Full Program Proposal

Master of Science in Informatics

Information Resources Management Track
Health Information Management Track

To be offered by the

College of Arts and Sciences

Of the

University of South Carolina Upstate

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Dr. Thomas F. Moore, Chancellor

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Dr. Harris Pastides, President

October, 2011
(revised September 2012)

Program Contact:
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Contents

1 Classification

Name: Master of Science in Informatics
                     Track 1: Health Information Management
                     Track 2: Information Resource Management

Academic Unit: Department of Informatics, College of Arts and Sciences
                     http://www.uscupstate.edu/informatics

Implementation: Fall, 2013

CIP Code: 51.2706 (healthcare informatics)
                     52.1206 (information resource management)

Identification: New program.

Designation: Master's degree requiring a minimum of thirty (30) credit hours
                     beyond the baccalaureate degree including six (6) credit hours
                     of independent study or thesis. The program does not qualify for
                     supplemental Palmetto Fellows Scholarship and LIFE scholarship
                     awards.

Delivery: Blend (Traditional and Internet)

2 Institutional Approval

Dr. Ron Fulbright
Chair
Department of Informatics
University of South Carolina Upstate

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Date

Dr. Dirk Schlingmann
Dean
College of Arts and Sciences
University of South Carolina Upstate

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Date

Dr. Charles Harrington
Executive Vice Chancellor
University of South Carolina Upstate

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Date

Dr. Thomas Moore
Chancellor
University of South Carolina Upstate

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Date

3 Purpose

As an academic discipline, *informatics* involves the study of information and the application of information technology to the acquisition, processing, management, and utilization of information. The past thirty (30) years have seen all aspects of business, and life in general, become increasingly dependent on information technology (IT) and electronic processing of information. IT and information management have become the lifeblood of organizations and affect almost every job. Many employees today are *information workers* (even if their job title does not officially reflect the role) whose daily job duties require the usage of an array of information and communication technologies as well as information management and processing practices, procedures, and methodologies. The design, procurement, implementation, maintenance, and evolution of information-based resources are collectively known as *information resource management.* The mission of the Department of Informatics is to prepare professionals with a multi-disciplinary education rich in information technology, information management, business, and communication—skills the information resource management job market is looking for in today's graduates.

Student Learning Outcome

Upon graduation from the Master of Science in Informatics program, students will be able to: envision and plan information management systems, solutions, structures, and processes, insure legal and regulatory compliance, and utilize information management resources to analyze and transform information into knowledge creating competitive advantage for the business or organization.

4 Justification

Need for the Program

According to a recent survey of forty (40) diverse regional companies (healthcare and non-healthcare organizations) conducted by IT-Ology[1], a South Carolina-based organization of industry and academic partners spanning North Carolina, South Carolina, and Georgia, 400-500 new hires will be made by these forty (40) companies in the information resource management field over the next five (5) years with one hundred and twenty (120) in the health information management and technology field. Extrapolating these results to the entire state of South Carolina and the entire Southeast means the job market will produce thousands of jobs for graduates of the proposed program over the next five (5) years. "Information" is now listed as a separate employment category by the state of South Carolina and is responsible for over 10,000 jobs in the Upstate region alone[5].

On a national scale, according to the U.S. Bureau of Labor Statistics[2], jobs in the medical records and health information management fields are expected to grow by 20% through 2018 with a 16% growth in managerial jobs typically requiring advanced degrees. This equates to more than 45,000 *new* jobs (with a total headcount over of 328,000) over the next eight (8) years just in the healthcare information management field. With incomes ranging from $62,170 to $104,120 ($80,240 being the average), these jobs represent excellent career paths for graduates of the proposed program.

Estimates from the South Carolina Healthcare Information Management Association (SCHIMA)[1] indicate hundreds of working professionals in the healthcare industry across the state holding a baccalaureate degree are interested in pursuing the master's degree in the field. Therefore, the proposed program offers Upstate South Carolina residents and workers a much-needed pathway from high school to master's degree.

Higher education in South Carolina is not currently able to produce enough qualified graduates to meet this demand. According to the South Carolina Commission on Higher Education (CHE)[3,4], only a few dozen master's degrees are awarded per year in the combined fields of information systems, information science, and information technology. Furthermore, only a handful of these master's degrees are from multi-disciplinary and healthcare-related programs. As a result, professionals are being hired from outside South Carolina to fill middle-management positions requiring graduate degrees and these professionals are being hired over South Carolina-educated workers lacking a graduate degree. The proposed master's degree in informatics supports the metropolitan mission of USC Upstate by responding to the need for South Carolina to generate its own graduate-degreed professionals in these fields.

The U.S. Bureau of Labor Statistics states "[in the information technology field] a master's degree is the standard credential, although a bachelor's degree is adequate for

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[1] Private communication, internal document. Report can be obtained via email from Dr. Ron Fulbright, Chair, Department of Informatics at rfulbright@uscupstate.edu

[2] US Bureau of Labor Statistics, http://www.bls.gov/occupation.htm, (accessed Fall 2010).

[3] SC Commission on Higher Education, http://www.che.sc.gov/New Web/Rep&Pubs/Completions/2008-2009.htm, (accessed Fall 2010).

[4] SC Commission on Higher Education, http://www.che.sc.gov/Finance/Abstract/Abstract-2011-ForWeb.pdf (accessed Fall 2012).

entry-level positions." The state of South Carolina is currently not producing enough graduates in these areas. The proposed Master of Science in Informatics graduate program provides an important 6-year degree path for South Carolina residents (high school to graduate degree) in a field with an increasing need for skilled professionals. The existing undergraduate program and its affiliation with the Upstate region insures a steady flow of no fewer than 30 new graduate students per year in to the proposed program.

Relationship to other Programs at USC Upstate

The accredited undergraduate program in health information management at USC Upstate has articulation relationships with two important accredited "feeder" programs at Greenville Technical College, and Midlands Technical College (a third is coming online at the time of this writing). Each of these feeder programs is at its maximum enrollment level with a significant number of students on waiting lists. A continuous stream of no less than seventy (70) 2-year graduates is produced each year from these programs. Surveys conducted by the directors of these programs indicate that at least 50% of these students will pursue the 4-year bachelor's degree and a significant percentage of those students will continue on to pursue the master's degree.

