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Welcome to the health informatics program. The faculty teaching in the health informatics program look forward to working with you as you progress through the curriculum. Health informatics is an exciting field that provides numerous opportunities for career opportunities and professional growth. It is the health care specialization that has seen the most rapid growth in jobs. Health care organizations from hospitals, to physician offices, long-term care facilities will need health informatics professionals to help them succeed as they convert their systems to electronic records and upgrade existing systems to meet demands for quality, efficiency, and safety. Likewise, the industry needs experts who are well versed in the intersection of health, information and technology. In addition to an understanding of the dynamics of this rapidly changing field, you will need "people skills" to facilitate the implementation of projects keeping in mind the needs of the user and the patient and/or client. The COVID-19 pandemic has heightened the importance of health data in our lives. Health informatics professionals can pave the way in helping us to understand the vast volumes of data generated and the best strategies to mitigate the pandemic. Our program is designed to help you gain and develop these competencies in a learning environment that fosters our Jesuit ideals, the magis in the pursuit of excellence while fostering cura personalis, care of the individual student with the goal of educating men and women for others. We are working together across disciplines to provide you with a high-quality education. Throughout the process, the faculty are ready to support your learning and our staff are here to facilitate the process of progressing through the program.

This handbook is designed as a complement to the University Graduate Studies Catalog that is found on the university website and serves as a guide for you while you are in our program. In those instances where the information in this handbook and the University of Scranton Graduate Catalog do not match, university policies in the catalog take precedence. This handbook also contains policies that are unique to the health informatics program that are not specified in the catalog and therefore govern those circumstances. If you have any questions about the policies, you are encouraged to contact the program director or the appropriate University department for clarification. You are wished success on your journey to becoming a health informatics professional.

Margarete L. Zalon, PhD, RN, ACNS-BC, FAAN
Professor
Program Director
**About the University of Scranton**

**University of Scranton Mission Statement**

The University of Scranton is a Catholic and Jesuit university animated by the spiritual vision and the tradition of excellence characteristic of the Society of Jesus and those who share its way of proceeding. The University is a community dedicated to the freedom of inquiry and personal development fundamental to the growth in wisdom and integrity of all who share its life.

**University of Scranton Vision**

The University of Scranton will be boldly driven by a shared commitment to excellence. We will provide a superior, transformational learning experience, preparing students who, in the words of Jesuit founder St. Ignatius Loyola, will "set the world on fire."

**University of Scranton Institutional Learning Outcomes**

Upon completion of their program of study, students will be able to:

1. Develop and use the intellectual and practical competencies that are the foundation of personal and professional development and lifelong learning including oral and written communication, scientific and quantitative reasoning, critical analysis and reasoning, and technological competency and information literacy.

2. Exhibit broad knowledge of the human condition, understanding the world in its physical and natural aspects, as well as the philosophical and theological basis for modern thought, faith and belief.

3. Demonstrate competence in their chosen field of study, using the knowledge and ability to address the most significant questions, and advancing towards positions of leadership.

4. Employ their knowledge and intellect to address situations in a way that demonstrates a devotion to the spiritual and corporal welfare of other human beings and by a special commitment to the pursuit of social justice and the common good of the entire human community.
The M. S. in Health Informatics Program at the University of Scranton

Health Informatics Program Mission Statement

The mission of the Master of Science in Health Informatics program is to promote excellence in the Jesuit tradition by preparing graduates in the interdisciplinary field of health informatics to use data, information, knowledge, and wisdom to improve health.

Health Informatics Program Vision

To be known and valued for excellence in preparing men and women, in the Jesuit tradition, to be ethical and responsible leaders in health informatics.

Health Informatics Program Description

The Master of Science in Health Informatics program at The University of Scranton will provide graduates with an innovative and forward-looking understanding of an ever-evolving discipline located at the intersection of information science, computer science, and health care. This interdisciplinary focus is used to explore the resources, devices, and methods required to optimize the acquisition, storage, retrieval, and use of information in health care. The program explores a number of health informatics tools that include not only information and communication systems, but also emerging and innovative technologies. Graduates will understand how health informatics is applied across the broad-spectrum of health care and learn how to work collaboratively in multidisciplinary teams to achieve goals in person-centered environments.

About the Program

The program is an interdisciplinary program with faculty who provide specific expertise in teaching courses in the Master of Science in Health Informatics Program. The program of study consists of eleven, three-credit hour online courses, for a total of 33 graduate credit hours. Each course is offered online in an eight-week format. Courses are offered at the beginning of the program provide a foundation in health informatics and subsequent courses provide the students with opportunities to apply their knowledge and skills.

Relationship of the Health Informatics Program with the University’s Mission

The graduate program in Health Informatics aligns with the following characteristics and goals of the University:

- Offers a degree program at the graduate level in professional area, that builds on the University’s strength in the areas of health sciences, advanced practice nursing, information sciences, health administration, and business management.

- Educates men and women for others who are committed to the service of faith and promotion of justice.

- Provides educational opportunities that meet the needs and interests of non-traditional students.

