondary STEM educators who have themselves been educated and trained as scientists in STEM fields. In the Earth Sciences, which are among the core content subjects for assessment in Kentucky, we see a particular need for earth scientists to teach that content, as opposed to someone broadly trained in another field or another science as is often the case at many high schools. We also foresee the potential for instructional and research collaborations between EES and the STEM Department, and even joint faculty appointments.

We look forward to the seeing the new STEM Department on campus. Please let us know if we can be of further assistance.

Sincerely,

Dhananjay Ravat Digitally signed by Dhananjay Ravat DN: cn=Dhananjay Ravat, o=University of Kentucky, o=DEES, email=dhananjay.ravat@uky.edu, c=US Date: 2010.09.08 16:48:06 -04'00'

Dhananjay Ravat, Chair

Dave Moecher, DUS



May 14, 2010

Jennifer Wilhelm College of Education University of Kentucky Chairman of Biology
Department of Biology
101 Thomas Hunt Morgan Building
Lexington, KY 40506-0225
859 257-6766
fix 859 257-1717
www.as.uky.edu/biology

Dear Dr. Wilhelm,

I am writing to provide my support for the creation of a Department of Science, Technology, Engineering and Mathematics (STEM) Education. It is clear that there is a grave shortage of competent science and mathematics teachers in the Commonwealth of Kentucky as well as the nation at large. Further, the level of ignorance of scientific principles is alarmingly high throughout this country, and training of enthusiastic, competent science teachers is a necessary first step in alleviating this deplorable situation. I appreciate your willingness to work with STEM departments that will provide the scientific content for these future STEM teachers. I also appreciate your recognition that multiple paths to teacher certification for science teachers should be encouraged. As we move forward, I look forward to working with your faculty collaboratively on science education research and will authorize courtesy appointments in my department to facilitate such proposals.

Good luck with your proposal, and, should you need further information or help, do not hesitate to contact me.

Yours Sincerely,

Vincent M. Cassone, Ph.D.

Professor and Chair



EDUCATION PROFESSIONAL STANDARDS BOARD

Steven L. Beshear Governor 100 Airport Road. 3rd Floor, Frankfort, Kentucky 40601 Phone: 502-564-4606 Fax: 502-564-7080 www.kyepsb.ky.gov

Phillip S. Rogers, Ed.D. Executive Director

November 16, 2010

Academic Organization and Structure Committee College of Education University of Kentucky 166 Taylor Education Building Lexington, KY 40506-0001

Dear Committee Members:

We have been contacted by the university to comment on the need for mathematics and science teachers across the Commonwealth. As the authorized agency for the certification of Kentucky's educators, we have first-hand knowledge regarding the shortage areas for educator certification. This belief is based on our issuance each year of emergency certifications for all content areas in K-12 education.

The Kentucky Department of Education annually compiles a list of certification shortage areas and this list is based on data provided by the EPSB. Mathematics and science certification areas have been on that list since its inception in the 1990's. A review of the emergency issuances during the 2009-2010 school year indicates the reason for this inclusion. During this school year, the last for which we have a full year's set of data, the EPSB issued a total of 461 emergency certificates to districts in Kentucky. Of that number, 123 of these certificates were in the areas of biology, chemistry, physics, earth/space science (all grades 8-12), mathematics (grades 8-12), middle school science (grades 5-9), and middle school mathematics (grades 5-9).

We believe that these data, illustrating that 27% of all emergency issuances last school year were in science and mathematics, make a strong case for the need for new and expanded programs in our state institutions for these teaching disciplines. Without going into data from previous school years, we can verify that a similar situation has existed for many years in Kentucky.

We would support any efforts to expand teacher preparation programs in the areas of science and mathematics, and we welcome any requests you may have for more information regarding this area.

Sincerely.

Phillip S. Rogers
Executive Director

Executive Director





May 17, 2010

Dr. Jennifer Wilhelm 101B Taylor Education Building University of Kentucky Lexington, KY 40506-0001

Dear Dr. Wilhelm,

I am pleased to offer, on behalf of the Partnership Institute for Mathematics and Science Education Reform (PIMSER), strong and unequivocal endorsement of the proposal to the University Senate to establish a STEM Education department in the College of Education.

The PIMSER has worked closely over the past three years with the deans of the College of Education and the university administration as an advocate for increasing the number of STEM education faculty and the creation of a department of this nature.

The proposed department will address the compelling evidence for the critical need for the enhancement of the quality and quantity of STEM education teachers in the Commonwealth and the nation. As our state and nation continue to fall behind other nations in technological and economic development, and the quality of life they bring, this department will build new bachelor's and master's degree programs in science, technology, engineering and mathematics education. The University of Kentucky is a very active member of the Science and Mathematics Teacher Imperative (SMTI) of the Association of Public and Land Grant Universities (APLU), chaired by President Lee Todd. This national program has provided the evidence and the rationale for degree programs of the type proposed.

A specific niche in the overall need for STEM education enhancement is that of research based programs that can attract graduate students, STEM faculty researchers pursuing cutting-edge research, and graduate education and research. The University of Kentucky, as the Commonwealth's Research I flagship institution can, and should occupy that niche.

Finally, the PIMSER is the University of Kentucky's institute that provides support to STEM-related departments in their initiatives to promote pre-and in-service teacher education through engagement partnerships with K-12 teachers and administrators. It has built a network of K-12 schools and state and national stakeholders that enables this support. The Institute will be a particularly strong partner with the proposed new STEM education department.

Sincerely,

John H. Yopp

John H. Yopp

Director, PIMSER and SMTI Team Leader



Appalachian Math Science Partnership

a continuum of learning .

www.appaimsp.or

April 6, 2010

Dear Dr. Wilhelm,

I am writing in support of the formation of a STEM Education Department in the College of Education and congratulate you and your colleagues for spearheading the efforts. The University's focus on science, technology, engineering and mathematics at the K-12, undergraduate and graduate levels is very timely. One can quote study after study, and commission after commission reports (national and state) indicating the lag in the nation, and particularly in this state, in K-12 student performance in mathematics and science.

The University of Kentucky has increased markedly its efforts to improve STEM education in the state over the past eight or so years. This began with the rewarding of a large grant from the National Science Foundation (NSF) to improve student and teacher performance in mathematics and science in the central Appalachian region. The program involved faculty from the Colleges of Arts and Science and Education. In addition, the University's administration is very supportive in that the President has taken lead positions at both state and national levels. He served as chair of a statewide taskforce on STEM education, serves as chair of an NSF Advisory committee in education and serves as chair of a recently formed Association of Public and Land-Grant Universities commission entitled the Science and Mathematics Teachers Imperative (SMTI) as well as serving on several forums, such as the Business-Education Forum. Further, the Provost has supported the Partnership Institute for Mathematics and Science Education Reform that evolved from the large NSF award and was approved by the University Senate [Board of Trustees]. He has lent support to the mathematics and science education efforts in the Colleges of the Arts and Science, Education and Engineering including outreach professors in mathematics, science, and science education to increase and improve the University's influence in K-12 STEM Education.

I mention the above to indicate the University is interested in taking a leadership role in STEM education and as mentioned before, it is timely that a unit be formed to assume this role, interiorly. There are other reasons for a STEM education department. The University has excellent STEM courses and STEM education courses. A unit that would assist in connecting these courses, i.e., the content and the pedagogy, would greatly enhance the quality of mathematics and science teachers produced by the University. Also, the number of teachers the University graduates needs to be increased. As it stands, a number of universities in the state graduate more teachers.

One further issue is that there are federal, and some state funds directed to the improvement of STEM education. Again, a focal point on STEM education will increase the University's potential to obtain funds for pre-service and in-service teachers as well as for research on best practices.

Finally, I mention briefly that for the past 15 years I have been involved with K-12 mathematics and science programs which have brought into the central Appalachian states over \$40 million. I have found there is a great need for a four year teacher education program. Five year programs do not supply many teachers in high needs areas. Secondly, programs with high quality content and pedagogy are absolutely essential to make the impact necessary to improve student performance.

It appears to me that your new department and its program in STEM education are being proposed at the appropriate time. I wholeheartedly support them.

Sincerely,

Wimberly C. Royster,

Co-PI, Appalachian Mathematics and Science Partnership

Emeritus Professor of Mathematics

Kentucky - Tennossee - Virginia



Dr. Jennifer Wilhelm Department of Curriculum & Instruction 335 Dickey Hall University of Kentucky Lexington, KY 40506-0017 Dr. David Royster Outreach Professor of Mathematics Department of Mathematics 759 Patterson Office Tower Lexington, KY 40506-0047

859-257-1258, (FAX: 859-257-4078) david.royster@uky.edu http://www.ms.uky.edu/~droyster

Dear Dr. Wilhelm,

I am writing to extend my support as the Outreach Professor of Mathematics for the formation of the new Department of Science, Technology, Engineering and Mathematics Education in the UK College of Education.

One of the purposes of the position of Outreach Professor of Mathematics is to enhance the teacher preparation program with which the Department of Mathematics has assisted the College of Education in the past. The formation of the STEM Department is a very positive step in advancing the preparation programs for teachers of secondary mathematics in the state of Kentucky. I come to the University of Kentucky from a university where there was a very close working relationship between the Department of Mathematics and the College of Education. I am pleased to see that it is only grower stronger here at UK. This is an opportunity for me to work together with the faculty from your department and for all of us to plan and implement new and better programs for the preparation of secondary mathematics teachers.

I anticipate the opportunity for undergraduate students to work seamlessly between our two departments, and it will be very good to have the opportunity for our interested faculty to be able to work seamlessly with both departments. In my past university position, I served as a faculty member in the Department of Mathematics with an Adjunct appointment in the Department of Middle, Secondary, and K-12 Education. In this capacity I was available to serve on department committees and direct dissertations for the department. I look forward to having similar opportunities here, if they present themselves. Having joint appointments serves only to indicate more forcefully to internal and external units the commitment of the departments and to ensure successful and productive collaborations.

Again, I support and commend the creation of the STEM Education department and look forward to working with you and this department in the future.

Dr. David C. Royster,

Outreach Professor of Mathematics

University of Kentucky



Dr. Jennifer Wilhelm Associate Professor University of Kentucky, College of Education Department of Curriculum and Instruction 101 B Taylor Education Building Lexington, KY 40506-0017

Dear Dr. Wilhelm:

I am writing this letter in support of the University of Kentucky (UK), College of Education's plan to develop a Department of STEM education. This is an important initiative for the University and the Commonwealth because it will help develop a statewide STEM pipeline and improve the STEM literacy of Kentucky's workforce.

The dominant industries of the future will be driven by advances in technology that require a workforce with strong background in information technology (IT) and a solid foundation in STEM. The next wave of the IT revolution not only will transform states, it will lead to significant new economic opportunities as IT companies find new business opportunities and create new digital environments. Unfortunately, Kentucky is facing an immediate, critical shortage in STEM-oriented labor. A 2010 Milken Institute assessment of the technical and scientific workforce of each state ranked Kentucky 47th overall, indicating that the state has limited science and technology assets. Based on the 2008 State New Economy Index, Kentucky ranks in the lowest percentile for IT professionals, high-tech jobs, science and engineering, and workforce education. The 2010 National Science Foundation's Science and Engineering Indicators show that this trend will continue as less than 1/4 of high school graduates participate in advanced placement programs. Kentucky is in the lowest quartile for number of students receiving degrees in a science and engineering field with fewer than 10% of these students pursuing graduate degrees. Currently, Kentucky is 37th in the NAEP's standing in mathematics and under performs US students on international tests in math and science and ACT scores. The key for Kentucky and the rest of the nation is to build an educational system that keeps pace with emerging industry needs.

The proposed STEM department in the College of Education will expand and enhance STEM Education at UK and in the Commonwealth in significant ways. Along with strengthening teacher preparation programs already in place (e.g., Elementary, Middle School, and Master's with Initial Certification), the STEM Education Department will build new bachelor's, master's, and doctoral programs in science, technology, engineering, and/or mathematics education. Through these curriculum and instruction goals, the new STEM department will increase and retain Kentucky students in the STEM pipeline, from pre-K through productive adulthood in the workforce.

