BIOMEDICAL AND HEALTH INFORMATION SCIENCES
COLLEGE OF APPLIED HEALTH SCIENCES
UIC

2023-2024

Student Handbook

University of Illinois at Chicago

Department of Biomedical and Health Information Sciences

Graduate Programs Health Informatics

Master's

Post-Master's Certificate

Post-Baccalaureate Campus Certificates

CONTENT AND DATES SUBJECT TO CHANGE

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Contents

Introduction

Biomedical Health Information Sciences Department

Department Mission

The mission of the Department of Biomedical and Health Information Sciences is to advance the quality and efficiency of health care through improved generation, management, and communication of biomedical and other health care data. The goals of the Department are leadership, innovation, initiative, and quality with strong focus on the unique arena of health informatics at the University of Illinois at Chicago.

Department History

In 1994, the Department of Biomedical and Health Information was created within the College of Applied Health Sciences at the University of Illinois at Chicago to signify the united commitment of health information management and medical laboratory sciences. The establishment of the Department created a unit strong in focus about the study, practice, and facilitation of health information technology, education, research, and bioscience. The program became the first CAHIIM accredited program in Health Informatics in 2010.

Program Accreditation

The University of Illinois at Chicago is accredited by the Higher Learning Commission (HLC) of the North Central Association of Colleges and Schools (NCA). The Master of Science in Health Informatics program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). The Post Master's Certificate is accredited by the Illinois Board of Higher Education.

Purpose of the Student Handbook

Welcome to the Department of Biomedical and Health Information Sciences (BHIS)! The faculty and staff welcome you to the health informatics program.

The Student Handbook is a reference guide that provides a centralized repository of academic policies and resources for the health informatics program and certificate. The content is subject to change. The handbook should direct you to UIC website links and resources for your reference and additional details. Graduate students are governed by the policies of the University of Illinois at Chicago, the Graduate College, and the Biomedical and Health Sciences Department, and are expected to become familiar with these policies. When a department requirement is approved by and exceeds that of the Graduate College, it replaces the Graduate College standard. Joint degree students must also conform to the requirements of their respective programs.

The Graduate College's policies and procedures can be accessed at the following site:

> http://catalog.uic.edu/gcat/graduate-study/graduate-study/

Health Informatics Program Admission Requirements

Application Requirements and Instructions

The Health Informatics degree/certificate programs admit three times a year per the admission deadlines on the UIC Graduate College's website, go to year, then to Section II: http://grad.uic.edu/deadlines

Application Instructions:

1. The application process is 100% online. https://admissions.uic.edu/grad/apply_grad.html
2. Applicants can apply and upload documents on the same day. Follow the directions provided in the application link: https://admissions.uic.edu/graduate-professional/apply
3. Fill out the FAFSA if you are applying for financial aid. Use code number 001776 to designate the University of Illinois at Chicago. https://studentaid.gov/h/apply-for-aid/fafsa

Incomplete applications will not be considered.

Admission Requirements- Masters in Health Informatics (MSHI) and Post Master's Certificate (PMC HI)

Applicants will be considered on an individual basis by anonymous submission to the Biomedical Health Information Sciences (BHIS) Committee for Academic Affairs.

Individuals determined to be deficient in one or more areas may be recommended to the Graduate College for limited standing admission upon the condition that the deficiencies are completed through appropriate course work or pre-requisites, prior to starting the program course work.

The applicant must meet the UIC Graduate College admission requirements and specific program admission requirements. Program requirements supersede the graduate school requirements.

	Masters Health Informatics	Post-masters Certificate Health Informatics
Application fee	Non-refundable application fee (required at the time of application submission)	
International Credential Fee	Credential evaluation fee for any international coursework	Credential evaluation fee for any international coursework
Degree Requirements	Bachelor's Degree from an accredited institution that equals a U.S. bachelor's degree.	Bachelor's degree from an accredited institution that equals a U.S. bachelor's degree and *Master's or Professional degree from an accredited institution.
	*For those with an MBA, the degree must be granted either by UIC or another school accredited by AACSB International—The Association to Advance Collegiate Schools of Business (http://aacsb.edu/)	
Grade Point Average (GPA)	Grade Point Average (GPA) minimum 3.0/4.0 cumulative for all undergraduate degrees, graduate and professional degrees and any additional post-degree coursework.	
Transcripts	Transcripts- registrar-issued transcripts (copies) from the following: • All colleges or universities attended that contributed to the degree(s) • All coursework taken after the first bachelor's degree • Transcripts must state degree conferred from awarding institution • Mark sheets or grading scale legends	

	• International students refer to: https://admissions.uic.edu/grad/international_requirements_grad.html

English Proficiency Requirements for International Students See link for exceptions: https://admissions.uic.edu/graduate-professional/requirements-deadlines/international-requirements	These are program required levels which differ from the graduate college levels.							
	TOEFL iBT internet based		IELTS		PTE Academic		TOEFL PBT	
	Total Score	95	**Overall Score**	7	**Overall Score**	54	**Total Score**	**585 or higher**
	Listening	22	Listening	6.5	Listening	51		
	Writing	24	Writing	6.5	Writing	56		
	Reading	24	Reading	6.5	Reading	51		
	Speaking	24	Speaking	6.5	Speaking	53		

English Proficiency Waiver Letter Instructions	The request for English Proficiency test scores automatically populates in the checklist for international applicants. If the international applicant intends to submit a waiver letter, please select that option on the application. For a domestic or permanent resident applicant that is required to fulfill the English proficiency requirement, the request for test scores does not populate. Admissions audits the application, and then adds the option of the test score requirement or a waiver letter.	
Resume	Current resume includes the applicant's education, work experience with employer name, employer location (city, state, country), job titles, dates of employment and any employment gaps.	
Personal Statement	Complete the personal statement form in the application.	
Letters of recommendation forms	Letters from two persons that can comment on the applicant's professional or academic abilities, such as supervisors or professors. Provide names and email addresses. (links expire in 30 days or by the application deadline)	Not required

Policy for advanced placement and transfer credits

Transfer students may request credits completed at another institution to be accepted toward the MSHI degree. The applicant must submit a syllabus for potential transfer credits for review by the program director.

Courses that were completed more than 5 years ago, will not be accepted as transfer credit. After a complete review, a recommendation is presented to the Academic Affairs Committee. Students will find out about approved transfer credits from the applications/recruitment advisor working with them.

Limited Status Admission

Limited admission status students must meet the conditions imposed by this status and progress to full degree status within one year or any shorter amount of time set forth in the letter of acceptance. Students accepted to Health Informatics programs under the condition of limited status may receive no grade below an A or a B in any of the 400-/500 level courses taken and must complete 10 hours of required course work within the first year of matriculation. Other conditions may also apply. Failure to do so will result in automatic dismissal from the university.

Deferred Admission Start- Students who have been recommended for admission, but cannot attend for valid reasons, may request to defer their admission. An admitted application can only be **deferred once and only up to one year**. (Applicants for the fall term may defer to the following spring, summer, or fall terms, but no further.) Admission to the term is contingent upon departmental admissions practices for that term. Students do not need to submit a new application, fee, or set of academic credentials in order for a deferral to be granted.

Only students who have been officially admitted by the Graduate College are eligible to defer admission. Denied applications and those cancelled due to missing academic credentials cannot be deferred.

To request a deferral, please contact your academic program.https://healthinformatics.uic.edu/online-programs/health-informatics-programs/?utm_source=google&utm_medium=cpc&utm_campaign=visionpoint_uic_pros&utm_content=health-informatics

Concurrent Enrollment

Department policy does not permit concurrent enrollment in other campus programs during matriculation in BHIS graduate health informatics programs. Students wishing to enroll in other campus programs may petition the department for a leave of absence from BHIS graduate studies. Forms may be requested from the department office at 312-996-733.

HI and PMCHI Program- Degree/Certificate Requirements

	MSHI Degree Requirements	PMC HI Certificate Requirements
Credit Hours	38 semester hours minimum * Additional pre-requisite hours may be required based on applicant's academic background and are not included in the 45 credit hours required to graduate	24 semester hours minimum * Additional pre-requisite hours may be required based on applicant's academic background and are not included in the 45 credit hours required to graduate
Grade Point Average (GPA)	3.0/4.0	3.0/4.0

If a student's cumulative program GPA (this does not include prerequisites) falls below 3.00, the student is automatically placed on probationary status by the Graduate College and/or by the program. The Graduate College's policy is that a student has two semesters to raise his/her GPA to a 3.0.

The departmental policies are as follows. All the rules apply if the student is registered for term:

- A minimum grade of "B" is expected.

- One grade of "C" or Unsatisfactory may result in a letter of warning from the Director of Graduate Studies (DGS) and possible repetition of the course during the next period of registration in which it is offered.

- Two grades of "C" or Unsatisfactory will lead to a formal review of the student's academic record by the program director and Director of Graduate Studies (DGS), resulting in a recommendation of either repetition of the courses during the next period of registration in which they are offered, or dismissal from the program.

- A grade of **"D"** will receive a formal review of the student's academic record by the Program Director and DGS. The student will be required to retake the course during the next period of registration in which it is offered.

- A grade of **"F"** will result in a formal review of the student's academic record by the Program Director and DGS. This will result in either retaking the class or dismissal from the program.

- A student who fails to make progress toward a certificate or degree may be dropped. (Examples include failure to complete required courses, accumulation of an excessive number of Incomplete (I) and/or unsatisfactory grades, failure to earn credit in any semester, failure to maintain a "B" average in BHIS).

- A student admitted to the program on "limited standing" must receive a grade of A or B in all courses, and complete 10 hours of course work within the first year of matriculation or face dismissal by the Graduate College.

In all cases, a student must have a 3.0 cumulative GPA to graduate from the Master of Science or the Post-master certificate in Health Informatics programs.

The Graduate College monitors progress toward and assures the integrity of the University of Illinois at Chicago graduate degree. If a graduate student's grade point average (GPA) falls below 3.0 at the end of any semester, the Graduate College will send the student a warning of probation letter notifying the student he/she has two semesters to raise the GPA above 3.0 or risk being dropped from his/her graduate program.

Pre-Requisite Courses	*Pre-requisites are determined upon admission and must be completed prior to taking program courses, and do not count toward degree credit hours. It is the student's responsibility to complete all pre-requisites.			
	Possible MSHI Pre-Requisites		*Possible PMC Pre-Requisites*	
	HIM 486	Foundations of Health Information Management	HIM 486	Foundations of Health Information Management
	BHIS 406	Medical Terminology for Health Information Management	BHIS 406	Medical Terminology for Health Information Management
			BHIS 460	Introduction to Health Informatics
Required Core Courses	26 Semester hrs. core credits *	Core Courses	19 Semester hrs. core credits *	Core Courses
	Required Core Courses for All HI Tracks		*Required Core Courses for All PMC Tracks*	
	BHIS 437	Health Care Data	BHIS 437	Health Care Data
	BHIS 499	Information Sources in Biomedical & Health Information Sciences	BHIS 499	Information Sources in Biomedical & Health Information Sciences
	BHIS 503	Communication Skills in Health Informatics	BHIS 510	Health Care Information Systems
	BHIS 505	Ethics and Legal Issues in Health Informatics	BHIS 515	Management of Health Care Communication Systems
	BHIS 510	Health Care Information Systems	BHIS 520	Health Information Systems Analysis and Design
	BHIS 515	Management of Health Care Communication Systems	BHIS 525	Social and Organizational Issues in Health Informatics
	BHIS 520	Health Information Systems Analysis and Design	BHIS 530	Topics in Health Informatics
	BHIS 525	Social and Organizational Issues in Health Informatics		
	BHIS 530	Topics in Health Informatics (required for course work track)		
	BHIS 593	Health Informatics Capstone Experience ** required for students who were admitted Fall of 2012 and after.		
Elective Courses	Choice of electives to reach the minimum 38 semester hours should be guided, in consultation with the advisor, by the area of interest and the student's professional experience.			
	Course-Work-Only Track Electives			