The undergraduate program in information management & systems (IM&S) has similar articulation agreements with Greenville Technical College, Spartanburg Community College, and Midlands Technical College. A continuous stream of no less than eighty (80) 2-year graduates is produced from these programs each year with about 25% of these graduates entering the IM&S program to complete the minor in business administration as their concentration. An internal survey of these students showed that about 33% are interested in pursuing a graduate degree after completing the bachelor's degree in IM&S. Furthermore, these students are working professionals with full-time employment in the Upstate region of South Carolina and are unable to attend classes at another university or campus in the state.

While the above mentioned programs are expected to be the primary source of students for the proposed graduate program, graduates from other undergraduate programs at USC Upstate are excellent candidates for the program. Baccalaureate graduates from the computer science, business administration, and engineering technology management programs are also prime candidates for the proposed graduate program in informatics.

Similarities and Differences with Other Programs in the State

The University of South Carolina's Master of Health Information Technology (MHIT) program is offered jointly by the Integrated Information Technology program and the Arnold School of Public Health. The MHIT program is similar to the proposed graduate program in that it blends an information technology foundation with domain-specific courseware in the healthcare area. However, there are significant differences. First, the proposed program at USC Upstate results in a master's degree in Informatics and not in information technology. While information technology is certainly a major component of informatics, as a discipline, informatics is a superset of information technology. As such, courseware in the proposed program addresses larger issues

inherent in informatics such as: information architecture, impact on and of business and popular culture, negotiating the politics of corporate executive management, and the role of innovation in today's global economy. While the MHIT results in an entire master's degree dedicated to health information technology, the health information management component of the proposed program at USC Upstate is one track.

The University of South Carolina's Darla Moore School of Business offers a concentration in information systems within their international MBA program and an emphasis in management information systems (MIS) as part of the doctoral program in business administration. The proposed program at USC Upstate does not intersect with either of these programs. Courses in these programs cover functional areas in order to round out the knowledge set of business administration majors but do not result in professional expertise in the field of information systems.

The School of Library and Information Science (SLIS) at the University of South Carolina offers a master's degree and a doctoral degree in library and information science. These programs prepare professionals for positions in libraries, information centers, and media centers and do not overlap with the proposed program at USC Upstate which is designed to produce mid-level managers in all areas of the corporate and healthcare industries.

As part of the master's and Ph.D. degree programs in management (MSM), Clemson University offers courses in information systems. However, these courses are intended to provide knowledge about information technology in support of functional operational management areas. One concentration in these programs prepares students to be managers of information systems, but the focus is on systems as capital resources. The proposed graduate program at USC Upstate focuses on the *information* being managed rather than the systems themselves.

Several universities in South Carolina, including the University of South Carolina, Clemson University, and the College of Charleston have graduate programs in computer science or information systems. Each of these programs is oriented toward producing graduates who build information technology systems. These programs differ from the proposed program at USC Upstate in that our program does not focus on the construction of the information systems. Our graduates are experts in the utilization of information systems for domain-specific purposes because we focus on the information itself and the information processing.

5 Admission Criteria

Individuals seeking admission to USC Upstate as a degree candidate will be considered for full admission when the USC Upstate Admissions Office receives all admissions materials. However, students are eligible to take up to six (6) hours of program courses pending receipt of all materials. Each candidate must:

- Submit an application for degree seeking graduate students
- Remit the $40 application fee
- Submit a state residency status form
- Submit two (2) letters of recommendation using forms provided in the application packet
- Score and submit a minimum *Miller Analogy Test* (MAT) score of 390 or a *Graduate Records Examination* (GRE) score of 400 on the verbal section and 400 on the quantitative section
- Submit official copies of transcripts from all previous undergraduate and graduate studies
- Achieve a minimum GPA on all undergraduate course work of 2.5 on a 4.0 scale
- Provide proof of immunization for measles (rubeola) and German measles (rubella) if born after Dec. 31, 1956.
- Complete a personal interview with a faculty member of the Department of Informatics

As long as all other admission requirements have been fulfilled, a student may apply for conditional admission by submitting a written request to the Chair of the Department of Informatics, in either of the following cases:

1. If, after two attempts, the student fails to meet the required Miller Analogies Test (MAT) score of 390 or Graduate Records Examination (GRE) score of 400 on the verbal section and 400 on the quantitative section

2. The student has a GPA on all undergraduate coursework below 2.5 on a 4.0 scale.

If the student is granted conditional admission, the student must maintain a minimum GPA of 3.25 on the initial twelve (12) hours of USC Upstate graduate coursework to be fully admitted as a masters candidate. If the student fails to achieve this grade point average, the student may not continue in the masters program.

Each candidate will be reviewed by an admissions panel, consisting of faculty from the Department of Informatics. The panel will make recommendations, including possible remedial coursework (additional courses at the undergraduate level to repair any deficiencies in the candidate's background), to the Chair of the Department of Informatics who will make the final decision on admission. The Dean of the College of Arts and Sciences will be able to reverse any admissions decision made by the Chair.

Before a student begins the independent study or research portion of the curriculum, each student will be assigned a faculty mentor to serve as the student's advisor. Some students may be offered graduate student stipends depending on availability of funding.

6 Enrollment

Total enrollment is limited by the number of terminally-degreed faculty in the Department of Informatics able to serve as graduate advisors and thesis mentors. We endeavor to keep the student/advisor ratio to 6:1 or less. Since we are planning to have five (5) full-time faculty to support the graduate program, a maximum enrollment of thirty (30) is planned.

Enrollment projections for the program were developed, in part, using data from the Directors of the three accredited health information management technical college programs: Greenville Tech, Midlands Tech, and Florence-Darlington Tech. These programs represent an important "pipeline" of students for both the undergraduate and graduate programs in health information management. Each of these feeder programs is currently at their maximum enrollment level of twenty to twenty-five (20-25) with a significant number of students on waiting lists. A continuous stream of approximately seventy (70) graduates is produced each year from these programs. Surveys conducted by the Directors indicate that as many as 50% (about 35) of these students are interested in pursuing the 4-year undergraduate degree in health information management at USC Upstate. Some 10%-20% (3-7) of these students will continue on to pursue the masters degree.   Estimates from the South Carolina Healthcare Information Management Association (SCHIMA) indicate that about 50-100 professionals already working in the healthcare industry and holding a baccalaureate degree are interested in pursuing the master's degree. Of course, not all of these will apply the first year, but it is reasonable to expect 5-10 new students per year from this pool of working professionals. Therefore, we expect 8-17 new students per year to be admitted into the health information management track of graduate program.

