



Course Information	HI 796: Capstone Practicum in Health Informatics
Course Instructor	Eman Elashkar eelashka@gmu.edu 4400 University Drive, MS 1J3 Peterson Hall 4411 Fairfax, VA 22030
Course Description	Field practicum in health informatics where students function as an integral member of an organizational entity to complete a non-thesis project while continuing to build skills in the field of health informatics.
Course Objectives	<p>At the conclusion of the course participants should be able to:</p> <ul style="list-style-type: none"> • Apply skills learned to develop solutions in a real-world context • Demonstrate effective functioning as a member of a team to conduct an organizational project • Understand the need to continue learning and be adaptable in the ever-changing environment of health informatics • Understand the needs of the users and the different stakeholders that surround new technology • Understand the issues, problems and challenges in the adoption and implementation of new technologies in the healthcare arena
Course Methodology	<ul style="list-style-type: none"> • Class Discussion • Peer review and critique • In-class and out of class Presentations • External Field Experiences • Research/ analytics projects • Reflective Learning/Modeling • Comprehensive Examination
Required textbook(s) and/or materials	Students should refer, as appropriate, to all texts and other learning materials that were used throughout the program.

Grading Scale	<p>Letter Grading Descriptions</p> <p>The following are the grade classifications and corresponding performance standards for each letter grade:</p> <ul style="list-style-type: none"> • A (96% and above): Clearly stands out as excellent work and could serve as a model for other students. Demonstrates an outstanding grasp of the subject matter, exceptional conceptual integration, and superior analytical and application skills. • A- (90–95%): Represents high-quality performance. Shows an excellent understanding of the subject matter and strong conceptual integration. Demonstrates a high level of thinking, analysis, application, and very good skills. • B+ (86–89%): Represents very good work. Indicates a thorough understanding of the subject matter and effective application. Shows good analytical thinking and skills. • B (80–85%): Represents satisfactory work. Demonstrates an adequate understanding of the subject matter with acceptable levels of analysis and application. • B- (76–79%): Indicates performance below graduate-level expectations. Skills and understanding of the subject matter are below expected standards. • C (70–75%): Work is clearly unsatisfactory and does not meet the minimum expectations for graduate-level performance. • F (Below 70%): Fails to meet the minimum acceptable standards of academic performance. <table border="1" data-bbox="537 1056 1268 1539"> <thead> <tr> <th>Percentage</th> <th>Grade</th> </tr> </thead> <tbody> <tr> <td>96 and above</td> <td>A</td> </tr> <tr> <td>90 - 95</td> <td>A-</td> </tr> <tr> <td>86 - 89</td> <td>B+</td> </tr> <tr> <td>80 - 85</td> <td>B</td> </tr> <tr> <td>76 - 79</td> <td>B-</td> </tr> <tr> <td>70 - 75</td> <td>C</td> </tr> <tr> <td>70 and below</td> <td>F</td> </tr> </tbody> </table>	Percentage	Grade	96 and above	A	90 - 95	A-	86 - 89	B+	80 - 85	B	76 - 79	B-	70 - 75	C	70 and below	F
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Computer Requirements	<p>This is a computationally intensive course, and you are expected to access databases, software tools, and other content.</p> <p>You will need:</p> <p>Fast computer (multicore PC or Mac) with at least 100GB of free disk space and at least 8GB RAM (16GB recommended), Windows 10. Mac users may require more powerful computers to enable virtualization to run windows.</p> <p>Fast internet connection</p> <p>Microsoft office for viewing and preparing files (free for GMU students)</p> <p>Good text editor: Notepad++, EditPad Pro, Text Wrangler, etc.</p> <p>Other software will be provided in class (SQL server, Weka, R, Genie, Python)</p>																

