



**Graduate Curriculum Committee Course Proposal Form
for Courses Numbered 5000 and Higher**

Note: Before completing this form, please carefully read the accompanying instructions.

Submission guidelines are posted to the GCC Web site: <http://www.ecu.edu/cs-acad/gcc/index.cfm>

1. Course prefix and number: COHE 6550 2. Date: 08/13/2014

3. Requested action:

| | | | | |
|-------------------------------------|---|---|----------|---|
| <input checked="" type="checkbox"/> | New Course | | | |
| | Revision of Active Course | | | |
| | Revision & Unbanking of a Banked Course | | | |
| | Renumbering of an Existing Course from | | | |
| | from | # | to | # |
| <input checked="" type="checkbox"/> | Required | | Elective | |

4. Method(s) of delivery (check all boxes that apply for both current/proposed and expected future delivery methods within the next three years):

**Current or
Proposed Delivery
Method(s):**

**Expected
Future Delivery
Method(s):**

| | | |
|-------------------------------------|---|-------------------------------------|
| <input checked="" type="checkbox"/> | On-campus (face to face) | <input checked="" type="checkbox"/> |
| | Distance Course (face to face off campus) | |
| <input checked="" type="checkbox"/> | Online (delivery of 50% or more of the instruction is offered online) | <input checked="" type="checkbox"/> |

5. **Justification.** Identify the committee or group (e.g., Graduate faculty of the Department of English) that conducted the assessment of curriculum and student learning. Explain why the unit wishes to offer or revise the course. Include specific results from the unit assessment that led to the development or modification of the course. If applicable, cite any accrediting agency/ies and reference the specific standard/s. Indicate the graduate faculty of your unit have reviewed and approved this proposal.

Assessing Group:
The assessing group is the graduate faculty in the Department of Health Services and Information Management.

Necessity of the course:
Currently, two external (to our department) courses (MIS 6843 and SENG 6230) are required for the thesis and non-thesis (*now combined as "health informatics"*) and one (MIS 6843) for the RHIA tracks of the MS in Health Informatics and Information Management degree. After reviewing both syllabi, it has been determined that: (1) there is significant overlap in the two courses, (2) the subject matter is taught from a perspective and level inconsistent with our students' backgrounds, and (3) the unique

challenges facing health care professionals in these areas are not being addressed. Furthermore, as we currently seek accreditation from the *Commission on Accreditation for Health Informatics and Information Management (CAHIIM)*, control over content is paramount. Therefore, the graduate faculty has decided to combine these two to form the proposed, internally offered course.

Accreditation Standards:

CAHIIM – Health Informatics Master’s Degree (pertains to all three tracks)

- Facet I.2 – Health information systems characteristics, strengths, and limitations
- Facet I.11 – Information security practices
- Facet I.12 – Management of information systems including life cycle analysis, system design, planning methods, and tools
- Facet I.17 – Project planning and management
- Facet II.5 – Clinical data and clinical process modeling (such as UML-Unified Modeling Language, UP-Unified Process)
- Facet III.3 – Software applications: design, development, and use
- Facet III.9 – Health information technology: systems architecture, database design, and data warehousing (emphasis of systems architecture)

CAHIIM – AHIMA Curriculum Competencies and Knowledge Clusters for Health Information Management (HIM) Education at the Baccalaureate Degree Level (allows the graduate of the RHIA track to sit for the RHIA credentialing exam)

- Domain IV.B – Information Systems: Systems Development Life Cycle
- Domain IV.B – Information Systems: Project Management

The graduate faculty in the department reviewed and approved the course proposal on August 5, 2014.

6. Course description exactly as it should appear in the next catalog:

6550. Health Informatics Project Design and Management (3) P/C: HIMA 6060 or consent of instructor. Information systems analysis and design and software engineering principles for health care related projects.

7. If this is a course revision, briefly describe the requested change:

N/A

8. Course credit:

| | | | | | | | | |
|---|---|--------|-----------|--|----------|--------------|---|------|
| Lecture Hours | 3 | Weekly | <u>OR</u> | | Per Term | Credit Hours | 3 | s.h. |
| Lab | | Weekly | <u>OR</u> | | Per Term | Credit Hours | | s.h. |
| Studio | | Weekly | <u>OR</u> | | Per Term | Credit Hours | | s.h. |
| Practicum | | Weekly | <u>OR</u> | | Per Term | Credit Hours | | s.h. |
| Internship | | Weekly | <u>OR</u> | | Per Term | Credit Hours | | s.h. |
| Other (e.g., independent study) Please explain. | | | | | | | | s.h. |
| Total Credit Hours | | | | | | | 3 | s.h. |

