

3/23/2016 12:36:50 PNI

<u>dearn/ed</u>

Course Information

MAR 22 2016

Date Submitted: 2/25/2016

OFFICE OF THE

Current Prefix and Number: BMI - Biomedical Informatics, BMI 732 BIOMED ONTOLOGIES AND SEMANTIC WEB

Other Course:

Proposed Prefix and Number: BMI 732

What type of change is being proposed?

Major Change

Should this course be a UK Core Course? No

1. General Information

a. Submitted by the College of: PUBLIC HEALTH

b. Department/Division: Dept Of Biostatistics

c. Is there a change in 'ownership' of the course? Yes

If YES, what college/department will offer the course instead: College of Medicine

e. Contact Person

Name: Andrea Perkins

Email: andrea.perkins@uky.edu

Phone: 218-2021

Responsible Faculty ID (if different from Contact)

Name: Kathryn Cardarelli

Email: kathryn.cardarelli@uky.edu

Phone: 218-0241

f. Requested Effective Date

Semester Following Approval: Yes OR Effective Semester:

2. Designation and Description of Proposed Course

a. Current Distance Learning (DL) Status: Already approved for DL*

b. Full Title: BIOMEDICAL ONTOLOGIES AND SEMANTIC WEB TECHNIQUES

Proposed Title: Same

c. Current Transcript Title: BIOMED ONTOLOGIES AND SEMANTIC WEB

Proposed Transcript Title: Same



d. Current Cross-listing: none

Proposed - ADD Cross-listing:

Proposed - REMOVE Cross-listing:

e. Current Meeting Patterns

LECTURE: 3

Proposed Meeting Patterns

LECTURE: 3

f. Current Grading System: Graduate School Grade Scale

Proposed Grading System: Graduate School Grade Scale

g. Current number of credit hours: 3

Proposed number of credit hours: 3

h. Currently, is this course repeatable for additional credit? No

Proposed to be repeatable for additional credit? No

If Yes: Maximum number of credit hours:

If Yes: Will this course allow multiple registrations during the same semester? No

2i. Current Course Description for Bulletin: This course is a conceptual introduction to biomedical ontologies and ontological modeling in biomedicine through Semantic Web techniques. Students will learn about RDF, OWL, description logics, and SPARQL and their role in designing ontologies. Biomedical terminologies such as GO, ICD-9/10, SNOMED-CT, and MeSH will be discussed as case studies.

Proposed Course Description for Bulletin: Same

2j. Current Prerequisites, if any: Prereq: MA 123 (or equivalent) or consent of the instructor.

Proposed Prerequisites, if any:

2k. Current Supplementary Teaching Component:

Proposed Supplementary Teaching Component:

3. Currently, is this course taught off campus? No

Proposed to be taught off campus? No

If YES, enter the off campus address:

4. Are significant changes in content/student learning outcomes of the course being proposed? No

If YES, explain and offer brief rational:

5a. Are there other depts, and/or pgms that could be affected by the proposed change? Yes

If YES, identify the depts. and/or pgms: College of Medicine, Department of Internal Medicine

5b. Will modifying this course result in a new requirement of ANY program? No



If YES, list the program(s) here:

6. Check box if changed to 400G or 500: No

Distance Learning Form

Instructor Name:

Instructor Email:

Internet/Web-based: No

Interactive Video: No

Hybrid: No

1. How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University Senate Syllabus Guidelines, specifically the Distance Learning Considerations?

- 2. How do you ensure that the experience for a DL student is comparable to that of a classroom-based student's experience? Aspects to explore: textbooks, course goals, assessment of student learning outcomes, etc.
- 3. How is the integrity of student work ensured? Please speak to aspects such as password-protected course portals, proctors for exams at interactive video sites; academic offense policy; etc.
- 4. Will offering this course via DL result in at least 25% or at least 50% (based on total credit hours required for completion) of a degree program being offered via any form of DL, as defined above?

If yes, which percentage, and which program(s)?

- 5. How are students taking the course via DL assured of equivalent access to student services, similar to that of a student taking the class in a traditional classroom setting?
- 6. How do course requirements ensure that students make appropriate use of learning resources?
- 7.Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.
- 8. How are students informed of procedures for resolving technical complaints? Does the syllabus list the entities available to offer technical help with the delivery and/or receipt of the course, such as the Information Technology Customer Service Center (http://www.uky.edu/UKIT/)?
- 9.Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)? NO

If no, explain how student enrolled in DL courses are able to use the technology employed, as well as how students will be provided with assistance in using said technology.

- 10.Does the syllabus contain all the required components? NO
- 11.I, the instructor of record, have read and understood all of the university-level statements regarding DL.