	<p>Expectations: Students are responsible for assigned readings, class content and material. Students are also responsible for finding the right computer equipment that allows access to the course materials online and completing all computing exercises, as well as checking email/blackboard on a daily basis.</p>
<p>Mason Honor Code</p>	<p>The complete Honor Code is as follows: To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the university community, have set forth this honor code: Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.</p>
<p>Individuals with Disabilities</p>	<p>The university is committed to providing equal access to employment and educational opportunities for people with disabilities.</p> <p>Disability Services at George Mason University is committed to upholding the letter and spirit of the laws that ensure equal treatment of people with disabilities. Under the administration of University Life, Disability Services implements and coordinates reasonable accommodations and disability-related services that afford equal access to university programs and activities. Students can begin the registration process with Disability Services at any time during their enrollment at George Mason University. If you are seeking accommodations, please visit the Disability Services website for detailed information about the Disability Services registration process. Disability Services is located in Student Union Building I (SUB I), Suite 2500. Email: ods@gmu.edu. Phone: (703) 993-2474.</p> <p>Student responsibility: Students are responsible for registering with Disability Services and communicating about their approved accommodations with their instructor in advance of any relevant class meeting, assignment, or exam.</p>
<p>E-mail Policy</p>	<p>Web: masonlive.gmu.edu</p> <p>Mason uses electronic mail to provide official information to students. Examples include notices from the library, notices about academic standing, financial aid information, class materials, assignments, questions, and instructor feedback. Students are responsible for the content of university communication sent to their Mason e-mail account and are required to activate that account and check it regularly. Students are also expected to maintain an active and accurate mailing address in order to receive communications sent through the United States Postal Service.</p> <p><i>(From the Catalog – catalog.gmu.edu)</i></p>
<p>Course Communication</p>	<p>FERPA and Use of GMU Email Addresses for Course Communication</p> <p>The Family Educational Rights and Privacy Act (FERPA) governs the disclosure of education records for eligible students and is an essential aspect of any course. Students</p>

	<p>must use their GMU email account to receive important University information, including communications related to this class. Instructors will not respond to messages sent from or send messages regarding course content to a non-GMU email address.</p> <p>Student responsibility: Students are responsible for checking their GMU email regularly for course-related information, and/or ensuring that GMU email messages are forwarded to an account they do check.</p>
<p>Title IX Resources and Required Reporting</p>	<p>As a part of George Mason University’s commitment to providing a safe and non-discriminatory learning, living, and working environments for all members of the University community, the University does not discriminate on the basis of sex or gender in any of its education or employment programs and activities. Accordingly, all non-confidential employees, including your faculty member, have a legal requirement to report to the Title IX Coordinator, all relevant details obtained directly or indirectly about any incident of Prohibited Conduct (such as sexual harassment, sexual assault, gender-based stalking, dating/domestic violence). Upon notifying the Title IX Coordinator of possible Prohibited Conduct, the Title IX Coordinator will assess the report and determine if outreach is required. If outreach is required, the individual the report is about (the “Complainant”) will receive a communication, likely in the form of an email, offering that person the option to meet with a representative of the Title IX office.</p> <p>For more information about non-confidential employees, resources, and Prohibited Conduct, please see University Policy 1202: Sexual and Gender-Based Misconduct and Other Forms of Interpersonal Violence. Questions regarding Title IX can be directed to the Title IX Coordinator via email to TitleIX@gmu.edu, by phone at 703-993-8730, or in person on the Fairfax campus in Aquia 373.</p> <p>Student opportunity: If you prefer to speak to someone confidentially, please contact one of Mason’s confidential employees in Student Support and Advocacy (SSAC), Counseling and Psychological Services (CAPS), Student Health Services (SHS), and/or the Office of the University Ombudsperson.</p>
<p>AI (Artificial Intelligence) Tools Policy</p>	<p>Students are expected to engage in the responsible use of AI-based tools in all coursework. The following guidelines apply:</p> <ul style="list-style-type: none"> • The use of AI-based tools is strictly prohibited to answer any assessment or the Comprehensive Exam, to generate original ideas, or to complete assignments in place of students own work. • Any work that incorporates the use of AI-tools must comply with copyright and intellectual property laws, and include proper citation and acknowledgment of: <ul style="list-style-type: none"> - The tool(s) used (e.g., ChatGPT, Grammarly, etc.), - The date of use, and - The specific purpose (e.g., editing grammar, reformatting text). • Students remain fully responsible for the originality, accuracy, and academic integrity of their submissions. <p>GMU Common Syllabus Policies</p>