To achieve these ambitious and urgent goals requires the concerted efforts of those with a common vision who share focused, relevant expertise in STEM education. The new efforts in the College have already been a catalyst for bringing diverse groups of academics and professionals from across campus to talk about STEM issues. In the years to come, this new department can serve as a model for other Kentucky universities in developing STEM initiatives. As an active practitioner and researcher in STEM education, I strongly recommend the development of this department and advocate for its implementation. I will support this endeavor in any all ways possible.

Respectfully,

Carol D. Hanley, Ed. D.

James 1) Hambery

Associate Director

Tracy Farmer Institute for Sustainability and the Environment

College of Agriculture, Environment and Natural Resources Initiative



December 6, 2010

Office of the Dean College of Engineering 351 Ralph G. Anderson Building Lexington, KY 40506-0503

859-257-1687 859-257-8827 fax 859-323-4922

www.engr.ukv.edu

University Senate University of Kentucky Lexington, KY 40506

Dear Colleagues:

I am writing to provide my enthusiastic endorsement of the creation of a Department of STEM Education in the College of Education at the University of Kentucky. As dean of the College of Engineering for over twenty years, I have become acutely aware of the substantial shortfall in certified math and science teachers that encumbers all other efforts to enhance Kentucky's competitiveness in high-tech areas. In my opinion, UK is the only university in the state that has the size and breadth in its STEM programs and the strength and leadership in its College of Education to properly address the needs in this area.

A sampling of data from recent years will underscore the severity of Kentucky's problems in STEM education. In the fall of 2008, the college-enrollment in Kentucky reached 249,000 students, and engineering enrollment reached an all time high of 4,696. Accordingly, 1.9% of all college students were enrolled in engineering courses of study in Kentucky. Nationally, 3.3% of all college students were enrolled in engineering. Among the surrounding states, the comparable figures were 2.4% in Illinois, 2.6% in Missouri, 3.2% in Tennessee, 3.5% in West Virginia, 3.5% in Virginia, 3.8% in Ohio, and 4.0% in Indiana. To move Kentucky to the national average would require an increase of nearly 3,400 students beyond the current engineering enrollment!

The College of Engineering has been a partner with the College of Education for a number of years in developing STEM-related initiatives. UK is the affiliate university for Project Lead the Way, the largest and most successful nationwide endeavor to increase the number of high school students who develop interest in, and persist to a degree in the STEM area. That initiative shows signs of being highly successful, but even its viability and long term prospects in Kentucky are severely limited by the shortage of qualified STEM faculty in the public schools.

A number of faculty in the College of Engineering have strong ties historically to the College of Education. In fact, the colleges have jointly appointed an assistant professor who has a PhD in Education and a BS in Mechanical Engineering. Another College of Education faculty member has been hired recently due to her similar



educational background. The College is looking forward to providing necessary coursework in engineering to assist the long-term development of the Department of STEM education and its programs. As the opportunity presents, I will work with the Dean of Education to identify and to hire additional faculty in joint positions to bolster the institution's ability to offer appropriate STEM educational degrees and to conduct educational research in the field.

I view the creation of a Department of STEM Education as the single most important initiative that the University of Kentucky can undertake to assure a higher quality education in math and science for Kentucky public school students. I commend this proposal to you as one worthy of your full support.

Sincerely,

Thomas W. Lester

Dean

UNIVERSITY CALENDAR 10-30-10 VERSION

2011 Fall Semester

Tuesday - Deadline for submission of all application materials,
College of Medicine, for the 2011 Fall Semester
Tuesday - Deadline for submission of all application materials
For the School of Interior Design
Tuesday - Priority deadline for freshman applicants seeking admission to the Fall Semester.
Tuesday - Priority filing deadline for the 2011-2012
academic year for financial aid for entering freshmen
Monday - Last day for filing an application for an August
2011 undergradute degree online in myUK
Tuesday - Deadline for all applicants to the School of Architecture
(College of Design)
Tuesday - Deadline for international applications to be
submitted to the Graduate School for the 2011 fall
semester Tuesday - Priority filing deadline for the 2011-2012 academic
year for financial aid for continuing and transfer students
Monday through Tuesday - Priority Registration for
Fall 2011
Friday - Deadline for NAAB Architecture transfer applicants
Friday - Deadline for applying with college deans for
reinstatement after a second academic suspension for the
2011 Fall Semester
Saturday through Thursday - Add/Drop for registered students
Friday - Deadline for students to schedule an appointment
for reinstatement in all colleges for the 2011 fall
semester
Sunday - Deadline for undergraduate international
applicants to submit 2011 Fall Semester application
Wednesday - Earliest date to submit application for
regular and Early Decision Program admission, College of Medicine, for the 2012 Fall Semester
Monday-Thursday-Summer Advising Conferences for new
freshmen, transfer,
students, and readmitted students enrolling for the 2011
Fall Semester
Approved time period for apply online in myUK for a
Dec. 2011 degree from the Graduate School
Thursday-Last day for filing an application for a December 2011 undergraduate degree online in myUK
Friday through Saturday - Add/Drop for registered
students
Friday - Deadline for applying for admission to the Graduate
School for the 2011 Fall Semester.
Monday - Final deadline for submission of all required
documents to the Office of Admissions for undergraduate
admission, for the 2011 Fall Semester, excluding freshmen
who will be considered on a space-available basis.

UNIVERSITY CALENDAR 10-30-10 Version

2011 Fall Semester

August 1	Monday - Deadline for application for Early Decision Program, College of Medicine, for the 2012 Fall Semester
August 3	Wednesday - Last day for students in the Employee Educational Program registered through August 3 to submit EEP form to Human Resource Services to confirm 2011 Fall Semester registration and tuition waiver
August 15	Monday - Deadline for international applications to be submitted to the Graduate School for the 2012 spring semester
August 16-22	Tuesday through Monday - Fall registration for students who entered the University in either the 2011 Four-Week Intersession or Eight-Week Summer Session
August 16-22	Tuesday through Monday - Registration for new program graduate students
August 18-22	Thursday through Monday - Fall registration for new post- baccalaureate students admitted for the First Summer Session, Second Summer Session or Fall Semester
August 19	Friday - Advising Conference and Registration for new international students
August 19-27	Friday through Saturday - K week for all new undergraduate students
August 22	Monday - Payment deadline of registration fees and/or housing and dining fees-if total amount due is not paid as indicated on the account statement, a late payment fee
August 22	of 1.25% of the amount past due will be assessed Monday - Advising Conference and Registration for new freshmen and transfer students including registration for Evening and Weekend
August 22-23	Monday - Tuesday - Opening-of-term add/drop for registered students
August 23	Tuesday - Advising Conference and Registration for readmission, and non-degree students including Evening and Weekend
August 23	Tuesday - Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees
August 24 August 24-	Wednesday - First day of classes Wednesday through Tuesday - Late registration for
August 30	returning students who did not priority register and new applicants cleared late for admission. A late fee is assessed students who register during this time period
August 30 August 30	Tuesday - Last day to add a class for the 2011 Fall Semester Tuesday - Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund
August 30	Tuesday - Last day for students in the Employee Educational Program who registered and/or changed schedules after August 3 to submit EEP form to Human Resource Services to confirm 2011 Fall Semester registration and tuition waiver

UNIVERSITY CALENDAR 10-30-10 Version

2011 Fall Semester

September 5 September 14	Monday - Labor Day - Academic Holiday Wednesday - Last day to drop a course without it appearing on the student's transcript
September 14	Wednesday - Last day to change grading option (pass/fail to letter grade or letter grade to pass/fail; credit to audit or audit to credit)
September 21	Wednesday - Last day to officially withdraw from the University or reduce course load and receive a 50 percent refund
September 22	Thursday - Deadline for submission of application and all required documents to the Office of Undergraduate Admission and University Registrar for change of residency status for 2011 Fall Semester
October 3- November 23	Monday through Wednesday - Students are prohibited from changing academic majors
October 6	Thursday - Last day for doctoral candidates for a December degree to submit a Notification of Intent to schedule a final examination in The Graduate School
October 10-	Monday through Friday - Midterm grading window is open.
October 21	The mid-term grading window will close at midnight on Oct. 21
October 15	Saturday - Deadline for submission of application and all required documents to the Office of Admissions for undergraduate applicants planning to attend November Advising Conference (including registration for spring classes)
October 17	Monday - Midterm of 2011 Fall Semester
October 31- November 22	Monday through Tuesday - Priority registration for the 2012 Spring Semester
November 1	Tuesday - Deadline for completed AMCAS application, College of Medicine, for the 2012 Fall Semester
November 4	Friday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for urgent non-academic reasons
November 17	Thursday - Last day for candidates for a December degree to schedule a final examination in The Graduate School
November 18	Friday - 2012 Spring Semester Advising Conference for new and readmitted undergraduate students
November 23-26	Wednesday through Saturday - Thanksgiving - Academic Holidays

UNIVERSITY CALENDAR 10-30-10 Version

2011 Fall Semester

November	30	Wednesday-Last day for filing an application for a May 2012 undergraduate degree online in myUK
November		Wednesday through Monday - Add/Drop for registered
December		students for the 2012 Spring Semester
December	1	Thursday - Deadline for submission of application and
		receipt of all materials for admission, readmission or
		transfer to the College of Law for the 2012 Spring
December	1	Semester Thursday Application deadline for undergoodsta
December	1	Thursday - Application deadline for undergraduate
December	1	admission to the Spring 2012 term Thursday - Last day for candidates for a December
December	1	graduate degree to sit for a final examination
December	5	Monday - Deadline for applying for admission to the Graduate
2000111002		School for the 2012 Spring Semester.
December	5-	Monday through Monday - Final grading window is open. The
December	19	final deadline for submission of grades online in the
		grading portal is midnight, Dec. 19
December	7	Wednesday - Last day for students in the Employee
		Educational Program registered through December 7 to
		submit EEP form to Human Resource Services to confirm
D 1	0	2012 Spring Semester registration and tuition waiver
December	-	Friday - Last day of classes
December		Monday through Friday - Final Examinations Friday - Last day for candidates for a December degree to
December	1.0	submit a thesis/dissertation to The Graduate School
December	16	Friday - End of 2011 Fall Semester
December		Friday December Commencement
		4

^{*} These dates are under review and are subject to change.

SUMMARY OF TEACHING DAYS, FALL SEMESTER 2011

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Teaching Da	ys
August	1	1	2	1	1	1	August	7
September	3	4	4	5	5	4	September	25
October	5	4	4	4	4	5	October	26
November	4	5	4	3	3	3	November	22
December	1	1	1	2	2	1	December	8
Totals	14	15	15	15	15	14		88

UNIVERSITY CALENDAR 10-30-10 Version

2012 Spring Semester

February 15 2011 March 15 2011	Tuesday - Priority filing deadline for the 2011-2012 academic year for financial aid for entering freshman Tuesday - Priority filing deadline for the 2011-2012 academic year for financial aid for continuing and transfer students
August 15 2011	Monday - Deadline for international applications to be submitted to The Graduate School for the 2012 Spring Semester
September 15 2011	Thursday - Deadline for applying with college deans for reinstatement after a second academic suspension for the 2012 Spring Semester
September 23- Feb. 20 October 1	Approved time period for apply online in myUK for a May 2012 degree from the Graduate School Saturday - Deadline for students to schedule an
2011	appointment for reinstatement in all colleges for the 2012 spring semester
October 15 2011	Saturday - Deadline for submission of application and all required documents to the Office of Admissions for undergraduate applicants planning to attend November Advising Conference (including registration for spring classes)
October 15 2011 November 18	Saturday - Deadline for undergraduate international applicants to submit 2012 Spring Semester application Friday - 2012 Spring Semester Advising Conference for
2011 November 30	new and readmitted undergraduate students Wednesday - Last day for filing an application for a May
2011 November 30- December 19 2011	2012 undergraduate degree online in myUK Wednesday through Monday - Add/Drop for registered students for the 2012 Spring Semester
December 1 2011	Thursday - Final deadline for submission of application and all required documents to the Office of Undergraduate Admission and University Registrar for the 2012 Spring
December 5	Semester. Monday - Deadline for applying for admission to the Graduate School for the 2012 Spring Semester.
December 7 2011	Wednesday - Last day for students in the Employee Educational Program registered through December 7 to submit EEP form to Human Resource Services to confirm 2012 Spring Semester registration and tuition waiver
January 4-7	Wednesday through Saturday - Add/Drop for registered students
January 4-9	Wednesday through Monday - Registration for new program graduate students
January 5-9	Thursday through Monday - Registration for new post- baccalaureate students
January 6 January 9	Friday - International Student Advising Conference Monday - Advising Conference and Registration for new freshmen and transfer students including registration for Evening and Weekend