	BHIS 504	Qualitative Methods and Health IT Evaluation		
	BHIS 509	Informatics for the Clinical Investigator		
	BHIS 514	Patient Safety Topics in Health Informatics		
	BHIS 517	Healthcare Information Security and Cybersecurity Foundations		
	BHIS 522	Mobile Health Informatics		
	BHIS 527	Knowledge Management in Healthcare Organizations		
	BHIS 528	Consumer Health Informatics		
	BHIS 529	Transforming Healthcare using Business Intelligence and Predictive Analytics		
	BHIS 532	Foundations of Clinical Decision Support Systems		
	BHIS 534	Health Information Technology and Patient Safety		
	BHIS 535	Organizational Dynamics and Health Informatics		
	BHIS 537	Health Informatics Product Management		
	BHIS 538	Health Care I.T. Administration		
	BHIS 540	Essentials of Health Data Science		
	BHIS 541	Healthcare Data Analytics		
	BHIS 542	Artificial Intelligence for Healthcare		
	BHIS 543	Health Care Project Management		
	BHIS 546	Leadership Development in Health Informatics		
	BHIS 554	Health Informatics Business Intelligence Tools and Application		
	BHIS 561	Programming for Health Analytics		
	BHIS 567	Healthcare Data Visualization		
	BHIS 570	Human Factors and Cognition in Health Information Technology		
	BHIS 575	Applied Statistics for Health Data Science		
	BHIS 580	Practicum in Health Informatics		
	Required Courses for Project and Thesis Research Tracks			
	Statistics course	Research track students must take or show completion of a statistics course		
	BHIS 500	Strategic Inquiry in Biomedical and Health Information Sciences		

	BHIS 595	Seminar in Biomedical and Health Information Sciences		
	BHIS 597 OR	Project Research in Biomedical and Health Information Sciences		
	OR BHIS 598	Thesis Research in Biomedical and Health Information Sciences		
	Electives for Research Track			
	BHIS 530	Topics in Health Informatics (elective for research track)		
	Thesis, Project-Options			
	Thesis: Students must earn at least 8 hours in BHIS 598			
	Project: Students must earn at least 4 hours in BHIS 597			

BHIS 593 Capstone

- *Course Description:* The BHIS 593 Capstone (**16-week**) course is required for all master's degree students. Students take this as their final, required course in the program. Faculty mentors will approve and guide the completion of the Capstone. The course is a one credit hour culminating experience where students complete a final product demonstrating a synthesis of competencies from the program such as:
- Literature review research paper on a health informatics topic selected by the student.
- Project analyzing a business problem or a related to the organization where they work
- Narrative Statement of Competence where they will reflect, discuss, and write about their experiences in the program and the competencies they developed.

The capstone course helps students to translate what they learned—the knowledge, skills, and professional attitudes—into the role of a health informatician in the work force.

Grading for the capstone is a satisfactory/unsatisfactory rating for the capstone final product. The Program Director will be notified of all unsatisfactory grades on Capstones. After three unsuccessful attempts at completing the capstone, the Director of Graduate Studies will review the case according to the guidelines for failure to progress in the program and the student may be dismissed.

Use of ePortfolio

ePortfolio Description: Using an ePortfolio has been identified as a high impact practice for online education. MSHI students will have the opportunity to develop an ePortfolio as they progress through the program. Using an ePortfolio is completely optional; students will receive information and instructions early in the MSHI program. Course assessments—including a student's completed Capstone project—may be added to the ePortfolio as artifacts demonstrating that the student has met required competencies of the program. Building an ePortfolio helps students to translate what they learned—the knowledge, skills, and professional attitudes—into career preparation as a health informatician in the work force.

Benefits of using a Portfolio:

- Portfolio authors are empowered to effectively present their information in a cohesive, personalized format
- Users prepare, reflect, share, and present the results of their academic career and professional experiences
- Tool to foster and document such complex learning such as development of competencies

How Students use ePortfolios:

- Students collect their work during the program
- Track learning progress and achievements and share them with others
- Share portfolios as evidence of their skills and future potential
- Reflect upon strengths and weaknesses, and strive to improve
- Develop a carefully crafted professional narrative statement about themselves and what they can do
- Use them to apply for jobs, show a transferable skill, and track their professional development

MS HI Research Track Option

All students are initially admitted into the MS HI course-only option to pursue their UIC MS HI degree. Students need to declare their intent to do research by the 8th week of the fall semester of their master program so they can register for BHIS 500 and BHIS 597/598 in the upcoming spring semester and BHIS 595 in the summer semester.

After 15-20 hours of matriculation in the MS HI program and if the student's GPA is > 3.5, a student may declare his/her intent to be considered for the research option. The student must contact the student advisor and state their intent to pursue research and formally declare intent to pursue research by emailing the MS HI program director a personal statement indicating desire for research, area of research interest and specific research topic, and future plans for using knowledge gained in completing the research project.

Students should be aware that pursuing the research track involves the following:

- Strong interest in a specific research topic and possible interest in going on for a PhD
- Taking additional courses
- Additional time (beyond the time needed for the course only option) to complete the thesis
- Identifying a faculty member who is willing to mentor and advise the student

Subsequently, the MS HI program director will explain and discuss the following considerations and expectations for students in the MS HI research-track:

- Students are required to take a statistics course or demonstrate completion of a statistics course before initiating the research track.
- Additional trips to campus are required for project development, research committee meetings, and project defense.
- Institutional Review Board (IRB) training and HIPAA training certifications may be necessary.
- The need to identify a faculty member who is willing to mentor the student and advise them through the completion of their thesis.
- The research will require student to have extensive writing, organizational, and time management skills.
- BHIS 500 (offered in the spring semester) and BHIS 595 (offered in the summer semester) will be substituted for BHIS 530. If a student drops research after taking these two courses, s/he must take BHIS 530.
- The designated chair will contact the student about next steps
  - Identification of other committee members
  - IRB requirements to be completed
  - Need to communicate regularly and often
  - Scheduling of committee meetings
  - Defense presentation requirements
  - Continuous registration requirements
- Enrollment in BHIS 597 in the PD's section for 1 CH during spring term concurrent with enrollment in BHIS 500 (credit can be applied to BHIS 598 if the student decides for thesis research).

- The project may require at least an additional year, or more, to complete.
- The program director will present the students declaration of intent to pursue research to the HI faculty. The HI faculty will consider the application and approve the student's curriculum change to matriculate in the research option. The MS HI program director will then communicate the outcome to the student applicant and student advisor.
- The student advisor and the program director will be copied on all correspondence
- The student advisor will work with the student to make sure he/she completes BHIS 500 and BHIS 595, as well as the required BHIS 597/598 hours (with continuous registration) until research project completion.

Students need to declare their intent to do research by the 8th week of the fall semester of their master program so they can register for BHIS 500 and BHIS 597/598 in the upcoming spring semester and BHIS 595 in the summer semester.

If the student is submitting a thesis (598) then they need to follow the guidelines for defending and submission. https://grad.uic.edu/academic-support/thesis/

November 4, F	Last day to submit approved thesis/dissertation to Graduate College for graduation this term.

If the student is submitting a project (597) then the attached form needs to submitted to the graduate college by the deadline. https://grad.uic.edu/academic-support/exams-defense/

December 9, F	Last day for Graduate College to receive certificates of approval for master's and professional doctorate projects for graduation this term.

MSHI Concentrations

- The MSHI program offers three concentration areas. The purpose of concentrations is to offer students the ability to identify an area of specialization that is **of interest to them** or that they may **seek to work in** after graduation. A concentration is an intentional use of electives to build deeper competency. Students seeking a concentration will use all 4 of their electives for the MSHI to complete courses in the concentration.

   Students may designate any of the following concentrations within the MSHI:

1. CONCENTRATION IN HEALTH DATA SCIENCE (HDS) - prepares students to participate on analytic teams, teaches data analysis and interpretation, develops skills and practical experience working with healthcare data.

    Requires two core data science courses,
    - BHIS 540 Essentials of Health Data Science
    - BHIS 575 Applied Statistics for Health Data Science

2. CONCENTRATION IN CONSUMER AND MOBILE HEALTH INFORMATICS (CMH) - prepares students to address the consumer and patient perspective, increase consumer health literacy, and use of mobile and digital technology in healthcare.

    Requires two core courses,
    - BHIS 522 Mobile Health Informatics
    - BHIS 528 Consumer Health Informatics

3. CONCENTRATION IN LEADERSHIP IN HEALTH INFORMATICS - prepares students to address the complexities of healthcare organizational change, use of data to meet strategic objectives and lead a modern and future-focused healthcare system.

    Requires two core courses,
    - BHIS 543 Healthcare Project Management
    - BHIS 546 Leadership Development in HI

Concentrations are noted on graduates' official transcript.

Post-Baccalaureate Campus Certificates

UIC's online health informatics certificate program provides opportunities for self-motivated, experienced health care or IT professionals who have already attained at least a bachelor's-level degree, to attain high level knowledge and skills related to the application and management of technology within the health care setting.

Program Admission:
Applicants will be considered on an individual basis by the BHIS Committee on Academic Affairs. Individuals determined to be deficient in one or more areas may be recommended to the Graduate College for admission upon the condition that any deficiencies are remedied through appropriate course work.

In addition to the Graduate College minimum requirements, applicants must meet the following program requirements:
- **Baccalaureate Field** From an accredited institution that is equivalent to a U.S. bachelor's degree.
- **Grade Point Average** At least 2.75/4.00 for the final 60 semester (90 quarter) hours of undergraduate study or for all terminal graduate degrees. In addition to the previous requirements, the cumulative GPA for any graduate-level course work must be at least 3.00.
- **Minimum English Competency Test Score**
    o TOEFL If the applicant has taken the paper-based TOEFL, minimum scores in the range of 585–600 will be considered; in addition, the applicant must take the Test of Written English and submit scores in the range of 5–6. Applicants taking the iBT Internet-based TOEFL must have a minimum score of 95, with subscores of Reading 24, Listening 22, Speaking 24, and Writing 24. OR,
    o IELTS 7.0, with subscores of 6.5 for all four subscores, OR,
    o PTE-Academic 54, with subscores of Reading 51, Listening 51, Speaking 53, and Writing 56.

- **Transcripts** Registrar-issued transcripts required from the following:
  - All colleges or universities attended that conferred a degree and any earned credit hours
  - All institutions where post-bachelor's course work was completed and credited Transcripts must state degree conferred from awarding institution, including grading scale legends, transcript key, mark up sheets (usually on the back of the transcript).
  - International students also refer to: https://admissions.uic.edu/graduateprofessional/ requirements-deadlines/international-requirements

- **Personal Statement Required**. The statement should address the questions on the form provided in the application.
- **Resume** Applicant should submit a resume that highlights education and work experience.

Academic Policies:
The Department's Committee on Academic Affairs will function as the Committee on Admissions and Academic Progress for the certificates. Membership of Academic Affairs includes the program directors for each of the active curricula in the Department: undergraduate health information management, graduate biomedical visualization, graduate health informatics, and post-master's certificate in health informatics and PhD in Biomedical and Health Informatics.

The Department's Director of Graduate Studies serves as Chair of Student Affairs.
- A traditional *A* to *F* grading system is used for all courses.
- To receive a certificate, students must have completed all coursework and have earned a final cumulative GPA of 3.00. Courses with grades below C may not be used as credit towards the certificate. Courses may not be repeated for credit.
- Transfer credit is not accepted toward the certificate program.
- All 12-13 semester hours must be taken at UIC.

Admission to one of the campus certificates does not guarantee admission to the MS in Health Informatics (MSHI). Certificate students may apply to the MSHI and, upon admission, may transfer up to 12 hours earned in a certificate toward the MSHI. To transfer credits, students must earn a minimum letter grade of "B" or above in each of the certificate courses and must attain a cumulative 3.00 GPA in the certificate. Certificate students who later pursue the MSHI will be required to meet all prerequisite criteria of the degree program and individual courses.

Students who leave the MSHI prior to degree completion or wish to transfer solely into a certificate can apply for admission to the certificate and utilize MSHI coursework towards the requirements of a certificate. Students may not be concurrently enrolled in both the MSHI and certificate programs.

Students enrolled in one of the campus certificates that wish to pursue another, may add a second certificate by completing the Request for Change of/Add Second Graduate Program form.

Prerequisites:
The Post-Baccalaureate Certificates do not require prerequisites.