- Imparts the importance of gathering, evaluating, disseminating, and apply information using traditional and contemporize methods.

- Provides learning experiences that reach beyond fundamental acquisition of knowledge to include understanding interactions and syntheses through critical thinking and decision making.

- Promotes respect for learning, discernment, and ethical decision making.
Health Informatics Program Goals

1. Prepare the next generation of leaders in health informatics dedicated to integrity, ethics, intellectual curiosity, and lifelong professional development.
2. Support patient safety, improved outcomes, and quality care through effective and efficient use of health information technology and investigation of new informatics tools and techniques.

Health Informatics Program Learning Outcomes

1. Use applicable information and research evidence to support effective health informatics practice. (Institutional Learning Outcome (ILO) 1, 2)

2. Integrate database and knowledge management skills into health informatics practice. ((ILO 2)

3. Address the data and information needs of healthcare systems in diverse settings through the application of theoretical knowledge of health, informatics, and computational thinking, and an intellectual curiosity and investigation of new informatics tools and technologies. (ILO 1)

4. Integrate theories, models and tools from business, social, behavioral and information sciences, and user experience for informatics solutions such as for the generation, storage, retrieval, sharing, analysis and use of health data. (ILO 3)

5. Demonstrate interprofessional team leadership and professionalism in the healthcare informatics through effective oral and digital communication, a commitment to ethics, and lifelong learning. (ILO 4)

6. Analyze the legal, risk management, and ethical implications of health informatics issues related to the use of health data, information and knowledge. (ILO 1, 3)

7. Leverage team-oriented communication skills to support the interprofessional patient care team and healthcare administration. (ILO 4)

8. Employ analytic and problem-solving skills to plan for and address healthcare information needs. (ILO 3)

9. Mitigate safety, confidentiality, and privacy issues pertaining to health information policies, and government regulations and requirements. (ILO 3)

10. Evaluate interactions of people with tasks, health informatics technologies, and the environment to enhance efficiencies in the promotion of health, safety and patient outcomes in person-centered environments. (ILO 4)

11. Evaluate the use of existing and emerging health information technologies to support healthcare systems. (ILO 2, ILO 3)
For students who enrolled in the program in August 2020 and thereafter:

All students must successfully complete each of the 11 courses listed below to earn the degree for a total of 33 credits.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HINF 520</td>
<td>Introduction to Health Informatics</td>
</tr>
<tr>
<td>HINF 530</td>
<td>Healthcare Knowledge for Health Informatics</td>
</tr>
<tr>
<td>HINF 535</td>
<td>Principles of Computer Science and Software Development</td>
</tr>
<tr>
<td>HINF 540</td>
<td>Information Technology for Health Informatics</td>
</tr>
<tr>
<td>HINF 545</td>
<td>Database Principles and Applications</td>
</tr>
<tr>
<td>HINF 550</td>
<td>Population Health for Health Informatics</td>
</tr>
<tr>
<td>HINF 560</td>
<td>Business Management and Communication for Health Informatics</td>
</tr>
<tr>
<td>HAD 522</td>
<td>Health Care Operations and Quality</td>
</tr>
<tr>
<td>HINF 570</td>
<td>Health Information Policy and Governance</td>
</tr>
<tr>
<td>HINF 580</td>
<td>Current Trends in Health Informatics</td>
</tr>
<tr>
<td>HINF 590</td>
<td>Health Informatics Capstone</td>
</tr>
</tbody>
</table>

For students who enrolled in the program prior to August 2020:

All students must successfully complete each of the 11 courses listed below to earn the degree for a total of 33 credits. HINF 501 and HINF 502 are co-requisites to HINF 520 and are taken depending on your previous coursework and background.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HINF 501</td>
<td>Introduction to Healthcare</td>
</tr>
<tr>
<td>HINF 502</td>
<td>Computer Information Technology for Health Professionals</td>
</tr>
<tr>
<td>HINF 520</td>
<td>Introduction to Health Informatics</td>
</tr>
<tr>
<td>HINF 530</td>
<td>Healthcare Knowledge for Health Informatics</td>
</tr>
<tr>
<td>HINF 535</td>
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<tr>
<td>HINF 545</td>
<td>Database Principles and Applications</td>
</tr>
<tr>
<td>HINF 550</td>
<td>Population Health for Health Informatics</td>
</tr>
<tr>
<td>HINF 560</td>
<td>Business Management and Communication for Health Informatics</td>
</tr>
<tr>
<td>*Elective</td>
<td>Select one elective from the list below</td>
</tr>
<tr>
<td>HINF 570</td>
<td>Public Policy for Health Informatics</td>
</tr>
<tr>
<td>HINF 580</td>
<td>Current Trends in Health Informatics</td>
</tr>
<tr>
<td>HINF 590</td>
<td>Health Informatics Capstone</td>
</tr>
</tbody>
</table>
Elective Choices (Select one from the following):
See Graduate Catalog (http://catalog.scranton.edu/index.php?catoid=35) for course details.

