NEW PROGRAM PROPOSAL FORM

Sponsoring Institution(s): Logan University

Program Title: Health Informatics

Degree/Certificate: Master of Science Degree

Options: n/a

Delivery Site(s): 1851 Schoettler Rd, Chesterfield, MO 63017

CIP Classification: 51.2706 (healthcare informatics)

CIP code can be cross-referenced with programs offered in your region on MDHE'S program inventory
highered.mo.gov/ProgramInventory/search.jsp

Implementation Date: Fall 2015

Cooperative Partners:

*If this is a collaborative program, form CL must be included with this proposal

AUTHORIZATION:

Dr. Clay McDonald, President

Name/Title of Institutional Officer	Signature	Date 6 - 9 - 15

Dr. Kimberly O'Reilly, VPAA   636-230-1743

Person to Contact for More Information	Telephone

www.dhe.mo.gov • info@dhe.mo.gov
205 Jefferson Street, P. O. Box 1469, Jefferson City, MO 65102 • (573) 751-2361 • (800) 473-6757 • Fax
(573) 751-6635

Form NP – New Program Proposal   1

STUDENT ENROLLMENT PROJECTIONS

Year	1	2	3	4	5
Full Time	15	20	30	40	40
Part Time	15	40	50	50	60
Total	30	60	80	90	100

Please provide a rationale regarding how student enrollment projections were calculated:

Logan University accepts applicants three times a year: Fall, Spring, and Summer. The first year, it is anticipated that we would have five accepted students in Fall 2015, ten accepted students in Spring 2016, and fifteen accepted students in Summer 2016. The new student enrollments will cap at 40 admissions per enrollment date. The first five years indicate a conservative number based on a sustainable growth pattern.

Provide a rationale for proposing this program, including evidence of market demand and societal need supported by research.

According to the U.S. Bureau of Labor statistics (2014), health care is one of the largest employment industries and provides 14.3 million jobs for wage and salary workers. Of the top 20 fastest growing occupations, 10 of those listings are health care related. Employment of health information technologists and health informatics is projected to grow 22 percent from 2012 to 2022, faster than the average for all occupations.

- 442,290 individuals are presently employed in health informatics, and at least 78,000 job openings are expected over the next 10 years (BLS, 2014).

"Health informatics (HI) graduate programs focus on information systems, informatics principles, and information technology as applied to the continuum of healthcare delivery. Health

www.dhe.mo.gov • info@dhe.mo.gov
205 Jefferson Street, P. O. Box 1469, Jefferson City, MO 65102 • (573) 751-2361 • (800) 473-6757 • Fax (573) 751-6635

Form SE – Student Enrollment Projections   2

Informatics graduate programs demonstrate uniqueness by offering varied options for practice or research" (CAHIIM, 2014).

> The Health Information Technology for Economic and Clinical Health (HITECH) Act, a part of the American Recovery and Reinvestment Act (ARRA) of 2009, authorized expenditures of at least $20 billion to promote the adoption and use of EHR technologies that would ideally be connected through a national health information network. Hospitals and physicians who make "meaningful use" of interoperable EHRs can qualify for extra payments through Medicare and Medicaid. (President's Council of Advisors on Science and Technology, 2010, p.2)

In 2009, the HITECH Act accelerated the adoption of EHR systems and related HIT nationwide in response to this government incentive program (Department of Health and Human Services, USA, 2011, p.4).

According to the Department of Health and Human Services (p.22), the government has four objectives to "Improve Care, Improve Population Health, and Reduce Health Care Costs through the Use of Health IT":

a. Support more sophisticated uses of EHRs and other health IT to improve health system performance
b. Better manage care, efficiency, and population health through EHR-generated reporting measures
c. Demonstrate health IT-enabled reform of payment structures, clinical practices, and population health management
d. Support new approaches to the use of health IT in research, public and population health , and national health security (Department of Health and Human Services, USA, 2011, p.22):

The modernization of medical records with electronic health data management has expanded the involvement of digital media and information in the practice of medicine. The HITECH Act was put in place to incentivize medical organizations to develop and maintain electronic health systems that would enable faster diagnosing, care, and better outcomes for patients. Technology in healthcare reaches across the whole continuum within an organization and to external medical facilities. Patient portals enable the public to become more cognizant of their health needs and to make better choices in their decisions. Technology is increasing at such a high rate, that processes need to be developed by those in HI careers to help interface with existing and add-on software and equipment. Security of these systems is a critical part of any healthcare organization. In addition, health systems, medical clinics, and other healthcare entities of all sizes and types around the country have begun to find common ground based on collective experience regarding best practices, necessary skill sets, and personnel needs in HIT

www.dhe.mo.gov • info@dhe.mo.gov
205 Jefferson Street, P. O. Box 1469, Jefferson City, MO 65102 • (573) 751-2361 • (800) 473-6757 • Fax (573) 751-6635