UNIVERSITY CALENDAR 10-30-10

2012 Spring Semester

January	9-10	Monday and Tuesday - Opening-of-term add/drop for registered students
January	10	Tuesday - Advising conference and Registration for readmission and non-degree students including registration for Evening and Weekend
January	10	Tuesday - Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees
January	11	Wednesday - First day of classes
January		Wednesday through Wednesday - Late registration for returning students who did not priority register and new applicants cleared late for admission. A late fee is assessed students who register during this time period
January	16	Monday - Martin Luther King Birthday - Academic Holiday
January		Tuesday - Deadline for submission of all application materials, College of Medicine, for the Fall 2012 Semester
January	18	Wednesday - Last day to add a class for the 2012 Spring Semester
January	18	Wednesday - Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund
January	18	Wednesday - Last day for students in the Employee Educational Program who registered and/or changed schedules after December 7 to submit EEP form to Human Resource Services to confirm 2012 Spring Semester
January	22	registration and tuition waiver Sunday - Payment deadline of registration fees and/or housing and dining fees Wednesday -if total amount due is not paid as indicated on the account statement, a late payment fee of 1.25% of the amount past due will be assessed
February	1	Wednesday - Preferred deadline for submitting application for admission to the College of Dentistry for the 2012 Fall Semester
February	1	Wednesday - Last day to drop a course without it appearing on the student's transcript
February	1	Wednesday - Last day to change grading option (pass/fail to letter grade or letter grade to pass/fail; credit to audit or audit to credit)
February	8	Wednesday - Last day to officially withdraw from the University or reduce course load and receive a 50 percent refund
February	9	Thursday - Deadline for submission of application and all required documents to the Office of Undergraduate Admissions and University Registrar for change of residency status for 2012 Spring Semester

10-30-10 Version

2012 Spring Semester

February 23	Thursday - Last day for doctoral candidates for a May degree to submit a Notification of Intent to schedule a
Februay 27- March 9	final examination in The Graduate School Monday through Friday - Midterm grading window is open. The mid-term grading window will close at midnight on March 9
Feb. 27- April 18	Monday-Wednesday - Students are prohibited from changing academic majors
February 28	Tuesday - Last day for filing an application for an August 2012 undergraduate degee online in myUK
March 1	Thursday - Last day for submission of application for admission to the College of Law for the 2012 Fall Semester
March 5	Monday - Midterm of 2012 Spring Semester
March 12-17	Monday through Saturday - Spring Vacation - Academic Holidays
March 15	Thursday - Deadline for international applications to be submitted to The Graduate School for the 2012 Fall Semester
March 26-	Monday through Tuesday - Priority registration for the
April 17	2012 Fall Semester and both 2012 Summer Sessions
April 5	Thursday - Last day for candidates for a May degree to schedule a final examination in The Graduate School
April 6	Friday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for urgent non-academic reasons.
April 9	Monday - Deadline for applying for admission to the Graduate School for the 2012 four-week Summer Session.
April 19	Thursday - Last day for candidates for a May graduate degree to sit for a final examination
April 23-	Monday through Monday - Final grading window is open. The
May 7	final deadline for submission of grades online in the grading portal is midnight, May 7
April 27	Friday - Last day of classes
April 30- May 4	Monday through Friday - Final Examinations
May 1-	Tuesday through Monday - Four-Week Intersession
May 7	registration and add/drop continue for students enrolled in the 2012 Spring Semester
May 1-	Tuesday through Wednesday - Eight-Week Summer Session
June 6	registration and add/drop continues for students enrolled in the 2012 Spring Semester
May 1-	Tuesday through Saturday - Add/Drop for priority
June 16	registered students for the 2012 Fall Semester
May 4	Friday - Last day for candidates for a May degree to submit a thesis/dissertation to The Graduate School
May 4	Friday - End of 2012 Spring Semester
May 6	Sunday - Commencement
May 7-	Monday-Saturday - College of Pharmacy 15-Week Summer Term
August 18	

• These dates are under review and are subject to change.

SUMMARY OF TEACHING DAYS, SPRING SEMESTER 2012

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Teaching	
Days								
January	2	3	3	3	3	3	January	17
February	4	4	5	4	4	4	February	25
March	3	3	3	4	4	4	March	21
April	4	4	4	4	4	3	April	23
May	_	-	-	-	-	-	May	0
Totals	13	14	15	15	15	14	-	86

2012 Four-Week - First Summer Session

D - 1- 01	The second bins and of the second sec
Feb. 21- June 20	Approved time period for apply online in myUK for an August 2012 degree from the Graduate School
February 28	Tuesday - Last day for filing an application for an
10014411 10	August 2012 undergraduate degree online in myUK
March 15	Thursday - Priority filing deadline for financial aid
	for the first summer session and/or the second summer
	session
April 6	Friday - Deadline for applying for admission to the
	Graduate School for the 2012 Four-Week Summer
7	Intersession.
April 15	Sunday - Final deadline for submission of application and all required documents to the Office of Admissions for
	undergraduate admission for the 2012 first summer session
May 1-	Tuesday through Monday - First summer session
May 7	registration and add/drop continue for students enrolled
1	in the 2012 Spring Semester
May 7	Monday - Beginning of College of Pharmacy 15-Week Summer
	Term
May 7	Monday - Advising Conference and Registration for new and
Μ 7	readmitted students
May 7	Monday - Deadline for applying for admission to the Graduate School for the 2012 Eight-Week Summer Session.
May 8	Tuesday - Last day a student may officially drop a course
riay o	or cancel registration with the University Registrar for
	a full refund of fees
May 8	Tuesday - First day of classes
May 8-9	Tuesday through Wednesday - Late registration for
	returning students not already registered and new
	applicants cleared late for admission. A late fee is
2.5	assessed students who register late
May 9	Wednesday - Last day to add a class for the 2012 First summer session
May 9	Wednesday - Last day to officially withdraw from the
ray 5	University or reduce course load and receive an 80
	percent refund
May 9	Wednesday - Last day for students in the Employee
_	Educational Program to submit EEP form to Human Resource
	Services for tuition waiver for the 2012 First summer
	session
May 14	Monday - Last day to drop a course without it appearing
Mar. 1/	on the student's transcript Manday Last day to share grading entire (nace/fail to
May 14	Monday - Last day to change grading option (pass/fail to letter grade or letter grade to pass/fail; credit to
	audit or audit to credit
	addie of addie to credit

2012 Four-Week - First Summer Session

Tuesday - Last day to officially withdraw from the University or reduce course load and receive a 50 percent refund
Wednesday through Wednesday - Second summer session registration and add/drop for students who entered the University in the 2012 first summer session
Monday - Midterm of 2012 Four-Week Intersession Tuesday - Payment deadline of registration fees and/or housing and dining fees-if total amount due is not paid as indicated on the account statement, a late payment fee of 1.25% of the amount past due will be assessed
Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons."
Monday - Memorial Day - Academic Holiday
Monday through Friday - Final grading window is open. The
final deadline for submission of grades online in the Grading portal is midnight, June 8
Wednesday - Last day for doctoral candidates for an August degree to submit a Notification of Intent to schedule a final examination in The Graduate School
Tuesday - Final Examinations
Tuesday - End of 2012 Four-Week Intersession
Wednesday - Deadline for submission of application and all required documents to the Office of Undergraduate Admission and University Registrar for change of residency status for the Four-Week and the Eight-Week Summer Sessions

 * These dates are under review and are subject to change.

SUMMARY OF TEACHING DAYS, 2012 FOUR-WEEK INTERSESSION

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Teaching Days
May	2	4	4	4	3	3	May 20
June	1	1	_	-	1	1	June 4
Totals	3	5	4	4	4	4	24

UNIVERSITY CALENDAR 10-30-10 Version

2012 Eight-Week - Second Summer Session

February 28	Tuesday - Last day for filing an application for an
March 15	August 2012 undergraduate degree online in myUK Thursday - Priority filing deadline for financial aid for the 4 week and/or the 8 week summer term(s)
May 1- June 7	Tuesday through Thursday - Eight-Week Summer Session registration and add/drop continue for students enrolled in the 2012 Spring Semester
May 7	Monday - Deadline for applying for admission to the Graduate School for the 2012 Eight-Week Summer Session.
May 15	Tuesday - Final deadline for submission of application and all required documents to the Office of Admissions for undergraduate admission for the 2012 Eight-Week Summer Session.
May 16-	Wednesday through Wednesday - Eight-Week registration and
May 30	add/drop for students who entered the University in the 2012 Four-Week Intersession
May 30	Wednesday - Last day for doctoral candidates for an August degree to submit a Notification of Intent to schedule a final examination in The Graduate School
June 5-6	Tuesday and Wednesday - Registration for new graduate students
June 6	Wednesday - Advising Conference and Registration for new and readmitted students including registration for Evening and Weekend
June 6	Wednesday - Deadline for submission of application and all required documents to the Office of Undergraduate Admission and University Registrar for change of residency status for the Eight-Week Summer Session
June 7	Thursday - Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees
June 7	Thursday - First day of classes
June 7-8	Thursday through Friday - Late registration for returning students not already registered and new applicants
cleared	
	late for admission. A late fee is assessed students who
June 8 2012	register late Friday - Last day to enter an organized class for the
June 8	Eight-Week Summer Session Friday - Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund

2012 Eight-Week - Second Summer Session

June 8	Friday - Last day for students in the Employee Educational Program to submit EEP form to Human Resource Services for tuition waiver for the 2012 Eight-Week Summer Session
June 15	Friday - Deadline for international applications to be submitted to The Graduate School for the 2012 Spring Semester
June 18	Monday - Last day to drop a course without it appearing on the student's transcript
June 18	Monday - Last day to change grading option (pass/fail to letter grade or letter grade to pass/fail; credit to audit or audit to credit)
June 18- July 20	Monday-Friday - Summer Advising Conferences for new freshmen, Community College transfers, advanced standing (transfer) students, auditors, non-degree and readmitted students enrolling for the 2012 Fall Semester
June 21	Thursday - Last day to officially withdraw from the University or reduce course load and receive a 50 percent refund
June 22	Friday - Payment deadline of registration fees and/or housing and dining fees - if total amount due is not paid as indicated on the account statement, a late payment fee of 1.25% of the amount past due will be assessed
June 30	Saturday-Last day for filing an application for a December 2012 undergraduate degree online in myUK
July 4	Wednesday - Independence Day - Academic Holiday
July 5 July 11	Thursday - Midterm of 2012 Eight-Week Summer Session Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons."
July 11	Wednesday - Last day for candidates for an August degree to schedule a final examination in The Graduate School
July 16	Monday - Deadline for applying for admission to the Graduate School for the 2012 Fall Semester.
July 25 graduate	Wednesday - Last day for candidates for an August
July 25-	degree to sit for a final examination Wednesday through Monday Final grading window is open.
August 6	The final deadline for submission of grades online in the Grading portal is midnight, August 6
August 1	Wednesday - Last day for students in the Employee Educational Program who registered through August 1 to submit EEP form to Human Resource Services to confirm 2012 Fall Semester registration and tuition waiver
August 2 August 2	Thursday - End of 2012 Eight-Week Summer Session Thursday - Last day for candidates for an August degree to submit a thesis/dissertation to The Graduate School
August 2 August 18	Thursday - Final Examinations Saturday - End of College of Pharmacy 15-Week Summer Term

^{*} These dates are under review and are subject to change.