These numbers represent only the health information management component of the proposed graduate program. The other component is the information resource management. Along with the information technology revolution has come a shift in the way information-technology savvy employees are utilized. In the early days of the computer age, the 1950s and 1960s, "data processing" employees were housed in separate, monolithic organizational departments within a corporation and dealt with only a small number of other employees in the company and were involved in only a few of the major business processes in the company. In the 1970s, data processing functions became housed in "IT departments" which became involved in almost every business function and process, but still tended to be housed within a single department organizationally. In the 1980s, with the advent of desktop computers and networking, data processing functions became distributed throughout the corporation. Since the 1990s, with the rise of the Internet, e-mail, powerful graphical desktop applications, and paperless/automated business processes, each department has assumed a significant degree of information processing requirements on their own. In today's marketplace, every department within a corporation is hiring its own IT-savvy employees. In this job market, our 4-year information management & systems graduates have an advantage, but they, like professionals in the healthcare industry, reach a glass ceiling because promotions require an advanced degree. In the Upstate region of the state alone, there are far more than 10,000 working professionals with various 4-year degrees that could benefit from completing a graduate degree. Throughout the entire state, this number is likely to exceed 30,000. Serving this prospective student population is a matter of

advertising, marketing, and delivery of the courseware via distance education, remote education, and the Internet. If only 1% of this prospective student population chooses our graduate program, we will have to turn away candidates to maintain the enrollment goal of 30-35 students. With 8-16 students per year expected from the healthcare community, it is reasonable to assume an additional 8-16 students per year will be admitted into the IRM track of the program.

To the above numbers, an additional 5-10 students per year can be expected to come from the pool of undergraduate students in the IMS program and other majors in the University. Combining all three of these sources results in a new student population of about 20-40 new students per year which easily reaches the enrollment goal. Below are projected total and new enrollment figures for the first five (5) years of the proposed program. Enrollment will build to the enrollment goal during the first two (2) years. Note that since it will take at least two (2) years to complete the program, no one will graduate until two (2) years into the program after which enrollment will stabilize.

PROJECTED TOTAL ENROLLMENT						
YEAR	FALL		SPRING		SUMMER	
	Headcount	Credit Hours	Headcount	Credit Hours	Headcount	Credit Hours
2013-2014	10*	60-90	15**	90-135	15	45
2014-2015	25*	150-225	30**	180-270	30	90
2015-2016	30***	180-270	35**	210-315	25	75
2016-2017	30	180-270	35	210-315	25	75
2017-2018	30	180-270	35	210-315	25	75

*Ten new students admitted into the program each taking 2 or 3 courses per semester.
** Five additional students admitted in the Spring semester each year.
***Graduates replaced by new students. Headcount stabilizes in the third year at about 30 students.

7 Curriculum

The proposed program will consist of at least thirty (30) semester hours beyond the baccalaureate degree including six (6) hours of thesis or independent study. Two tracks will be available to students: health information management (HIM) and information resource management (IRM). A minimum of eight (8) courses (24 credit hours) will be required. Four (4) of the required courses will be applicable to both tracks so will be taken by all students. Each track contains four (4) additional courses taken by students in that track. Students lacking pre-requisite knowledge, as determined by the review panel, may be required to complete one or more additional courses at the undergraduate level.

Informatics Core (required for all students)

SIMS 622:	Advanced Knowledge Inference Systems
SIMS 650:	Information Resource Management
SIMS 710:	Systematic Innovation
SIMS 720:	Information Architecture

(student chooses one of these tracks)

Health Information Management	*Information Resource Management*
SHIM 750: Public Health Statistics	SIMS 760: IT Intellectual Property Protection
SHIM 751: Healthcare IT Vendor Management	SIMS 761: Business and Competitive Intelligence
SHIM 752: Compliance in the Healthcare Industry	SIMS 762: Interoperability
SHIM 753: Strategic Planning for Healthcare Information Management Systems	SIMS 763: Advanced IT Project Management

Independent Study[1]

	SIMS 798: Independent Graduate Study in Informatics (1-6 hours)
	SIMS 799: Thesis Preparation (1-6 hours)
(optional)	SIMS 796: Special Topics in Graduate Informatics (1-6 hours)

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[1]*A minimum of 6 hours of SIMS 798 or SIMS 799 is required. Students can take these 6 hours across multiple offerings of the course. The time demand of a student is determined by the number of credit hours the student is attempting. For example, most students will take either SIMS 798 or SIMS 799 twice for 3 credit hours each. Others may take one of these courses three times for 2 credit hours each. The SIMS 796 course is an optional course that may be substituted for any of the other courses except for SIMS 798 and SIMS 799. The content and credit hour rating of a SIMS 796 offering will be determined by the instructor.*

Fifteen (15) new courses, detailed below, will be developed to support the proposed graduate program. All new courses have been approved through USC Upstate faculty governance and will appear in the next USC Upstate catalog pending CHE approval.

SIMS 622. Advanced Knowledge-Inference Systems (3) Advanced methods for turning data into information and information into wisdom, concepts and real-world applications of data mining and decision support systems including discovery of interesting facts and decision-making. Prerequisite: Admission to the graduate informatics program.
Learning Outcome: Students will describe and compare leading data mining and decision support systems technologies, explain how, when, and why to use data mining, and demonstrate discovery of actionable rules in a large structured information store.

SIMS 650. Information Resource Management (3) IT Alignment, IT Governance, executive leadership, corporate politics, building business cases for strategic IT investments, risk management, oversight of corporate information security policies, and general executive-level business knowledge for information resource managers. Prerequisite: Admission to the graduate informatics program.
Learning Outcome: Students will describe and plan key components of IT governance and alignment with business-critical functions in a corporate environment. Students will prepare a 10-domain information security risk assessment report.

SIMS 710. Systematic Innovation (3) Incorporation of creative, alternative, and parallel thinking methods and computer-aided innovation (CAI) into existing business processes and workflows and managing these as critical information resources to sustain competiveness in the global marketplace[5]. Prerequisite: SIMS 650 or consent of instructor.
Learning Outcome: Students will demonstrate use of a computer-aided innovation methodology to creatively solve real-world problems and describe important components of successful management of innovation strategies.

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[5] This course identified as a result of participation in the 2007 Information Resource Management Association (IRMA) Conference in Vancouver, BC. See also:

> Fulbright, R., "Innostructure: Managing Innovation as a Strategic Business Resource," *Information Resources Management Association Proceedings*, Vancouver, BC, May 2007.

> Fulbright, R. "Innostructure: The need for corporate infrastructure supporting innovation," *Business Innovation*, September 2006, http://www.ccesoft.com/e-zine/Innostructure.htm (accessed October 2007).