Form SE – Student Enrollment Projections   3

implementation. The high number of implementation sites, ranging from large integrated health systems to single practitioner offices, provides a wealth of knowledge through cumulative successes and failures. These implementations include both a technical component and a human capital component to ensure that the HIT system(s) are properly installed and used to their full potential.

Market Demand

A recent market analysis (Christiansen, 2014) indicated annual job openings for Health Informatics (HI) in the state of Missouri at 168 (none were reported for St. Louis, MO). Findings indicated that there are two programs for the baccalaureate degree in health information management (HIM) in St. Louis, and no programs at the master's degree level in either HIM or health informatics (HI) within the state of Missouri. In a further search, Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) displayed no accredited programs in HIM or HI at the master's level in the state of Missouri. Currently, there are only six CAHIIM accredited master's degrees in HIM and four CAHIIM accredited master's degree in HI in the U.S.

Most individuals in this profession work in hospitals, medical clinics, doctor's offices or nursing care facilities, but some work for medical research facilities (BLS, 2014).

PROGRAM STRUCTURE

    A.   **Total credits required for graduation:___36-39___**

    B.   **Residency requirements, if any:___24_credit hours must be taken at Logan University___**

    C.   **General Education: Total Credits:__0___**

Courses (specific courses OR distribution area and credits):

Course Number	Credits	Course Title

    D.   **Major requirements: Total credits: ___36-69___**

Course Number	Credits	Course Title
HLTS 05101	3	Introduction to Health Informatics
HLTM 05201	3	Project Management
HLTI 05101	3	Information Systems Management
HLTI 05201	3	Data Design, Access, Modeling, and Security

www.dhe.mo.gov • info@dhe.mo.gov
205 Jefferson Street, P. O. Box 1469, Jefferson City, MO 65102 • (573) 751-2361 • (800) 473-6757 • Fax (573) 751-6635

Form PS --Program Structure   4

HLTM 05101	3	Organization Behavior and Workflow Design
HLTI 05201	3	Data Management in Healthcare
HLTM 05201	3	Operations in Healthcare Organizations
RMET 05101	3	Research Methodology
	Total 24 Core	
Choose from *one* out of the following four concentrations:		
Health Policy and Management (12 credit hours)		
HLTS 05102	3	The Healthcare System
HLTM 06203	3	Healthcare Economics
HLTM 05202	3	Financial Concepts in Healthcare Management
CAPS 08106	3	Professional Track
Public Health (12 credit hours)		
HLTS 05103	3	Introduction to Public Health
HLTI 06101	3	Management of Public Health Data
HLTS 05201	3	Health Communications
CAPS 08106	3	Professional Track
Quality Systems (15 credit hours)		
HLTM 06102	3	Practical Quality Management
HLTM 06103	3	Applied Quality and Regulatory Practices
HLTM 06202	3	Quality Assurance Project Management
HLTM 06201	3	Medical Device Regulations
CAPS 08106	3	Professional Track
Healthcare Compliance (15 credit hours)		
HLTS 06104	3	Healthcare Regulatory Environment
HLTS 06105	3	Healthcare Compliance Programs
HLTS 06201	3	Healthcare Regulatory Enforcement
HLTS 06202	3	Healthcare Billing Models and Systems
CAPS 08106	3	Professional Track

E. **Free elective credits:**
   _0_____ (Sum of C, D, and E, should equal A)

F. **Requirements for thesis, internship or other capstone experience:**
   _3_ credit hours professional track required (listed in table D) __

G. **Any unique features such as interdepartmental cooperation:**
   __n/a____

www.dhe.mo.gov • info@dhe.mo.gov
205 Jefferson Street, P. O. Box 1469, Jefferson City, MO 65102 • (573) 751-2361 • (800) 473-6757 • Fax (573) 751-6635

Form PS –Program Structure   5

PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS

Institution Name: Logan University
Program Name: Master of Science in Healthcare Informatics (MSHI)
Date: April 27, 2015

(Although all of the following guidelines may not be applicable to the proposed program, please carefully consider the elements in each area and respond as completely as possible in the format below. Quantification of performance goals should be included wherever possible.)