Instructor Name:





SIGNATURE|ALHAYS0|Andrea L Perkins|BMI 732 CHANGE College Review|20160225 SIGNATURE|ZNNIKO0|Roshan N Nikou|BMI 732 CHANGE Graduate Council Review|20160322



May 4th, 2016

Andrew Hippisley
Chair, University of Kentucky Senate Council

Dear Dr. Hippisley,

We, the undersigned tenure and tenure-track faculty members of the Division of Biomedical Informatics (BMI), Department of Internal Medicine in the College of Medicine, support the proposed move of the following BMI courses from the Department of Biostatistics in the College of Public Health to the Division of Biomedical Informatics in the Department of Internal Medicine:

- BMI 633: Introduction to Bioinformatics
- BMI 730: Principles of Clinical Informatics
- BMI 731: Biomedical Information Retrieval
- BMI 732: Biomedical Ontologies and Semantic Web Techniques
- BMI 733: Biomedical Natural Language Processing
- BMI 734: Introduction to Biomedical Image Analysis
- BMI 735: Introduction to Biolmage Informatics

Sincerely,

Guznang, Professor

Wi Kcichat us hay n Radha Nagarajan, Associate Professor Sujin Kim, Associate Professor

Ramakanth Kavuluru, Assistant Professor

Division of Biomedical Informatics College of Medicine

Course Change Form

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	ments:							
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elete	e 6331 LOS BMI Cours		1					
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	1.	BMI - Biomed	ical Informatics		Proposed Prefix & Nu	ımber.		
	Current Prefix and Number:	BMI 732 BION	MED ONTOLOGIES AND SEMAN	TIC WEB	(example: PHY 401G)	BMI 732	
					Check if same as	current		
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ĺ				1 '	or - Add Distance Lear	-		
				L Mir 799 is	or - change in number to the same "hundred seri	within the same es"	hundred series, except	
±	What type of change is	being proposed	?	□Mir	Minor - editorial change in course title or description which does no change in content or emphasis			
	-			course	or - a change in prereque content or emphasis, of ificant alteration of the p	r which is made		
				l "	or - a cross listing of a		bed above	
	Should this course be a	LIK Core Cours	e2 Av & v.					
	If YES, check the area		or ores onto					
	Inquiry - Arts & Cre	ativity	Composition & Communicat	tions - II				
	☐Inquiry - Humanities	s	Quantitative Foundations					
	☐ Inquiry - Nat/Math/F	hys Sci	Statistical Inferential Reason	ning				
	Inquiry - Social Scie	ences	U.S. Citizenship, Communit	v. Diversity				
	Composition & Cor		· .					
	<u> </u>		C. Global Dynamics					
1.	General Information	1						
a.	Submitted by the College of: PUBLIC HEALTH Submission Date: 2/25/2016							
a.							3	
	Department/Division:	je of: PUBLIC			Submission L	Date: 2/25/2016		
b.	Department/Division:		Dept Of Biostatistics		Submission L	Date: 2/25/2016		
b.	Department/Division:	vnership" of the o	Dept Of Biostatistics	nstead? Colleg	e of Medicine	Date: 2/25/2010		
b.	Department/Division: Is there a change in "ow @ Yes O No If YES	vnership" of the o	Dept Of Biostatistics course? lepartment will offer the course in		e of Medicine			
b. c.*	Department/Division: Is there a change in "ov	vnership" of the o	Dept Of Biostatistics course? lepartment will offer the course in Andrea Perkins	Email: andre	e of Medicine a.perkins@uky.edu/Phon	e: 218-2021		
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			☑ N/A		Currently ³ Cre Number):	oss-listed with (Prefix &	none
	Proposed -	Proposed – ADD ² Cross-listing (Prefix & Number):					:
	Proposed -	REMOVE ^{3,4} Cross-listing	(Prefix & Numb	er):			
e,	Courses m	ust be described by <u>at le</u>	east one of the	neeting patterns belov	v. Include number of act	ual contact hours ⁵ for each	meeting patterr
Curr	Current: Lecture La		Laborat	огу <u>⁵</u>	Recitation	Discussion	Indep, Study
		Clinical	Colloqu	um	Practicum	Research	Residency
		Seminar	Studio		Other	Please explain:	
Prop	Proposed: * Lecture 3		Laborat	огу ⁵	Recitation	Discussion	Indep. Słudy
		Clinical	Colloqu	um	Practicum	Research	Residency
		Seminar	Studio		Other	Please explain:	
f.	Current Gr	ading System;		Graduate School Grade	Scale		
	Proposed Grading System: Proposed Grading System: Pass/Fail Medicine Numeric Grade (Non-medical students will receive a letter grade) Graduate School Grade Scale						
g.	Current nu	mber of credit hours:		3		Proposed number of credit hours:*	3
h.*	Currently,	is this course repeatable	for additional	redit?			○ Yes ⑨ No
*	Proposed to	o be repeatable for addition	nal credit?				○ Yes 🏵 No
	If YES:	Maximum numbe	r of credit hours:				:
	If YES:	Will this course a	llow multiple reg	strations during the san	ne semester?		○ Yes ○ No
	Current Course Description for Bulletin: This course is a conceptual introduction to biomedical ontologies and ontological modeling in biomedicine through Semantic Web techniques. Students will learn about RDF, OWL, description logics, and SPARQL and their role in designing ontologies. Biomedical terminologies such as GO, ICD-9/10, SNOMED-CT, and MeSH will be discussed as case studies.						
*	Proposed C	ourse Description for Bulle	etin:				
	Same						
j.		erequisites, if any:					
	Prereq: M	IA 123 (or equivalent) or consent	of the instructor.			
+	Proposed P	rerequisites, if any:					
**							
k.	Current Su	pplementary Teaching C	omponent, if ar	y:		ී Community-Based E	xperience