SUMMARY OF TEACHING DAYS, 2012 EIGHT-WEEK SUMMER SESSION

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Teaching	Days
June	3	3	3	4	4	4	June	21
July	5	5	3	4	4	4	July	25
August	_	_	1	1	_	_	August	2
Totals	8	8	7	9	8	8		48

February 1	Friday - Deadline for submission of all application materials, College of Medicine, for the 2013 Fall Semester
February 1	Friday - Deadline for submission of all application materials for the School of Interior Design
February 15	Friday - Priority deadline for freshman applicants. Applicants for the 2013 Fall Semester by this date who meet selective admission criteria will be offered general admission; applicants after this date or deferred decision candidates will be considered on a space-available basis only
February 15	Friday - Priority filing deadline for the 2013-2014 academic year for financial aid for entering freshmen
February 28	Thursday - Last day for filing an application for an August 2013 undergraduate degree online in myUK.
March 1	Friday - Deadline for all applicants to the College of Architecture
March 15	Friday - Priority filing deadline for the 2013-2014 academic year for financial aid for continuing and transfer students
March 15	Friday - Deadline for international applications to be submitted to The Graduate School for the 2013 Fall Semester
April 1	Monday- Deadline for NAAB Architecture transfer applicants
April 15	Monday - Deadline for applying with college deans for reinstatement after a second academic suspension for the 2013 Fall Semester
May 14	Tuesday - Deadline for students to schedule an appointment for reinstatement in all colleges for the 2013 fall semester
June 15	Saturday - Deadline for undergraduate international applicants to submit 2013 Fall Semester application
June 15	Saturday- Earliest date to submit application for regular and Early Decision Program admission, College of Medicine, for the 2014 Fall Semester
June 17- July 18	Monday-Thursday -Summer Advising Conferences for new freshmen, transfers, and readmitted students enrolling for the 2013 Fall Semester
June 21-	Approved time period for apply online in myUK for a
September 22	December 2013 degree from the Graduate School
June 29	Last day for filing an application for a December 2013 undergraduate degree in college dean's office
June 30	Sunday - Last day for filing an application for a December 2013 undergraduate degree online in myUK
July 19	Friday - Deadline for applying for admission to the Graduate School for the 2013 Fall Semester.
July 19-	Friday through Saturday - Add/Drop for registered
August 17	Students
August 1	Thursday - Final deadline for submission of all required
December 1	documents to the Office of Admissions for undergraduate admission, excluding freshman for the 2013 Fall Semester, who will be considered on a space-available basis.
August 1	Thursday - Deadline for application for Early Decision Program, College of Medicine, for the 2014 Fall Semester

Aug. 7	Wednesday - Last day for students in the Employee
-	Educational Program registered through Aug. 7 to submit EEP form to Human Resource Services to confirm
	2013 registration and tuition waiver
August 20-26	Tuesday through Monday - Registration for new program graduate students
August 20-26	Tuesday through Monday - Fall registration for new
	undergraduate and new program graduate students who
	entered the University in either the 2013 Four-Week
August 22-26	Intersession or Eight-Week Summer Session Thursday through Monday - Fall registration for new
nagase 22 20	post-baccalaureate students admitted for the Four-
	Week Intersession, Eight-Week Summer Session or Fall
	Semester
August 22	Thursday - Payment deadline of registration fees
	and/or housing and dining fees-if total amount due is not paid as indicated on the account statement, a late
	payment fee of 1.25% of the amount past due will be
	assessed
August 23	Friday - Advising Conference and Registration for new
	international students who have been cleared for
August 23-31	admission but did not priority register Friday through Saturday - K week for all new undergraduate
August 25 51	students
August 26	Monday - Advising Conference and Registration for new
_	freshmen and transfer students who have been cleared for
	admission but did not priority register including
August 26-27	registration for Evening and Weekend Monday and Tuesday - Opening-of-term add/drop for
August 20-27	registered students
August 26-30	Monday through Friday - Approved time period for
	students to change academic majors (note: please
7116116+ 27	check with college for admission deadline)
August 27	Tuesday - Last day a student may officially drop a course or cancel registration with the University
	Registrar for a full refund of fees
August 27	Tuesday - Advising Conference and Registration for
	readmission and non-degree students who have been cleared
	for admission but did not priority register including
August 28	registration for Evening and Weekend Wednesday - First day of classes
August 28-	Wednesday through Wednesday - Late registration for
Sept. 4	returning students who did not priority register and
	new applicants cleared late for admission. A late
Santambar ?	fee is assessed students who register late Monday - Labor Day - Academic Holiday
September 2 Sept. 4	Wednesday - Last day to add a class for the 2013
- Jp 0. 1	Fall Semester
Sept. 4	Wednesday - Last day to officially withdraw from the
	University or reduce course load and receive an 80
	percent refund

September 4	Wednesday - Last day for students in the Employee Educational Program who registered and/or changed schedules after Aug. 7 to submit EEP form to Human Resource Services to confirm 2013 Fall Semester registration and tuition waiver
September 18	Wednesday - Last day to drop a course without it appearing on the student's transcript
September 18	Wednesday - Last day to change grading option (pass/ fail to letter grade or letter grade to pass/fail; credit to audit or audit to credit)
September 25	Wednesday - Last day to officially withdraw from the University or reduce course load and receive a 50 percent refund
September 26	Thursday - Deadline for submission of application and all required documents to the Office of Undergraduate Admission and University Registrar for change of residency status for 2013 Fall Semester
October 10	Thursday - Last day for doctoral candidates for a December degree to submit a Notification of Intent to schedule a final examination in The Graduate School
October 14-	Monday through Friday - Midterm Grading window is open.
October 25	The mid-term grading window will close at midnight on October 25.
October 15	Tuesday - Deadline for submission of application and all required documents to the Office of Admissions for undergraduate applicants planning to attend November Advising Conference (including registration for spring classes)
October 21	Monday - Midterm of 2013 Fall Semester
October 22-	Tuesday through Monday - Approved time period for
Nov. 4	students to change academic majors (note: please
	check with college for admission deadline)
November 1	Friday - Deadline for completed AMCAS application, College of Medicine, for the 2014 Fall Semester
Nov. 4-	Monday through Tuesday - Priority registration for the
November 26	2014 Spring Semester
November 8	Friday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons."
November 14	Thursday-Last day candidates for the December 2013 degree can schedule a final examination in the Graduate School
November 22	Friday - 2014 Spring Semester Advising Conference for new and readmitted undergraduate students
November 27-30	Wednesday through Saturday - Thanksgiving - Academic Holidays

2013 Fall Semester

November	30	Saturday - Last day for filing an application for a May 2014 undergraduate degree online in myUK
December	1	Sunday-Deadline for submission of application and receipt of all materials for admission, readmission or transfer to the College of Law for the 2014 Spring Semester
December		Wednesday through Monday - Add/Drop for registered
December	23	students for the 2014 Spring Semester
December	5	Thursday- Last day candidates for a December 2013 degree can sit for a final examination
December	9	Monday - Deadline for applying for admission to the Graduate School for the 2014 Spring Semester.
December	9-	Monday through Monday - Final Grading window is open. The
December	23	final deadline for submission of grades online in the grading portal is midnight, Dec. 23
December	11	Wednesday - Last day for students in the Employee Program registered through December 11 to submit EEP form to Human Resource Services to confirm 2013 Spring Semester registration and tuition waiver
December	13	Friday - Last day of classes
December		Monday through Friday - Final Examinations
December		Friday - End of 2013 Fall Semester
December		Friday- Last day for candidates for a a Dec 2013 degree to submit a thesis/dissertation to the Graduate School
December	20	Friday - December Commencement

^{*} These dates are under review and are subject to change.

SUMMARY OF TEACHING DAYS, FALL SEMESTER 2013

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Teaching Da	ys
August	_	_	1	1	1	1	August	4
September	4	4	4	4	4	4	September	24
October	4	5	5	5	4	4	October	27
November	4	4	3	3	4	4	November	22
December	2	2	2	2	2	1	December	11
Totals	14	15	15	15	15	14		88

UNIVERSITY CALENDAR 10-30-10 Version

2014 Spring Semester

February 15 Friday - Priority filing deadline for the 2013-2014

2013 February 28 2013 March 15 2013	academic year for financial aid for entering freshman Last day for filing an application for an August 2013 undergraduate degree online in myUK Friday - Priority filing deadline for the 2013-2014 academic year for financial aid for continuing and transfer students
August 15 2013	Thursday - Deadline for international applications to be submitted to The Graduate School for the 2014 Spring Semester
September 15 2013	Sunday - Deadline for applying with college deans for reinstatement after a second academic suspension for the 2014 Spring Semester
September 23- Feb. 20 October 1 2013	Approved time period for apply online in myUK for a May 2014 degree from the Graduate School Tuesday - Deadline for students to schedule an appointment for reinstatement in all colleges for the 2014 spring semester
October 15 2013	Tuesday - Deadline for submission of application and all required documents to the Office of Admissions for undergraduate applicants planning to attend November Advising Conference (including registration for spring classes)
October 15 2013 November 22	Tuesday - Deadline for undergraduate international applicants to submit 2014 Spring Semester application Friday - Advising Conference for freshmen, transfer,
2013 November 30	readmission students admitted for spring 2014 Saturday - Last day for filing an application for a
2013 December 1 2013	May 2014 undergraduate degree online in myUK Sunday - Final deadline for submission of application and all required documents to the Office of Admissions for undergraduate admission for the 2014 Spring Semester.
December 4- December 23 2013	Wednesday through Monday - Add/Drop for registered students for the 2014 Spring Semester
December 9 2013	Monday - Deadline for applying for admission to the Graduate School for the 2014 Spring Semester.
December 11 2013	Wednesday - Last day for students in the Employee Educational Program registered through December 11 to submit EEP form to Human Resource Services to confirm 2014 Spring Semester registration and tuition waiver
January 8-13	Wednesday through Monday - Registration for new program graduate students
January 9-13	Thursday through Monday - Registration for new post- baccalaureate students
January 10	Friday - International Student Advising Conference

2014 Spring Semester

January 13	Monday - Advising Conference and Registration for new freshman and transfer students who have been cleared for admission but did not priority register including registration for Evening and Weekend
January 13-14	Monday and Tuesday - Opening-of-term add/drop for registered students
January 14	Tuesday - Last day a student may officially drop a

	course or cancel registration with the University
January 14	Registrar for a full refund of fees Tuesday - Advising Conference and Registration for
	readmission and non-degree students including registration for Evening and Weekend
January 15	Wednesday - First day of classes
January 15-22	Wednesday through Wednesday - Late registration for
	returning students who did not priority register and new applicants cleared late for admission. A late
	fee is assessed students who register late.
January 20	Monday - Martin Luther King Birthday - Academic
January 20	Holidav
January 22	Wednesday - Last day to add a class for the 2014 Spring
Candary 22	Semester
January 22	Wednesday - Last day to officially withdraw from the
	University or reduce course load and receive an 80
	percent refund
January 22	Wednesday - Last day for students in the Employee
-	Educational Program who registered and/or changed schedules
	after December 11 to submit EEP form to Human Resource
	Services to confirm 2014 Spring Semester registration and
	tuition waiver
January 22	Wednesday - Payment deadline of registration fees
	and/or housing and dining fees-if total amount due is
	not paid as indicated on the account statement, a late
	payment fee of 1.25% of the amount past due will be
T - 1 1	assessed
February 1	Saturday - Deadline for international applications to be submitted to The Graduate School for the 2014 Fall
	Semester
February 1	Saturday - Preferred deadline for submitting
repluary i	application for admission to the College of Dentistry
	for the 2014 Fall Semester
February 5	Wednesday - Last day to drop a course without it
restaury e	appearing on the student's transcript
February 5	Wednesday - Last day to change grading option (pass/
4	fail to letter grade or letter grade to pass/fail;
	credit to audit or audit to credit)
February 12	Wednesday - Last day to officially withdraw from the
	University or reduce course load and receive a
	50 percent refund
February 13	Thursday - Deadline for submission of application and
	all required documents to the Office of Undergraduate
	Admission and University Registrar for change of residency
	status for 2014 Spring Semester

February 27 Thursday - Last day for doctoral can degree to submit a Notification of I a final examination in The Graduate	Intent to schedule
February 28 Friday - Last day for filing an appl 2014 undergraduate degree online in	lication for an August
March 1 Saturday - Last day for submission of admission to the College of Law for Semester	
March 3- Monday through Friday - Midterm Grad	ding window is open. The
March 14 mid-term grading window will close a	
March 3- Monday-Wednesday - Students are proh	nibited from
April 23 changing academic major	- a t - a
March 10 Monday - Midterm of 2014 Spring Seme March 17-22 Monday through Saturday - Spring Vac	
Holidays Holidays	Jacion Academic
March 31- Monday through Tuesday - Priority re	egistration for the
April 22 2014 Fall Semester and both 2014 Sum	
April 10 Thursday - Last day for candidates f	
schedule a final examination in the April 11 Friday - Last day to withdraw from t	
reduce course load. Students cam wi	
course load after this date only for	
academic reasons."	3
April 11 Friday - Deadline for applying for a	admission to the Graduate
School for the 2014 Four-Week Summer	<u> </u>
Session.	
April 24 Thursday - Last day for candidates f sit for a final examination	for a May 2014 degree to
April 28 - Monday through Monday - Final Gradin	ng window is open. The
May 12 final deadline for submission of gra	
grading portal is midnight, May 12	
April 29- Tuesday through Monday - Four-Week I	
May 5 registration and add/drop continue f	
enrolled in the 2014 Spring Semester April 29- Tuesday through Wednesday - Eight-We	
June 4 registration and add/drop continue f	for students
enrolled in the 2014 Spring Semester	
May 2 Friday - Last day of classes	
May 5-May 9 Monday through Friday - Final Examin	
May 6- Tuesday through Saturday - Add/Drop	
June 21 registered students for the 2014 Fal	
May 9 Friday - End of 2014 Spring Semester	
May 9 Friday - Last day for candidates for submit a thesis/dissertation to The	
May 10 Saturday - Commencement	Staddace School
May 12- College of Pharmacy 15-Week Summer T	Term .
August 23	

 $[\]star$ These dates are under review and are subject to change.