9. Anticipated annual student enrollment:

25

10. Changes in degree hours of your programs:

| Degree(s)/Program(s) | Changes in Degree Hours |
|--|-------------------------|
| MS in Health Informatics and Information Management – thesis and non-thesis tracks | Reduced by 3 SCH. |
| MS in Health Informatics and Information Management – RHIA track | No change in SCH. |

11. Affected degrees or academic programs, other than your programs:

| Degree(s)/Program(s) | Changes in Degree Hours |
|----------------------|-------------------------|
| None | |

12. Overlapping or duplication with affected units or programs:

| | |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | Not applicable |
| | Documentation of notification to the affected academic degree programs is attached. |

13. Council for Teacher Education (CTE) approval (for courses affecting teacher education):

| | |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | Not applicable |
| | Applicable and CTE has given their approval. |

14. Service Learning Committee (SLC) approval:

| | |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | Not applicable |
| | Applicable and SLC has given their approval. |

15. Statements of support:

a. Staff

| | |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | Current staff is adequate |
| | Additional staff is needed (describe needs in the box below): |
| | |

b. Facilities

| | |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | Current facilities are adequate |
| | Additional facilities are needed (describe needs in the box below): |
| | |

c. Library

| | |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | Initial library resources are adequate |
| | Initial resources are needed (in the box below, give a brief explanation and an estimate for the cost of acquisition of required initial resources): |
| | |

d. Unit computer resources

| | |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | Unit computer resources are adequate |
| | Additional unit computer resources are needed (in the box below, give a brief explanation and an estimate for the cost of acquisition): |
| | |

e. ITCS resources

| | |
|----------|--|
| X | ITCS resources are not needed |
| | The following ITCS resources are needed (put a check beside each need): |
| | Mainframe computer system |
| | Statistical services |
| | Network connections |
| | Computer lab for students |
| | Software |
| | <i>Approval from the Director of ITCS attached</i> |

16. Course information (see: *Graduate Curriculum and Program Development Manual for instructions*):

a. Textbook(s) and/or readings: author(s), name, publication date, publisher, and city/state/country. Include ISBN (when applicable).

Hoffer, Jeffrey A., George, Joey, Valacich, Joe. *Modern Systems Analysis and Design* (7th ed.). Prentice Hall, 2013. ISBN-10: 0132991308 or ISBN-13: 978-0132991308.

Current journal articles will be assigned to supplement the readings.

b. Course objectives for the course (student – centered, behavioral focus)

Upon completion of this course, students will be able to:

1. Describe healthcare information systems characteristics, strengths, and limitations
2. Summarize systems architecture as applied to healthcare information systems
3. Relate healthcare laws and regulations to the systems and software design process, focusing on data, hardware, and software considerations
4. Evaluate a systems development process using the Systems Development Life Cycle (SDLC) and a software development process using the Unified Process (UP)
5. Apply SDLC and UP techniques to systems analysis and design and software development respectively
6. Construct Unified Modeling Language (UML) models and Gantt charts in support of systems and software design and development projects
7. Apply project planning and management techniques to systems and software design scenarios
8. Implement and maintain an information system
9. Develop, test, deploy, and maintain a software engineering project

c. Course topic outline

The list of topics should reflect the stated objectives.

1. Introduction to Systems Analysis and Design and Software Engineering
2. Elements of healthcare information systems
3. Healthcare laws and regulations
4. Systems Development Life Cycle and the Unified Process
5. Designing systems and software using the SDLC and UP models
6. Requirements analysis, modeling (UML), and planning (time (Gantt) and cost estimation) projects
7. Planning and managing projects

8. Implementing and maintaining systems
9. Developing, testing, deploying, and maintaining software

d. List of course assignments, weighting of each assignment, and grading/evaluation system for determining a grade

Students will be required to complete the following four areas of graded material. The team project will include multiple deliverables (milestones) throughout the semester, culminating in a final report and presentation. Each individual will be responsible for contributing to weekly discussion board postings.

| | | |
|------------------------|--------------|-------|
| 1. Exams | 2 @ 25% each | 50% |
| 2. Homework | 2 @ 5% each | 10% |
| 3. Team project | | 30% |
| 4. Class participation | | 10% |
| | | <hr/> |
| | | 100% |

Grading scale:

- A 90-100%
- B 80-89%
- C 70-79%
- F Below 70%