NEW COURSE FORM

Signature Routing Log

General Information:

Course Prefix and Number: IS 402

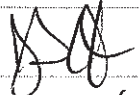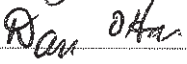Proposal Contact Person Name: Jeffrey Huber   Phone: 859-257-2334   Email: jeffrey.huber@uky.edu

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
SCIS Faculty	2/4/11	Jeff Huber /7334/ jeffrey.huber@uky.edu	*(signature)*
Dean, CCIS	2/22/11	Dan O'Hair /218-0290 / ohair@uky.edu	Dan OHair
		/	
		/	
		/	

External-to-College Approvals:

Council	Date Approved	Signature	Approval of Revision[6]
Undergraduate Council	3/22/2011	Sharon Gill Digitally signed by Sharon Gill DN: cn=Sharon Gill, o=Undergraduate Education, ou=Undergraduate Council, email=sgill@uky.edu, c=US Date: 2011.04.14 11:45:30 -04'00'	
Graduate Council			
Health Care Colleges Council			
Senate Council Approval		University Senate Approval	

Comments:

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

Rev 8/09

NEW COURSE FORM

1.	**General Information.**		
a.	Submitted by the College of: Communications and Information Studies	Today's Date:	2/4/11

b.	Department/Division: School of Library & Information Science

c.	Contact person name: Jeffrey T Huber	Email:	jeffrey.huber@uky.edu	Phone:	859-257.2334

d.	Requested Effective Date: ☐ Semester following approval OR ☒ Specific Term/Year[1] : Fall 2011

2.	**Designation and Description of Proposed Course.**

a.	Prefix and Number: IS 404

b.	Full Title: Health Informatics

c.	Transcript Title (if full title is more than 40 characters): _____

d.	To be Cross-Listed[2] with (Prefix and Number): _____

e.	Courses must be described by <u>at least one</u> of the meeting patterns below. Include number of actual contact hours[3] for each meeting pattern type.

3.0 Lecture	_____ Laboratory[1]	_____ Recitation	_____ Discussion	_____ Indep. Study
_____ Clinical	_____ Colloquium	_____ Practicum	_____ Research	_____ Residency
_____ Seminar	_____ Studio	_____ Other – Please explain: _____		

f.	Identify a grading system: ☒ Letter (A, B, C, etc.) ☐ Pass/Fail

g.	Number of credits: 3

h.	Is this course repeatable for additional credit?	YES ☐ NO ☒
	If YES: Maximum number of credit hours: _____	
	If YES: Will this course allow multiple registrations during the same semester?	YES ☐ NO ☐

i.	Course Description for Bulletin:	Provides an overview of health care information systems, legal and ethical issues in health care, compliance and regulatory requirements, coding of health care data, quality management, HL7, data security, and HIPAA. Explores major applications and commercial vendors, decision support methods, evaluation of health-care information systems; and new opportunities and emerging trends.

j.	Prerequisites, if any: IS 201, IS 202

k.	Will this course also be offered through Distance Learning?	YES[4] ☒ NO ☐

l.	Supplementary teaching component, if any: ☐ Community-Based Experience ☐ Service Learning ☐ Both

3.	**Will this course be taught off campus?**	YES ☐ NO ☒

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

[2] The chair of the cross-listing department must sign off on the Signature Routing Log.

[3] In general, undergraduate courses are developed on the principle that one semester hour of credit represents one hour of classroom meeting per week for a semester, exclusive of any laboratory meeting. Laboratory meeting, generally, represents at least two hours per week for a semester for one credit hour. (from *SR 5.2.1*)

[4] You must *also* submit the Distance Learning Form in order for the proposed course to be considered for DL delivery.

Rev 8/09

NEW COURSE FORM

4.	**Frequency of Course Offering.**	
a.	Course will be offered (check all that apply): ☐ Fall ☒ Spring ☐ Summer	
b.	Will the course be offered every year?	YES ☒ NO ☐
	If NO, explain:	

5.	**Are facilities and personnel necessary for the proposed new course available?**	YES ☐ NO ☒
	If NO, explain:	Course is part of a proposed new minor in Information Studies. The proposal for the new minor includes a timeline for bringing new courses and new faculty positions on line to support the minor.

6.	**What enrollment (per section per semester) may reasonably be expected?** 25

7.	**Anticipated Student Demand.**	
a.	Will this course serve students primarily within the degree program?	YES ☒ NO ☐
b.	Will it be of interest to a significant number of students outside the degree pgm?	YES ☒ NO ☐
	If YES, explain:	Under new general education requirements, it is our belief that more students will be looking for appropriate electives to take. Information Studies will be relevant to most majors as information - storage, access and retrieval - will become an ever important commodity.