Required courses –
Health Informatics Fundamentals (12 hours, 5 required courses)
- BHIS 460 - Introduction to Health Informatics (1 cr. hr.) *
- BHIS 510 - Health Care Information Systems (3 cr. hr.) *
- BHIS 514 – Patient Safety Topics in Health Informatics (2 cr. hr.) *
- BHIS 522 - Mobile Health Informatics (3 cr. hr.) *
- BHIS 527 – Knowledge Management in Health Care Organizations (3 cr. hr.) *

Leadership in Health Informatics (12 hours, 3 required courses & 1 selective course)
- BHIS 537 – Health Informatics Product Management (3 cr. hr.) *
- BHIS 543 – Health Care Project Management (3 cr. hr.) *
- BHIS 546 – Leadership Development in Health Informatics (3 cr. hr.) *
- BHIS 525 – Social and Organizational Issues in Health Informatics (3 cr. hr.) **or**
- BHIS 538 – Health Care IT Administration (3 cr. hr.)

Health Data Science Informatics (12 hours, 3 required courses & 1 selective course)
- BHIS 529 – Transforming Healthcare Using Business Intelligence and Predictive
- Analytics (3 cr. hr.) *
- BHIS 540 – Essentials of Health Data Science (3 cr. hr.) *
- BHIS 541 – Healthcare Data Analytics (3 cr. hr.) *
- BHIS 554 – Health Informatics Business Intelligence Tools and Applications (3cr. hr.) **or**
- BHIS 567 – Healthcare Data Visualization (3 cr. hr.)

Mobile Health Informatics (13 hours, 5 required courses)
- BHIS 460 – Introduction to Health Informatics (1 cr. hr.) *
- BHIS 522 – Mobile Health Informatics (3 cr. hr.)*
- BHIS 528 – Consumer Health Informatics (3 cr. hr.)* *Quality Matters Certified until 2025*
- BHIS 540 – Essentials of Health Data Science (3 cr. hr.)*
- BHIS 523– Advanced Topics in Mobile Health Technologies (3 cr. hr.) *

* = Required

Non-Degree Option

For applicants that do not meet the 3.0 GPA requirement, BHIS provides the option of enrolling as a non-degree student. Non-degree students may take up to 12 credit hours from the health informatics curriculum. Applicants without sufficient healthcare background through education or experience may be required to begin by completing one or more prerequisite courses first. The courses for non-degree students are:

Prerequisites
- HIM 486, Fundamentals of Health Information Management
- BHIS 406, Medical Terminology
- BHIS 460 Introduction to Health Informatics.

Required Courses
- BHIS 499 Information Sources in Biomedical Health Information Sciences
- BHIS 437 Health Care Data
- BHIS 510 Health Care Information Systems
- BHIS 503 Communication Skills in Health Informatics

When a student has successfully completed up to 12 credit hours (including the pre-requisites if necessary), and has maintained a GPA of 3.0 or higher, they may then re-apply to the Master's of Science in Health Informatics program. All credit hours taken as a non-degree student will be counted toward the MSHI degree requirements if students are accepted to the program. Prerequisite courses do not count toward the total degree course credit hours required in the program. To continue as a non-degree student, a grade no lower than B for each course completed is required.

There is no guarantee of admission to the MSHI program. Non-degree students may apply for admission for semester after all courses completed.

Reapplying to the MSHI or PMCHI program
- It is recommended that students take 9-12 hours of 400/500 level courses before reapplying to the degree program.
- Students must receive no grade below an A or B in any of the 400/500-level courses for 12 hours maximum.
- Students may not transfer more than 12 hours of graduate coursework of the courses listed above, when applying to the HI or PMCHI degree program.
- Pre-requisite courses do not count toward the degree course credit hours required in the program.
- Course transcripts from the courses taken at UIC as a non-degree student will be required.

Course Tracking Guides

Students can copy and use this tracking guide for planning and recording courses in order to complete the degree/certificate. You should receive a similar guide from your student adviser.

MSHI PROGRAM -COURSE TRACKING GUIDE					
Masters of Science in Health Informatics - Required: 26 core course credit hours, 12 elective hours = 38 hours					
Student Name:			NetID:		
Prerequisites:					
Course #	Course Name	Credits	Semester/Year Offered	Grade	Earned
HIM 486	Foundations of Health Information Management	2			
BHIS 406	Medical Terminology for Health Information Management	2			
Courses Required: 26 credit hours					
Course #		Course Name			
BHIS 437	Health Care Data	3			
BHIS 499	Information Sources BHIS	1			
BHIS 503	Communication skills in Health Informatics	3			
BHIS 505	Ethics and Legal Issues in HI	3			
BHIS 510	Health Care Info Systems	3			
BHIS 515	Mgmt of Healthcare Communication Systems	3			
BHIS 520	Health Info Systems Analysis & Design	3			
BHIS 525	Social and Org Issues in Health Informatics	3			
BHIS 530	Topics in Health Informatics (required for Course-Only-Work track)	3			
BHIS 593	Health Informatics Capstone Paper	1			
Electives: (12 credit hours required) Note: See course catalog to see current list of electives. https://catalog.uic.edu/gcat/colleges-schools/applied-health-sciences/him/#courseinventory					
BHIS 504	Qualitative Methods and Health IT Evaluation	3			
BHIS 509	Informatics for the Clinical Investigator	3			
BHIS 514	Patient Safety Topics in Health Informatics	2			

BHIS 517	Healthcare Information Security and Cybersecurity Foundations	3				
BHIS 522	Mobile Health Informatics*	3				
BHIS 527	Knowledge Management in Healthcare Organizations	3				
BHIS 528	Consumer Health Informatics* *Quality Matters Certified until 2025*	3				
BHIS 529	Transforming Healthcare using Business Intelligence and Predictive Analytics	3				
BHIS 530	Topics in Health Informatics (Research track elective)	3				
BHIS 532	Foundations of Clinical Decision Support Systems	3				
BHIS 534	Health Information Technology and Patient Safety	3				
BHIS 535	Organizational Dynamics	3				
BHIS 537	Health Informatics Product Management	3				
BHIS 538	Health Care IT Administration	3				
BHIS 540	Essentials in Health Data Science*	3				
BHIS 541	Healthcare Data Analytics	3				
BHIS 542	Artificial Intelligence in Healthcare	3				
BHIS 543	Health Care Project Management*	3				
BHIS 546	Leadership Development in Health Informatics*	3				
BHIS 554	Health Informatics Business Intelligence Tools and Application	3				
BHIS 561	Programming for Health Analytics	3				
BHIS 567	Healthcare Data Visualization	3				
BHIS 570	Human Factors and Cognition in Health Information Technology	3				
BHIS 575	Applied Statistics for Health Data Science*	3				
BHIS 580	Practicum in Health Informatics	3				
Total Credit Hours Applied to Degree (38 credit hrs. required)						
Expected Graduation:						

*Indicates that this is a required course for a concentration

Concentrations
If the student is pursuing a Concentration, this requires the 12 elective hours to be selected from the concentration courses. Two of those courses are required:
> HDS required courses: BHIS 540 and 575.
> CMH required courses: BHIS 522 and 528
> Leadership required courses: BHIS 543 and 546

PMC-HI PROGRAM COURSE TRACKING GUIDE

Post-Master's Certificate in Health Informatics 24 credit hours					
Student Name:			NetID:		
Prerequisites:					
Course #	Course Name	Credits	Semester/Year Offered	Grade	Earned
HIM 486	Foundations of Health Information Management	2			
BHIS 406	Medical Terminology for Health Information Management	2			
BHIS 460	Intro to Health	1			
Courses Required: 19 credit hours					
Course #	**Course Name**				
BHIS 437	Health Care Data	3			
BHIS 510	Health Care Info Systems	3			
BHIS 499	Information Sources BHIS	1			
BHIS 515	Mgmt of HC Comm. System	3			
BHIS 520	Health Info Systems Analysis & Design	3			
BHIS 525	Sociological and Organizational Issues in HI	3			
BHIS 530	Topics in Health Informatics	3			
Elective Courses: 5 credit hours					
		2			
BHIS electives	Select one 3 credit hour elective: Note see course catalog for current list of electives. https://catalog.uic.edu/gcat/colleges-schools/applied-health-sciences/him/#courseinventory	3			
Total Credit Hours Applied to Degree (24 credit hrs. required)					
Expected Graduation:					

- Courses highlighted in yellow must be completed prior to moving forward in the curriculum for the Post Master's Certificate in HI program

Online Health Informatics Post-Baccalaureate Certificates - Advising Guide

Online Health Informatics Post Baccalaureate Certificates

Student Name:		**NetID:**		
UIN:		**Term Entered:**		
Certificate Name:				

Health Informatics Fundamentals : Required Courses - 12 Credits (5 Required Courses)

Course #	Course Name	Credits	Semester/Year Offered	Grade	Earned
BHIS 460	Introduction to Health Informatics (PMC prereq. used for Financial Aid purposes - no credit)	1			
BHIS 510	Health Care Information Systems	3			
BHIS 514	Patient Safety Topics in Health Informatics	2			
BHIS 522	Mobile Health Informatics	3			
BHIS 527		3			
	Required Courses Totals	**12**			

Mobile Health Informatics : Required Courses - 13 Credits (5 Required Courses)

Course #	Course Name	Credits	Semester/Year Offered	Grade	Earned
BHIS 460	Introduction to Health Informatics (PMC prereq. used for Financial Aid purposes - no credit)	1			
BHIS 522	Mobile Health Informatics	3			
BHIS 528	Consumer Health Informatics	3			
BHIS 540	Essentials of Health Data Sciences	3			
BHIS 523	Advanced Topics in Mobile Health Technologies	3			
	Required Courses Totals	**13**			

Health Data Science Informatics : Required Courses - 12 Credits (3 Required Courses & 1 Selective Course)

Course #	Course Name	Credits	Semester/Year Offered	Grade	Earned
BHIS 529	Transforming Healthcare Using Business Intelligence and Predictive Analytics	3			
BHIS 540	Essentials of Health Data Sciences	3			
BHIS 541	Healthcare Data Analytics	3			
BHIS 554	Health Informatics Business Intelligence Tools and Application Health Data Science Concentratio	3			
or					
BHIS 567	Healthcare Data Visualization	3			
	Required Courses Totals	**12**			

Leadership in Health Informatics : Required Courses - 12 Credits (3 Required Courses & 1 Selective Course)

Course #	Course Name	Credits	Semester/Year Offered	Grade	Earned
BHIS 537	Health Care IT Vendor Management	3			
BHIS 543	Health Care Project Management	3			
BHIS 546	Leadership Development in Health Informatics	3			
BHIS 525	Social and Organizational Issues in Health Informatics	3			
or					
BHIS 538	Health Care I.T. Administration	3			
	Required Courses Totals	**12**			

Graduation Term: ☐Spring   ☐Summer   ☐Fall / YEAR_____

Revised: 2/21/2019

Registration

Concurrent Enrollment

Department policy does not permit concurrent enrollment in other campus programs during matriculation in BHIS graduate health informatics programs. Students wishing to enroll in other campus programs may petition the department for a leave of absence from BHIS graduate studies. Forms may be requested from the department office at 312-996-733.

Advisor

At the beginning of your graduate program, each student will be assigned an academic advisor. The advisor is a resource person for information about registration, program requirements, courses, textbooks, and graduation.

Registration Schedule

Refer to the registration time ticket schedule link for the registration schedule. Newly admitted students are scheduled in Open Registration times.

http://registrar.uic.edu/current_students/calendars/time_ticket_schedule.html

Registration Definitions

https://registrar.uic.edu/registration/policies_procedures.html#prerequisite

This is very important:

When you register for online courses, each course is eight weeks long. A spring or fall semester = two eight-week periods, Term A (first eight weeks) and Term B (second eight weeks). Withdrawing from a course in one eight-week period may also affect your credit and refund in the next or previous eight-week period since you are registering for a semester! See the academic calendar links in this handbook regarding deadlines.

A Summer Term for online courses is eight weeks. Summer Term 1 is the first eight weeks, Summer Term 2 is the second eight weeks. These summer terms overlap by 4 weeks.