	<p>AI Toolkit - Information Technology Services</p> <p>AI Guidelines George Mason University</p>
<p>Academic Standards</p>	<p>Academic Standards exist to promote authentic scholarship, support the institution’s goal of maintaining high standards of academic excellence, and encourage continued ethical behavior of faculty and students to cultivate an educational community which values integrity and produces graduates who carry this commitment forward into professional practice.</p> <p>As members of the George Mason University community, we are committed to fostering an environment of trust, respect, and scholarly excellence. Our academic standards are the foundation of this commitment, guiding our behavior and interactions within this academic community. The practices for implementing these standards adapt to modern practices, disciplinary contexts, and technological advancements. Our standards are embodied in our courses, policies, and scholarship, and are upheld in the following principles:</p> <ul style="list-style-type: none"> · Honesty: Providing accurate information in all academic endeavors, including communications, assignments, and examinations. · Acknowledgement: Giving proper credit for all contributions to one’s work. This involves the use of accurate citations and references for any ideas, words, or materials created by others in the style appropriate to the discipline. It also includes acknowledging shared authorship in group projects, co-authored pieces, and project reports. · Uniqueness of Work: Ensuring that all submitted work is the result of one’s own effort and is original, including free from self-plagiarism. This principle extends to written assignments, code, presentations, exams, and all other forms of academic work. <p>Violations of these standards—including but not limited to plagiarism, fabrication, and cheating—are taken seriously and will be addressed in accordance with university policies. The process for reporting, investigating, and adjudicating violations is outlined in the university’s Academic Standards procedures. Consequences of violations may include academic sanctions, disciplinary actions, and other measures necessary to uphold the integrity of our academic community.</p> <p>The principles outlined in these academic standards reflect our collective commitment to upholding the highest standards of honesty, acknowledgement, and uniqueness of work. By adhering to these principles, we ensure the continued excellence and integrity of George Mason University's academic community.</p> <p>Student responsibility: Students are responsible for understanding how these general expectations regarding academic standards apply to each course, assignment, or exam they participate in; students should ask their instructor for clarification on any aspect that is not clear to them.</p>