8.	**Check the category most applicable to this course:**
	☐ Traditional – Offered in Corresponding Departments at Universities Elsewhere
	☒ Relatively New – Now Being Widely Established
	☐ Not Yet Found in Many (or Any) Other Universities

9.	**Course Relationship to Program(s).**	
a.	Is this course part of a proposed new program?	YES ☒ NO ☐
	If YES, name the proposed new program: Information Studies Minor	
b.	Will this course be a new requirement[5] for ANY program?	YES ☐ NO ☒
	If YES[5], list affected programs:	

10.	**Information to be Placed on Syllabus.**	
a.	Is the course 400G or 500?	YES ☐ NO ☒
	If YES, the *differentiation for undergraduate and graduate students must be included* in the information required in **10.b**. You must include: (i) identification of additional assignments by the graduate students; and/or (ii) establishment of different grading criteria in the course for graduate students. (See *SR 3.1.4*.)	
b.	☐ The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable, from **10.a** above) are attached.	

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

Distance Learning Form

This form must accompany <u>every</u> submission of a new/change course form that requests distance learning delivery. This form may be required when changing a course already approved for DL delivery. **All fields are required!**

<u>Introduction/Definition</u>: For the purposes of the Commission on Colleges Southern Association of Colleges and Schools accreditation review, *distance learning* is defined as a formal educational process in which the majority of the instruction (interaction between students and instructors and among students) in a course occurs when students and instructors are not in the same place. Instruction may be synchronous or asynchronous. A distance learning (DL) course may employ correspondence study, or audio, video, or computer technologies.

A number of specific requirements are listed for DL courses. **The *department* proposing the change in delivery method is responsible for ensuring that the requirements below are satisfied at the individual course level.** It is the responsibility of the instructor to have read and understood the university-level assurances regarding an equivalent experience for students utilizing DL (available at http://www.uky.edu/USC/New/forms.htm).

Course Number and Prefix: IS404	Date: 2/4/2011
Instructor Name: Not known	Instructor Email: for contact please use jeffrey.huber@uky.edu

Check the method below that best reflects how the majority of course of the course content will be delivered.
Internet/Web-based ☒　　　Interactive Video ☐　　　Hybrid ☐

	Curriculum and Instruction
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? Daily interaction will be possible through Blackboard discussion boards and email. Syllabus conforms to Senate guidelines. Syllabus includes statement on timliness of response to email inquiries.
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. Many items from traditional face to face courses will remain intact for this class including appropriate text and course goals. Assessment will be accomplished through similarly appropriate assignments such as papers, projects and course participation. Additionally, course will make use of online tools such as discussion boards, email, Adobe Connect, Flash video presentations and other communication methods to improve the overall experience.
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. Each student's Blackboard account is tied into their myUK account. Assignments, such as papers, will be handled much the same as they would in a face to face course in terms of being evaluated for possible issues in regards to the academic offense policy. Quizzes and exams will be given via Blackboard and myUK, which require secure password authentication. All exams will consist of random ordering of questions in a category and random ordering of answers for questions, helping to prevent copying from one computer to another. Quizzes and exams will be open book, and timed, to assure that all students have the same opportunities for success. Written work will be read closely for evidence of plagiarism and appropriate tools will be used to check for this. (e.g., SafeAssign).
4.	Will offering this course via DL result in at least 25% or at least 50%* (based on total credit hours required for

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	completion) of a degree program being offered via any form of DL, as defined above?
	Yes. The School of Library & Information Science is proposing a new undergraduate minor in Information Studies. The entire minor will be available online.
	If yes, which percentage, and which program(s)?
	100%; IS (proposed undergraduate minor)
	*As a general rule, if approval of a course for DL delivery results in 50% or more of a program being delivered through DL, the effective date of the course's DL delivery will be six months from the date of approval.
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?
	Since our program has long had remote students (primarily around Louisville and northern Kentucky), we have much experience in making student services as accessible as possible. Our program uses a listserv for program annoucements and we employ a full-time student affairs officer who regularly communicates with our students, regardless of location. We've also begun a Blackboard organization to further assist in providing student services to remote participants. Additionally, we encourage students to use services such as Distance Learning Libary Services when appropriate. We anticipate doing similar things for students in this proposed minor.
	Library and Learning Resources
6.	How do course requirements ensure that students make appropriate use of learning resources?
	In order to successfully complete assignments such as class participation, quizzes and projects, students will have to use their textbook, course readings and supplementary materials available through UK Libraries.
7.	Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.
	Students will not require access to equipment outside of a personal computer and appropriate software. Students will primarily use the services of UK's Distance Learning, UK Distance Learning Library and electronic access to UK Libraries.
	Student Services
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 Teaching and Academic Support Center (http://www.uky.edu/TASC/index.php) and the Information Technology Customer Service Center (http://www.uky.edu/UKIT/)?
	Students are informed via the syllabus and given contact information for technical issues.
9.	Will the course be delivered via services available through the Teaching and Academic Support Center?
	Yes ☒
	No ☐
	If no, explain how students 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.