1. **Student Preparation**
   - **Any special admissions procedures or student qualifications required for this program which exceed regular university admissions, standards, e.g., ACT score, completion of core curriculum, portfolio, personal interview, etc. Please note if no special preparation will be required**

An applicant must have earned a baccalaureate degree or higher from an accredited college or university.

An applicant must request that an official transcript be sent directly to Logan from the institution awarding the qualifying entrance degree. If the applicant attended multiple institutions, an official transcript must be sent from each institution directly to Logan.

- An applicant must present a minimum cumulative grade point average of a 3.00 on a 4.00 scale in their qualifying bachelor's degree. If the applicant's cumulative grade point average (GPA) is between a 2.50 and a 2.99, the student must have passed the Graduate Record Exam (GRE) with a score of at least a 290 (combined verbal and qualitative) within the last five years. The previous minimum qualifying score of 910 (combined verbal and quantitative) will continue to be accepted until 2016 from an applicant who took the exam prior to September 2011 with appropriate documentation. GRE information can be found at www.ets.org.
  - o An applicant with qualifying post undergraduate coursework may have those courses and cumulative GPA re-evaluated by the Admissions Committee.
- An applicant must have completed the prerequisite course work listed below from an accredited institution with grades of "C" (2.0 on a 4.0 scale) or higher in each course.

www.dhe.mo.gov • info@dhe.mo.gov
205 Jefferson Street, P. O. Box 1469, Jefferson City, MO 65102 • (573) 751-2361 • (800) 473-6757 • Fax
(573) 751-6635

Form PG – Program Characteristics and Performance Goals   6

Requisite Course Work Requirements
Master of Science (MS) degree in Health Informatics
• 6 semester credit hours of business related courses: organizational behavior, management, financial, etc.
• 6 semester credit hours of computer science related courses

- An applicant currently enrolled as a Doctor of Chiropractic student at Logan University must meet the above requirements; additionally, the applicant must have completed all DC coursework through trimester four with a cumulative grade point average of 3.00 or higher. In a case where the applicant's cumulative grade point average is between 2.50 and 2.99, the student must have passed Part I (all sections) on the National Board of Chiropractic Examiners examination or have the approval of the Dean of the College of Chiropractic.

2. **Faculty Characteristics**
   - **Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate.**
     - ➤ Minimum of a Master of Science degree in Health Informatics, Health Administration or related fields; plus five years of experience; or equivalent combination of education and experience.

   - **Estimated percentage of credit hours that will be assigned to full time faculty. Please use the term "full time faculty" (and not FTE) in your descriptions here.**
     - ➤ Full-time faculty will teach approximately 55-60% of the program courses.

   - **Expectations for professional activities, special student contact, teaching/learning innovation.**
     - ➤ Faculty are expected to comply with all college regulations and policies, committee service, participation in college functions (i.e., graduation).
     - ➤ *Service:* expectations include community involvement related to Logan, membership in professional/learned societies, participation in professional/learned societies, and faculty advisor to student clubs.
     - ➤ *Academic/Scholastic Activity or Productivity:* expectations include publications in refereed/non-refereed journals, oral presentations, poster presentations, invited conference participant, keynote speaker participation on Boards/Teams of accrediting agencies or task forces, continuing education, certifications, etc.

3. **Enrollment Projections**
   - **Student FTE majoring in program by the end of five years.**

www.dhe.mo.gov • info@dhe.mo.gov
205 Jefferson Street, P. O. Box 1469, Jefferson City, MO 65102 • (573) 751-2361 • (800) 473-6757 • Fax (573) 751-6635

Form PG -- Program Characteristics and Performance Goals   7

> ➤ 40-80 full-time students

- **Percent of full time and part time enrollment by the end of five years.**
  - ➤ 40% full-time, and 60% part-time students

4. **Student and Program Outcomes**
   - **Number of graduates per annum at three and five years after implementation.**
     - ➤ 3-year estimate = 35 students; 5-year estimate = 50

   - **Special skills specific to the program.**
     - ➤ An understanding of the main concepts and software applications of Electronic Health Records and Personal Health Records
     - ➤ An understanding of the principles of major healthcare quality and safety measurements
     - ➤ An understanding of information technology (IT) governance, health information ethics and legal requirements to improve healthcare processes, customer response, and business competitiveness
     - ➤ Evaluate IT based systems and solutions within healthcare
     - ➤ Analyze primary and emerging technological means of communication, collaboration, and information search and retrieval within the healthcare and medical fields
     - ➤ Practical knowledge of how to effectively integrate the functional efforts of many in the execution of programs and projects
     - ➤ Knowledge of information structures and of relationships among data elements and objects

   - **Proportion of students who will achieve licensing, certification, or registration.**
     - ➤ It is expected that there will be 50-75% of the graduates obtaining certification in the next 3-5 years.