SUMMARY OF TEACHING DAYS, SPRING SEMESTER 2013

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Teaching	Days
January	1	2	3	3	3	2	January	14
February	4	4	4	4	4	4	February	24
March	4	3	3	3	3	4	March	20
April	4	5	5	4	4	4	April	26
May	_	_	_	1	1	_	May	2
Totals	13	14	15	15	15	14		86

2014 Four-Week - First Summer Session

Feb. 21- June 20	Approved time period for apply online in myUK for an August 2014 degree from the Graduate School
February 28	application Friday - Last day for filing an application for an August 2014 undergraduate degree online in myUK
March 15	Saturday - Priority filing deadline for financial aid for the 4 week and/or the 8 week summer term(s)
April 11	Friday - Deadline for applying for admission to the Graduate School for the 2014 Four-Week Summer Session.
April 15	Tuesday - Deadline for submission of application and all required documents to the Office of Admissions for undergraduate admission for the 2014 Four-Week Intersession
April 29-	Tuesday through Monday - Four-Week Intersession
May 5	registration and add/drop continue for students enrolled in the 2014 Spring Semester
May 12	Monday - Beginning of College of Pharmacy 15-week Summer Term
May 12	Monday - Advising Conference and Registration for new and returning students
May 12	Monday - Deadline for applying for admission to the Graduate School for the 2014 Eight Week Summer Session.
May 13	Tuesday - First day of classes
May 13	Tuesday - Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees
May 13-14	Tuesday through Wednesday - Late registration for returning students not already registered and new applicants cleared late for admission. A late fee is assessed students who register late
May 14	Wednesday - Last day to add a class for the 2014 Four-Week Intersession
May 14	Wednesday - Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund
May 14	Wednesday - Last day for students in the Employee Educational Program to submit EEP form to Human Resource Services for tuition waiver for the 2014 Four-Week Intersession
May 19	Monday - Last day to drop a course without it appearing on the student's transcript

2014 Four-Week - First Summer Session

May 19	Monday - Last day to change grading option (pass/fail
Hay 15	to letter grade or letter grade to pass/fail; credit
	to audit or audit to credit)
35 00	,
May 20	Tuesday - Last day to officially withdraw from the
	University or reduce course load and receive a 50
	percent refund
May 21-	Wednesday through Wednesday - Eight-Week registration
June 11	and add/drop for students who entered the University
	in the 2014 Four-Week Intersession
May 22	Thursday - Payment deadline of registration fees and/or
<u> </u>	housing and dining fees-if total amount due is not paid as
	indicated on the account statement, a late payment fee of
	1.25% of the amount past due will be assessed
May 26	Monday - Memorial Day - Academic Holiday
May 27	Tuesday - Midterm of 2014 Four-Week Intersession
May 28	Wednesday - Last day to withdraw from the University or
ray 20	reduce course load. Students can withdraw or reduce course
Tuno 0	load after this date only for "urgent non-academic reasons."
June 2 -	Monday through Friday - Final Grading window is open. The
June 13	final deadline for submission of grades online in the
_	grading portal is midnight, June 13
June 4	Wednesday - Last day for doctoral candidates for an
	August degree to submit a Notification of Intent to
	schedule a final examination in The Graduate School
June 10	Tuesday - Final Examinations
June 10	Tuesday - End of 2014 Four-Week Intersession
June 11	Wednesday - Deadline for submission of application and all
	required documents to the Office of Undergraduate Admission
	and University Registrar for change of residency status for
	the Four-Week and the Eight-Week Summer Sessions
* These dates	are under review and are subject to change.
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SUMMARY OF TEACHING DAYS, 2013 FOUR-WEEK INTERSESSION

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Teachin	g Days
May June Totals	1 2 3	3 2 5	3 1 4	3 1 4	3 1 4	3 1 4	May June	16 8 24

UNIVERSITY CALENDAR 10-30-10 Version

2014 Eight-Week - Second Summer Session

February 28	Friday - Last day for filing an application for an August
	2014 undergraduate degree online in myUK
March 15	Saturday - Priority filing deadline for financial aid for
	the 4 week and/or the 8 week summer term(s)

April 11	Friday - Deadline for applying for admission to The Graduate School for the 2014 Four Week Summer Intersession.
April 29-	Tuesday through Wednesday - Eight-Week Summer Session
June 4	registration and add/drop continue for students
	enrolled in the 2014 Spring Semester
May 12	Monday - Deadline for applying for admission to the Graduate
-	School for the 2014 Eight Week Summer Session.
May 15	Thursday - Deadline for submission of application and
-	all required documents to the Office of Admissions
	for undergraduate admission for the 2014 Eight-Week
	Summer Session.
May 21-	Wednesday through Wednesday - Eight-Week registration
June 11	and add/drop for students who entered the University
	in the 2014 Four-Week Intersession
June 11	Wednesday - Deadline for submission of application and all
	required documents to the Office of Undergraduate Admission
	and University Registrar for change of residency status for
	the Eight-Week Summer Session
June 11	Wednesday - Advising Conference and Registration for new and
	returning students including registration for Evening and
	Weekend
June 12	Thursday - First day of classes
June 12	Thursday - Last day a student may officially drop a
	course or cancel registration with the University
	Registrar for a full refund of fees
June 12-13	Thursday through Friday - Late registration for
	returning students not already registered and new
	applicants cleared late for admission. A late
	fee is assessed students who register late.

2014 Eight-Week - Second Summer Session

June 13	Friday - Last day to enter an organized class for the
June 13	2014 Eight-Week Summer Session Friday - Last day to officially withdraw from the University or reduce course load and receive an 80
June 13	percent refund Friday - Last day for students in the Employee Educational Program to submit EEP form to Human

	Resource Services for tuition waiver for the 2014 Eight-Week Summer Session
June 15	Sunday - Deadline for international applications to be submitted to The Graduate School for the Spring Semester
June 22	Sunday - Payment deadline of registration fees and/or housing and dining fees-if total amount due is not paid as indicated on the account statement, a late payment fee of 1.25% of the amount past due will be assessed
June 23	Monday - Last day to change grading option (pass/fail to letter grade or letter grade to pass/fail; audit to credit or credit to audit)
June 23	Monday - Last day to drop a course without it appearing on the student's transcript
June 23-	Summer Advising Conferences for new freshmen,
August 2	(transfer) students, auditors, non-degree and
-	readmitted students enrolling for the 2014 Fall
	Semester
June 26	Thursday - Last day to officially withdraw from the
	University or reduce course load and receive a 50
	percent refund
June 26	Thursday - Last day to officially withdraw from the
	University or reduce course load and receive a 50
	percent refund
June 30	Monday Last day for filing an application for a December
T 7 4	2014 undergraduate degree online in myUK
July 4	Friday - Independence Day - Academic Holiday
July 10	Thursday - Midterm of 2014 Eight-Week Summer Session
July 16	Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or
	reduce course load after this date only for "urgent
	non-academic reasons."
July 25	Friday - Deadline for applying for admission to the Graduate
odry 25	School for the 2014 Fall Semester.
July 28 -	Monday through Monday - Final Grading window is open. The
August 11	final deadline for submission of grades online in the
	grading portal is midnight, August 11
August 6	Wednesday - Last day for students in the Employee
	Educational Program registered through August 6 to
	submit EEP form to Human Resource Services to confirm
	2014 Fall Semester registration and tuition waiver
August 7	Thursday - Final Examinations
August 7	Thursday - End of 2014 Eight-Week Summer Session

2014 Eight-Week - Second Summer Session

August 23 Saturday - End of College of Pharmacy 15-week Summer Term

* These dates are under review and are subject to change.

SUMMARY OF TEACHING DAYS, 2013 EIGHT-WEEK SUMMER SESSION

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Teaching	g Days
June	3	2	2	3	3	3	June	16

July	4	5	5	5	3	4	July	26
August	1	1	1	1	1	1	August	6
Totals	8	8	8	9	7	8		48

COLLEGE OF DENTISTRY ACADEMIC CALENDAR 2011-2012 FOR DMD, OROFACIAL PAIN, ORTHODONTICS, PEDIATRIC DENTISTRY, AND PERIODONTICS PROGRAMS

Fall 2011

June 13 Monday	Academic Year Begins for 4 th Year DMD Students (Externship)
July 1 Friday	Pediatric Dentistry Residency Begins for New 1 st Years and 1 st Years Promoted to 2 nd Year
July 4 Monday	Independence Day: Academic Holiday
July 5 Tuesday	Academic Year Begins for Orofacial Pain and 1 st Year Periodontics Students
July 25 Monday	Academic Year Begins for 2 nd and 3 rd Year Periodontics Students
August 1 Monday	Academic Year Begins for 1 st , 2 nd , and 3 rd Year DMD Students
August 1 Monday	Academic Year Begins for 1 st Year Orthodontics Students, 1 st Years Promoted to 2 nd Year, 2 nd Years Promoted to 3 rd Year
August 1 Monday	Last day a 1 st , 2 nd , and 3 rd Year DMD Student can officially withdraw from the College of Dentistry for a full refund for the current term
August 8 Monday	Clinical Year Begins for 4 th Year DMD Students
August 8 Monday	Last day a 4 th Year DMD student can officially withdraw from the College of Dentistry for a full refund for the current term
August 8 Monday	Last day a 1 st , 2 nd , and 3 rd year DMD student can officially withdraw from the College of Dentistry and receive an 80 percent refund for the current term
August 15 Monday	Last day a 4 th Year DMD student can officially withdraw from the College of Dentistry and receive an 80 percent refund for the current term

Last day a 1st, 2nd, and 3rd Year DMD student can officially withdraw August 29 Monday from the College of Dentistry and receive a 50 percent refund for the current term September 5 Monday Labor Day: Academic Holiday Last day a 4th Year DMD student can officially withdraw from the College September 6 Tuesday of Dentistry and receive a 50 percent refund for the current term November 24, 25 Thanksgiving Holidays: Academic Holidays Thursday & Friday December 16 Friday Winter Break Begins After Last Class or Clinic for DMD, Orthodontics, and Periodontics Students Winter Break Begins for 2nd Year Pediatric Dentistry Residents December 19-30 Winter Break Begins After Last Class or Clinic for Orofacial Pain December 23 Friday Students 1st Year Pediatric Dentistry Residents May Use Bonus Days for December Winter Break if Clinic Is Covered Adequately

Spring 2012

Classes/Clinics Resume for All Students/Residents: DMD, January 3 Tuesday Orofacial Pain, Orthodontics, Pediatric Dentistry and Periodontics January 3 Tuesday Last day a DMD student can officially withdraw from the College of Dentistry and receive full refund for the current term January 10 Last day a DMD student can officially withdraw from the College of Dentistry and receive an 80 percent refund for the current term January 16 Monday Martin Luther King, Jr. Birthday Observed: Academic Holiday Last day a DMD student can officially withdraw from the College February 1 Wednesday of Dentistry and receive a 50 percent refund for the current term Spring Break for DMD, Orthodontic and Periodontics Students April 2-6