Abbreviations: TASC = Teaching and Academic Support Center   DL = distance learning   DLP = Distance Learning Programs

Distance Learning Form

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10.	Does the syllabus contain all the required components, below? ☒ Yes
	☐ Instructor's *virtual* office hours, if any.
	☐ The technological requirements for the course.
	☐ Contact information for TASC (http://www.uky.edu/TASC/; 859-257-8272) and Information Technology Customer Service Center (http://www.uky.edu/UKIT/; 859-257-1300).
	☐ Procedure for resolving technical complaints.
	☐ Preferred method for reaching instructor, e.g. email, phone, text message.
	☐ Maximum timeframe for responding to student communications.
	☐ Language pertaining academic accommodations:
	o "If you have a documented disability that requires academic accommodations in this course, please make your request to the University Disability Resource Center. The Center will require current disability documentation. When accommodations are approved, the Center will provide me with a Letter of Accommodation which details the recommended accommodations. Contact the Disability Resource Center, Jake Karnes, Director at 859-257-2754 or jkarnes@email.uky.edu."
	☐ Information on Distance Learning Library Services (http://www.uky.edu/Libraries/DLLS)
	o Carla Cantagallo, DL Librarian
	o Local phone number: 859 257-0500, ext. 2171; long-distance phone number: (800) 828-0439 (option #6)
	o Email: dllservice@email.uky.edu
	o DL Interlibrary Loan Service: http://www.uky.edu/Libraries/libpage.php?lweb_id=253&llib_id=16
11.	I, the instructor of record, have read and understood all of the university-level statements regarding DL.
	Instructor Name: TBD Instructor Signature:

IS 404
Health Informatics

Course Information:

Meeting Time/Location: Online
Course Web Site

Instructor Information:

Name
Office location
Phone number
Email address
Office Hours
Preferred Contact Method
Response time: If you email me, you should expect a response with 24 hours. There may be a delay over weekends or holidays.

Provides an overview of health care information systems, legal and ethical issues in health care, compliance and regulatory requirements, coding of health care data, quality management, HL7, data security, and HIPAA. Explores major applications and commercial vendors, decision support methods, evaluation of health-care information systems; and new opportunities and emerging trends.

Prerequisite: IS 201, IS 202

Course Goals

This course is designed to achieve the following goals:

- Demonstrate a working knowledge of health care information systems
- Demonstrate knowledge of legal and ethical issues in health care.
- Be familiar with compliance and regulatory requirements.
- Recognize existing and potential problems in health care data coding and devise strategies to resolve them.
- Demonstrate knowledge of HIPPA and data security procedures
- Analyze health information problems and develop solutions, drawing from a wide range of information technology tools and practices.

Learning Outcomes

In achieving these learning outcomes, students will:

- Describe the national health situation
- Define health informatics and list different examples of IT applications in Health and Medicine
- Describe health information systems and their components
- List open source software alternatives for office productivity and content management
- Define the important stages in developing information systems, and describe the major outputs in each stage
- Describe application of database and data mining technologies in health context
- Propose a health information system solution for a given community

Textbooks

Tan, Joseph. (2009). *Medical Informatics: Concepts, Methodologies, Tools, and Applications.* Information Science Reference.

Tan, Joseph. (2005). *E-Health Care Information Systems: An Introduction for Students and Professionals.* Jossey-Bass.

Exams and Assignments

Quizzes, Assignments, Class Activities (30%)
This includes a mix of online activities such as class and group discussions and hands-on exercises on web and database development.

Projects (30%)
Students will be asked to apply lessons where they will design, create and implement an information system solution for a given health community.

Exams (40%)
Midterm and final examinations will be given to all students.

Course Grade

Course grades are assigned according to the following criteria.

Course Grade	Percentage
A	90% or better
B	80 – 89%
C	70 – 79%
D	60 – 69%
E	Below 60%

Policies

Attendance and Participation

Though this is a distance learning course, we will rely heavily on class discussion as we discover methods of research and inquiry. You are expected to check the Blackboard site at least twice a week and to be prepared with questions and comments about the readings. Engaged and respectful discussion is necessary for the success of this class. An absence in this class is a week of no activity on Blackboard. Any student who misses more than 1/5 of the class will automatically fail the course.