<p>Capstone Deliverables</p>	<p>Students are expected to complete the following components as part of the capstone experience:</p> <ul style="list-style-type: none"> • Form an accountability group consisting of 3–4 members to support collaboration and peer feedback. • Attending at least one guest speaker session to gain insight into real-world applications and professional experiences. • Submit the Capstone Book Page summarizing your project and key takeaways. • Complete and submit the General Release Form to authorize participation and publication. • Participate in the Speed Dating Session to network with classmates and exchange project ideas. • Upload your Poster Draft to the course Discussion Board for peer critique and instructor feedback. • Complete and submit the Group Critique Assignment as part of reflective peer learning. • Revise your poster based on feedback to enhance clarity and presentation quality. • Present your poster during the scheduled Poster Presentation (3-5 mins) • Complete all required course surveys to provide feedback on the capstone experience. • Ensure submission of the Preceptor Evaluation Form to validate the experiential learning component. • Successfully complete the Comprehensive Examination as a culminating assessment. 																
<p>Course Evaluation</p>	<p>The instructor will evaluate students on the following deliverables:</p> <ul style="list-style-type: none"> • Student Participation/ Discussions/ Teamwork • Capstone Book Page Requirements (Student Biopic, Biographical & Project Synopsis, etc.) • Capstone Deliverables (Final project’s deliverables assigned by preceptor) • Poster Presentation (3-5 mins) • Preceptor's Evaluation of Student • Comprehensive Exam <table border="1" data-bbox="464 1388 1344 1732"> <thead> <tr> <th style="background-color: #4CAF50; color: white;">Grading Components</th> <th style="background-color: #4CAF50; color: white;">Percentage of Course Grade</th> </tr> </thead> <tbody> <tr> <td>Student Participation/ Discussions/ Teamwork</td> <td>15%</td> </tr> <tr> <td>Capstone Book Page (Student Bio-pic, Biographical & Project Synopsis, etc.)</td> <td>10%</td> </tr> <tr> <td>Capstone Deliverables (Final Practicum Project Assignments + Optional Project Report)</td> <td>20%</td> </tr> <tr> <td>Poster Presentation - Publication</td> <td>30%</td> </tr> <tr> <td>Preceptor's Evaluation of Student</td> <td>10 %</td> </tr> <tr> <td>Comprehensive Exam</td> <td>15%</td> </tr> <tr> <td>Total</td> <td>100%</td> </tr> </tbody> </table>	Grading Components	Percentage of Course Grade	Student Participation/ Discussions/ Teamwork	15%	Capstone Book Page (Student Bio-pic , Biographical & Project Synopsis, etc.)	10%	Capstone Deliverables (Final Practicum Project Assignments + Optional Project Report)	20%	Poster Presentation - Publication	30%	Preceptor's Evaluation of Student	10 %	Comprehensive Exam	15%	Total	100%
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<p>Student Participation/ Discussions/ Teamwork: 15%</p>	<p>Participation is a critical component of this course and reflects the student's consistent engagement, collaboration, and communication with classmates, faculty, preceptors, and peers both within and outside the classroom.</p> <p>Participation will be assessed based on the following criteria:</p> <ul style="list-style-type: none"> • Proactive efforts to secure a Capstone project opportunity, including networking and outreach • Regular and punctual class attendance • Active involvement in in-class discussions and group activities • Preparedness and quality of in-class presentations • Constructive critique and discussion of both one's own work and that of peers • Professionalism and engagement during the final poster presentation event, including effective communication and responsiveness to feedback and questions <p>Strong participation demonstrates a student's commitment to learning, collaboration, and professional growth, all of which are essential to the success of the Capstone experience and the overall course.</p>
<p>Capstone Book page Requirements - 10%</p>	<ul style="list-style-type: none"> • This assignment is split into smaller sections for your convenience. Please combine all sections of the "Capstone Book" assignment in one Word document and submit in the link: "Capstone Book Page". • The deadline is strict to allow the books to be printed on time. • Follow the instructions and the template/example provided in Canvas.
<p>Final Practicum Project Poster Presentation - 30%</p>	<ul style="list-style-type: none"> • Upload your poster draft to the course discussion board for peer critique and feedback. • Revise your poster based on feedback to enhance clarity and presentation quality. • Present your poster during the scheduled Poster Presentation. (3-5 mins)
<p>Preceptor's Evaluation of Student - 10%</p>	<p>The Preceptor's Evaluation will be sent electronically by your course faculty, via an external survey tool, approximately two weeks prior to the end of the semester.</p>
<p>Comprehensive Exam - 15%</p>	<p>The Comprehensive Exam will be available at the end of the course.</p>
<p>Capstone Course Instructions</p>	<p><u>Information and Requirements for Students and Preceptors</u></p> <p>Students may elect to do the practicum in any of a wide array of organizations and agencies: Hospitals, senior care facilities, medical group practices, health maintenance organizations, insurance companies, governmental agencies, international health organizations, bio-medical equipment companies, consulting and technology firms and others. Students are not permitted to engage in a practicum in the same business unit and organization in which they are employed.</p> <p>Prior to the beginning of the practicum placement, the organization in which the student will be doing practicum work must sign the Mason Affiliation Agreement or have a valid Mason umbrella contract for students in clinical and field practicum</p>

learning. Students are not permitted to begin the practicum assignment until a signed agreement has been received.

Practicum Supervision

Students are supervised in the practicum by the course faculty and host agency preceptor/mentor. The preceptor/mentor of record must have a minimum of a master's degree in IT, operations research, engineering, business, health care management, law or applicable clinical discipline or profession. In cases where students complete the practicum in the organization or agency in which they are employed, the student's current supervisor is not permitted to also serve as the practicum preceptor. Responsibilities of the student, course faculty, and agency preceptor follow below.