Holds on Registration

Students will be restricted from registration if they have the following holds:

- **Online orientation and statistics modules are not completed. (Both non-fee pre-requisites).**
- **Financial**- owe money to the university, requests to register after the registration deadline will **not** be approved if the student failed to clear a hold during the regular registration periods.
- **Program** – program admissions paperwork is not complete. (Example- official transcript is not received)
- **Academic**- pre-requisites not completed before the student will be permitted to advance in the program, academic holds.
- **Instructor approval required**- class dependent

Students can access their account through my.UIC.edu portal for more details regarding a financial hold. For information on any other holds, contact the program advisor at **312 996-5785 or 1-866-674-4842.**

Continuous Registration Policy

Students who have completed all course credit requirements, but have not yet completed a project or thesis, are required to register continuously for zero hours of credit in project research or thesis research until the degree is awarded. Unless a student is defending project or thesis research, registration is not required for the summer term. The exception is the student holding a fellowship, assistantship, or tuition and fee waiver, who must register for the minimum hours required by the terms of the award. Students must petition the program and the Graduate College to register for zero hours in project or thesis research.

Students on an F-1 visa may be eligible to register for zero hours if all requirements are complete except for project or thesis, and a petition is submitted to the Graduate College and approved. The petition must be endorsed by the advisor and DGS or head of program and the Office of International Services

Health Informatics Course Descriptions (2018 - 2019)

Subject to Change*

Pre-requisites

https://registrar.uic.edu/registration/policies_procedures.html#prerequisite

Students are responsible for planning, registering, and completing all prerequisites prior to enrolling in program courses per the academic integrity standards. The University is not responsible for a student's failure to complete the prerequisites. Pre-requisite credits do <u>not</u> count toward required credit hours for graduation.

Guidelines for Assignment of Pre-requisites and Proficiency Testing for New Health Informatics Students:

<u>**MSHI - BHIS 406, Medical Terminology**</u>

BHIS 406, Medical Terminology is <u>required</u> for:

1. All applicants with no clinical experience
2. International applicants with clinical experience in non-English language patient care facility experience (based on the English, non-English language requirements designated by the Office of Admissions, https://admissions.uic.edu/graduate-professional/requirements-deadlines/international-requirements)

BHIS 406, Medical Terminology <u>not</u> required for:

1. Any licensed clinician actively working in a health care facility.
   a. HIM professionals credentialed RHIT, RHIA, CCS, currently working in HIM role
   b. Licensed clinician (e.g., MD, BSN, RN, PT, OT, MT, RT, Pharmacist, dietitian, nurse) currently working in a patient care facility or health system (e.g., hospital, outpatient clinic, PT/OT clinic, long term care facility).
   c. Any applicant that has taken Medical Terminology in US or English-speaking country and passed with a C grade or better within the last 5 years.

Proficiency Testing BHIS 406-Proficiency testing available for this course by request to the instructor in the semester of admission only, during program orientation. The instructor will enroll students in the proficiency test; once enrolled, students will receive instructions on the testing procedure and due date. Students must score 80% or higher on the test to proficiency out of BHIS 406. Please note: students admitted with limited standing are ineligible to take the proficiency test.

<u>**HIM 486, Foundations in Health Information Management (US health care system, accreditation, clinical records)**</u>

HIM 486 required:

1. All applicants with no clinical experience
2. International applicants with clinical experience in non-US patient care facility

HIM 486 <u>not</u> required:

1. Health information management (HIM) professionals credentialed RHIT, RHIA, CCS, currently working in HIM role
2. Any US licensed clinician (e.g., MD, BSN, RN, PT, OT, MT, RT, Pharmacist, dietitian, nurse) actively working in a patient care facility or health system (e.g., hospital, outpatient clinic, PT/OT clinic, long term care facility).

Proficiency Testing BHIS 486- no proficiency testing available for this course.

Post Master's Certification- Assignment of Pre-requisites for New Students:

1. HIM 486, BHIS 406- Same as above
2. BHIS 460 -All new students required to take BHIS 460 except HIM professionals credentialed RHIT, RHIA, CCS, currently working in HIM role

There is NO proficiency testing for Limited Standing students in the programs: MSHI or Post master's certificate.

Required and Elective Course Descriptions

Refer to the Graduate College catalog for a list and description of all courses.

https://catalog.uic.edu/gcat/colleges-schools/applied-health-sciences/him/

https://catalog.uic.edu/gcat/colleges-schools/applied-health-sciences/him/#courseinventory

Adds, Drops, Withdrawals, Deferrals

Please register for your courses in advance of the course start date so you can also purchase any required texts. Courses do fill to capacity so register early to make sure that you are in classes you need to complete. You can register via *my.UIC.edu* from the UIC home page. Please speak with your student adviser if you have any questions. Your advisor will provide a full course plan for your specific program of study. Please follow the plan so you don't miss any requirements for graduation. It is the student's responsibility to track all courses required for completion of the program, including the pre-requisites. *Not all courses are offered every term.*

This is very important:

When you register for online courses, each course is eight weeks long. A spring or fall semester = two eight-week periods, Term A (first eight weeks) and Term B (second eight weeks). Withdrawing from a course in one eight-week period may also affect your credit and refund in the next or previous eight-week period since you are registering for a semester! See the calendar below. A Summer Term for online courses are eight weeks. Summer Term 1 is the first eight weeks, Summer Term 2 is the second eight weeks. These summer terms overlap by 4 weeks.

Program Policy:

The deadline to drop a course is the end of the first week (Friday, 5:00pm CT) for 8-week courses and the end of the second week (Friday, 5:00pm CT) for 16-week courses. Between the end of the first week of the term (8-week courses) or second week of the term (16-week courses), and end of the fifth week of the term (8-week courses) or tenth week of the term (16-week courses) students may drop courses with the approval of the Director of Graduate Studies in the College of Applied Health Sciences. After the end of the first week (8-week courses) or tenth week (16-week) of the term, students may drop a course only through a petition process. Only petitions involving extenuating circumstances (does not include an unsatisfactory grade or sudden work-related problem) are considered. The petition must obtain the approval of the Director of Graduate Studies. Should you need to drop a course, please notify your academic advisor first to learn about next steps.

NOTE: Refer to the Add/Drop/ Withdraw deadlines included on the UIC academic calendars. If you have questions, please contact your student adviser.

- https://catalog.uic.edu/ucat/academic-calendar/

- https://registrar.uic.edu/current_students/index.html
- https://registrar.uic.edu/registration/term-withdrawal.html

Students may access the course schedules from the my.UIC.edu site.
https://my.uic.edu/uPortal/f/welcome/normal/render.uP

To view two semesters of course schedules, select the following links: >Schedule of Classes> Department View>BHIS Department.

BHIS = Biomedical Health Information Sciences

BHIS Grade Scale
https://registrar.uic.edu/student_records/grading_system.html

Grade	Equivalent	Grade Points per hour
A	Excellent	4
B	Good	3
C	Average	2
D	Poor	1
F	Failure	0

Other Grade Symbols

Grade	Equivalent
DFR	Deferred
W	Withdrawn
I	Incomplete

Withdrawn- The grade of W is *officially withdrawn without penalty* according to the policies outlined in the withdrawal policy. This grade "W" will remain on the transcript but does not affect the grade point average or the degree grade point average.

Incomplete- Course work is incomplete when a student fails to submit all required assignments or is absent from the final examination due to crisis circumstances approved by your instructor. **Inform your instructor immediately if there is circumstance beyond your control. If you cannot inform the instructor, please have a representative or alternate proxy inform the instructor. A student receiving a failing grade is not eligible for an *Incomplete*.** Incomplete course work will normally result in a failing grade if it is not completed within the designated time limit.

https://registrar.uic.edu/student_records/grading_system.html

The *Incomplete* may be assigned in lieu of a grade only when *all* of the following conditions are met:

The student has been **making satisfactory progress** in the course; failing work in a course does not merit consideration of an *Incomplete* grade.

The student is unable to complete all course work due to very unusual crisis circumstances that are beyond personal control and are acceptable to the instructor. **The student or his/her representative must contact the instructor immediately. Notification date of the problem initiates the paperwork;** and

The student presents these reasons prior to the time that the final grade roster is due.

The instructor informs the department head who evaluates each situation. If approved, the final grade of *"I"* is recorded. An incomplete grade may be given only if, for reasons beyond the student's control, required work has not been completed by the end of the term. An *Incomplete* must be removed by the end of one calendar year after the term in which the *Incomplete* was received. When the student submits the course work, the instructor will grade it and change the *Incomplete* to the appropriate grade.

Note: *Course instructors may require an earlier deadline.* An *Incomplete* that is not replaced by a letter grade by the deadline will remain on the student's record as an *Incomplete* (*I*), with no credit earned. A course in which an *Incomplete* was received and not removed by the deadline may be repeated for credit only once.

Deferred Grade

DFR - Deferred. Grade deferred (independent study courses).

Academic Requirements

The academic standards of the Department of Biomedical and Health Information Sciences (BHIS) are consistent with those of the Graduate College; however, the Department of BHIS has developed additional policies for academic standards that are essential for a professional practice discipline.

A basic premise of these policies is that graduate students are expected to achieve a minimum GPA of 3.00 (out of 4.0) in all academic pursuits. If a student's cumulative program GPA (this does not include prerequisites) falls below 3.00, the student is automatically placed on probationary status by the Graduate College and/or by the program. The Graduate College's policy is that a student has two semesters to raise his/her GPA to a 3.0.

The BHIS departmental policies are defined as follows. All the rules apply if the student is registered for term:

- A minimum grade of "B" is expected.

- Multiple grades of **"C"** or Unsatisfactory may result in a formal review of the student's academic record by the program director and DGS and possible repetition of the courses during the next period of registration in which it is offered.
- A grade of **"D"** will receive a formal review of the student's academic record by the Program Director and DGS. The student will be required to retake the course during the next period of registration in which it is offered.
- A grade of **"F"** will result in a formal review of the student's academic record by the Program Director and DGS. This will result in either retaking the class or dismissal from the program.
- A student who fails to make progress toward a certificate or degree may be dropped. (Examples include failure to complete required courses, accumulation of an excessive number of Incomplete (I) and/or unsatisfactory grades, failure to earn credit in any semester, failure to maintain a "B" average in BHIS, and multiple course withdrawals).
- A student admitted to the master's health informatics program or post master's certificate program on limited standing must receive a grade of A or B in their first 10 credit hours, within the first year of matriculation (including summer). Students on limited standing who receive a grade below a B and/or do not complete 10 credit hours within the first year of matriculation face dismissal by the Graduate College.
- Students admitted to the post-baccalaureate program on limited standing must receive a grade of A or B in their first 12 credit hours of matriculation, including prerequisites, within the first two semesters of matriculation (including summer). Students on limited standing who receive a grade below a B and/or do not complete 12 credit hours within their first two semesters of matriculation face dismissal by the Graduate College.
- In all cases, a student must have a 3.0 cumulative GPA to graduate from the Master of Science or the Post-master certificate in Health Informatics programs.
- The Graduate College monitors progress toward and ensures the integrity of the University of Illinois at Chicago graduate degree. If a graduate student's grade point average (GPA) falls below 3.0 at the end of any semester, the Graduate College will send the student a warning of probation letter notifying the student he/she has two semesters to raise the GPA above 3.0 or risk being dropped from his/her graduate program.

Limited Standing Status

Students admitted to the master's health informatics program or post master's certificate program on limited admission status must meet the conditions imposed by this status and progress to full degree status within two semesters or any shorter amount of time set forth in the letter of acceptance. **Students accepted to Health Informatics programs under the condition of limited status must complete 10 credit hours within the first year of matriculation and receive no grade below a B in any courses. Other conditions may also apply. Failure to comply with conditions of admission may result in dismissal from the University.**

Students admitted to the post-baccalaureate certificate program (health information management program) on limited admission status must meet the conditions imposed by this status and progress to full degree status within two semesters or any shorter amount of time set forth in the letter of acceptance. **Students accepted to post-baccalaureate programs under the condition of limited status must complete 12 credit hours within the first two semesters of matriculation and receive no grade below B in any courses.** Other conditions may also apply. Failure to comply with conditions of admission may result in dismissal from the University.

Transfer credits may not be used to satisfy limited status requirements. Students admitted to any program on limited status may not take a semester off until the requirements are met, and the student is placed on full academic standing.

Probation and Academic Dismissal

Visit the Graduate College website for information pertaining to probation as well as other topics related to academic standing: http://grad.uic.edu/probation-and-academic-dismissal

Attendance

Students are expected to "attend" asynchronous classes and participate as outlined in the course syllabus/policies and rubrics since most of the courses involve interaction with other students and group work. **The student or his/her proxy is responsible for advising the instructor immediately** of his/her absence from the course due either to unexpected personal circumstances or events such as: hospitalization, death in the family, local natural disasters, which disrupt Internet access and preclude class attendance. The instructor will decide if/how the work can be made up.