Special B Term Electives
- ERP 510 Integrated Enterprise Management Systems
- HAD 501 Health Care Financial Management I 501
- HAD 510 Hospital Administration
- HAD 512 Medical Practice Administration
- HR 501 Human Resources
- OM 543 Project and Change Management

Special A Term Electives
- ERP 515 Business Intelligence
- HAD 513 Long Term Care Administration
- HAD 517 Global Health Management

Regular Semester Electives
- NURS 507 End-of-Life Care
- NURS 591 Issues in Advanced Practice Nursing

Check your specific schedule of courses to learn in which semester the elective should be scheduled. Special A Term courses may be taken as an elective; however, advanced scheduling arrangements must be made. The regular semester elective courses are currently taught in specific standard terms only. Financial aid implications will occur. Special arrangements must be made in advance.

M. S. in Health Informatics with a Specialization in Data Analytics

The University of Scranton MS in Health Informatics program provides the opportunity for students to complete a specialization in data analytics. The healthcare climate is one of rapid technological change and is increasingly data driven. Health informatics is a field that exists at the intersection of health, information science and technology, and social and behavioral science.¹ The data analytics specialization provides health informatics students with additional competencies, which can then be applied to support decision making in the implementation of informatics solutions and in healthcare delivery. You will graduate with a foundation in health informatics, enhanced by the ability to use analytic techniques and “Big Data.”

Coursework for the Data Analytics specialization includes three 3-credit courses: Introductory Business Analytics, Data Mining and Data Visualization as well as two 1-credit modules in Management Science and Statistics in preparation for the specialization. Additional outcomes for the data analytics specialization include:

1. Explain data analytics and its application for the improvement of population health and health care delivery.

2. Describe how descriptive, predictive and prescriptive analytics can be used to address healthcare needs.

3. Identify patterns and relationships among “big data” variables using a variety of data mining techniques that involve data preparation, modeling, evaluation and application.

4. Develop data visualization techniques to tell a story in the identification of trends to guide decision making in health informatics.

M. S. in Health Informatics with a Specialization in Data Analytics Program Degree Planner

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HINF 501</td>
<td>Introduction to Healthcare</td>
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<tr>
<td>HINF 502</td>
<td>Computer Information Technology for Health Professionals</td>
</tr>
<tr>
<td>HINF 520</td>
<td>Introduction to Health Informatics</td>
</tr>
<tr>
<td>HINF 530</td>
<td>Healthcare Knowledge for Health Informatics</td>
</tr>
<tr>
<td>HINF 535</td>
<td>Principles of Computer Science and Software Development</td>
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<tr>
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<tr>
<td>HINF 550</td>
<td>Population Health for Health Informatics</td>
</tr>
<tr>
<td>HINF 560</td>
<td>Business Management and Communication for Health Informatics</td>
</tr>
<tr>
<td>MBA 501A</td>
<td>Statistics Module (1 credit)</td>
</tr>
<tr>
<td>MBA 501B</td>
<td>Management Science Module (1 credit)</td>
</tr>
<tr>
<td>BUAN 571</td>
<td>Business Analytics</td>
</tr>
<tr>
<td>BUAN 572</td>
<td>Data Mining</td>
</tr>
<tr>
<td>BUAN 577</td>
<td>Data Visualization</td>
</tr>
<tr>
<td>HINF 570</td>
<td>Public Policy for Health Informatics</td>
</tr>
<tr>
<td>HINF 580</td>
<td>Current Trends in Health Informatics</td>
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<tr>
<td>HINF 590</td>
<td>Health Informatics Capstone</td>
</tr>
</tbody>
</table>

The business analytics specialization requires 6-8 additional credits for a total of 39-41 credits for the degree. Students enrolled in this specialization take BUAN 571, BUAN 574 and BUAN 577 instead of HAD 522. BUAN 571 has three one-credit pre-requisites, MBA 501A, MBA 501B and MBA 501C. The MBA 501C pre-requisite, Information Management Module is waived for health informatics students. Depending on the student’s background and/or previous courses, students may be able to waive the MBA 501A and/or MBA 501B. Students desiring to enroll in this specialization should contact the program director. Detailed course planning will be needed as courses may not be offered every semester.

**HINF 590 Health Informatics Capstone Course Information**

The capstone course, HINF 590 Health Informatics Capstone taken at the end of the program provides the student an opportunity to apply learning from previous courses in a precepted professional practice experience during which they participate in an applied health informatics project.