April 25- 27	Spring Break for Orofacial Pain Students (National Conference)
May 4 Friday	Academic Year Ends for Graduating DMD Students
May 6 Sunday	University Commencement College of Dentistry Hooding Ceremony
May 25 Friday	Academic Year Ends for 3 rd Year Graduating Orthodontics Students
May 28 Monday	Memorial Day: Academic Holiday
June 8 Friday	Academic Year Ends for 3 rd Year DMD Students
June 15 Friday	Academic Year Ends for 2 nd Year DMD Students
June 25 – July 6	Summer Break for 1 st and 2 nd Year Orthodontics Students
June 29 Friday	Academic Year Ends for 1 st Year DMD, Orofacial Pain and 1 st , 2 nd , and 3 rd Year Periodontics Students
June 30 Saturday	Last Day of Residency for 2 nd Year Pediatric Dentistry Residents
July 2 – July 20	Summer Break for 2 nd and 3 rd Year Periodontics Students

COLLEGE OF DENTISTRY TENTATIVE ACADEMIC CALENDAR 2013-2014 FOR DMD, OROFACIAL PAIN, ORTHODONTICS, PEDIATRIC DENTISTRY, AND PERIODONTICS PROGRAMS

Fall 2013

June 10 Monday	Academic Year Begins for 4 th Year DMD Students (Externships)
July 1 Monday	Academic Year Begins for 1st Year Periodontics Students
July 1 Monday	Pediatric Dentistry Residency Begins for New 1 st Years and 1 st Years Promoted to 2 nd Year
July 4 Thursday	Independence Day: Academic Holiday
July 8 Monday	Academic Year Begins for Orofacial Pain Students
July 22 Monday	Academic Year Begins for 2 nd and 3 rd Year Periodontics Students
July 29 Monday	Academic Year Begins for 1 st , 2 nd , and 3 rd Year DMD Students
July 29 Monday	Last day a 1 st , 2 nd , and 3 rd Year DMD student can officially withdraw from the College of Dentistry for a full refund for the current term
August 5 Monday	Clinical Year Begins for 4 th Year DMD Students
August 5 Monday	Last day a 4 th Year DMD student can officially withdraw from the College of Dentistry for a full refund for the current term
August 5 Monday	Last day a 1 st , 2 nd , and 3 rd Year DMD student can withdraw from the College of Dentistry and receive an 80 percent refund for the current term
August 5 Monday	Academic Year Begins for 1 st Year Orthodontics Students, 1 st Years Promoted to 2 nd Year, 2 nd Years Promoted to 3 rd Year
August 12 Monday	Last day a 4 th Year DMD student can withdraw from the College of Dentistry and receive an 80 percent refund for the current term
August 26 Monday	Last day a 1 st , 2 nd , and 3 rd Year DMD student can officially withdraw from the College of Dentistry and receive a 50 percent refund for the current term

September 2 Monday Labor Day: Academic Holiday Last day a 4th Year DMD student can officially withdraw from the College September 3 Tuesday of Dentistry and receive a 50 percent refund for the current term Thanksgiving Holidays: Academic Holidays November 28, 29 Thursday & Friday December 13 Friday Winter Break Begins After Last Class or Clinic for DMD, Orthodontics, and Periodontics Students Winter Break Begins for 2nd Year Pediatric Dentistry Residents December 16-27 Winter Break Begins for Orofacial Pain Students December 21 Saturday 1st Year Pediatric Dentistry Residents May Use Bonus Days for December

Winter Break if Clinic is Covered Adequately

Classes/Clinics Desuma for All Chydonis/Desidents, DMD

Spring 2014

Innuary 2 Thursday

January 2 Thursday	Classes/Clinics Resume for All Students/Residents: DMD, Orofacial Pain, Pediatric Dentistry, Orthodontics, and Periodontics
January 2 Thursday	Last day a DMD student can officially withdraw from the College of Dentistry and receive full refund for the current term
January 9 Thursday	Last day a DMD student can officially withdraw from the College of Dentistry and receive an 80 percent refund for the current term
January 20, Monday	Martin Luther King, Jr. Birthday Observed: Academic Holiday
January 31, Friday	Last day a DMD student can officially withdraw from the College of Dentistry and receive a 50 percent refund for the current term
March 31 – April 4	Spring Break for DMD, Orthodontics, and Periodontics Students
April 23 – 26	Spring Break for Orofacial Pain Students (National Conference)

May 9 Friday	Academic Year Ends for Graduating DMD Students
May 10 Saturday	University Commencement College of Dentistry Hooding Ceremony
May 26 Monday	Memorial Day: Academic Holiday
May 30 Friday	Academic Year Ends for 3 rd Year Graduating Orthodontics Students
June 13 Friday	Academic Year Ends for 3 rd Year DMD Students
June 20 Friday	Academic Year Ends for 2 nd Year DMD Students
June 23 – July 3	Summer Break for 1st and 2nd Year Orthodontics Students
June 27 Friday	Academic Year Ends for 1 st Year DMD, Orofacial Pain, 1 st , 2 nd , and 3 rd Year Periodontics Students
June 30 Monday	Last Day of Residency for 2 nd Year Pediatric Dentistry Residents
June 30 – July 11	Summer Break for 2 nd and 3 rd Year Periodontics Students

UNIVERSITY OF KENTUCKY COLLEGE OF LAW CALENDAR FALL 2011

- August 22 Monday Payment deadline of registration fees and/or housing and dining fees if total amount
 due is not paid as indicated on the account statement late payment fee of 1.25% of the amount past due will be
 assessed.
- August 23 Tuesday Class work begins
- August 23 Tuesday Add/Drop
- August 23 Tuesday Last day a student may officially drop a course or cancel registration with the university Registrar for a full refund of fees.
- August 24 Wednesday Add/Drop
- August 30 Tuesday Last day to add a class for the 2011 fall semester
- August 30 Tuesday Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund
- September 5 Monday Labor Day Academic Holiday
- September 6 Tuesday Monday Classes Meet
- September 14 Wednesday Last day to change grading option (credit to audit or audit to credit)
- September 14 Wednesday Last day to drop a course without it appearing on student's transcript
- September 21 Wednesday Last day to officially withdraw from the University or reduce course schedule and receive a 50% refund
- September 22 Thursday Last day to file an application for a December degree
- September 22 Thursday Deadline to apply for Kentucky residency for this semester
- October 11 Tuesday Last day to withdraw from a course Students may withdraw after this date only upon petition to the Dean's office specifying "reasons relating to extended illness or equivalent distress."
- October 31-November 22 Monday through Tuesday Priority Registration for the 2012 Spring Semester
- November 23-26 Wednesday through Saturday Thanksgiving Holidays Academic Holidays
- December 2 Friday End of class work
- December 3-5 Saturday through Monday Law Examination Reading Period
- December 6-17 Tuesday through Saturday Law Final Examination Period
- <u>December 17 Saturday End of 2011 Fall Semester</u>

UNIVERSITY OF KENTUCKY COLLEGE OF LAW CALENDAR 2012 SPRING SEMESTER

- January 9 Monday Add/Drop
- January 9 Monday Class work begins
- January 10 Tuesday Add/Drop
- January 10 Tuesday Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees
- January 16 Monday Martin Luther King Birthday Academic Holiday
- January 18 Wednesday Last day to add a class for the 2012 Spring Semester
- January 22 Sunday Payment deadline of registration fees and/or housing and dining fees if total amount due is not paid as indicated on the account statement, a late payment fee of 1.25 percent of the amount past due will be assessed
- February 1 Wednesday Last day to change grading option (credit to audit or audit to credit)
- February 1 Wednesday Last day to drop a course without it appearing on student's transcript
- February 8 Wednesday Last day to officially withdraw from the University or reduce course schedule and receive a 50 percent refund
- February 9 Thursday Last day to file an application for a May degree
- February 9 Thursday Deadline to apply for Kentucky residency for this semester
- <u>February 24 Friday Last day to withdraw from a course</u> Students may withdraw after this date only upon petition to the Dean's office specifying "reasons relating to extended illness or equivalent distress."
- March 1 Thursday Last day for submission of application for admission for 2012 Fall Semester
- March 12-17 Monday through Saturday Spring Vacation Academic Holidays
- March 26-April 17 Monday through Tuesday Priority Registration for the 2012 Summer Session and 2012
 Fall Semester
- April 20 Friday End of class work
- April 21-23 Saturday through Monday Law Examination Reading Period
- April 24-May 5 Tuesday through Saturday Law Final Examination Period
- May 4 Friday Law Commencement
- May 5 Saturday End of 2012 Spring Semester

UNIVERSITY OF KENTUCKY COLLEGE OF LAW CALENDAR 2012 SUMMER TERM

- June 7 Thursday Class work begins
- June 7- Thursday Last day a student may officially drop a course or cancel registration with the University
 Registrar for a full refund of fees
- June 8 Friday Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund
- June 8 Friday Last day to enter an organized class for the 2010 eight week summer session
- June 18 Monday Last day to change grading option (credit to audit or audit to credit)
- June 18 Monday Last day to drop a course without it appearing on student's transcript
- June 21 Thursday Last day to officially withdraw from the University or reduce course schedule and receive a 50 percent refund
- June 22 Friday Last day to file an application for an August degree
- July 4 Wednesday Independence Day Academic Holiday
- <u>July 5 Tuesday Last day to withdraw from a course</u> Students may withdraw after this date only upon petition to the Dean's office specifying "reasons relating to extended illness or equivalent distress."
- July 27 Friday End of class work
- July 28-29 Saturday Sunday Law Examination Reading Period
- July 30-Aug. 2- Monday through Thursday Law Final Examination Period
- August 2 Thursday End of 2010 Summer Session

UNIVERSITY OF KENTUCKY COLLEGE OF LAW CALENDAR FALL 2013

- August 22 Thursday Payment deadline of registration fees and /or housing and dining fees if total amount
 due is not paid as indicted on the account statement, a late payment fee of 1.25% of the amount past due will
 be assessed.
- August 27 Tuesday- Class work begins
- August 27– Tuesday Add/Drop
- August 27 Tuesday Last day a student may officially drop a course or cancel registration with the university Registrar for a full refund of fees.
- August 28 Wednesday Add/Drop
- September 2 Monday Labor Day Academic Holiday
- September 3 Tuesday Monday Classes Meet
- Sept. 4 Wednesday Last day to add a class for the 2013 fall semester
- Sept. 4 Wednesday Last day to officially withdraw from the University or reduce course load and receive an
 80 percent refund
- September 18 Wednesday Last day to change grading option (credit to audit or audit to credit)
- September 18 Wednesday Last day to drop a course without it appearing on student's transcript
- September 25 Wednesday Last day to officially withdraw from the University or reduce course schedule and receive a 50% refund
- September 25 Wednesday Last day to file an application for a December degree
- September 26 Thursday Deadline to apply for Kentucky residency for this semester
- October 22 Tuesday Last day to withdraw from a course Students may withdraw after this date only upon petition to the Dean's office specifying "reasons relating to extended illness or equivalent distress."
- November 4 November 26 Monday through Tuesday Priority Registration for the 2014 Spring Semester
- November 27-30 Wednesday through Saturday Thanksgiving Holidays Academic Holidays
- December 6 Friday End of class work
- December 7-9 Saturday through Monday Law Examination Reading Period
- December 10-21 Tuesday through Saturday Law Final Examination Period
- <u>December 21- Saturday End of 2013 Fall Semester</u>