Leaves of Absence for Medical, Family Reasons or Military Service
https://grad.uic.edu/academic-support/registration-information/leave-of-absence/

Dress Code

While on campus or while representing the health informatics program in a practicum, at a research site or during a presentation, appropriate behavior and dress is required. If the student fails to meet these standards, as determined by the program director, the student will be asked not to wear the inappropriate item again and may be sent home to change clothes.

For those students participating in campus visits/courses, clinical, research or practicum settings, the dress code of the institution is appropriate.

- Clothing must cover cleavage, back, chest, stomach, and undergarments.
- Provocative clothing styles are not appropriate.
- Avoid clothing that has words, terms or pictures that may be offensive.

Clinical Setting

- Appropriate respect, conduct and appearance are expected of students as they engage with patients, families, and health care professionals.
- For those students participating in clinical, research or practicum setting, the dress code of the institution is required.

Final Presentations, research defense, offsite meetings, practicum site attire:

- Personal attire should be clean, pressed, free from holes, tears, or stains and businesslike.
- Clothing must cover cleavage, back, chest, stomach, and undergarments.
- Skirt and dress hems should be at or below the knee.
- Provocative clothing styles are not appropriate.

UIC Student Records Policy
https://registrar.uic.edu/campus_policies/records_policy.html

Confidentiality of Student Records

Class schedules are not released to unauthorized persons. UIC Student Records policy governs record keeping and release.
http://registrar.uic.edu/student_records/record_confidentiality.html

Access to Records/Transcripts

Current or previous University of Illinois students are entitled to examine their educational records under the provisions of the 1974 Family Educational Rights and Privacy Act (FERPA as amended). As custodian of student records, the University assumes an implicit trust and, accordingly, uses extreme care and concern in recording and disseminating

information about students. The University policy is in compliance with the Family Educational Rights and Privacy Act. The Office of Admissions and Records issues transcripts in one of four ways outlined in the following website:

https://registrar.uic.edu/student_records/transcripts.html

BHIS Academic Integrity and Standards of Conduct
http://grad.uic.edu/university-regulations

Students assume an obligation to conduct themselves in a manner compatible with the University's function as an educational institution and suitable to members of the university community. The University may at any time exclude a student or impose disciplinary sanctions on a student for violations of the UIC Standards of Conduct. The conduct for which students are subject to disciplinary action includes, but is not limited to, the following standards of conduct.

Student Standards of Conduct –Version 3/29/2016

Office of the Dean of Students: http://dos.uic.edu//

Students assume an obligation to conduct themselves in a manner compatible with the University's function as an educational institution and suitable to members of the university community. The University may at any time exclude a student or impose disciplinary sanctions on a student for violations of the UIC Standards of Conduct.

Students agree that by taking a BHIS course they agree to abide by the following standards. The instructor may need to take immediate action upon observing academic dishonesty or class disruption. The student will comply with any and all requests made by the instructor or other associated personnel.

A.   Academic Integrity
Academic integrity is the submission of one's own work with properly acknowledged contributions of others. Any violation of this principle constitutes academic dishonesty and may result in disciplinary action including referral to the university student conduct process (available at Office of the dean http://www.uic.edu/depts/dos/conductforstudents.shtml

The conduct for which students are subject to disciplinary action includes, but is not limited to, the following:

Pre-requisites—Students are responsible for being aware of and meeting all academic prerequisites prior to enrolling in a course. Instructors reserve the right to remove students who fail to meet prerequisites for their courses. In certain instances, instructors may elect to waive a prerequisite based upon a student's ability to demonstrate the competency embodied in the prerequisite. However, a student who enrolls in a course without explicitly meeting all course and program prerequisites is considered to have committed a form of academic dishonesty and assumes responsibility for all possible subsequent outcomes including course grade performance and termination from the program.

Use of Artificial Intelligence (AI) Tools

The education process, in part, expects students to acquire and demonstrate skills and expertise in searching the evidence-base/literature for prior work, determining relevance, synthesizing and summarizing such work as it relates to assignments. Each instructor's course policy on use of generative AI tools (including but not limited to ChatGPT, etc.) vary widely, depending on the specific objectives of the course. Further, students are reminded that material provided by such AI tools are not vetted and accuracy **CANNOT** be guaranteed. **Students are responsible for checking each instructor's policy, in each course, on the use of Generative AI.**

Academic Dishonesty

Any violation of the "Guidelines Regarding Academic Integrity" which includes but is not limited to: giving or receiving unauthorized aid in any assignment or examination, plagiarism, tampering with grades, or other academic irregularities.

1. PLAGIARISM OR SELF-PLAGIARISM--Submitting all or part of another's work as one's own work or resubmitting one's own previous work as new work in an academic exercise such as an examination, computer program, image, or written assignment. For more information on proper use of references/citations see the following:
    i. http://researchguides.uic.edu/styleguides
    ii. https://researchguides.uic.edu/copyright

    CHEATING-Using or attempting to use unauthorized materials on an examination or assignment, such as using unauthorized texts or notes or improperly obtaining (or attempting to obtain) copies of written assignments, examinations, or answers to examinations. *Unauthorized materials may include automated AI-enabled tools such as ChatGPT that assist in generating answers if APA citation is not included. Proper APA citations for all work that is not the student's own are required.*

2. COLLUSION-Helping another commit an act of dishonesty, such as substituting for an examination, completing an assignment for someone else, or providing other students with completed materials such as papers, essays, discussion posts, or examination questions or answers.

3. FABRICATION-Altering or transmitting without authorization, academic information or records.

4. BRIBES/FAVOR/THREATS--Bribing or attempting to bribe; promising favors to or making threats against any person with the intention of affecting a record of a grade, grade, or evaluation of academic performance. This also includes any conspiracy with another person who then takes or attempts to take action on behalf or at the direction of the student.

5. EXAMINATION BY PROXY- Taking or attempting to take an exam for an enrolled student by a third party is a violation by both the student enrolled in the course and the third party.
    i. http://catalog.uic.edu/gcat/graduate-study/graduate-study/

6. PARTICIPATION BY PROXY**:** Participating or attempting to participate in any online course activity of any type for an enrolled student by a third party is a violation by both the student enrolled in the course and the third party.

7. GRADE TAMPERING: Any unauthorized attempt to change, actual change of, or alteration of grades or any tampering with grades.

8. NON-ORIGINAL WORKS: Submission or attempt to submit any course work authored or created, in whole or part, by someone other than the student.

Note on Copyrights: UIC, its employees, and students are legally required to adhere to copyright law; consequently, they may not use copyrighted material for an online course unless its use is consistent with copyright law. Violations of copyright law include unauthorized access to or use of copyrighted material (THIS INCLUDES COPYRIGHTED MATERIAL FOUND ON THE INTERNET). When violations of copyright law are suspected, a description of the suspected violations will be referred to the appropriate UIC office and may result in sanctions

For more information on the appropriate uses of copyrighted material, the UIC Library has created an online resource that offers detailed information. The resource is available at:

https://researchguides.uic.edu/copyright

Sanctions for Academic Dishonesty:

First Violation:
- At the first documented violation of any of the nine aspects of Academic Dishonesty a student(s) will be notified in writing by email of the incident of academic dishonesty. The notification will outline each detail with evidence of the offense.
- The first violation will be reported via email to the student's program director and academic advisor, and for students from other colleges, to their program directors. The instructor may file an incident report with the university student conduct process http://www.uic.edu/depts/dos/conductforstudents.shtml).
- The student(s) will be provided with details that clearly explain the nature of the offense and explain the sanction for the violation. The student(s) will have 72 hours to respond by email to the instructor that the explanation of and sanction for the violation have been understood and agreed to. If the student does not send an email within 72 hours or does not agree with the sanction, the instructor may file an incident report with the Office of Dean of Students to resolve the matter.
- Depending on the degree of the violation, the student will receive a minimum of 10% reduction of the grade to a maximum of a "F" grade on the assignment and at the sole discretion of the instructor of record.

Second Violation:
- Upon the second documented violation of the Academic Dishonesty policy student(s) will be notified in writing by email of the incident of academic dishonesty. The notification will outline each detail with evidence of the offense.
- The second violation will be reported via email to the departmental DGS, the student's program director and academic advisor, and for students from other colleges, to their program directors. The instructor will file an incident report with the university student conduct process http://www.uic.edu/depts/dos/conductforstudents.shtml).
- Depending on the degree of the violation, the student will receive a minimum of a "F" grade for the assignment to a recommendation to the Graduate College for the student's removal from the BHIS program.

B. Behavioral Integrity

Each student is expected to conduct himself/herself in a manner that facilitates learning in the academic environment. This is particularly important for BHIS courses since they are discussion centered.

Communication with other learners should reflect a professional attitude on the part of the learner; however, "professional" does not mean formal or stilted. Informality provides the optimal communication strategy. Humor, when used with care, will add value to the discussion when it helps mitigate dry, abstract discussions. Students are reminded that postings to a discussion forum are similar to e-mail messages in that they lack the visual or audio clues that designate humor.   Sarcasm is almost never appropriate and often provokes conflict.

Attitudes and behaviors that nurture character and ethical behavior include but are not limited to the following core values:

- RESPECT – Showing regard, consideration, and courtesy for the rights and feelings of other students and employees and conducting oneself in a mature, professional manner.
- RESPONSIBILITY – Distinguishing between right and wrong and being held accountable for one's actions.
- HONESTY – Being truthful, respecting the property of others, and demonstrating integrity.
- SELF-DISCIPLINE – Controlling one's actions and attitudes so as not to inflict emotional and physical harm on others.

- NETIQUETTE – Engaging in socially acceptable conduct in online or digital environments.

In the first disregard for Behavioral Integrity, the course instructor shall initiate a discussion with the student when that student fails to display the attitudes and behaviors described above. The instructor will follow-up with the student via email, reviewing the Behavioral Integrity issue and the substance of their formal discussion.

In the second disregard for Behavioral Integrity, the behavioral disruption will be reported in writing/email to the program director and academic advisor, and for students from other colleges, to their program directors. Depending on the degree of the offense, the student could minimally receive a further reprimand and warning from any or all the administrators noted above, and as much as a recommendation to the Graduate College for the student's removal from the course and or suspension from the BHIS program.

Student Disciplinary Policy-Office of the Dean site
https://dos.uic.edu/

The instructor may, at any point, initiate the university student conduct process. As a result of this action, a recommended consequence will be given to the instructor and student. Consequences for behavioral disruption include but are not limited to warnings, probation, and removal from the program. In cases of behavioral misconduct, instructors do not have the prerogative to make a final decision on the outcome. The decision rests solely within the student conduct process.

Student Academic Grievance Procedures
https://grad.uic.edu/academic-support/grievance-information/

First instituted in 1983, the University of Illinois at Chicago's Academic Grievance Procedures define a process by which students, faculty and academic employees can seek resolution of complaints. Not all actions are grievable, so it is important that these procedures be reviewed for both eligibility and process.

There are strict deadlines, steps, and guidelines for eligibility that must be followed by both graduate students and the faculty or administrators involved. For a complete description of the procedures, students should consult the website'

Financial Information
Online Tuition and Fees
Online programs are assessed UIC's e-Tuition, which is a single-rate, per credit hour tuition.

https://admissions.uic.edu/graduate-professional/tuition-fees

Graduate Tuition, $750 per credit hour, subject to change.

Financial Aid / Scholarships/Fellowships
Graduate students in Health Informatics are eligible for financial support from a variety of sources: *Board of Trustee waivers, assistantships, the HIMSS Foundation Scholarship Program, the Martin Luther King, Jr. Financial Award,* the Beverly Fiorella Award, t*he Van Doren Scholarship Fund, and fellowships*. An attempt is made to see that all students benefit from available funds at some time during their two years of study. A description of each financial award is listed below along with their eligibility requirements. Refer to https://grad.uic.edu/funding-awards/ for an overview of opportunities.