During the capstone course, students are placed with a health care organization or with a healthcare vendor as their capstone site. To prepare for the capstone course, students will need to identify a capstone site in their community and/or area of interest. To begin that process, students are contacted by the faculty member responsible for teaching the capstone approximately six months in advance of the semester in which the capstone is taken. Students are asked about specific health informatics area of interest that they might want to explore more fully in the capstone course. We work to create a partnership between the student and preceptor so that it is a positive experience for everyone.
Students may choose their place of employment for their capstone site, if the capstone project is in a different department than where they are employed, and their direct reports or supervisor will not be associated with their capstone project in any way. Regardless of whether the student is employed in the setting, or whether the student is seeking a capstone experience in a different setting, an affiliation agreement must to be completed and in place prior to beginning the capstone course. With some organizations, an agreement with the University of Scranton may already be in place. If such an agreement is not in place, an agreement will need to be completed. It can take several months or more to complete an agreement, so advance planning when selecting a capstone site is essential. Identifying the site and contacts (health informatics specialist and administrative officer) within the organization are important in ensuring that the process goes smoothly. When planning for the capstone, students are expected to respond to e-mails and phone calls from the program director and capstone course instructor in a timely manner. Failure to do so may result in delays in planning the capstone, and subsequent delay in being able to enroll in the capstone course.

Once a site has been identified, students are expected to reach out to a health informatics specialist and the capstone site contact, to determine if the site accepts students and to discuss possible capstone projects. Students are expected to identify and complete any site requirements, (e.g. HIPAA training, criminal background check, confidentiality agreement, health screenings, drug screen, and/or proof of vaccinations etc.) prior to beginning the capstone course. Students are also responsible for any costs associated with meeting these requirements. See Appendix A for the HINF 590 for Capstone Student Planning Form.

Note, that the site for the capstone does not necessarily have to be a healthcare facility, but it may be an electronic health record vendor, insurer, state agency, pharmaceutical company, health information exchange (HIE) etc. If you are employed by a healthcare agency, the capstone may be completed at the agency provided you can meet the objectives and are not in a reporting relationship with the preceptor. However, the site, preceptor and project must be approved by the HINF 590 course faculty and/or the Health Informatics Program Director prior to beginning the capstone course.

Students are expected to devote a minimum four to six hours per week working on the capstone project to meet the course objectives. Students are encouraged to spend more time if they can to take full advantage of the capstone project as a professional practice experience. The schedule must be mutually agreed upon by the student and the capstone preceptor and capstone course faculty where appropriate.

The capstone preceptor is expected to provide confidential feedback to the course faculty about the student’s performance and the capstone project at the four- and eight-week mark during the course. Students are also expected to provide confidential feedback about the preceptor and the site to the course faculty at those same times. Students are expected to engage with weekly readings, participate in weekly discussion forums, and submit weekly project logs and reflections. The students are also expected to submit a final deliverable at the end of the course. The deliverable can take a number of forms, depending on the needs of the site and project. The deliverable must be approved in advance by the course faculty.

The MS in Health Informatics Program Portfolio

Portfolios are becoming an increasingly common means of demonstrating one’s accomplishments and ongoing professional development. Coursework for the Health Informatics program goes pretty quickly with our format of courses being offered in eight-week blocks. As you go through the program, you will develop a variety of competencies important in the field of health informatics. You will be expected to document the competencies needed by health informatics professionals and the program learning outcomes so that you can showcase your accomplishments to a future employer, or a present employer when seeking to advance within an organization as well as demonstrate your achievement of the program learning outcomes. The portfolio provides you with the opportunity to demonstrate your professional development over the course of your enrollment in the health informatics program. The portfolio
is designed to be an active document that is modified over time. The portfolio process includes not only selecting “artifacts” or examples of your work, but ongoing reflection to indicate how the artifacts selected for the work demonstrates how you are meeting the American Medical Informatics Association master’s level health informatics competencies\(^2\) and the objectives of the University of Scranton’s master’s program in health informatics.

The aims for the portfolio include:

1. Demonstrate achievement of the AMIA master’s level health informatics competencies.
2. Demonstrate achievement of the University of Scranton’s program objectives.
4. Provide a record of accomplishments
5. Provide an ongoing record of accomplishments demonstrating professionalism and life-long learning.

The Engage learning management system has a Portfolio option available to students. Submit your course assignments to your own personal Portfolio, which remains available to you after graduation from the program. This can be done from right within the Engage system when you submit your assignments. Note, that your access to a course ends after you have completed the course. Thus, you want to be sure that you are keeping track of your work while you are enrolled in each of the courses so that it will be easier to compile at the end of the program. You will be required to provide an update to your Portfolio at selected points in your program.

To learn how to use the Portfolio, login into Engage, select Support on the left side of the page, then select the Student tab, then select Community Groups/Portfolio and select Using Engage Portfolio.

Periodically, you will be required to submit your portfolio to the Portfolio Course drop box within the Engage system. This is a different drop box in that it allows the program director and faculty to use your portfolio for ongoing program assessment and evaluation and in meeting accreditation standards. The final version of your portfolio will be evaluated in HINF 590 Health Informatics Capstone. See Appendix

What should be included in the portfolio?

All content or artifacts (assignments, presentations, etc.) need to be linked to program learning outcomes and the AMIA health informatics competencies. An artifact is a piece of evidence that is used for the purposes of demonstration. In addition, the portfolio includes a periodic self-reflection or analysis of how the portfolio content has contributed to your achievement of the program learning outcomes and health informatics competencies. Types of work that may be included:

1. Completed assignments
2. Case studies
3. Presentations
4. Discussion postings that demonstrate specific competencies
5. Capstone project deliverable
6. Capstone presentation
7. Group project (be sure to identify your role).