SIMS 720. Information Architecture (3) Structural design of shared information environments, such as customizable user interfaces, Web site portals, intranets, and online communities and the conceptual forms maximizing effective presentation and usability[6]. Prerequisite: SIMS 622 or consent of instructor.
Learning Outcome: Students will design a shared information resource and demonstrate use of enhanced dimensionality and density of information representation.

Health Information Management Courses
SHIM 750. Public Health Statistics (3) Collection, organization, and interpretation of data pertinent to public health and vital statistics, application of biostatistical methods, population data, morbidity and mortality rates, ratios, and life tables to public health.[7] Prerequisite: Admission into the graduate informatics program.
Learning Outcome: Students will compile and analyze statistical data in the public health domain and write reports demonstrating effective presentation.

SHIM 751. Healthcare IT Vendor Management (3) Environment and activities necessary to plan, select, contract, and implement systems from information technology suppliers in the healthcare industry.[8] Prerequisite: SIMS 622 or SIMS 650 or consent of instructor.
Learning Outcome: Students will describe and explain key issues and challenges in a relationship with an outside vendor of software and other information processing systems in the health industry and demonstrate effective management of change order and compliance activities.

SHIM 752. Compliance in the Healthcare Industry (3) Managerial and legal issues of healthcare corporate compliance, essential elements of a compliance program, federal legislation, and enforcement initiatives conducted by the U.S. Department of Justice and the Office of Inspector General.[9] Prerequisite: SIMS 710 or SIMS 720 or consent of instructor.
Learning Outcome: Students will discuss, describe and explain key federal requirements and laws relating to the handling of patient information and medical records.

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[6] The Information Architecture Institute, http://iainstitute.org/ (accessed October 2007). See also: University of Texas , http://www.ischool.utexas.edu/courses/course_descriptions.php (accessed October 2007). See also: Kent State University, http://iakm.kent.edu/courses/descriptions.html (accessed October 2007). This course also identified as the result of private consultation with several regional corporations including: Spartanburg Regional Healthcare System, Greenville Hospital System, and Met Life.

[7] This course identified as a result of review of the American Healthcare Information Management Association's (AHIMA) accreditation standards.

[8] This course identified in consultation with Spartanburg Regional Healthcare System.
See also: University of Illinois at Chicago, http://www.online.uillinois.edu/catalog/CourseDetail.asp?CourseID=9747 (accessed October 2007).

[9] The College of St. Scholastica, http://academics.css.edu/catalog/current/MasterHIM.shtml (accessed October 2007). The CSS program has been accredited for 50 years.

SHIM 753. Strategic Planning for Healthcare Information Management Systems (3)
Long range planning, migration path, regulations, and new trends, and the future of electronic healthcare records[10]. Prerequisite: SIMS 710 or SIMS 720 or consent of instructor.
Learning Outcome: Students will analyze and assess the information management requirements for a fictional health organization and create a long-range plan including a migration path from current to future practices and systems.

Information Resource Management Courses
SIMS 760. Intellectual Property Protection for IT (3) Legal issues facing information and knowledge-based organizations including structuring of ownership, trademarks, service marks, patents, patent fences, transactions in intellectual property, licensing, and technology transfer.[11] Prerequisite: Admission into the graduate informatics program.
Learning Outcome: Students will create an intellectual property disclosure, prepare a trademark and patent application and explain the major components of an intellectual property licensure/technology transfer agreement. Students will plan a patent fence protection strategy using a computer-aided design-around methodology.

SIMS 761. Business and Competitive Intelligence (3) Use of information technology to facilitate better business decisions by collecting and analyzing the efficiency and productivity of internal operations as well as external influences such as competitors, market trends, and global economics.[12] Prerequisite: SIMS 622 or SIMS 650 or consent of instructor.
Learning Outcome: Students will describe how and why corporations use business and competitive intelligence information and will critique several different business intelligence software and reporting packages currently on the market.

SIMS 762. Interoperability (3) Techniques for integrating information from disparate systems by different manufacturers using different formats and communication protocols. Topics include: XML, EDI, Web services, and standards-based open-source collaborative.[13] Prerequisite: SIMS 710 or SIMS 720 or consent of instructor.
Learning Outcome: Students will design and prepare an XML-encoded data store and demonstrate cross-application use of these data. Students will also analyze several current public user-generated collaborative Internet-based crowdsourcing and open-source.

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[10] This course identified in consultation with the American Healthcare Information Management Association (AHIMA) and review of the accreditation standards.

[11] This course was identified via involvement with the Information Resource Management Association (IRMA), and involvement in the FastTrac TechVenture program (see http://www.gsatc.org/fasttrac). See also: The University of Michigan School of Information, http://www.si.umich.edu/courses/description.htm?passCID=466 (accessed October 2007).

[12] Many academic programs around the country have business/competitive intelligence courses. See also: University of Denver, http://daniels.du.edu/business-intellegence-master.aspx (accessed October 2007). See also: Texas A&M University, http://library.tamu.edu/portal/site/Library/menuitem.e985aca67eb697ded0bbd0b119008a0c/?vgnextoid=ba7826f2d92e0010VgnVCM1000007800a8c0RCRD (accessed October 2007). See also: Kent State University, http://iakm.kent.edu/courses/descriptions.html (accessed October 2007).

[13] This course was identified by consultation with various regional corporations including: BMW, Michelin, Fluor, Kemet, Met Life, Spartanburg Regional Healthcare System, and Greenville Hospital System.

SIMS 763. Advanced IT Project Management (3) Organizing and using resources to complete structured projects, activities, and tasks within defined scope, quality, time, and cost constraints including the selection and alignment of performance metrics to bottom-line goals of the enterprise. Prerequisite: SIMS 710 or SIMS 720 or consent of instructor.
Learning Outcome: Students will analyze and select the appropriate IT project management architecture for a given situation and demonstrate the application of different software development methodologies.

SIMS 798. Independent Graduate Study in Informatics (1-6) Directed research and study in information technology, information resource management, or healthcare information management. Students are required to complete a minimum of 6 hours but may be repeated for additional hours. Prerequisite: Consent of instructor.
Learning Outcome: Students will plan, design, analyze, and assess as part of an independent research/development project mutually agreed to by student and advisor.

SIMS 799. Thesis Preparation (1-6) Preparation of a thesis and research in the pursuit of the masters degree in informatics. Students are required to complete a minimum of 6 hours but may be repeated for additional hours. Prerequisite: Consent of instructor.
Learning Outcome: Students will compile information for and write a publication-quality report on the student's chosen independent graduate study project.