Office of Financial Aid
https://financialaid.uic.edu/

College of Applied Health Sciences Scholarships, Fellowships and Awards
https://ahs.uic.edu/applying/tuition-and-aid/

HIMSS Foundation Scholarship Program
The HIMSS Foundation Scholarship Program annually awards $5000 scholarships to Master's student members studying in the healthcare information or management systems field. Visit the HIMSS site at https://www.himss.org/what-we-do-initiatives/foundation-overview for additional information.

AHIMA Merit Scholarship
The AHIMA Foundation annually offers $2000 merit scholarships to currently enrolled outstanding students in HIM and health information technology (HIT) as well as those professionals pursuing masters or doctoral degrees in areas related to health information https://www.ahimafoundation.org/programs-partnerships/education/scholarships/

Board of Trustee Waivers- full time and part-time students
For more information, go to: https://ahs.uic.edu/applying/tuition-and-aid/

Students who are interested in receiving an allocated Graduate College waiver must speak to the Director of Graduate Studies, Eric Swirsky (eswir@uic.edu) or the Admissions and Records Officer (Ms. Nedra Robinson at nedrar@uic.edu) for their academic program. All programs have a limited and fixed number of allocated waivers available; programs that have a high percentage of part-time students also have PT waivers available (requiring 8-11 hours of enrollment). All Graduate College waivers are requested by the academic program, not directly by the student. The Graduate College communicates these waiver recipients' information to Financial Aid each semester.

University Resources
Disability Resources
The Office of Disability Services works to ensure the accessibility of UIC programs, classes, and services to students with disabilities. Services are available for students who have documented disabilities, including vision or hearing impairments and emotional or physical disabilities. Students with disability/access needs or questions may contact the Office of Disability Services at (312) 413-2183 (voice) or (312) 413-0123 (TTY only).
 http://www.uic.edu/depts/oaa/disability_resources/index.html
http://www.uic.edu/uic/studentlife/studentservices/disability.shtml

Graduation
You must apply online to graduate. https://grad.uic.edu/academic-support/graduation-information/

Students cannot be cleared for graduation until they have filed their declaration and have had their academic records reviewed for progress in completing degree requirements.

The commencement ceremony occurs prior to the end of courses in the fall and spring semesters. Students may attend the ceremony and "walk," but that does not guarantee that they have met all the requirements to graduate. Students will need to complete outstanding requirements for graduation after the commencement ceremony.

Commencement

For more information, visit the Website at: http://grad.uic.edu/commencement-ceremony

Online Student Resources my.UIC.edu

Many student resources are located on the my.UIC.edu landing page via the Current Student link. This includes schedule of classes, graduate catalog, registering for a class, ACCC (Computer and Blackboard computer helpdesk) and more.

http://www.uic.edu/life-at-uic/current-students

Computer/ Technical Requirements for Online Courses

Students can purchase software at a discounted rate through http://webstore.illinois.edu/home/

Students are required to have the minimum computer hardware, software, network and technical requirements to access online courses via the Blackboard Learn online learning system. The system requirements are listed on the following link https://help.blackboard.com/Learn/Student

Technical Requirements

https://it.uic.edu/services-support/student-resources/online-learning/basic-requirements/

- **Computer Literacy** All students enrolled in this program are expected to have working knowledge of the following: microcomputer operating system, word processing, spreadsheets, electronic mail, Internet browsers.

Blackboard Learning Management System (LMS)

Blackboard System Requirements- refer to this link to https://help.blackboard.com/Learn/Student

Blackboard Helpdesk

For problems with Blackboard, contact blackboard@helpdesk.uic.edu

Or call 312-996-9824.

Academic Computing and Communications Center

The Academic Computing and Communications Center (ACCC) is responsible for all computing and communications services. It manages the Blackboard Helpdesk, computer labs, email, passwords and more.

For more information about the Academic Computing and Communications Center, visit their website at: https://it.uic.edu/

University Library Resources Online

University Library System

The University Library of the University of Illinois at Chicago (UIC), consisting of the Richard J. Daley Library and four sites of the Library of Health Sciences, provides collections for students in all curricular areas, for graduate programs, for

faculty research and for health care. Library holdings number more than 8.7 million items, including 2.7 million books and bound periodicals, and over 6 million other items. The University Library currently receives over 65,000 print or electronic serials. Students and faculty have full access to books and other materials shelved on the open stacks, and both on-site and remote access to the library's rich collection of electronic databases, books and journals. Visit the library website: http://library.uic.edu/

Library of the Health Sciences is located at 1750 West Polk Street, the Library of the Health Sciences (LHS) serves the faculty, staff and students of the UIC as well as members of the general public seeking health information. The LHS collection of over 500,000 volumes and over 20,000 health sciences journals supports education, research and clinical practice in the Colleges of Medicine, Dentistry, Nursing, Applied Health Sciences and Pharmacy, and the School of Public Health; the University of Illinois Hospital and Clinics; and other affiliated health care institutions. LHS also serves as the Regional Medical Library for ten Midwestern states under a contract awarded by the National Library of Medicine.

Online Library Services
Online and distance education students can schedule research consultations with a librarian and access a majority of the library's resources remotely. You can chat with a librarian using the "Ask a Librarian" chat tool.

Professional Organizations

Student Membership
Participation in professional society activities is a defining characteristic of a professional. Graduate students are therefore strongly encouraged to join an organization such as the Healthcare Information and Management Systems Society (HIMSS) and a specialty organization of their choice. Some organizations offer reduced rates for student members. Consult the society websites listed in this manual for membership information.

HIMSS - Healthcare Information and Management Systems Society
http://www.himss.org

A not-for-profit organization representing information and management systems professionals in healthcare, serving its members, customers, and the industry by providing leadership, education, and networking. It has more than 43 chapters and more than 70,000 individuals, 630 corporate members, 470 non-profit partners and 465 affiliated organizations around the world working in healthcare organizations throughout the world. Members include healthcare professionals in hospitals, corporate healthcare systems, clinical practice groups, vendor organizations, healthcare consulting firms, and government settings in professional levels ranging from senior staff to CIOs and CEOs.

It publishes a quarterly journal, the *Journal of Healthcare Information Management*, and a monthly newsletter. National meetings are held in large U.S. cities. Student membership is recommended and encouraged.

AHIMA - American Health Information Management Association
http://www.ahima.org

Represents more than 40,000 health information management professionals who work throughout the healthcare industry. Health information management professionals serve the healthcare industry and the public by managing, analyzing, and utilizing data vital for patient care.

AHIMA produces three important periodicals--*Journal of AHIMA*, *AHIMA Advantage*, and *Keeping Pace*. National meetings are held in one of the larger U.S. cities. Student and associate membership is available.

AMIA - American Medical Informatics Association
http://www.amia.org

Dedicated to the development and application of medical informatics in the support of patient care, teaching, research, and health care administration. Since its inception in 1991, it now has nearly 4,000 members from 42 countries worldwide. Together, these scientists, educators, researchers, physicians, nurses, students, biomedical engineers, medical librarians, and health care administrators who make up the organization's membership represent all basic, applied, and clinical interests in health care information technology. It publishes a peer-reviewed, bimonthly journal, the *Journal of the American Medical Informatics*, and a newsletter. National meetings are held in one of the larger U.S. cities. Student membership is recommended and encouraged.

Health Informatics Faculty and Staff:

Faculty

https://ahs.uic.edu/biomedical-health-information-sciences/directory

Administrative Staff

The administrative staff provide preadmission advising and respond to prospective and current student inquiries. They coordinate all HI program admissions, records, and the registration/withdrawal process, including the maintenance of confidential student records and files.

You may reach the administrative staff for Biomedical Health Information Sciences department at:

https://ahs.uic.edu/biomedical-health-information-sciences/contact

Dana Hopkins, Curtis Adams

Health Informatics Program- Student Advisors

Phone 1-866-674-4842
Email **studentservices@healthinformatics.uic.edu**
dhopkin1@uic.edu   curtis20@uic.edu

The student advisors provide student advising for enrollment in courses and course planning advice to facilitate student completion of their program.

Independent Study, Practicum, Thesis, Research Project

Independent Study Guidelines and Forms

The following guidelines are used in implementing the requirements for BHIS 596 Independent Study Learning Agreement.

1. A student may elect to perform individually arranged activities designated as Independent Study. Such activities may include the following projects:

    a. A research project
    b. An in-depth study of a health informatics related topic
    c. Participation in various community institutions

2. In arranging such activities, the student is responsible for the following tasks:

    a. Identifying a topic and organizing a preliminary outline of activities for that topic
    b. Meeting with the instructor to discuss the feasibility of the topic, its scope and depth, and available resources

3. After a mutually acceptable "project/activity" has been agreed upon, the Independent Study Learning Agreement form will be drafted (by either the student and/or faculty member) containing the following elements:

    a. A brief summary of the project/activity
    b. The time frame for the independent study
    c. The grading criteria

4. The completed Independent Study Learning Agreement is to be signed and dated by all involved parties by the second week of the term (first week summer semester) in order to enroll in BHIS 596.

5. The signed Independent Study Learning Agreement is placed in the student's file until the project is completed.

6. The Independent Study Learning Agreement must be prepared prior to undertaking the project.

7. Submission of a completed agreement form is required before a student may register for credit in BHIS 596 Independent Study.

8. The student is responsible for completing all Independent Study requirements. The instructor will act in an advising/consulting role and will monitor the student's progress. It is the student's responsibility to communicate regularly with the instructor.

9. After completion of the project, the final portion of the Independent Study Learning Agreement form must be completed and signed by the instructor and submitted with the Grade Report.

Department of Biomedical and Health Information Sciences

Independent Study Learning Agreement

NAME:_____   UIN: _____

I elect BHIS 596 Independent Study for Term/Year: _____Credit Hours:_____

Following the guidelines below, I will perform the independent work described below to earn the credit listed for a letter grade.

Describe your independent work. (If you need more space, please feel free to use an additional sheet)

Guidelines for BHIS 596 Independent Study

10 pages, double spaced, 1" margins; provides new knowledge for the student; min 5 peer reviewed references; must generate an opinion; paper is well written (has clarity, is organized, has correct grammar/spelling/punctuation); indicates an intended audience for the paper; early on, clearly articulates the purpose of the paper.

20 pages, double spaced, 1" margins; provides new knowledge for the student; min 10 peer reviewed references; must generate an opinion; paper is well written (has clarity, is organized, has correct grammar/spelling/punctuation); is publishable; indicates an intended audience for the paper; early on, clearly articulates the purpose of the paper.

30 pages, double spaced, 1" margins; provides new knowledge for the student; min 15 peer reviewed references; must generate an opinion; well written (has clarity, is organized, has correct grammar/spelling/punctuation); is publishable; indicates an intended audience for the paper; early on, clearly articulates the purpose of the paper.

I understand if I do not complete the work described to the satisfaction of the instructor by the <u>beginning of the examination period</u> <u>for the term</u>, a grade of **F** will be recorded. A deferred grade requires the instructor's approval prior to the beginning of the examination period.

This form must be completed, signed by the student and the instructor and submitted to the independent study coordinator by the <u>second week of the term</u> (first week summer term) in order to enroll in BHIS 596.

Student Signature _____ Date Signed _____

Instructor Signature _____Date Signed _____

Grade_____   Instructor name (printed or typed) _____

Date_____

cc: Student, Instructor, Student File

Revised: 06/14/2013

Department of Biomedical and Health Information Sciences

BHIS Practicum Guidelines

Purpose

The purpose of the practicum is to provide a structured project experience that is a valuable educational component and link between the didactic education and a student's career. The practicum provides the student with a foundation for professional development and assists in refining skills and behaviors necessary for successful practice in the complex health care environment. As such, it is best taken after the majority of core and area of study courses are complete.

Goals

The goals of the practicum encompass three broad areas: the mentoring relationship, observation, and application.

> *Mentoring Relationship*: Through a mentoring relationship between the preceptor and the student, the student can develop a personal philosophy of leadership that exploits new opportunities for managing technology and organizational transformation in a continuous environment of change. Through the mentoring relationship, the student can enhance understanding of organizational behavior and skills in interpersonal relationships, communication, negotiation, and strategic thinking.

> *Observation:* Through observation and selected participation, the student can develop an appreciation of the relationships between organization culture, structure, and behavior and how these enhance the effectiveness of the health care organizations.

> *Application*: The practicum experience should provide the student with an opportunity to develop confidence in the application of acquired knowledge and skills. Furthermore, the student should gain enhanced project planning and management skills.