   - **Performance on national and/or local assessments, e.g., percent of students scoring above the 50th percentile on normed tests; percent of students achieving minimal cut-scores on criterion-referenced tests. Include expected results on assessments of general education and on exit assessments in a particular discipline as well as the name of any nationally recognized assessments used.**
     - ➤ Students will have to complete a professional track capstone course to graduate. There is not a nationally recognized assessment test in the field of Health Informatics at this time.

   - **Placement rates in related fields, in other fields, unemployed.**

www.dhe.mo.gov • Info@dhe.mo.gov
205 Jefferson Street, P. O. Box 1469, Jefferson City, MO 65102 • (573) 751-2361 • (800) 473-6757 • Fax (573) 751-6635

Form PG – Program Characteristics and Performance Goals   8

> There is no data on file at this time.

- **Transfer rates, continuous study.**
  > There is no data on file at this time.

5. **Program Accreditation**
   - **Institutional plans for accreditation, if applicable, including accrediting agency and timeline. If there are no plans to seek specialized accreditation, please provide a rationale.**
     > Logan University plans to seek accreditation through CAHIIM for the MSHI degree program. A letter of intent and request to be a candidate for accreditation will be completed after students are enrolled in Fall 2015. The Program Director will complete the self-study and discuss a timeline with CAHIIM, as CAHIIM will direct the timeframe. CAHIIM will set a site visit to coordinate with the availability of graduates of the program.

6. **Alumni and Employer Survey**
   - **Expected satisfaction rates for alumni, *including timing and method of surveys.***
     > Alumni satisfaction surveys are developed in SurveyMonkey and are sent out through email once a year (summer term) for the prior year's graduating classes. It is expected that the annual survey results will demonstrate high ratings.

   - **Expected satisfaction rates for employers, including timing and method of surveys.**
     > As the program progresses, employee satisfaction surveys will be considered as a data collection tool. It is expected that the annual survey results will demonstrate high ratings.

7. **Institutional Characteristics**
   - Characteristics demonstrating why your institution is particularly well-equipped to support the program.
     > Program Director and faculty – Minimum of a Master of Science degree in Health Informatics, Health Administration or related fields; plus five years of experience; or equivalent combination of education and experience.
     > Part time or adjunct instructors as needed
     > Online and on-campus teaching experience
     > Logan University uses Canvas as a Learning Management System

> There are open classrooms for study or simulations after 4:00PM, interactive classroom technology, and full time online Canvas and student support services, a Learning Resource Center that can also be accessed online and tutoring resources.

www.dhe.mo.gov • info@dhe.mo.gov
205 Jefferson Street, P. O. Box 1469, Jefferson City, MO 65102 • (573) 751-2361 • (800) 473-6757 • Fax (573) 751-6635

Form PG – Program Characteristics and Performance Goals   9

References

Christiansen, J.F. (2014). *Academic program review, college of health sciences*. St. Louis, MO

Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) (2014). http://www.cahiim.org/applyaccred_HI_grad.html

Department of Health and Human Services, USA (2011). Federal health information technology strategic plan 2011-2015. *Office the National Coordinator for Health Information Technology (ONC)*. pp. 1-80. Retrieved from http://www.healthit.gov/sites/default/files/utility/final-federal-health-it-strategic-plan-0911.pdf

President's Council of Advisors on Science and Technology (2010). Report to the President realizing the full potential of health information technology to improve healthcare for Americans: The path forward. *Executive Office of the President*, pp1-108. Retrieved from http://www.whitehouse.gov/sites/default/files/microsites/ostp/pcast-health-it-report.pdf

U.S. Bureau of Labor Statistics (BLS) (2014). *Recreational Therapists*. Retrieved from: http://www.bls.gov/ooh/healthcare/recreational-therapists.htm

www.dhe.mo.gov • info@dhe.mo.gov
205 Jefferson Street, P. O. Box 1469, Jefferson City, MO 65102 • (573) 751-2361 • (800) 473-6757 • Fax (573) 751-6635

References   10