SIMS 796. Special Topics in Graduate Informatics (1-6) Select subjects and current trends in the social, cultural, political, and technical issues associated with information resource management. Prerequisite: Consent of instructor.
Learning Outcome: Students will demonstrate the use and application of an advanced skill or technology selected by the instructor.

Sample program of study

Master of Science in Informatics
(Health Information Management Track)
Student Worksheet

I. **Core Courses (12 credit hours)**

_____ SIMS 622: Advanced Knowledge-Inference Systems
_____ SIMS 650: Information Resource Management
_____ SIMS 710: Systematic Innovation
_____ SIMS 720: Information Architecture

II. **Health Information Management (12 credit hours)**

_____ SHIM 750: Public Health Statistics
_____ SHIM 751: Healthcare IT Vendor Management
_____ SHIM 752: Compliance in the Healthcare Industry
_____ SHIM 753: Strategic Planning for Healthcare Information Management

III. **Independent Study (6 credit hours)** *from the following*

_____ SIMS 798: Independent Graduate Study in Informatics
_____ SIMS 799: Thesis Preparation

Suggested Sequence of Courses

First Year

Fall
SIMS 622: Advanced Knowledge-Inference . 3
SIMS 650: Information Resource Mgmt 3
SHIM 750: Public Health Statistics 3

Spring
SIMS 710: Systematic Innovation 3
SIMS 720: Information Architecture 3
SHIM 751: Healthcare IT Vendor Mgmt 3

Second Year

Fall
SHIM 752: Compliance in Healthcare Ind. 3
SIMS 799: Thesis Preparation 3

Spring
SHIM 753: Strategic Planning for HIM...........3
SIMS 799: Thesis Preparation 3

TOTAL HOURS 30

Master of Science in Informatics
(Information Resource Management Track)
Student Worksheet

I. Core Courses (12 credit hours)

_____ SIMS 622: Advanced Knowledge-Inference Systems
_____ SIMS 650: Information Resource Management
_____ SIMS 710: Systematic Innovation
_____ SIMS 720: Information Architecture

II. Information Resource Management (12 credit hours)

_____ SIMS 760: Intellectual Property Protection for IT
_____ SIMS 761: Business and Competitive Intelligence
_____ SIMS 762: Interoperability
_____ SIMS 763: Advanced IT Project Management

III. Independent Study (6 credit hours) *from the following*

_____ SIMS 798: Independent Graduate Study in Informatics
_____ SIMS 799: Thesis Preparation

Suggested Sequence of Courses

First Year

Fall
SIMS 622: Advanced Knowledge-Inference..3
SIMS 650: Information Resource Mgmt 3
SIMS 760: Intellectual Property for IT 3

Spring
SIMS 710: Systematic Innovation..................3
SIMS 720: Information Architecture...............3
SIMS 761: Business and Competitive Intel ...3

Second Year

Fall
SIMS 762: Interoperability 3
SIMS 799: Thesis Preparation.......................3

Spring
SIMS 763: Advanced IT Project Mgmt 3
SIMS 799: Thesis Preparation.......................3

TOTAL HOURS……………………………30

8 Assessment

Program Assessment

The Department of Informatics, as do all academic units at USC Upstate, uses a formal assessment instrument called the *Program Assessment* specifying learning objectives and data collection for the undergraduate IM&S program. This assessment will be extended for the proposed graduate program. The learning outcomes in the course descriptions included in this document will be used to construct the extension to the Program Assessment. To measure success against the expected outcomes, performance indicators from the courses will be identified. Each year, faculty members teaching these courses will collect results for each learning objective. These will be summarized and averaged into a final report. The department faculty will review this report and make suggestions as to how to improve against any learning objective and how to improve the assessment instrument itself. These comments will be incorporated into the report and changes implemented in the courses as necessary.

Also accepted into the report will be ad-hoc suggestions from faculty for improvement to the curriculum, specific courses, and individual topics. Often, these ideas take the form of insuring consistency across courses or reinforcing concepts throughout the curriculum to enhance curricular cohesion. Such changes will be voted on by the faculty members and changes made as noted in the report.

Faculty Assessment

Each year, full-time faculty members are assessed and scored in three (3) categories: *teaching (0-10pts), service (0-5pts),* and *scholarship (0-5pts)*. Faculty members are expected to teach a full load (usually four (4) sections in the Fall semester and four (4) sections in the Spring semester). Additional points are awarded for extra sections, new preparations, or other student-oriented service above the call of duty. Faculty members are expected to serve on at least two (2) governance committees and are expected to perform professional or community service outside the campus. Extra points are awarded for chairing a committee, or performing extraordinary outside service. Tenured and tenure-track faculty are expected to publish/present at least one paper or article a year in their respective research domain. Extra points are awarded for additional publications or other scholarly work. The faculty assessment will subsume graduate-level teaching and service for those faculty members teaching graduate courses. No substantive change to assessment itself is required.

Student Opinion Polls

Every student is encouraged to submit a *Student Opinion Poll (SOP)* for each course. These surveys include several questions asking the student to rate the course and the instructor. The SOP also allows the student to write comments and suggestions. Each semester, these surveys are examined by the instructors and included in the faculty member's faculty assessment. SOPs are highly regarded by faculty members and suggestions made by students on the SOPs get the highest of attention and are usually incorporated into classroom delivery.

9 Faculty

Staff by Rank	Highest Degree	Field of Study	Teaching in Field?
Associate Professor	Ph.D.	Computer-aided innovation, information resource management	Yes
Associate Professor	Ph.D.	Databases, inferential security	Yes
Associate Professor	Ph.D.	Information technology, data mining, user interfaces, networks	Yes
Instructor	Ph.D.	Information resource management	Yes
Assistant Professor (new hire)	Ph.D.	Healthcare information management, public health	Yes