\(^2\) American Medical Informatics Association. (2016). *AMIA Health informatics core competencies for CAHIIM.*
https://www.amia.org/sites/default/files/AMIA-Health-Informatics-Core-Competencies-for-CAHIIM.PDF
Group work may be included provided that it is clearly identified as such and your role in the group is described.

The use of the portfolio begins in HINF 520, Introduction to Health Informatics, reassessed at the mid-point in HINF 550, Population Health for Health Informatics. The final portfolio is evaluated in HINF 590, Health Informatics Capstone. During the capstone course, the portfolio is used to determine attainment of health informatics competencies and your achievement of the program objectives. This is enhanced by your descriptions of the artifacts selected and reflection on how the artifacts selected illustrate your attainment of health informatics competencies and your achievement of the program objectives.

**Portfolio Format**

**Title**

**Table of Contents**

**CV or Resume**

See the University of Scranton Center for Career Development: https://www.scranton.edu/studentlife/studentaffairs/careers/index.shtml

**Health Informatics Competencies**

Each health informatics competency should be listed, then, the artifacts to support the achievement of the competency should be included under each competency. For each competency, provide a self-reflection to indicate how the artifact supported your achievement of the specific competency as well as the program objectives. Be sure to identify the specific course associated with the artifact. Artifacts from courses that do not have the HINF prefix may be included.

**Summary and Plan for Continuing Professional Development**

Provide a one to three-page summary about your accomplishments, how your course work and learning experiences helped you to achieve the health informatics competencies and the program objectives. Include a plan for further professional development.

**Appendix**

Create an Excel file listing each artifact and then check off each competency addressed so that it is clear that you have addressed all of the competencies and all of the program objectives when the portfolio is completed. Note that it is possible for an artifact to address several competencies and several program objectives.

**Health Informatics Certificate**

The certificate program in Health Informatics is comprised of courses that introduce professionals to the discipline of health informatics providing them with a foundation in the intersection of health care and informatics. The program provides a foundation in the theoretical knowledge and practical applications of informatics and the use of the electronic health record. This also includes application of the knowledge of emerging health care trends impacting information technologies, algorithm evaluation and software development processes as applied to information needs and the information technology infrastructure of health care organizations. The certificate is designed for professionals from business, computer science and health care as well as clinicians from a variety of health care disciplines who are interested in pursuing a career in health informatics as well as those health informatics professionals who want to broaden their expertise with formal course work. The certificate enables professionals to take advantage of opportunities for growth in a rapidly expanding discipline, and career advancement while bringing value to their organizations.
Health Informatics Certificate Program of Study

The program consists of four, 3-credit hour online modules for a total of 12 graduate credit hours. Each is offered online in an eight-week format. Courses are offered sequentially, and learning is cumulative.

Health Informatics Certificate Course Planner

All students must successfully complete each of the four 3-credit courses listed below to earn the certificate.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HINF 520</td>
<td>Introduction to Health Informatics</td>
</tr>
<tr>
<td>HINF 530</td>
<td>Healthcare Knowledge for Health Informatics</td>
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<tr>
<td>HINF 535</td>
<td>Principles of Computer Science and Software Development</td>
</tr>
<tr>
<td>HINF 540</td>
<td>Information Technology for Health Informatics</td>
</tr>
</tbody>
</table>

Key Contacts for Health Informatics

Program Director
Margarete L. Zalon, PhD, RN, ACNS-BC, FAAN
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margarete.zalon@scranton.edu

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Academic Advisement
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tammy.manka@scranton.edu

Student Services Coordinator
Andrew S. Lee
(570) 9337641
andrew.lee@scranton.edu

Personal Support Center (for the Engage Learning Management System)
(866) 373-9657
help@personalsupportcenter.com

Registrar’s Office
570-941-7721
registrar@scranton.edu

Technology Support Center (for my.scranton.edu)
(570) 941-4357 (570-941-HELP)

Tuition & Billing
Bursar’s Office
(570) 941-4062
bursar@scranton.edu
**Financial Aid Office**  
(570) 941-7701  
finaid@scranton.edu

**Portal for Student Services**  
http://my.scranton.edu  
If you have trouble logging in to the University’s website, please call:  
(570) 941-HELP (4357)

**Course Server**  
https://engagelms.scranton.edu/learn/  
If you have trouble logging in to the Engage System, please call:  
(866) 373-9657

**Faculty**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title and Department</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beth Elias, PhD, MIS, FHIMSS</td>
<td>Adjunct Faculty Health Informatics</td>
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<td><a href="mailto:margarete.zalon@scranton.edu">margarete.zalon@scranton.edu</a></td>
</tr>
</tbody>
</table>
Admission Requirements

An applicant for the program must possess a baccalaureate degree from a regionally accredited college or university and have an undergraduate GPA of at least 3.00 on a grading scale of 4.00. Applicants falling below this level may submit other evidence of their ability to complete graduate work such as grades in other graduate level courses, scores on the Graduate Record Examination, and/or a record of progressively higher work responsibilities. A completed application, together with official transcripts of undergraduate and graduate work taken elsewhere, letters of recommendation, any required test scores, and other supporting documents, should be received at least ten days before the term in which the student wishes to begin graduate study. International students, whose native language is not English, must demonstrate their proficiency in English by meeting the established graduate program criteria.