Excused Absences and Verification

Please refer to Student Rights and Responsibilities, Part II, Section 5.2.4.2 (http://www.uky.edu/StudentAffairs/Code/part2.html) for UK's policy on excused absences. You can request verification for excused absences.

Excused absences include (as defined at the web site above):
- Significant illness of student or serious illness of household member or immediate family
- Death of a household member or immediate family
- Trips for members of student organizations, class excursions or participation in intercollegiate athletic events
- Major religious holidays
- Any other circumstance that the instructor finds reasonable cause for nonattendance

Academic Accommodations

If you have a documented disability that requires academic accommodations, please see me as soon as possible. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, jkarnes@uky.edu) for coordination of campus disability services available to students with disabilities. We can then collaborate on the best solution.

Academic Integrity, Cheating and Plagiarism

You are expected to submit your own original work for all assignments in this course. See the home page for the Office of Academic Ombud Services (http://www.uky.edu/Ombud) for a definition of plagiarism, how to avoid plagiarism and UK's new academic offense policy.

Please refer to Student Rights and Responsibilities, Part II, Section 6.3 (http://www.uky.edu/StudentAffairs/Code/part2.html) for UK's policy on academic integrity.

Classroom Behavior, Decorum and Civility

Please be respectful to others in the class and engage in civil discourse when we discuss topics that have a diversity of perspectives. Please help me maintain the most courteous environment by using a little peer pressure if necessary. Thank you.

TECHNOLOGY INFORMATION & RESOURCES

Distance Learning Students are expected to have a minimum level of technological acumen and the availability of technological resources. Students must have regular access a computer with a reliable Internet connection and audio capabilities. Internet Explorer 7 (IE) or Firefox 2.x are the recommended browsers for those using a Windows-based PC. Those using Firefox 3.x may encounter problems with assignment uploads. Those using an Apple computer with MAC OS X (10.5.x) may use Firefox 3.x or Safari 3.x.

Please be certain that your computer and/or browser allow you to view Adobe Reader documents (.pdf). Microsoft Office and other software products are free for students: https://iweb.uky.edu/MSDownload/.

As your instructor, I am your first go-to person for technology problems. If you need more immediate assistance, please contact TASC or UKIT.

Teaching and Learning Services Center (TASC)
http://www.uky.edu/TASC/; 859-257-8272

Information Technology Customer Service Center (UKIT)
http://www.uky.edu/UKIT/; 859-257-1300

Library Services

Distance Learning Services
http://www.uky.edu/Libraries/DLLS
        Carla Cantagallo, DL Librarian
        Local phone number: 859 257-0500, ext. 2171; long-distance phone number:
(800) 828-0439 (option #6)
        Email: dllservice@email.uky.edu
        DL Interlibrary Loan Service:
http://www.uky.edu/Libraries/libpage.php?lweb_id=253&llib_id=16

General Course Policies
Policies concerning academic integrity, excused absences and academic accommodations due to disability are available online at:
http://www.uky.edu/CIS/SLIS/academics/policies.pdf

Course Schedule

TOPIC	LEARNING OBJECTIVES	ACTIVITIES	STUDENT OUTPUT
Introduction to Health Informatics Weeks 1 - 2	List the different disciplines under health informatics and cite examples of applications for each List different examples of IT applications in Health and Medicine List trends in IT applications in Health and Medicine	Class Discussion Internet Research on IT application in Health and Medicine, Online Discussion on Health informatics	Internet Research Report Online Discussion entry
U.S. Health Care System Weeks 3 - 4	Describe the national health situation	Class Discussion Internet Research U.S. Health and Medicine, Online Discussion on Health informatics	Internet Research Report Online Discussion entry Health Information System Proposal
Information Systems Fundamentals Weeks 5 - 7	Describe health information systems and their components Define appropriate alternatives in technology components of an information system	Lecture Class Discussion Case Analysis	Hardware/Software proposal
Information Systems Development Weeks 8 - 10	Describe the different stages of systems development process List the different common approaches in developing information systems Describe the major outputs in the systems development phases	Lecture Class Discussion Hands-On: Screen Design	Screen Design Health Information System prototype for a community

Managing Health Information Weeks 11 - 13	Design and create a simple database Define data mining Identify pertinent coding issues	Lecture Class and Online Discussions Internet Research Database Design and	Database Design and Prototype
Security and Ethical Issues Weeks 13 - 15	Discuss major security and ethical issues related to use of health information system	Lecture Class Discussion Hands-On: Database Design and Development	
Final Exam Week			Final Exam