UNIT ADMINISTRATION/FACULTY/STAFF SUPPORT						
YEAR	NEW		EXISTING		TOTAL	
	Headcount	FTE	Headcount	FTE	Headcount	FTE
Administration						
2013-2014	0	0	1	0.25 - 0.50	1	0.25 - 0.50
2014-2015	0	0	1	0.25 - 0.50	1	0.25 - 0.50
2015-2016	0	0	1	0.25 - 0.50	1	0.25 - 0.50
2016-2017	0	0	1	0.25 - 0.50	1	0.25 - 0.50
2017-2018	0	0	1	0.25 - 0.50	1	0.25 - 0.50
Faculty						
2013-2014	1	1.0	4	1.0	5	2.0
2014-2015	0	0	5	2.0	5	2.0
2015-2016	0	0	5	2.0	5	2.0
2016-2017	0	0	5	2.0	5	2.0
2017-2018	0	0	5	2.0	5	2.0
Staff						
2013-2014	0	0	1	1	1	0.15 - .20
2014-2015	0	0	1	1	1	0.15 - .20
2015-2016	0	0	1	1	1	0.15 - .20
2016-2017	0	0	1	1	1	0.15 - .20
2017-2018	0	0	1	1	1	0.15 - .20

One (1) new terminally-degreed, tenure-track faculty must be hired the first year to support the health information management track of the proposed graduate program. The new-hire must hold the Ph.D. in health information management, public health, or closely related field, and will preferably have achieved the Registered Health Information Administrator (RHIA) certification. The search for this new position is underway and scheduled to be complete by summer 2013. The new hire will teach as many as three (3) graduate courses per semester in the health information management track. The new-hire will join four (4) existing terminally-degreed faculty (three associate professors and one instructor). On average, each of the four (4) existing faculty will teach no more than two (2) graduate courses per year.

The normal loading for each of the associate professors is four (4) units per semester. The loading for the full-time instructor is five (5) units per semester. Each existing faculty will contribute about 25% of an FTE to the graduate program. The new hire will contribute 100% of an FTE to the graduate program. The following is a typical schedule of courses for an academic year.

Fall		Spring	
Undergraduate		*Undergraduate*	
SIMS 101 (sec 001)	Walters	SIMS 101 (sec 001)	Walters
SIMS 101 (sec 002)	Walters	SIMS 101 (sec 002)	Walters
SIMS 201	Tzacheva	SIMS 201	Tzacheva
SIMS 211 (sec 001)	Williams	SIMS 211 (sec 001)	Williams
SIMS 211 (sec 002)	Williams	SIMS 211 (sec 002)	Williams
SIMS 303	Walters	SIMS 303	Walters
SIMS 305	Toland	SIMS 305	Fulbright
SCSC 325	Toland	SCSC 325	Toland
SIMS 345	Routh	SIMS 345	Routh
SIMS 307	Fulbright	SIMS 307	Fulbright
SIMS 347	Few	SIMS 347	Few
SCSC 315	Tzacheva	SIMS 415	Tzacheva
SIMS 421	Toland	SIMS 421	Toland
SIMS 441	Williams	SIMS 441	Williams
SIMS 450	Routh	SIMS 450	Routh
SIMS 499	Toland	SIMS 499	Toland
SHIM 250	Metz	SHIM 250	Metz
SHIM 201	Liotta	SHIM 201	Liotta
SHIM 301	Liotta	SHIM 301	Liotta
SHIM 302	Liotta	SHIM 302	Liotta
SHIM 412	Tesh	SHIM 412	Tesh
SHIM 413	Tesh	SHIM 413	Tesh
SHIM 450	Tesh	SHIM 450	Tesh
Graduate		*Graduate*	
SIMS 622	Tzacheva	SIMS 710	Fulbright
SIMS 650	Routh	SIMS 720	Tzacheva
SIMS 760	Fulbright	SIMS 761	Routh
SIMS 762	Toland	SIMS 763	Routh
SHIM 750	New hire	SHIM 751	New hire
SHIM 752	New hire	SHIM 753	New hire
SIMS 799/798	Advisor	SIMS 799/798	Advisor

The impact of accommodating the teaching load for the proposed graduate program will be minimal because over the last three years, teaching loads and course assignments have been modified toward the new course scheduling. As an option to assist in teaching load management, three (3) of the graduate courses can be offered as co-listed courses with undergraduate courses: SIMS 450/650, 422/622, and 307/710. Both undergraduate and graduate students will attend co-listed courses with graduate students expected to perform an elevated workload commensurate with a graduate-level course.

The following table identifies specific re-assignments of existing faculty for the proposed program:

Instructor	Grad Courses/yr	Assignment Changes
Fulbright/ Toland	3 courses	a. SIMS 305 will not be offered in Fall but will in Spring. The Fall offering can be re-instated using an adjunct or Dr. Toland if demand dictates. b. SIMS 303 will not be taught in Spring but will be taught in Fall. The Spring offering can be re-instated using an adjunct or Dr. Toland if demand dictates. c. SIMS 498 duties will be shifted to junior faculty
Routh	3 courses	a. Only 1 section of SIMS345 will be offered instead of 2. An additional section can be offered by junior faculty or a faculty member from the Communications Department if demand dictates. b. The Greenville section of SIMS 450 and 499 will be offered as an online/hybrid DVD enhanced course.
Tzacheva	2 courses	a. The graduate course each semester will replace The independent study course taught each semester.
New Hire	4 courses	N/A (no impact to current workload)

10 Physical Plant

The Department of Informatics is currently located on the second floor of the Media building on the USC Upstate campus in Spartanburg, SC where both office space and classroom space exist to accommodate the proposed graduate program as well as the existing undergraduate program. The office suite contains twelve (12) offices, including nine (9) faculty offices, a staff office that will be used to house graduate researchers/teaching assistants, a conference room, a dedicated computer lab with eighteen (18) student computer workstations, and a dedicated hardware lab with eight (8) workplaces. All courses offered by the Department of Informatics are taught in the Media building utilizing three (3) theater-style multimedia classrooms each seating in excess of thirty-five (35) students, the dedicated computer lab, and the dedicated hardware lab.

11 Equipment

The ability to deliver the majority of the course material via distance education technology, teleconferencing, Internet, and DVD-based lectures is critical to the success of the proposed program. Many students attracted to this program will be "non-traditional" students, most having full-time jobs and careers in progress, and will be unable to attend a full schedule of "live" classes. To meet this requirement, the Department of Informatics has developed an in-house capability to produce, record, and deliver lectures on a DVD format and deliver these via weekly mailings or as a single volume purchased at the beginning of the semester. The equipment necessary has been accumulated and course materials produced for several undergraduate courses. This equipment will be maintained indefinitely and upgraded and/or repaired when needed. One of the offices mentioned above is dedicated to DVD and electronic courseware production. Each year, student worker funds are available in the Department of Informatics' budget to support one or more students to assist in DVD production.