Advisement and Registration for Courses

Academic advisement is provided by the program director. Once a student is accepted into the program, information about activating University accounts and registration will be provided. Students will receive a pin number and complete the registration process on their own. Students may also seek advice from the Student Services Coordinator for the health informatics program.

Academic Calendar

Dates for the academic calendar and courses may be found in two locations on the University of Scranton Registrar's Home Page: Academic Calendars or Course Search by Term at http://www.scranton.edu/registrar. Be sure to select special terms (fall, spring or summer).

Student Support Services Available to Online Students

The University of Scranton's Center for Teaching and Learning Excellence (CTLE) supports and encourages a strong culture of teaching and learning. For the online student, the CTLE aims to provide the same array of student support services available to traditional students. Beyond a student’s first recourse for support, their instructor, the CTLE writing consultants and tutors are available to further assist students. CTLE services may be accessed at the following website: https://www.scranton.edu/academics/ctle/student-services.shtml

Information for Students with Disabilities

The Center for Teaching and Learning Excellence works with students to provide support they need to have a rewarding and successful experience at the University of Scranton. Students who have a disability and need assistance to achieve successfully their academic or extracurricular goals should contact the Center for Teaching and Learning Excellence at (570) 941-4038. Additional details are found on the CTLE website: https://www.scranton.edu/academics/ctle/disabilities/index.shtml

Drop, Withdrawal & Refund Policy

In the event that you must drop or withdraw from a course please be advised of important dates and the refund schedule below. Note that dropping or withdrawing may have financial aid implications. For the latest information see the schedule of refunds in the current graduate catalogue at https://catalog.scranton.edu/content.php?catoid=49&navoid=6169
Refund Schedule Health Informatics Online Eight-Week Terms

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Refund Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Until the fifth calendar day of the term</td>
<td>100%</td>
</tr>
<tr>
<td>Sixth through ninth calendar day of the term</td>
<td>75%</td>
</tr>
<tr>
<td>Tenth through thirteenth calendar day of the term</td>
<td>50%</td>
</tr>
<tr>
<td>Fourteenth through seventeenth calendar day of the term</td>
<td>25%</td>
</tr>
<tr>
<td>Beyond seventeenth calendar day of the term</td>
<td>No Refund</td>
</tr>
</tbody>
</table>

Exclusive Use of Scranton E-mail Address

Please note that all electronic communication from the University will be sent exclusively to the student’s University e-mail account. Be sure to check your e-mails regularly at: http://my.scranton.edu. Note that if you forward emails to another email address, you might miss important notices because of filters. It is expected that you will respond to e-mails in a timely manner. This is especially important when planning for the capstone experience.

Weinberg Memorial Library

As an online student, you have library privileges. To access the library, login in at my.scranton.edu and select the library tab in the middle of the page. You can chat with a librarian 24/7. If you want to speak with a librarian, you can call the library during its regular hours (EST) at 570-941-4000. Here is a tab that links to useful information for students in health informatics: https://guides.library.scranton.edu/healthinformatics

Registration, Tuition and Billing, Financial Aid and Veterans Information.

Current information may be found in the catalogue. The health informatics program publishes a newsletter approximately one month before the beginning of the fall, spring and summer terms, which will be sent to your University e-mail account. Important details regarding registration, tuition and billing, financial aid and information for veterans may be found in the newsletter. For specific questions, contact the pertinent office.

Eligibility for Financial Aid

The Master of Science in Health Informatics and the Certificate in Health Informatics programs are both eligible for Financial Aid. Information on financial aid is available at https://www.scranton.edu/financialaid

If you have questions, you may e-mail the financial aid office at finaid@scranton.edu

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Grade Appeal

A student who wishes to formally appeal a final grade in a health informatics course, should first contact the instructor of the course to remedy the situation informally. Students who wish to formally appeal a final course grade must make a written appeal to the instructor within ten calendar days of the date the course grade becomes available to the student from the University and must include a rationale for the grade change. If the instructor agrees that a grade change is warranted, the faculty member will submit a Change of Grade form to the Dean. If the instructor declines to change the grade, the student must be notified in writing within five calendar days of receipt of the appeal. If the student is not satisfied with the instructor's written response, the student has the right to appeal in writing to the program director within five calendar days of receiving the instructor's response, providing a rationale for the appeal. The program director will attempt to facilitate a reasonable solution and will make a written recommendation to the both the student and faculty member within five calendar days of receiving the appeal. If the matter is not resolved at the program level, the student may appeal to the Dean of the Panuska College of Professional Studies. The appeal to the Dean must be made within 30 calendar days of the time the original grade was made available to the student. The appeal to the Dean include a rationale and responses received from the instructor and program director. The Dean will conduct a review and provide a written decision to the student and faculty member within 15 business days of receiving the written appeal. The Dean's decision is final. Appeal of a grade for HAD 522 (or elective course) is directed to the instructor of the course, then chairperson of the department for the course and the appropriate Dean in accordance with University policy found in the Graduate catalog.