Practicum Commitment

- 135 - 150 hours over 16 weeks

Student is responsible for:

- o Submitting a student resume
- o Participating in a student interview
- o Finding a site and a preceptor
- o Forming a team
- o Completion of deliverables for 4 modules
- o Final Report and presentation

Practicum Guidelines

- The practicum is a structured project experience with oversight provided by a BHIS faculty member and conducted under the supervision of a preceptor. Practicum sites are established based on the goals of the individual student considering their background and experience. Students will submit a resume/description of the project as a pre-requisite to being considered for this course.
- The practicum is 16 weeks in length.
- Students may identify a preceptor and project at any healthcare facility, including a present or former place of employment, clinical practicum site, or other healthcare organization.
- Projects may be completed working in teams of 2-4 students.
- Students are responsible to complete their assigned tasks and deliverables according to the norms defined by the project team.

Practicum Projects

Practicum projects are decided on by the students. A Practicum Experience may include the following types of projects:

- Implementation projects for new systems
- Enhancement or process improvement projects (outside of technology)
- Enhancement projects for current healthcare technology systems
- Organizational change management (OCM) or HIT adoption
- New performance measures that need to be incorporated (often within the Quality Department)
- Workflow mapping or specification gathering
- Health data analytics (performance measures, dashboard, analytic plans)

Practicum Planning Timeline

3-6 months ahead	1-2 months ahead	Less than 1 month ahead	Week zero and Week 1
- Speak to your student advisor about your interest in taking BHIS 580 - Submit the Request to Enroll Form to the instructor for BHIS 580 - Submit student resume that identifies at least 2 possible practicum sites/projects to pursue	- Receive approval to enroll in BHIS 580 from instructor - Schedule student interview - Enroll in BHIS 580 course - Identify a preceptor who would be willing to work with you on a project - Complete HIPAA training, non-disclosure /confidentiality agreement paperwork.	- Log in to the BlackBoard course site to connect with other students and form a group - Post a short description of your practicum projects options for the group to consider	- Groups meet to compare and discuss practicum project options - Decide on your practicum project - Submit project to instructor for approval - Submit Group Charter defined by the group - Submit the preceptor CV

Students should work with their advisor to discuss enrolling in the Practicum. Advisors will provide students with the Request to Enroll Form.

Students will submit their Request to Enroll form to the faculty for BHIS 580. Attach a brief student resume with at least 2 ideas for a practicum project. The actual project will be decided during the first 2 weeks of the course when groups have been formed. The deadline for submitting a request to enroll in a practicum is **August 1 for the fall semester and November 1 for the spring semester** in advance of when the student will begin working on the practicum.

When the semester starts and projects are confirmed, Preceptor Guidelines and a letter to confirm participation are sent to the preceptor from the practicum faculty.

Goals and Activities

The following are activities normally expected to occur during the practicum to meet the goals of: Mentoring, observation, and application.

Mentoring

A mentoring relationship is established between the preceptor and the student in which the preceptor assumes a role of professional guide or counselor. The relationship should provide opportunities for guiding student's professional development and provide for periods of dialog between the student and the preceptor on critical issues in the discipline. Techniques for fostering the mentoring relationship may include, but are not limited to, formal and informal discussions or debriefings, "shadowing" the preceptor, critique of student affective and professional behavior or presentation, or appraisal of application of student's knowledge and skill set.

Among general activities that can foster the mentoring relationship are the following:

- Working with the preceptor on assignments, projects, or assuming a role of "assistant to" the preceptor
- Attending organizational meetings with the preceptor
- Defining regular periods of time for formal or informal discussions and/or evaluations.

Observation

Through observational activities, the student gains an understanding of the organization, its mission, goals, objectives, structure, and culture. The student should be able to observe and assess complex interrelationships within the organization, gaining an understanding of the organization, management, scope of responsibilities, functions, and strategic planning.

General activities may include

- Review of mission, goals, and organizational strategic plan.
- Review of mission, goals, and operational plan of the unit to which the student is assigned.
- Review of enterprise organizational chart, information systems or the unit organizational chart and job descriptions.
- Review of organizational policies and procedures.
- Tour of organization's facilities.
- Attendance at meetings internal to the organization and to function in the following ways: observation, active participation in discussion if appropriate, presentation of reports if appropriate.
- Observation of information system activities and/or project management
- Observation of activities relating to human resources management including planning for human resources, hiring, interaction with employees.
- Observation of team-building processes/activities.

Application

Through projects, knowledge and skills in planning, management, design, integration, implementation, or evaluation is enhanced. The project should be appropriately focused so that deliverables can be achieved within the practicum period.

Examples of areas for projects include but are not limited to the following:

- Management
- Design
- Integration
- Implementation
- Evaluation

Students should also have the opportunity of developing affective behaviors through interaction with employees, delivering formal and informal presentations, and participating in meetings as appropriate.

Students may complete the following types of projects:

- Implementation projects for new systems
- Enhancement or process improvement projects (outside of technology)
- Enhancement projects for current healthcare technology systems
- Organizational change management (OCM) or HIT adoption
- New performance measures that need to be incorporated (often within the Quality Department)
- Workflow mapping or specification gathering
- Health data analytics (performance measures, dashboard, analytic plans)

Practicum site

The organization must provide the following to serve as a practicum site:

- Offer opportunities that will give the student a productive experience and assist the student in continued professional development.
- Provide a preceptor who is a recognized expert in the field and who is committed to providing a valuable educational experience to the student.
- Provide mentoring and evaluation to help the student develop a personal philosophy of leadership that exploits new opportunities in the field of study.
- Agrees to the purpose, goals, and philosophy of the BHIS graduate practicum experience.

Before approaching any organization of interest for a practicum, students should update their resume and provide a cover letter describing their interest, skill sets, a brief description of practicum requirements (a minimum of 135 hours – 150 hours over 16 weeks, a defined project with a preceptor, etc.), and their availability. Students are encouraged to update and remove any unprofessional content from their social media accounts (LinkedIn, Facebook, Twitter…) since individuals from a potential practicum site may likely look at students' social media presence as part of their due diligence and acceptance process.

Tips for securing a practicum site:

- Ask a colleague or a career service professional to look over your resume/cover letter for clarity, spelling, and formatting.
- Check local job postings to identify potential sites and to discover current and future projects and desired skills.
- Look for internship/volunteer opportunities on companies' websites.
- Seek out opportunities to meet with potential colleagues and preceptors in person. Attend or volunteer at outreach events and seminars to become known to the organization.
- Maintain a spreadsheet to track organization, the date of initial contact, and follow up activities.
- Request informational interviews to learn about an organization and opportunities for practicum projects.
    - During the interview, discuss interests and career goals while being open and flexible to learning more about the organization and available projects.
    - Follow up; remember to always be courteous and professional.

Roles and Responsibilities

Preceptor

It is the preceptor's responsibility to provide the University of Illinois at Chicago practicum coordinator with the preceptor's own resume. In those cases, in which the direct supervisor is not the preceptor, the resume of the direct supervisor should be submitted.

The preceptor is responsible for facilitating the continuing educational development of the student during the practicum.

An initial task for the preceptor is to assist the student in planning the practicum project through the development of a Practicum Plan (PP). This is done during the beginning of the practicum and will clarify expectations on the part of the involved parties by defining the scope of the project and the deliverables.

Second, the preceptor provides guidance. This is accomplished by conducting regular conferences with the students. These meetings are used to share the preceptor's understanding of their organization and its professional ethics, culture, and goals.

Finally, the preceptor reviews the progress of the practicum experience with the student and other key staff members and evaluates the student's performance. Along with specific written evaluations that reflect the performance of the student, the preceptor reports a letter grade to the University of Illinois at Chicago.

Practicum Instructor

The responsibility of the UIC practicum Instructor is to facilitate the practicum planning and implementation and overall coordination of the practicum process.

The instructor reviews deliverable for each module and provide feedback which is incorporated for the final report. The instructor is informed of the student's progress during the practicum by periodic status reports from the team. The instructor is responsible for review of preceptor and student evaluations and for assigning and submitting the final grade. The final grade is composed of grades for the practicum deliverables, the preceptor's evaluations, final report and presentation, and the student's evaluation of the practicum experience.

Student

The student enrolled in the BHIS practicum courses will accomplish the learning objectives outlined in the course syllabus and more specifically what has been defined in the Practicum Plan (PP). In addition, the student is an ambassador and a representative of the Department of Biomedical and Health Information Sciences at the University of Illinois Chicago.

The student is responsible for completing the PP with the consultation and approval of the preceptor. The student is also responsible for the completion and submission of the *Student Evaluation of Practicum Experience*, due at the end of the semester.

The student is expected to always act in a professional manner; comply with all standards and regulations, policies, and procedures of the practicum organization.

Project Management

In addition to completing the practicum project itself, students will also use project management methods and tools during the practicum. The main tool and deliverable for the practicum is the Project Plan (PP): The student is responsible for initiating and completing the PP with the assistance and approval of the preceptor. The plan should be completed by the end of week 3 of the practicum and submitted to the BHIS 580 faculty. The PP provides documentation of the practicum goals and objectives, describes the activities to be performed, identifies the project to be conducted, describes the deliverable(s), and provides a structure by which the student will be evaluated.

The PP should be based upon the overall objectives of the practicum program as noted in this guideline and the specific needs, interest, and professional goals of the student. The plan should provide a clear understanding and specification of what the student expects to obtain from the practicum. The PP must be approved by the preceptor, student, and practicum faculty.

The PP is composed of a Statement of Objectives and a Work Plan.

> **Statement of objectives:** The Statement of Objectives should address the general goals of project. Objectives should be measurable and quantifiable.

> **Work plan:** The Work Plan should specify what students (each member of the project team) will do in terms of defined tasks, activities and deliverables relating to each of the stated objectives. For each objective, the Work Plan should describe:

> - The **activities** for achievement of the objective (e.g., attendance at meetings, special assignments, projects)
> - Schedule or timeframe and **deadlines** for completion of activities

The PP is a planning tool to enhance the practicum experience and may be changed and re-negotiated based on the changing needs of the preceptor site.

The first step to enroll in practicum is for the student to submit this request to enroll. This request must be **submitted by August 1 for the fall semester and November 1 for the spring semester** in advance of when the student will begin working on the practicum. Along with this form, the student will submit a current resume and summary of goals and career objectives

Date:

1. Name and address of the Practicum site organization

2. Contact information for the person who will be the preceptor

    Name:

    Title:

    Phone:

    E-mail:

3. Provide a short description of the practicum project you have discussed doing.

4. Write a short summary of your goals and career objectives

Preceptor Evaluation of the Intern

Each preceptor will be evaluating the intern by completing a *Professional Behaviors Evaluation*. The preceptor also reports a letter grade, based on the progress of the student in attaining the goals and objectives delineated in the PP and the quality of work on projects or studies performed. The final grade for the practicum is calculated by the practicum coordinator, based on the following:

Student Evaluation of Practicum

The student is required to submit the *Student Evaluation of Practicum Experience* at the end of the practicum experience. The coordinator will share the evaluation with the preceptor.

This evaluation provides the student the opportunity to reflect on the internship activities and review and evaluate progress in attaining the educational goals and objectives of the practicum.

Practicum Termination

If the preceptor or the student determines that the association of the intern with the institution should be terminated, the practicum coordinator must be notified by the most expeditious method and provided the reasons for making such a recommendation. If the recommendation ends in termination, the event(s) must be documented by the practicum coordinator and placed in the student's file.

Research Project Guidelines

Department of Biomedical and Health Information Sciences

The project option meets the professional goals of students who choose an applied emphasis of study to prepare for their careers. Project research must be an independent investigation that engenders the responsibilities of professionals to contribute to their body of knowledge. Students investigate a topic/problem in their field, write and prepare an article for submission to a peer reviewed journal, and deliver a formal defense. The project option maintains rigorous standards of academic preparation equal to that of the thesis, befitting the MS degree. Students should not register for project research until completion of BHIS 499, BHIS 500, BHIS 595, and the majority of required coursework. A statistics course completion is required of all research students.