UNIVERSITY OF KENTUCKY COLLEGE OF LAW CALENDAR 2014 SPRING SEMESTER

- January 13 Monday Add/Drop
- January 13 Monday Class work begins
- January 14 Tuesday Add/Drop
- January 14 Tuesday Last day a student may officially drop a course or cancel registration with the University
 Registrar for a full refund of fees
- January 22- Wednesday Last day to add a class for the 2014 Spring Semester
- January 22 Wednesday Last day to officially withdraw from the University or reduce course load and receive an 80% refund.
- January. 20 Monday Martin Luther King Birthday Academic Holiday
- January 22 Wednesday Payment deadline of registration fees and/or housing and dining fees if total
 amount due is not paid as indicated on the account statement, a late payment fee of 1.25 percent of the
 amount past due will be assessed
- Feb. 5 Wednesday Last day to drop a course without it appearing on your transcript
- Feb. 5 Wednesday Last day to change grading option (credit to audit or audit to credit)
- February 12 Wednesday Last day to officially withdraw from the University or reduce course schedule and receive a 50 percent refund
- February 13 Thursday Last day to file an application for a May degree
- <u>February 28+ Friday Last day to withdraw from a course</u> Students may withdraw after this date only upon petition to the Dean's office specifying "reasons relating to extended illness or equivalent distress."
- March 1 Saturday Last day for submission of application for admission for 2013 Fall Semester
- March 17-22 Monday through Saturday Spring Vacation Academic Holidays
- March 31-April 22 Monday through Tuesday Priority Registration for the 2014 Summer Session and 2014
 Fall Semester
- April 25 Friday End of class work
- April 26-28 Saturday through Monday Law Examination Reading Period
- April 29-May 10 Tuesday through Saturday Law Final Examination Period
- May 9 Friday Law Commencement
- May 10 Saturday End of 2014 Spring Semester

UNIVERSITY OF KENTUCKY COLLEGE OF LAW CALENDAR 2014 SUMMER TERM

• June 12 - Thursday - Class work begins

- June 12 Thursday Last day a student may officially drop a course or cancel registration with the University
 Registrar for a full refund of fees
- June 13 Friday Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund
- June 13 Friday Last day to enter an organized class for the 2014 eight week summer session
- June 23 Monday Last day to change grading option (credit to audit or audit to credit)
- June 23 Monday Last day to drop a course without it appearing on student's transcript
- June 26 Thursday Last day to officially withdraw from the University or reduce course schedule and receive a
 50 percent refund
- June 27- Friday Last day to file an application for an August degree
- June 22 Payment Deadline
- July 4 Friday Independence Day Academic Holiday
- <u>July 7 Monday Last day to withdraw from a course</u> Students may withdraw after this date only upon petition to the Dean's office specifying "reasons relating to extended illness or equivalent distress."
- August 1 Friday End of class work
- August 2 and 3 Saturday & Sunday Law Examination Reading Period
- -Aug 4-7 Monday through Thursday Law Final Examination Period
- August 7 Thursday End of 2014 Summer Session

UNIVERSITY OF KENTUCKY COLLEGE OF MEDICINE 2011-2012 Academic Year

2011 Fall Semester

July 28 & 29 Thursday & Friday – Third-year general orientation August 1 Monday – Fourth-year rotations begin August 1 Monday – Last day for fourth-year students to withdraw from the College of Medicine for a full refund of tuition & fees August 1 Monday - First-year orientation begins August 1 Monday – Last day for first-year students to withdraw from the College of Medicine for a full refund of tuition & fees August 1 Monday – Third-year students begin rotations Monday - Last day for third-year students to withdraw from the College August 1 of Medicine for a full refund of tuition & fees August 8 Monday – Last day for first, third, and fourth-year students to withdraw from the College of Medicine and receive an 80% refund August 8 Second-year students begin classes August 8 Monday – Last day for second-year students to withdraw from the College of Medicine for a full refund of tuition & fees August 15 Monday - Last day for second-year students to withdraw from the College of Medicine and receive an 80% refund Monday – Tuition deadline for all students August 22 September 5 Monday - First and second-year students - LABOR DAY HOLIDAY September 21 Wednesday - Last day to withdraw from the College of Medicine and receive a 50% refund November 1 Last day for candidates applying to the College of Medicine to submit their application to AMCAS November 23-27 Wednesday-Sunday – First and second-year students – THANKSGIVING HOLIDAY December 17 Saturday – WINTER BREAK begins

UNIVERSITY OF KENTUCKY COLLEGE OF MEDICINE 2010-2011 Academic Year

2012 Spring Semester

January 3 January 3	Tuesday – All students register and return to class Tuesday – Last day to withdraw from the College of Medicine and receive a full refund
January 9	Monday – Last day to withdraw from the College of Medicine and receive an 80% refund
January 15	Last day for candidates applying to the College of Medicine to submit their supplemental application materials
January 16	Monday – First and second year students – MARTIN LUTHER KING JR'S BIRTHDAY HOLIDAY
January 22	Sunday – Tuition deadline for all students
February 8	Wednesday – Last day to withdraw from the College of Medicine and receive a 50% refund
Feb 27 – Mar 2	Monday-Friday – SPRING BREAK for first-year students
March 12-16	Monday-Friday – SPRING BREAK for second-year students
April 26 & 27	Thursday-Friday – MINI BREAK for first-year students
May 4	Friday – End of academic year for second-year students
May 11	Friday – End of academic year for fourth-year students
May 12	Saturday – College of Medicine Graduation
May 28	Monday – MEMORIAL DAY HOLIDAY for first-year students
June 29	Friday – End of academic year for first-year students
June 30	Monday – Special graduation date
July 13	Friday – End of academic year for third-year students
July 14, 16-20, 23-25	CPX Exam

Enrollment Dates

First Year	8/1/11 to 6/29/12	Winter Break	12/17/11 to 1/2/12
Second Year	8/8/11 to 5/4/12	Graduation	5/12/12
Third Year	7/28/11 to 7/13/12		
Fourth Year	8/1/11 to 5/11/12		

First Year 2011-2012

Aug. 1 - Aug. 5 Orientation

Aug. 8 - Nov. 4 Histology & Anatomy - MTWThF A.M.

Aug. 8 – June 26 Introduction to Clinical Medicine I – W P.M.

Aug. 22 Fall tuition deadline Sept. 5 Labor Day Holiday

Nov. 14 - Feb. 24 Biochemistry & Genetics - MTWRF A.M.

Nov. 14 – Apr. 25 Nutrition I - TBD Nov. 23 - 27 Thanksgiving Holiday

Dec. 17 – Jan. 2 Winter Break

Jan. 16 Martin Luther King, Jr. Day Holiday

Jan. 22 Spring tuition deadline

Feb. 27 – Mar. 2 Spring Break

Mar. 5 – Apr. 25 Neurosciences - MTWRF A.M.

Apr. 26 & 27 Mini-Break

Apr. 30 – June 30 Physiology - MTWRF A.M.

Second Year 2011-2012

Aug. 8 – Oct. 28 Immunity, Infection & Disease - MTWRF A.M.

Aug. 8 – Oct. 21 Introduction to Clinical Medicine II - TBD

Aug. 8 – May 4 Nutrition II - TBD
Aug. 22 Fall tuition deadline
Sept. 5 Labor Day Holiday

Oct. 20 – Apr. 26 Introduction to Clinical Medicine III - TBD Oct. 31 - May 4 Pathology and Pharmacology - MTWRF A.M.

Nov. 23 - 27 Thanksgiving Holiday

Dec. 17 – Jan. 2 Winter Break

Jan. 16 Martin Luther King, Jr. Day Holiday

Jan. 22 Spring tuition deadline Feb 29 – Mar. 9 Psychiatry - MTWRF A.M.

Mar. 12 - 16 Spring Break

May 4 End of Second Year

Third Year - 2011-2012

July 28 - July 13

July 14, 16-20, 23-25 CPX

Fourth Year 2011-2012

Aug 1 - Aug 26	Period 01
Aug 29 - Sept 23	Period 02
Sept 26 - Oct 21	Period 03
Oct 24 - Nov 18	Period 04
Nov 21 - Dec 30	Period 05

Includes: 4 week rotation

2 week Winter Break/Interviewing Break

Jan 3 – Jan 27 Period 06

Jan 30 – Feb 24 Period 07 Advanced Clinical Pharmacology & Anesthesiology

Feb 27 – Mar 23 Period 08 Mar 26 – Apr 20 Period 09

TBD Dean's Colloquium

May 12, 2012 Graduation

(updated 07/14/10)

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ZUNIVERSITY OF KENTUCKY COLLEGE OF MEDICINE 2013-2014 Academic Year

August 1 & 2	Thursday & Friday – Third-year general orientation
August 5 August 5	Monday – Fourth-year rotations begin Monday – Last day for fourth-year students to withdraw from the College of Medicine for a full refund of tuition & fees
August 5 August 5	Monday – First-year students begin orientation Monday – Last day for first-year students to withdraw from the College of Medicine for a full refund of tuition & fees
August 5 August 5	Monday – Third-year students begin rotations Monday – Last day for third-year students to withdraw from the College of Medicine for a full refund of tuition & fees
August 12	Monday – Last day for first, third, and fourth-year students to withdraw from the College of Medicine and receive an 80% refund
August 12 August 12 August 12	First-year students begin classes Second-year students begin classes Monday – Last day for second-year students to withdraw from the College of Medicine for a full refund of tuition & fees
August 19	Monday – Last day for second-year students to withdraw from the College of Medicine and receive an 80% refund
August 22	Monday – Tuition deadline for all students
September 2	Monday – First and second-year students – Labor Day Holiday
September 9	Monday – Last day to withdraw from the College of Medicine and receive a 50% refund
November 1	Last day for candidates applying to the College of Medicine to submit their application to AMCAS
Nov 27-Dec 1	Wednesday-Sunday – First and second-year students – Thanksgiving Holiday
December 21	Saturday – Winter Break begins

UNIVERSITY OF KENTUCKY COLLEGE OF MEDICINE 2013-2014 Academic Year

2014 Spring Semester

January 6 January 6	Monday – All students return to class Monday – Last day to withdraw from the College of Medicine and receive a full refund
January 13	Monday – Last day to withdraw from the College of Medicine and receive an 80% refund
January 15	Last day for candidates applying to the College of Medicine to submit their supplemental application materials
January 20	Monday – First and second year students – Martin Luther King Jr.'s Birthday Holiday
January 22	Wednesday – Tuition deadline for all students
February 3	Monday – Last day to withdraw from the College of Medicine and receive a 50% refund
March 3-7	Monday-Friday – Spring Break for first-year students
March 17-21	Monday-Friday – Spring Break for second-year students
May 1 & 2	Thursday-Friday – Mini Break for first-year students
May 2	Friday – End of academic year for second-year students
May 16	Friday – End of academic year for fourth-year students
May 17	Saturday – College of Medicine Graduation
May 26	Monday – Memorial Day Holiday for first-year students
June 30	Monday – Special graduation date
July 3	Thursday – End of academic year for first-year students
July 18	Friday – End of academic year for third-year students
July 19, 21-25, 28-30	CPX Exam

Enrollment Dates

First Year	8/5/13 to 7/3/14	Winter Break	12/21/13 to 1/5/14
Second Year	8/12/13 to 5/2/14	Graduation	5/17/14
Third Year	8/1/13 to 7/18/14		
Fourth Year	8/5/13 to 5/16/14		

Additional Information for UK University Senate on Implementation of New Gen Ed Program for Fall 2011

December 9, 2010

Motion on the Table: Approve implementation of the new General Education curriculum for Fall 2011.

At the November 8th meeting of the University Senate, an overview of General Education related to two central issues was presented. These issues are:

- 1. The Senate must be satisfied that all necessary resources, etc. are available for a new gen ed, with attention paid to a tentative implementation date of fall 2011.
- 2. The Senate expects that the process for forming a group to vet proposed gen ed courses will be approved by the Senate.

The original document provided for the November meeting is appended to this document.

Resources

As was indicated at the November 2010 meeting, the provost has set aside \$5,300,000, recurring, for hiring lecturers, targeted tenure-track faculty and TA lines to facilitate offering small classroom experiences in areas that traditionally have been characterized by large lectures with little interaction, and replacing part-time and adjunct instructors.

A question was raised regarding the source of this funding. The sources of this funding were provided by the Provost and are shown in the table below.

Source	Total Permanent Funding for Personnel
Tuition Revenue Increase	4,089,000
Provost Reallocation	1,211,000
Total	5,300,000

The tuition increase represents new dollars from the rate increase in tuition, coupled with slightly higher enrollment and higher student retention, all of which contribute to increased tuition revenue. Provost reallocations are derived from administrative reallocation of current dollars towards funding General Education.

A table was also presented showing the number of students per year that are slated to be served in each of the ten areas of gen ed for fall 2011. These numbers represent where we are now, and we expect continued growth in seats over time as faculty continue to submit courses.