The computers in the dedicated computer lab are maintained by USC Upstate's Information Technology Services department and are configured with software specifically needed for undergraduate and graduate students in the department's degree programs. Each faculty and staff office has the standard computer equipment, telephone, and wired Internet access. The entire building has wireless Internet access. The suite contains five (5) printers, two (2) accessible to students, two (2) copiers, one (1) accessible to students, a common area suitable for casual student congregation and study, and a private reading area with a couch, two (2) chairs, and numerous industry-relevant magazines and books, all accessible to students.

12 Library Resources

The USC Upstate Library contains over 220,000 volumes (with some 6,000 new volumes added each year), 730 journal subscriptions, and 13,141 electronic journals that include all full-text titles. Approximately 400 of the full-text journals are applicable to the field of education. The Library provides on-line searches in over 120 databases. It also has a substantial collection of materials (that is expanded yearly) directly related to visual impairment education. Books and periodicals not available at USC Upstate are easily obtained by means of interlibrary loan. The USC Upstate Library is a member of five different consortia for interlibrary loans, including the Association of the Southeastern Research Libraries' Kudzu.

Additionally, the Library offers library instruction/information literacy sessions to classes upon invitation of the instructor. This instruction includes information not only on using this library and its resources but also instruction on using information responsibly, finding and evaluating electronic resources available through the Internet. Students are instructed in developing information strategies that will allow them to participate in lifelong learning. The method of delivering instruction is determined on a case-by-case evaluation of the instructor and student needs.

For books and articles not available in the online databases, students may use Inter-Library Loan (ILL) to have books and articles sent to them. For the student who does not live in the Spartanburg area, there are two options: for materials not owned by USC Upstate, they may use ILL; for materials owned by the USC Upstate Library, they may use the home delivery option. In this program, materials are sent to students via the U.S. Mail delivery system.

Ask-A-Librarian provides reference services to students via electronic mail. Public service librarians answer all questions. This is particularly helpful for students who do not live in the Spartanburg area.

Students and faculty may also participate in the Statewide Library Borrowing Agreement. This service allows students to borrow materials from participating institutions of higher education. All students and faculty must obtain a universal borrowing card from the USC Upstate Library to be eligible.

Faculty may place items on reserve for student use by taking advantage of the library's electronic reserve service or placing the physical items in the USC Upstate Library or the media center at UCG. Electronic reserve service is primarily used for journal articles. This service places the scanned image of the article on a secured website that can only be accessed with a username and password.

The Library is open a total of 82.5 hours per week, with on-site reference service available 80 of those hours. Circulation, reserves, interlibrary loan and personal instruction are offered to students, faculty and staff. The Library has a computer laboratory for general student use. This lab has electronic catalog access, full-text databases, Internet access and software for document preparation, spreadsheet applications, and data construction.

The proposed courses can be supported by the library's current collection. The following journals and magazines, all available via the library, have been identified by the faculty as being necessary to support graduate-level research and study in the fields of information management, information technology, and health information management.

1. Harvard Business Review
2. Forbes
3. Fortune
4. Business 2.0
5. CIO Magazine
6. eWeek
7. ComputerWorld
8. Information Week
9. International Journal of Innovation Science
10. International Journal of Information Technlogy
11. International Journal of Information Systems
12. Emergence, Complexity, and Organization
13. Communications of the ACM
14. Interactions
15. Crossroads, The ACM Magazine for Students
16. Journal of the ACM
17. ACM Transactions on Information and System Security
18. ACM Transactions on Knowledge Discovery from Data
19. ACM Transactions on Management Information Systems
20. ACM Transactions on Computer-Human Interaction
21. ACM Transactions on Database Systems
22. ACM Transactions on Information Systems
23. ACM Transactions on Internet Technology
24. ACM Transactions on Multimedia Computing, Communications, and Applications
25. Transactions on the Web

The library has access to the following digital databases and indices, all of which are primary sources of material for the above mentioned fields:

- ACM Digital Library (42 journals, 9 magazines, 2000 proceedings)
- AHIMA (American Health Information Management Assoc.)(60 journals, 74 magazines)
- Health Information Management (698 magazines)
- Information Management Systems (1087 magazines)

The Partnership Among South Carolina Academic Libraries (PASCAL) is a strategic initiative to improve information access for South Carolinians. It was launched by South Carolina's public and private academic libraries in conjunction with their parent institutions, the Commission on Higher Education (CHE), the State Library, the SC Independent Colleges & Universities (SCICU), the Office of State Chief Information Officer, and the Department of Archives and History. "PASCAL Delivers" is a rapid book delivery service for the patrons of all PASCAL member institutions. PASCAL Delivers begins with a single, Web-based, unified catalog of library holdings. Library users search the PASCAL Catalog, locate books in any member-library, submit an electronic request for delivery of a book to their home institution, and receive those books within a few days. PASCAL Delivers is part of the State-wide Electronic Academic Library. Several databases available through PASCAL will be useful for the proposed program:

Computer Source provides researchers with the latest information and current trends in high technology. This database offers full text for more than 300 publications, covering topics such as computer science, programming, artificial intelligence, cybernetics, information systems, robotics, and software. In addition, this database offers indexing and abstracts for nearly 450 publications. Includes full text

Regional Business News incorporates 75 business journals, newspapers and newswires covering all metropolitan and rural areas within the United States. Included in this database are Arizona Business, Business North Carolina, Crain's New York Business (and other Crain Communications editions), Des Moines Business Record, Enterprise Salt Lake City, Fort Worth Business Press, Orange County Business Journal, Westchester County Business Journal, etc. Includes full text

MEDLINE with Full Text (via EBSCO) provides authoritative medical information on medicine, nursing, dentistry, veterinary medicine, the health care system, pre-clinical sciences, and much more. Created by the National Library of Medicine, MEDLINE uses MeSH (Medical Subject Headings) indexing with tree numbers, tree hierarchy and explosion capabilities to search abstracts from over 4,600 current biomedical journals. Other databases are brokered and require extra fees for participating libraries. Several of these databases impact Informatics.

Academic Search Complete is the world's largest scholarly, multi-disciplinary full text database containing full text for more than 8,500 publications. Most of the articles are provided in PDF format dating back to 1887. This scholarly collection offers information in nearly every area of academic study.

Business Source Complete provides the leading collection of full text business content with access to thousands of scholarly business journals and other sources. This database offers information in nearly every area of business including management, economics, finance, accounting, international business, and more.

CINAHL Plus with Full Text is the world's most comprehensive source of full text for nursing & allied health journals, providing full text for more than 560 journals indexed in CINAHL. Of those, nearly 400 have cover-to-cover indexing in CINAHL. With more than 600,000 full-text articles dating back to 1937, CINAHL Plus with Full Text is the definitive research tool for all areas of nursing and allied health literature.