Grievance Procedure

Students generally meet the expectations of the University and in return are satisfied with their experiences at the University. If you are not satisfied, we would like to know. Students have opportunities to express their concerns through course evaluations, surveys as well as to the program direct, advisors, and student services coordinators. Generally, this process is started by contacting the person directly responsible such as the faculty member for a course. A student who is considering a formal grievance should first discuss the matter with the person involved. The student has the right to take a grievance to the faculty member's program director (or chairperson in the case of course offered by another department [HAD or elective course]) who will make a recommendation to his or her Dean. The student may request the Dean to review the matter. (Note: procedures set forth in the University of Scranton Academic Code of Honesty, Grade Appeal, Sexual Harassment and Sexual Misconduct Policies, and other policies will be followed where applicable. See the current graduate catalogue for policies under Academic Regulations.)

Professional Behaviors

Academic Code of Honesty

The University seeks to educate students who have strong intellectual ambition, high ethical standards and dedication to the common good of society. Academic excellence requires not only talent and commitment but also moral integrity and a sense of honor. Integrity in intellectual activity is an indispensable prerequisite for membership in any academic community, precisely because the resultant trust makes possible the open dialog and sharing of information that are the core of successful academic community.

Plagiarizing papers and cheating on examinations are examples of violations of academic integrity. Student behavior in violation of academic honesty includes plagiarism, duplicate submission of the same work, collusion, and false information. Students are responsible for knowing and following the Academic Code of Honesty published by the University. Academic dishonesty trivializes the students’ quest for knowledge and hinders professors from accurately assessing the individual talents and accomplishments of their students. To
avoid these problems, to educate all scholars about the nature of academic dishonesty, and to promote a healthy academic community, The University of Scranton has implemented its Academic Code of Honesty and an on-line tutorial to support it. Graduate students are required to complete the graduate level Academic Integrity Tutorial during the first semester of enrollment regardless of whether the undergraduate degree was completed at the University. The Academic Code of Honesty may be found at https://www.scranton.edu/academics/wml/acad-integ/acad-code-honesty.shtml

**Ethical Behaviors**

Students are expected to become familiar with the ethical behaviors expected of health informatics professionals. Health informatics professionals will be involved in developing institutional standards for the use of health information, and the protection of the rights of individuals whose information is contained in records under their responsibilities. There are a number of resources that health informatics professionals can use to provide guidance for ethical behavior. Consistent with Jesuit values of the University of Scranton in the pursuit of excellence, respect for others, and the promotion of justice, students are expected to become familiar with these resources and adhere to these standards in the conduct of their learning activities and interactions with healthcare professionals.

The International Medical Informatics Association has developed a *Code of Ethics for Health Informatics Professionals*, which was updated in 2016. The *Code of Ethics for Health Informatics Professionals* addresses subject-centered duties (electronic health records, data contained in the records, and the subjects of the records), duties towards healthcare professionals, duties towards institutions, employers and agencies, duties towards society, and duties toward the profession. The link provided below provides the code, as well as a detailed discussion and application of its tenets.

The American Medical Informatics Association (AMIA) also has a *Code of Ethics*. Its code addresses guidelines for those involved in patient care; working with colleagues, institutions, employers, business partners, and clients; society and research; maintaining competence and evidence-based approaches to improve health care. Information about the AMIA Code of Ethics is available at https://www.amia.org/about-amia/ethics

Additional guidance for ethical behaviors in relation to specific issues are available on the websites for professional organizations for health informatics professionals. For example, the Health Informatics and Management Systems Society, has *HIMSS Business Conduct Guidelines for Healthcare IT* available on the members only portion of its website.

**Professional Associations in Health Informatics**

Professional identity is important to career development. Career opportunities and thus, career paths in health informatics are quite diverse. Consequently, there are numerous professional organizations in health informatics that address specific professional interests. Students are strongly encouraged to join at least one health informatics professional association. Membership in these organizations provide networking opportunities as well as the opportunity to gain insight from health informatics professionals in their respective specialties. They are also important sources of information about current trends in health informatics and resources for career development. The following is a partial list of professional groups related to health informatics. In addition, many professional associations have special interest or work groups with a focus on informatics. HIMSS has a special low student member rate that includes a number of benefits as well as opportunities for networking.