Approval Process

Information relative to issue two was also presented, reminding Senate that they had already approved the Interim General Education Oversight Committee on May 3, 2010, with a two-year lifetime. As appointed by the Senate Council on May 11, 2010, the IGEOC charge is:

- Providing input and recommendations on issues that may arise as implementation of the new curriculum takes place.
- Reviewing proposed general education courses to ensure conformity with Senate-approved course templates for each of the 10 course areas. Final approval of courses will reside with the University Senate.
- Working collaboratively with the offices of Undergraduate Education and Assessment to ensure that assessment of the general education program meets the needs of program review and the needs and diverse activities of faculty teaching general education courses.
- Developing recommendations for the long-term oversight of the program, including periodic course review and program assessment to ensure that the program remains true to the learning outcomes
- Providing regular updates on General Education to the University Senate and the campus community.

A question was asked about the long-term oversight of general education, inquiring about approval and oversight process. Mullen responded that the current committee was commissioned for two years and that Senate would have ultimate approval of how Gen Ed is to be administered going forward. More detail was requested on how this might work.

IGEOC developed a course review and approval process during the summer of 2010. That process was vetted by Senate Council and approved for use for one year. This process is now being used successfully to review scores of courses to ensure that they meet the intent of General Education as codified in the Senate Approved Learning Outcomes and Course Templates. IGEOC faculty members are currently fully engaged in making all curricular decisions, and in developing curricular process and policy. However, IGEOC is aware of the need for a permanent process, one created and governed by faculty. IGEOC will provide a final proposal for structure and function of a General Education Oversight Committee to Senate not later than the September 2011 meeting. This proposal will include a focus on equitable representation by faculty through election processes, much like the current Graduate and Undergraduate Councils.

Over the past year, much work has occurred at many levels to allow us to implement a new and robust General Education Program. College faculty have developed many new and revised courses to meet the learning outcomes of the curriculum. The Provost has secured

the funding to make investments in the human capital needed to make the program a reality. And, a process has been put in place by faculty and Senate, through the Interim General Education Oversight Committee, that ensure we can evaluate course proposals and develop long-term oversight to make sure that the program remains true to the vision of the Senate for a new General Education program at UK.

Note: This document (pages 3-7) was provided prior to the First Reading on November 3.

General Education Program Information for University Senate November 3, 2010

Introduction

The University of Kentucky has been engaged in a lengthy and thoughtful conversation about its core curriculum, beginning with the 2004 review of the University Studies Program. After approving a set of Design Principles for a revised curriculum, in March 2008, the University Senate and the Provost jointly established a General Education Reform Steering Committee, whose recommended Learning Outcomes and Curricular Framework were approved by the University Senate at its December 8, 2008 meeting.

The learning outcomes adopted by the University Senate articulate the major components of a curricular framework for general education and the distribution of course work within each segment of that framework. And, general education in its new conception is to be integrated throughout the four years of study. The core courses are meant to create the foundation. Members of ten curricular faculty teams were appointed, each of which is associated with one of the ten courses within the adopted curricular framework. Each of the ten teams was composed both of specialists and non-specialists in the corresponding discipline, in order to ensure balance between rigorous disciplinary content and the central learning outcomes of the general education curriculum.

At the April 13, 2009 meeting of the University Senate, Provost Subbaswamy shared his estimate of the instructional cost differential associated with a move from the current University Studies Program to the proposed General Education program. The rationale for increased expense was to move to a model with smaller classes or large classes with break-out sessions, such as recitations, labs, etc. The agenda for that meeting also involved a First Reading of the curricular teams' recommended Course Templates, which established both the detailed learning outcomes and the assessment framework for each of the ten courses.

At the May 4, 2009 meeting, the final reading of the course templates occurred. Chair Randall indicated that

- 3. The Senate must be satisfied that all necessary resources, etc. are available for a new gen ed, with attention paid to a tentative implementation date of fall 2011.
- 4. The SC expects that the process for forming a group to vet proposed gen ed courses will be approved by the Senate.

After discussion, a vote was taken on the motion that the Senate approve the 10 course templates with an intended implementation date of fall 2011, subject to final confirmation by the University Senate of: 1) the implementation date; and 2) the process of vetting Gen Ed courses for inclusion during fall 2010. The motion passed in a show of hands with none opposed and one abstaining (Minutes of the May 4, 2009 Senate Meeting).

This document pulls together information to show that we are, indeed, ready to implement the new Gen Ed for Fall 2011. Following are discussions of: 1) financial considerations; 2) projected courses and seats; 3) course approval process; and 4) an overview of assessment processes.

1. Financial Considerations

At the April 13, 2009 Senate meeting, Provost Subbaswamy shared preliminary estimates of the cost of a new general education program built on the design principles and learning outcomes for this program as put forth by Senate. The estimate at that time was \$4.4 million. That estimate was based on the costs to hire tenure track faculty in strategic areas, to hire new lecturer lines to provide terminal degree faculty for general education teaching, and to add additional Teaching Assistant lines. The premise for these moves was to provide what our students deserve, a high quality educational experience with faculty and strategically placed Teaching Assistants and to reduce our dependence on courses taught by part-time instructors and too many TAs. We know now, that the cost to do this is higher than originally estimated. Provost Subbaswamy has set aside the required funds to do this though. The distribution of funding across the ten areas of General Education is shown in the table below.

Area of General Education	Total \$ Allocated	
Inquiry in Arts and Creativity	\$958,050	
Inquiry in Humanities	\$143,863	
Inquiry in Natural Sciences	\$575,644	
Inquiry in Social Sciences	\$540,094	
Composition and Communications		
Comp and Com I and II	\$1,721,320	
Quantitative Reasoning		
Quantitative Foundations	\$209,485	
Statistical Inferential Reasoning	\$264,718	
Citizenship		
Community, Culture and Citizenship in		
USA	\$895,280	
Global Dynamics		
Total Funding Allocated	\$5,308,455	

2. Projected Seats for General Education

During the past year, colleges have been working to develop new courses, or to revise existing courses, to meet the new Gen Ed program. The table below shows the approximate number of seats expected to be available for the 2011-2012 academic year. One can see that seats in Arts and Creativity and Global Dynamics are lower than the other areas. Over time, we anticipate growth in these areas as more faculty members determine how their courses can fit into each area.

Projected General Education Seats by Area

Area	Seats
Inquiry in Arts and Creativity	4200
Inquiry in Humanities	7080
Inquiry in Natural Sciences	9000
Inquiry in Social Sciences	7330
Composition and Communications I	4400
Composition and Communications II	4400
Quantitative Foundations	5900
Statistical Inferential Reasoning	4800
Community, Culture and Citizenship in USA	4500
Global Dynamics	3960

These numbers include seats in classes that have been approved and are to be submitted for approval as put forth by the Colleges. For a summary of courses that have been approved, see the Gen Ed website at http://www.ukv.edu/GenEd.

3. Course Approval Process:

Recall that at the May 2009 Senate meeting it was voted that prior to approval of the fall 2011 implementation, Senate wanted to be assured of "the process of vetting Gen Ed courses for inclusion during fall 2010."

At the September 14, 2009 Senate Meeting, the development of a series of vetting teams for the 2009-10 academic year was proposed in order to vet courses developed during the summer of 2009. The Vetting teams were appointed based on faculty elections and SC appointments. Senate then gave approval at the December 14, 2009 meeting for piloting courses in the spring based on the activities of the vetting teams. The teams remained active through May 2010 and made considerable progress in vetting and approving the Gen Ed content of the courses that had been submitted during that time.

The vetting teams were not intended to be permanent. To that end, the development of an oversight committee was necessary. Senate Council and the Office of Undergraduate Education worked collaboratively to develop the concept of the current Interim General Education Oversight Committee (IGEOC – more commonly referred to as simply GEOC).

On May 3, 2010, the University Senate authorized the appointment of the Interim General Education Oversight Committee (IGEOC). Senate Council Chair David Randall officially appointed this committee on May 11. The core of the committee is comprised of ten faculty members who represent, broadly, each of the 10 course template areas in the new Gen Ed. These 10 faculty members serve as a sub-committee of the Undergraduate Council (UGC) that

adheres to all academic approval processes of the faculty. The committee charge includes:

- Providing input and recommendations on issues that may arise as implementation of the new curriculum takes place.
- Reviewing proposed general education courses to ensure conformity with Senate-approved course templates for each of the 10 course areas. Final approval of courses will reside with the University Senate.
- Working collaboratively with the offices of Undergraduate Education and Assessment to ensure that assessment of the general education program meets the needs of program review and the needs and diverse activities of faculty teaching general education courses.
- Developing recommendations for the long-term oversight of the program, including periodic course review and program assessment to ensure that the program remains true to the learning outcomes
- Providing regular updates on General Education to the University Senate and the campus community.

GEOC will operate for a period of two years, from May 17, 2010 until May 15, 2012. The committee is chaired by Dr. William Rayens (Professor, Department of Statistics) who is serving a two-year appointment as Assistant Provost of General Education in the Office of Undergraduate Education.

Operationally, each GEOC member works with faculty referees who are chosen to review courses in each area. When the area expert, based on the input of the referees, recommends that a course be approved, the larger GEOC must approve it as well. GEOC also makes sure that syllabi meet Senate Guidelines and that course approval forms are in proper form. Once approved by GEOC, the proposals are then sent to the UGC. One member of GEOC, Dr. Ruth Beattie from Biology, is also appointed to UGC and has a long history of outstanding service to the Council. Dr. Beattie represents the Gen Ed courses to UGC for final approval prior to moving to Senate. The table below provides data on the number of courses that have already been submitted and vetted during the past 18 months. For an overview of the activities of GEOC, please see the Gen Ed website, http://www.uky.edu/GenEd.

Number of courses currently approved or in the approval process – As of Nov. 8, 2010

	2009/10 Vetting Cycle*	0 Vetting Cycle* 2010 GEOC Vetting	
Area	Courses Approved	Courses Submitted**	Courses Reviewed
Inquiry Humanities	8	19	4
Inquiry Arts and Creativity	5	12	8
Inquiry Social Sciences	6	3	3
Inquiry Natl/Math/Phys Sciences	8	11	2
Comp and Comm I	1	0	0
Comp and Comm II	0	1	1
Quantitative Foundations	1	3	3
Statistical Inferential Reasoning	1	1	1
Citizenship/Diversity	10	8	0
Global Dynamics	11	15	2
TOTAL	51	73	24

^{*}Not all 60 courses submitted in summer 2009 were vetted by the original committees and are being vetted by GEOC.

^{**31} of these were submitted on or after October 1st

4. Assessment:

Design Principle Seven states: "The curriculum will specify learning outcomes and the processes for both the systematic assessment of those learning outcomes and ongoing curricular improvement."

In order to assess the General Education Program, the Office of Assessment has developed an assessment plan that includes the following components:

- 1. Developing Student Learning Outcomes (SLO). The UK faculty has articulated four Senate approved SLO for our Gen Ed Program, under which the ten areas fit.
- 2. A mapping of courses in the program that address one or more SLO. As previously discussed, this is happening, as faculty submit courses for one of the ten areas of Gen Ed.
- 3. Identification of "authentic artifacts" from each course that can be used for assessment of the SLO. An "authentic artifact" for purposes of Gen Ed should be an assignment that is part of the course that will be administered and graded. Graded assignments help to ensure that students are serious about completing the work. These "artifacts" are collected from the course each semester, prior to grading, and stored in a database. The documents are stripped of class and student identifiers and are coded to reflect which SLO they relate to.
- 4. A random, stratified sample is chosen from the larger pool, packaged into groups of 10, and distributed to evaluators. Each packet of 10 will be evaluated at least twice.
- 5. "Artifacts" will be evaluated by holistic scoring using AAC&U VALUE rubrics.
- 6. After data analysis, results will be provided to a number of stakeholders, including GEOC. The data are used to evaluate the efficacy of the Gen Ed program, and to allow for improvement planning over time.

Assessment of Gen Ed, done well, and done consistently, will strengthen the program and prevent slippage away from our SLO. It is important that the process is one that is supported by faculty and is a strong collaboration between faculty governance and academic administration. Faculty, through GEOC and other avenues, will have input on evaluating the process, the rubrics used and improvement plans that impact Gen Ed curricula.