SOUTHERN ILLINOIS UNIVERSITY EDWARDSVILLE

BJC Center for Lifelong Learning

Master of Science in Healthcare Informatics

Student Handbook

www.siue.edu

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History of the Program
Starting in 2008, Southern Illinois University Edwardsville (SIUE) developed and delivered a 15-week noncredit professional development clinical informatics program for BJC Healthcare. The success of this program coupled with a growing need by healthcare organizations to more effectively collect and process patient data, and federal mandates for use of electronic health records, led BJC to express a strong need for an interdisciplinary master's degree program.

An interdisciplinary team from SIUE met with a clinical team from BJC to explore the development and design of a master's degree that would meet the needs of working professionals from a variety of healthcare.

This effort has led to the creation of a Master of Science in Healthcare Informatics. The degree will serve the needs of any healthcare practitioner that is experiencing increasing demand to collect, process, analyze, and interpret clinical and patient information.

Program Objectives
The Master of Science in Healthcare Informatics will prepare healthcare professionals in the clinical use of technology with the goal of improving patient outcomes and enhancing patient care. This will be accomplished through directing the learner to:

a. Manage information safely, securely, and legally.
b. Translate scientific discovery into practice.
c. Improve collaboration between clinical practice and information technology.
d. Assess, select, implement, evaluate, and maintain information systems.
e. Lead health informatics related projects.
f. Use technology to improve patient care, healthcare outcomes, and cost effectiveness.
g. Educate members of the healthcare team on the use of technology.
h. Interpret and report the results of data analyses to support evidenced-based care.

The BJC Learning Institute Site
All classes meeting are conducted on-site at the BJC Learning Institute (BLI):

Address: 8300 Eager Road, Saint Louis, Missouri 63144
Contact: Amy Pollock, Senior Manager, Learning Partnerships and Assessments
BJC HealthCare, Center for LifeLong Learning, Suite 200a
Phone: 314-362-0875 Fax: 314-362-0966

Parking and Classrooms
SIUE uses classrooms on the 2nd and 7th floors. Covered parking is adjacent. Students should park in the garage and use the crossover bridge to the BLI located on the 5th floor.

Registration
Students are registered by staff from the Office of Educational Outreach. Students receive official correspondence regarding registration via email. During the initial orientation meeting, students are informed of the regular process, point of contact at SIUE for non-academic issues, and information for special circumstances.

Accelerated Format
The BJC courses are approved to be held in a blended format, meaning that online and on-ground learning experiences will be provided.

The duration of each course spans nine weekly meeting days. Instructors will make every attempt to keep coursework assignment due dates and out-of-class work within the confines of the nine class meetings.

Textbooks
Approximately one month before the first class meeting, the students receive an email with details regarding the required textbook(s) for the upcoming course. Students may purchase textbooks from their preferred vendor.

Attendance
SIUE offers the Healthcare Informatics program in a blended format, meaning that a percentage of course content may be delivered online. As this also is an accelerated program, instructors must make the best use of available course time to deliver content and create learning experiences for students.

BJC students will follow a schedule with nine concurrent course "meetings." Instructors decide how and when to deliver content, so while it is likely that some "classes" will not be held in the physical classroom, students should not plan other activities during their regularly scheduled class meeting times. BJC students may be expected to participate in a physical class meeting during a University holiday in an effort to accommodate the accelerated course schedule.

In the event of an evening SIUE closure due to inclement weather, BJC courses also will be cancelled. However, students should check email and Blackboard to determine whether other content is to be delivered online to accommodate the accelerated course schedule.

While there is no quantitative attendance policy, students are fully responsible for all information delivered both online and in the physical classroom.

Prerequisite Skills
While students are required to demonstrate successful completion of a statistics course with a grade of "C" or better, some students feel deficient in basic computer processing applications or have lost significant amounts of their understanding of statistics over time. It is highly recommended that students engage in professional development courses

that will improve their requisite skills in word processing, spreadsheet and presentation applications. Students are encouraged to use the skills courses at BJC to familiarize themselves with MS Office applications.

Transfer Credit

For students pursuing Healthcare Informatics on site at BJC, transfer credit will be awarded with approval from the Graduate School and the individual department administering the course.

A maximum of six (6) credit hours may be accepted in transfer to meet university degree requirements if the following conditions are met:

1. The course must be evaluated and deemed acceptable based on its content and comparability relative to standard curricula.
2. The course must be from an institution holding accreditation from any one of the six regional accrediting agencies.
3. The course must be less than six years old.
4. The course must be complete and graded with a "B" or better.

Academic Integrity Policy

The University recognizes plagiarism as a serious academic offense. Plagiarism is presenting another existing work, original ideas, or creative expressions as one's own without proper attribution. Any ideas or materials taken from another source, including one's own work, must be fully acknowledged unless the information is common knowledge. What is considered "common knowledge" may differ from subject to subject. To avoid plagiarizing, one must not adopt or reproduce material from existing work without acknowledging the original source. Existing work includes but is not limited to ideas, opinions, theories, formulas, graphics, and pictures. Examples of plagiarism, subject to interpretation, include but are not limited to directly quoting another's actual words, whether oral or written; using another's ideas, opinions, or theories; paraphrasing the words, ideas, opinions, or theories of others, whether oral or written; borrowing facts, statistics, or illustrative material; and offering materials assembled or collected by others in the form of projects or collections without acknowledgment.