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American Health Information Management Association (AHIMA) www.ahima.org
American Medical Informatics Association (AMIA) www.amia.org
American Nursing Informatics Association (ANIA) www.ania.org
American Telemedicine Association (ATMEDA) www.atmeda.org
Health Information and Management Systems Society (HIMSS) www.himss.org
International Federation of Health Information Management Associations (IFHIMA) www.ifhima.org
International Medical Informatics Association (IMIA) www.imia-medinfo.org
Workgroup for Electronic Data Interchange (WEDI) www.wedi.org

Career Planning

Faculty work with students to define interests, evaluate options, and plan careers as they continue in the program. To further help students with career decisions, the University Career Services staff is available to advise students on career development. Information about the Gerard R. Roche Center for Career Development is available at: http://www.scranton.edu/studentlife/studentaffairs/careers/index.shtml

Latest Information

Every effort has been made to make sure that this handbook has up to date information. For the latest catalog information, see the catalog at http://catalog.scranton.edu/index.php or contact the appropriate office. Select the graduate studies catalog from the drop down menu on the right. You can also contact your program director or the student services coordinator for additional information.
### Appendix A

**HINF 590 Capstone Student Planning Form**

<table>
<thead>
<tr>
<th>Date:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Name:</td>
<td></td>
</tr>
<tr>
<td>Capstone Site and Department:</td>
<td></td>
</tr>
<tr>
<td>Capstone Site Contact Name and Phone:</td>
<td></td>
</tr>
<tr>
<td>Capstone Site Affiliation Agreement Contact Name and Phone:</td>
<td></td>
</tr>
<tr>
<td>Capstone Site Student Requirements:</td>
<td></td>
</tr>
<tr>
<td>Capstone Project Focus:</td>
<td></td>
</tr>
<tr>
<td>Capstone Project Learning Objective 1:</td>
<td></td>
</tr>
<tr>
<td>Capstone Project Learning Objective 2:</td>
<td></td>
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<tr>
<td>Capstone Project Learning Objective 3:</td>
<td></td>
</tr>
<tr>
<td>Capstone Project Learning Objective 4:</td>
<td></td>
</tr>
</tbody>
</table>
# Appendix B

## Rubric for Portfolio Evaluation

<table>
<thead>
<tr>
<th>Component</th>
<th>Outcome Achieved</th>
<th>Outcome Not Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduction</td>
<td>Defines purpose of the portfolio in a professional and articulate manner.</td>
<td>Vague or does not define the purpose of the portfolio.</td>
</tr>
<tr>
<td></td>
<td>Exemplary description of health informatics competencies and program outcomes achieved.</td>
<td>Brief or no description of the outcomes</td>
</tr>
<tr>
<td></td>
<td>Description of the organization is excellent, thoughtful and logical.</td>
<td>The description of the portfolio organization is vague or absent.</td>
</tr>
<tr>
<td>2. Achievements based upon AMIA Health Informatics Competencies</td>
<td>There is substantive demonstration of the knowledge, skills and attitudes for each of the health informatics competencies.</td>
<td>Minimal demonstration of the knowledge, skills and attitudes for the health competencies or not all competencies are addressed.</td>
</tr>
<tr>
<td>3. Achievements based upon the University of Scranton Health Informatics program learning outcomes.</td>
<td>There is substantive demonstration of the achievement of the program learning outcomes.</td>
<td>Minimal demonstration of the achievement of the program learning outcomes or not all learning outcomes are addressed.</td>
</tr>
<tr>
<td>4. Documentation/Choice of Artifacts</td>
<td>Selection of artifacts reflects substantial knowledge, skills and attitudes of a health informatics professional</td>
<td>Does not or only minimally illustrates knowledge, skills and attitudes of a health informatics professional.</td>
</tr>
<tr>
<td>5. Reflections/Explanations of Artifacts</td>
<td>Reflections are well-developed.</td>
<td>Reflections are inadequate, unclear or inconsistent in quality.</td>
</tr>
<tr>
<td></td>
<td>Thoughtful reflections with insight, critical thinking and problem-solving.</td>
<td>Reflections are minimal, lack insight, critical thinking or problem-solving.</td>
</tr>
<tr>
<td></td>
<td>Evidence of clear and consistent connection to readings, theories, research and latest developments in health informatics.</td>
<td>Limited connection to readings, theories, research and latest developments in health informatics.</td>
</tr>
<tr>
<td>6. Writing Mechanics</td>
<td>Use of standard written English is outstanding with limited number of errors in spelling, punctuation, capitalization, subject-verb agreements. No fragmented or run-on sentences.</td>
<td>The use of standard written English is unsatisfactory with more than 10 errors in punctuation, capitalization, subject-verb agreement. Excessive fragments or run-on sentences.</td>
</tr>
<tr>
<td></td>
<td>Syntax and word choice is excellent.</td>
<td>Syntax or word choice is inconsistent in quality or writing lacks cohesion.</td>
</tr>
<tr>
<td>7. Organization and Appearance of the Portfolio</td>
<td>Attractive, professional appearance</td>
<td>Unprofessional appearance.</td>
</tr>
<tr>
<td></td>
<td>Organization makes it easy to locate or link to material.</td>
<td>Difficult to locate material in the portfolio.</td>
</tr>
</tbody>
</table>