		© Service Learning ○ Both	
	Proposed Supplementary Teaching Component:	○ Community-Based Ex ○ Service Learning ○ Both ○ No Change	xperience
3.	Currently, is this course taught off campus?		○ Yes ⑨ No
*	Proposed to be taught off campus?		○ Yes ® No
	If YES, enter the off campus address;		
4.*	Are significant changes in content/student learning outcomes of the course being proposed?		○ Yes ⑨ No
	If YES, explain and offer brief rationale:		
5.	Course Relationship to Program(s).		
a.*	Are there other depts and/or pgms that could be affected by the proposed change?		® Yes ○ No
_	If YES, identify the depts, and/or pgms: College of Medicine, Department of Internal Medicine		
b.*	Will modifying this course result in a new requirement ^z for ANY program?		⊖ Yes ⑨ No
	If YES ^I , list the program(s) here:		
6.	Information to be Placed on Syliabus.		
a.	Check box if changed to 400G or 500. If changed to 400G or 500 or flexible to the graduate students by: (i) requiring additional assignments by the graduate students. (See SR 3.1.4.)	st include the differentiation udents; and/or (ii) establish	n between under ning different grad

ESee comment description regarding minor course change. Minor changes are sent directly from dean's office to Senate Council Chair. If Chair deems the change as "not minor," the form will i appropriate academic Council for normal processing and contact person is informed.

©Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received.

© Signature of the chair of the cross-listing department is required on the Signature Routing Log.

Removing a cross-listing does not drop the other course – it merely unfilties the two courses.

Generally, undergrad courses are developed such that one semester hr of credit represents 1 hr of classroom meeting per wk for a semester, exclusive of any lab meeting. Lab meeting gene least two hrs per wk for a semester for 1 credit hour. (See SR 5.2.1.)

You must also submit the Distance Learning Form in order for the course to be considered for DL delivery.

In order to change a program, a program change form must also be submitted.

Charles "Chipper" Henry Griffith, III, MD, MSPH Senior Associate Dean for Medical Education Professor of Internal Medicine and Pediatrics University of Kentucky College of Medicine Office of the Dean 800 Rose Street, MN 143 Lexington, KY 40536-9983

Dear Dr. Griffith:

The Division of Biomedical Informatics in the College of Public Health was dissolved in fall 2015, and the faculty that were formerly affiliated with that division have now transferred to the College of Medicine. The College of Public Health now proposes to transfer the following courses to the College of Medicine:

- BMI 633 Introduction to Bioinformatics
- BMI 730 Principles of Clinical Informatics
- BMI 731 Biomedical Information Retrieval
- BMI 732 Biomedical Ontologies and Semantic Web Techniques
- BMI 733 Biomedical Natural Language Processing
- BMI 734 Introduction to Biomedical Image Analysis
- BMI 735 Introduction to Bioimage Informatics

These courses are not required for any of our college's degree programs but will likely be of interest to your college as its new Division of Biomedical Informatics, under the leadership of Dr. Zhang, continues to develop. Thank you for considering our proposal.

Sincerely,

Kathryn M. Cardarelli, Ph.D.
Associate Dean for Academic and Student Affairs
College of Public Health
University of Kentucky



February 22, 2016

Kathryn M. Cardarelli, Ph.D. Associate Dean for Academic and Student Affairs University of Kentucky College of Public Health 111 Washington Ave., Suite 120 Lexington, KY 40536 Office of Medical Education
Vice Dean for Education
800 Rose Street, MN 104 UKMC
Lexington, KY 40536-0298
(859) 257-5286
www.mc.uky.edu

Dear Dr. Cardarelli:

Given the transfer of the Division of Biomedical Informatics faculty from the College of Public Health to the College of Medicine in fall 2015, the College of Medicine is supportive of your proposal to transfer the following courses to the College of Medicine:

- BMI 633 Introduction to Bioinformatics
- BMI 730 Principles of Clinical Informatics
- BMI 731- Biomedical Information Retrieval
- BMI 732 Biomedical Ontologies and Semantic Web Techniques
- BMI 733 Biomedical Natural Language Processing
- BMI 734 Introduction to Biomedical Image Analysis
- BMI 735 Introduction to Bioimage Informatics

Thank you for your efforts in the transfer of these courses.

Sincerely,

Charles H. Griffith, III, MD, MSPH
Professor of Internal Medicine and Pediatrics
Vice Dean for Education
University of Kentucky College of Medicine