International Security & Counter Terrorism Reference Center covers nearly all aspects of security and counter-terrorism. Hundreds of journals are included along with news feeds, reports, and other sources of intelligence and information. Includes full text.

13 Accreditation

The Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) accredits 2-year, 4-year, and 6-year degree-granting programs in Health Informatics and Information Management. The Department of Informatics has received accreditation of the undergraduate program in Health Information Management and plans to seek accreditation for the proposed graduate health information management track within four (4) years. The accreditation process is outlined below:

Step 1: Program Submits a Letter of Intent to CAHIIM

Step 2: Program Submits Application and Self-Study Report

Step 3: Quality Review of all Report materials by Panel and Staff
         Assessment Report Submitted to CAHIIM

Step 4: CAHIIM Review
         Program Receives Report and Responds

Step 5: CAHIIM formulates decision and determines Approval Award Decision
         Program is notified of Approval Award Decision

14 Articulation

Although graduates from many different undergraduate programs and institutions can apply, the proposed graduate program is a natural continuation for graduates of the 4-year, Bachelor of Arts in Information Management and Systems (IMS) degree program offered by the Department of Informatics at USC Upstate. Currently, several special articulation agreements leading 2-year graduates to the 4-year IMS degree exist with various technical and community colleges in the state:

- Greenville Technical College – Computer Technology
- Spartanburg Community College – Computer Science
- Greenville Technical College – Healthcare Information Management
- Midlands Technical College – Healthcare Information Management
- Florence-Darlington Technical College – Healthcare Information Management

In general, students completing the suggested program of study transfer to the 4-year program as a rising junior therefore requiring as little as two (2) years to complete the BA degree. Full-time students could complete the proposed graduate program with an additional two (2) years. The three (3) healthcare articulations represent the only accredited 2-year programs in the state and our 4-year health information management program is the only accredited 4-year program in the state. The proposed graduate program provides a path to a 6-year degree in the health information management field, and once accredited, will be one of only a few accredited graduate progressions in the entire country.

15 Estimated Cost

The following table shows the total cost of the proposed program including all administrative, staff, and faculty allocation of time and resources.

ESTIMATED TOTAL COST BY YEAR						
CATEGORY	**1st**	**2nd**	**3rd**	**4th**	**5th**	**TOTALS**
Administration	9,000[1]	9,270	9,548	9,834	10,129	*47,781*
Faculty Salaries	116,275[2]	119,763	123,356	127,056	130,868	*617,318*
Graduate Assistant	0[3]	0	0	0	0	*0*
Clerical/Support Personnel	4,500[4]	4,635	4,774	4,917	5,065	*23,891*
Supplies and Materials	250[5]	500	750	750	750	*3000*
Library Resources	3,000[6]	3,000	3,000	3,000	3,000	*15,000*
Equipment	3,000[7]	3,000	3,000	3,000	3,000	*15,000*
Facilities	2,040[8]	2,040	2,040	2,040	2,040	*10,200*
TOTALS	*138,065*	*142,208*	*146,468*	*150,597*	*154,852*	*732,190*

1. Percentage of the Chair's time incremented by 3% each year to reflect annual raises.
2. Percentage of faculty salaries (dollar amounts are approximate prorated salaries at 7.5% per course and incremented each year by 3% to accommodate annual raises)
   a. Fulbright/Toland: $21,150
   b. Routh: $14,625
   c. Tzacheva: $10,500
   d. New Hire: $70,000
3. Graduate stipends will be paid from external funding sources supporting research projects.
4. 15% of the department's administrative assistant incremented by 3% each year to reflect raises.
5. The proposed graduate program will result in between 10 and 30 new students representing an increase of approximately 10%-30% over current enrollment. The dollar value is the approximate cost of supplies and materials for the graduate faculty (see #2) multiplied by the percentage for that year.
6. It was determined that three new subscriptions to journals will be required each costing less than $1000.
7. There are 5 faculty involved in teaching the graduate curriculum. Equipment and furniture cost for one faculty member is an expense of about $2,500 every 3-4 years. Therefore, $600/year prorated for 5 faculty members results in the $3000 per year for this line item
8. The same methodology is used for this line item as with #7 except an office space costs approximately $5000 for one faculty member and represents a continuing cost. The total for 4 faculty then is $20,000 per year when multiplied by the 51% fraction of time ($10,200) and prorate yields the $2,040 figure.

Accommodation for the existing faculty teaching loads has already been built into their teaching schedule, so absorbing the teaching load for the graduate program will produce very little incremental cost to the university. The Chair and Administrative Assistant will subsume administrative duties related to the proposed graduate program without additional salary. Therefore, the total cost table shown above does not accurately represent the financial impact to the University. The following table shows the *incremental* cost to the University of adding the proposed graduate program. Financing for the proposed program will come from tuition only at the graduate course rate of $455/hour. No special state or Federal funding is required.

ESTIMATED TOTAL COST BY YEAR						
CATEGORY	1st	2nd	3rd	4th	5th	TOTALS
Administration	0	0	0	0	0	0
Faculty Salaries	70,000	70,000	70,000	70,000	70,000	350,000
Graduate Assistant	0	0	0	0	0	0
Clerical/Support Personnel	0	0	0	0	0	0
Supplies and Materials	250	500	750	750	750	3,000
Library Resources	3,000	3,000	3,000	3,000	3,000	15,000
Equipment	3,000	3,000	3,000	3,000	3,000	15,000
Facilities	2,040	2,040	2,040	2,040	2,040	10,200
TOTALS	78,290	78,540	78,790	78,790	78,790	393,200

SOURCES OF FINANCING BY YEAR						
CATEGORY	1st	2nd	3rd	4th	5th	TOTALS
Tuition Funding	89,000[1]	178,000[2]	216,125[3]	216,125[3]	216,125[3]	915,375
Fees	0	0	0	0	0	0
State Funding	0	0	0	0	0	0
Reallocation	0	0	0	0	0	0
Federal Funding	0	0	0	0	0	0
Other	0	0	0	0	0	0
TOTALS	89,000	178,000	216,125	216,125	216,125	915,375

1- Estimating 200 credit hours at the rate of $455 per hour (enrollment ramp up).
2- Estimating 400 credit hours at the rate of $455 per hour (enrollment ramp up).
3- Estimating 475 credit hours at the rate of $455 per hour (stabilized sustained enrollment).