The Provost and Vice Chancellor for Academic Affairs is charged with administrative responsibility for handling complaints, allegations, or grievances against students concerning plagiarism, according to the http://www.siue.edu/policies/3c2.shtml.

Preferred Referencing Format

The preferred referencing format for BJC students is American Psychological Association (APA).

Student Portfolio requirements

Students and course instructors will evaluate the program objectives on a continuing basis via the electronic portfolio stored in Blackboard. The purpose of the portfolio is to provide a tangible method for graduate students in the program to express their professional growth and attainment of program objectives. Students will be required to

update their portfolio each semester and present their portfolio in the final capstone course.

Dropping Course or Program
Students may drop courses within the first two class meetings without penalty. Students may add courses with instructor permission at any time during the term. After BJC is invoiced for the course the student who drops will receive a grade of "W". Students must send written confirmation of their intent to drop courses.

Course Evaluation
Students are strongly encouraged to fill out an evaluation for each course. The evaluations are made available for approximately one week before the course ends and remain open for another week after the class has concluded. Invitations to fill evaluations are sent to students' SIUE email accounts. Faculty are encouraged to allow students to use a computer lab at the BJC Learning Institute at the conclusion of the next-to-last class meeting.

Grading and Grade Submission to BJC
Faculty will turn in grades two weeks after the course has ended and grading scales may differ for individual courses. Students are able to view their grades using CougarNet. Students may request a grade report by contacting the SIUE registrar's office to obtain an official grade letter. Use akates@siue.edu or 618-650-2268 to make this request. Students may also opt to receive an official transcript by following this link: http://www.siue.edu/registrar/forms/transcriptrequest.shtml.

Satisfactory Academic Progress
To remain in good standing, students must maintain a 3.0 grade point average in coursework. Grades of "D" or "F" cannot be used to satisfy the requirements for a graduate degree.

Capstone Experience
The capstone experience is divided into three areas as outlined in the document at siue.edu/healthcareinformatics/pdf/Capstone-Project-Document.pdf.

Faculty Chairs are responsible for:

1. Determining whether students are on track with their project proposals prior to the beginning of Capstone 1.
2. Working with the student(s) to determine whether Institution Review Board (IRB) approval will be required for student projects.
3. Helping students determine from which other disciplines they may seek to have committee members.
4. Working with the students during the Capstone experience to keep students on track, report pass/no pass grades, and meetings or consultations with students, committee, other faculty, or other stakeholders on behalf of the student.

Appendix A
MS Healthcare Informatics Course Descriptions

NURS 509 Interdisciplinary Health Care Informatics
This course introduces informatics technology and theory. The focus then shifts to searching, managing, and evaluating data, analyzing information systems, and integrating technology into practice.

CMIS 557 Enterprise Resource Planning
The role of Enterprise Resource Planning (ERP) software in the business environment will be explored using SAP. A risk management approach will be emphasized.

PSYC 576 Graduate Seminar in Organizational Development
Early history, assumptions, concepts, and various change strategies. Human process approaches to planned change within a systems framework.

IT 590 Seminar in IT: Instructional Design and Media Selection for Healthcare Informatics
Provides a foundation in systematic instructional design (ISD). The course focus includes the various activities of the ISD process. This course also will address the several aspects of media and its capabilities as a delivery tool for instruction.

CMIS 535 Project Management Standard Process
A framework of standard processes based on the Project Management Body of Knowledge and other resources. Includes processes for managing scope, time, quality, cost, human resources, communications, risk, and procurement.

PAPA 420 Quantitative Analysis
Research design, descriptive statistics, hypothesis testing, nonparametric statistics, analysis of variance, correlation, and regression.

CS 434 Database Management Systems
Database management system concepts, models, and languages. Entity/relationship, relational, and object oriented data models; relational database design and implementation including SQL; object databases.

CS 560 Information Discovery in Electronic Healthcare Records
This course surveys analytical techniques for discovering information in electronic healthcare record systems through data mining, text mining, and human-driven visual analytics techniques.

NURS 511 Social, Ethical, and Legal Issues in an Information Age
Explores basic and emerging social, ethical and legal issues related to searching, storing and using health care information and the ethical and legal formation of informatics professionals.

HCIM 596a Capstone I
During Capstone I, the student will initiate the information systems design project. The student will conduct a feasibility study to determine the project scope and objectives, alternative design options, and cost-effectiveness.

NURS512 Managing Quality and Safety in Healthcare
Examination of processes and integration of concepts used to measure and improve the quality and effectiveness of health care is discussed. Research statistics and quality data will be examined and analyzed.

HCIM 596b Capstone II
During Capstone II, the student will develop the requirements for the information systems design project. The student will develop the detailed analysis of the existing system and logical systems design for the proposed system (e.g. the requirements specification).

CMIS 588 Seminar in CMIS: Information Security
An introduction to the technical and administrative aspects of Information Security and Assurance. Provides an understanding of the key issues associated with protecting information assets, determining the levels of protection and response to security incidents, and designing an effective information security system.

HCIM 596c Capstone III
During Capstone III, the student will implement the information systems design project. The student will focus on detailed systems design, including program design, configuration, and test planning, and systems implementation, including training, testing, documentation, data migration, quality assurance, and information security.