Project Committee

Before undertaking research leading to a project, a student, with the assistance and approval of an academic advisor, must select a project advisor, who is a member of this department. After conference with the project advisor, the student proposes the members of the project committee**.** This committee consists of at least three members. One member of the committee may be from either outside of the academic unit or outside the university; the member must demonstrate equivalent academic standards and his/her curriculum vitae must accompany the *BHIS Project Committee Recommendation Form*. A certificate of completion for Investigator Training 101 must be attached to the *BHIS Project Committee Recommendation Form* before the DGS approves the committee. Final committee structure is subject to the approval of the academic advisor, the program director, and Director of Graduate Studies (DGS).

Project Proposal and Protocol Approval

The members of the project committee will meet with the student to approve both the research topic and project proposal, determining if the student is adequately prepared to undertake the project. The project research may emphasize theoretical, laboratory, field, or computer-based investigations, but it should be feasible to complete in three semesters. The members of the committee then provide guidance and assistance throughout the research experience of the student. The student is responsible for convening the committee once a semester. The student must sign the *Project Research Agreement Form* each semester s/he is enrolled in 597.

Federal regulations mandate that any research involving the use of human subjects, animals or Recombinant DNA must be approved by the Institutional Review Board (IRB), the Animal Care Committee (ACC) and/or the Institutional Biosafety Committee (IBC) before the research is started. The student must attend the UIC Investigator 101 training session and be recertified every two years. The student is responsible for initiating all protocol approval applications. If the work is completed without protocol approval, it cannot be published. It is University policy that all research must be in compliance with the Office of Protection of Research Subjects (OPRS). The project advisor will indicate written approval of the research topic, project proposal, and research protocol on the *Master's Degree Completion Checklist.*

Proposed Sequence of Project Activities

- Work with project advisor to identify a topic area and to select committee members
- Conduct a literature review and write a project proposal
- Convene committee and obtain research topic and project proposal approval
- Apply for protocol approvals if required
- Conduct and complete project
- Select peer-reviewed journal and review the journal's instructions for authors
- Write draft(s) of an article using the peer-reviewed journal's format
- Convene committee for at least a mid-project evaluation
- Begin to prepare formal defense
- Complete article and convene committee for final review

- Deliver formal defense
- Convene committee and obtain final approvals

Article Approval and Formal Defense

Throughout the writing phase, the committee may review the drafts as individuals or as a committee. When the project advisor determines the article is near completion, s/he will have the student assemble the project committee one last time to evaluate the student's progress and approve the article for submission to a peer-reviewed journal. All committee members should attend the meeting. Committee members confer with the student in this private session and indicate whether any further revision of the article is required. When revision is required, it is the student's responsibility to incorporate suggestions into the article. A member of the project committee will be assigned to verify that changes were made in accordance with the intent of the project committee.

Students who choose the project option are required to summarize and discuss their research in a seminar setting. The formal defense is open to faculty, students, and invited guests.

After the project committee approves the article and is satisfied with the student's formal defense, the project committee reports to the Director of Graduate Studies that the student has or has not passed. A candidate cannot be passed if more than one vote of "fail" is reported. The report to the Graduate College is made by the committee members who sign and date the *Certificate of Approval Master's Project*. The Director of Graduate Studies then indicates department approval by signing the *Certificate of Approval Master's Project* and sends the document to the Graduate College.

Research Project Forms

Department of Biomedical and Health Information Sciences

Project Committee Recommendation Form

Name of Student _____ UIN: _____ Graduate Program: _____

MS in HI Project title:

_____

<div style="border: 1px solid black; padding: 10px;">

Regulatory Issues

Does the student's research involve human subjects?

Yes ____ or No ____

If yes, has the Institutional Review Board approved the proposal?

Yes ____ or No ____   Approval # _____

Does the student's research involve animals in any way?

Yes ____ or No ____

If yes, has the Animal Care Committee approved the proposal?

Yes ____ or No ____   Approval # _____

</div>

Please note that SBHIS requires that the committee have a minimum of three members, one of which can be from outside of the academic unit.

We recommend that the following be approved as members of the committee for the student named above:

Name   Department

_____

Project advisor

_____

_____

_____

_____

Member outside of UIC   Name of institution or agency, etc.

_____   Date _____

Academic advisor

_____   Date _____

Program director

_____   Date _____

Director of graduate studies

Health Informatics Program Research Project Form

Department of Biomedical and Health Information Sciences

University of Illinois at Chicago

PROJECT RESEARCH AGREEMENT NAME: _____

PROJECT RESEARCH ADVISOR: _____

I elect BHIS 597 Project Research:

Term/Year: _____ **UIN:** _____

Work to be completed by _____

Description of work/goals for the semester:

I agree to perform the described work by the designated date to earn an S (Satisfactory) in the course.

Should I not achieve the agreed upon goals, I understand I will receive a grade of "U." In this event, my Status will be reviewed by the advisor, the director of graduate studies, and the Graduate College, and I may be dismissed from the Graduate College. A grade of "I" (Incomplete) may only be given if, for reasons beyond the student's control, required work has not been completed by the end of the term. An *Incomplete* must be removed by the end of the next term in which the student is registered (including summer), or within twelve months of the end of the term in which the IN was received, whichever occurs sooner.

This form must be completed, signed by the student and the project research instructor, and submitted to the Program Director by the second week of the term (first week summer term) in order to enroll in BHIS 597.

This form must be completed each semester the student is enrolled in project research.

_____   _____
Student Signature   Instructor's Signature

_____   _____
Date Signed   Date Signed
 Cc: Student
       Instructor
       Student File
BHIS Academic Affairs approved 6/14/2014

BHIS Thesis Policy

Thesis Committee

Before undertaking research leading to a thesis, students, with the assistance and approval of an academic advisor, must select a thesis advisor. In conjunction with the thesis advisor, the student proposes the members of the thesis committee. This committee consists of at least three members. Following UIC Graduate College policy, the chair must be a member of the UIC Graduate College faculty and at least one member must be a tenured full member of the UIC Graduate College faculty. One member of the committee may be from outside of the academic unit, or outside the university, in which case the member must demonstrate equivalent academic standards and his/her curriculum vitae must accompany the *Committee Recommendation Form*. A certificate of completion for Investigator Training 101 must be attached to the *Recommendation Form* before the DGS approves the committee. Final committee structure is subject to the approval of the student's academic advisor, program director, Director of Graduate Studies (DGS), and the UIC Graduate College. Students should not register for thesis research until completion of BHIS 499, BHIS 500, and the majority of required coursework.

Thesis Proposal and Protocol Approval

The members of the thesis committee will meet with the student to approve both the thesis topic and the thesis proposal, determining if the student is adequately prepared to undertake the research. The thesis research may emphasize theoretical, laboratory, field, or computer-based investigations, but it should be feasible to complete in three semesters. The members of the committee then provide guidance and assistance throughout the research experience of the student. The student is responsible for convening the committee once a semester.

Federal regulations mandate that any research involving the use of human subjects, animals or recombinant DNA must be approved by the Institutional Review Board (IRB), the Animal Care Committee (ACC) and/or the Institutional Biosafety Committee (IBC) before the research is started. The student must attend the UIC Investigator 101 training session and be recertified every two years. The student is responsible for initiating all protocol approval applications. If the work is completed without protocol approval, it cannot be published, even as a thesis. Copies of the IRB, ACC and/or IBC approval must be included in the Appendix of the final draft of the thesis submitted for review by the Graduate College. It is University policy that theses that are not in compliance with the Office of Protection of Research Subjects (OPRS) will not be accepted for fulfillment of graduation requirements. The thesis advisor will indicate written approval of the thesis topic, thesis proposal, and research protocol on the *Master's Degree Completion Checklist.*

Thesis Preparation

Students should seek the guidance of their advisors and the Graduate College at an early stage of thesis preparation. Before beginning work on their thesis, students should obtain a copy of the *Thesis Manual* available from the Graduate College. The manual contains instructions on the format of the thesis and samples of Graduate College forms to be filed upon thesis and oral examination approval. It is the responsibility of the student to abide by all Graduate College deadlines and guidelines for preparation, duplication, and submission of the thesis.

Thesis Defense

When the student and thesis advisor agree that the student is prepared, the thesis advisor assembles the **thesis committee** to conduct the thesis defense. Prior to the oral defense, the Thesis Advisor should request two *Certificates of Approval* (red bordered pages), the *Examination Report* form and the *Department/Program Format Approval* form from a designated graduate program support person. All committee members must be present at the defense. The thesis committee examines the student in a private session and indicates to the student whether any further work or revision of the thesis is required.

After the examination, the thesis committee reports to the Graduate College that the student has or has not passed and thus, has or has not satisfied all requirements for the MS degree. A candidate cannot be passed if more than one vote of "fail" is reported. The report to the Graduate College is made by the committee members who sign and date the Certificates of Approval for the thesis and the Examination Report form.

When further work or revision is required, it is the student's responsibility to do the work and incorporate suggestions into the thesis. A member of the thesis committee will be assigned to verify that work was performed, and changes were made in accordance with the intent of the thesis committee. When everything is completed, the thesis advisor and Director of Graduate Studies will indicate department approval by signing the *Department/Program Approval* form.

All students are required, before commencement, to summarize and discuss their research in a seminar setting. This oral presentation is open to faculty, students and invited guests. The Department also requires that the student submit one bound copy of the thesis to their program coordinator. The thesis advisor may also request a bound copy.

Graduate College Thesis Submission Deadlines

https://grad.uic.edu/academic-support/thesis/

http://grad.uic.edu/thesis

https://catalog.uic.edu/gcat/academic-calendar/

The thesis must be submitted to the Graduate College for formal approval. The Certificates of Approval and the

Department/Program Approval forms must accompany the thesis. After Graduate College approval is obtained, students must submit the final, corrected thesis (two copies) by the deadline for final approved thesis submission, as advertised by the Graduate College for that semester.

MULTI-AUTHORED PUBLICATION

The following are guidelines for all scholarly collaborations in which multiple authorship is anticipated:

Determining authorship

1. Authorship can be diluted if the list of contributors is excessive; authorship should be limited to those with significant roles.

2. Authorship is not warranted for a commentary on a draft of a paper, one or two consultations to a project, editorial assistance that focuses on grammar, punctuation, and composition, compensated data collection, or limited voluntary data acknowledgment. Authorship should not be used to reward limited assistance to a project.

3. The person who has major responsibility for the published contents should be the primary author. In the event that two people equally share the first level of responsibility, alphabetic order is the protocol for entry of names.

4. The second author usually assists in the development of ideas, method and instrumentation, data reduction, analysis and in writing.

5. The third author may be someone who assists or carries out data collection of a significant portion of the data or who makes a substantial contribution to one or more phases of the project such as statistical analysis and interpretation. In instances when authors other than the first author have made equal contributions, alphabetic order is the protocol for order of entry of names.

6. A journals or discipline's protocol for author order may take precedence over items 3-5.

Group practices

1. Principal investigators and senior faculty have special responsibilities to assure the overall cohesiveness and validity of the publications on which they appear as coauthors.

2. All authors in a group effort have a shared responsibility for the published result and should have the opportunity to review all sample preparation procedures and data, as well as all data acquisition and analysis procedures.

3. Each author in a group effort should have access to the manuscript prior to its being submitted for publication and should agree to his or her inclusion as a coauthor. All the participants in the program should know that the paper is being prepared for publication.

4. Early in the project, each research group should define appropriate practices for the maintenance of data.

Student project research

1. The student must be primary author of the final manuscript, except in the final circumstances:

When participating in an ongoing grant that is not his/her idea, the student must recognize that s/he may not be primary author. Multiple articles may be generated from the project research. It is the decision of the committee members if they wish to be listed as contributing authors of the ensuing articles. The student will not remain primary author after the initial publication unless s/he writes the ensuing articles.

2. The project research committee members must indicate if they wish to be contributing authors (but not primary author) on the student's manuscript. Generally, the project research advisor is the secondary author.

3. Multiple articles may be generated from the project research. It is the decision of the committee members if they wish to be listed as contributing authors of the ensuing articles. The student will not remain primary author after the initial publication unless s/he writes the ensuing articles.

4. All copyright and intellectual property laws will be followed for all written materials, as well as graphical representations and illustration contributions.

5. Project committee members must sign acknowledgement of these guidelines prior to the initiation of the project research.

Student:

_____   Date_____

Project Research Committee Head:

_____   Date_____

Committee Members:

_____   Date_____

_____   Date_____

_____   Date_____

BHIS Academic Affairs approved 6/14/2013