Responsibility of Student

Students are expected to be self-directed and show initiative to:

- Negotiate the practicum/project opportunity, explaining their capabilities and fit for the practicum opportunity to the prospective agency/preceptor;
- Manage institutional relationships (preceptor and others) to successfully design, execute and complete the approved capstone project;
- Leverage practicum contacts to facilitate professional advancement/career opportunities after graduation.
- Work with course faculty and agency preceptor to identify and satisfactorily complete an approved project as part of the practicum.

The Practicum/Project

Students must complete the HI 795 Pre-Capstone course prior to enrolling in the HI 796 Capstone Practicum course. The Capstone Practicum affords students an opportunity to gain valuable working experience. As such, the practicum should be considered an important strategy to advent individual career goals.

Students independently identify and successfully negotiate their Capstone opportunity, subject to faculty approval. Students who are successful in this challenge are able to demonstrate skill in researching potential organizations, networking with peers and professional contacts, and negotiating a capstone opportunity with the preceptor (useful for future job searches). Sources of information for potential Capstone opportunities include Mason Career Services, faculty, peers, professional networks, organization websites, and the internet.

Responsibility of the GMU Practicum Course Faculty

Work with students to:

- Clarify practicum course objectives.
- Assist students to develop individualized professional goals and goals for the practicum project experience.

- Work iteratively with the students to identify and design an approved capstone project proposal.
- Maintain regular contact with the student during the practicum.
- Interact with the preceptor and other agency personnel on an as needed basis to answer questions, explain practicum requirements and assist with problem solving practicum issues, including student conduct and performance.
- Evaluate the student’s final deliverable and obtain feedback from the preceptor to inform them of the final grade for the course.
- Feedback from preceptors is also utilized to inform efforts to improve the academic program and strengthen students’ professional development.

Responsibility of the Preceptor/Mentor (Host Agency Preceptor)

The practicum preceptor supervises the student to consult with the practicum project for the agency/organization. This includes supervision and mentorship to:

1. Identify a suitable project, based upon a problem area or opportunity in the agency that may benefit from the assistance/supplement of work of a student during the 10-12 weeks of the practicum course.
2. Identify agency onboarding requirements and provide recommendations to the student to complete a self-directed orientation to the agency/organization.
3. Discuss with or involve the student in relevant organizational meetings.
4. Meet regularly with students during the practicum (minimum of every two to three weeks). Meetings should allow for discussion of the preceptor’s role and work approaches to gain an understanding of the challenges and issues impacting the host agency and include a discussion of the student’s project status and problem-solving efforts.
5. Upon course completion, the preceptor provides written feedback to the course faculty by completing the student evaluation form.

Practicum Project

A major component of the practicum is the assigned project that serves to focus the student’s work on the agency and supports the acquisition of practical experience in the application of theoretical knowledge and technical skills learned in the academic program. Experience gained also introduces the student to practicing skills in managing work relationships, interdependent teamwork, communication, and problem-solving.

The project should be sufficiently complex and comprehensive to expose students to a variety of organizational employees, departments and or stakeholders for students to gain an understanding of the organization’s mission and strategic priorities. It is recommended that the project assigned will be meaningful to the organization and contribute to its operations/work.

Upon identification of the project, the student will prepare a “Capstone Project Proposal” that includes a statement of work to be completed, initial description of the expected approach and a detailed description of the final deliverable. The proposal will

identify the essential work of the project and its approach that must be completed within the 14-15 weeks of the semester. The project must be approved by both the Preceptor and course faculty.

To develop the proposal, the student will work with the preceptor to identify the scope of work and overall approach as well as the frequency and form of regular progress reports (including interim project reports) to keep the preceptor informed.

At the completion of the capstone project, the student will submit to the preceptor and faculty a written report or other agreed upon deliverable to bring the capstone practicum project to a conclusion for the agency. The students prepare and present a summary of their practicum project at the end of semester at their Capstone Project Seminar.

The student practicum grade is derived from the student's performance in developing, managing, completing, and presenting the project. Preceptors provide input to faculty on grading student performance via the written Student Evaluation Form provided at the end of the semester.

Access to Agency/Organization Meetings

The student may benefit from attending a variety of meetings that take place in the organization and its external community. Students have been instructed that the subject matter discussed at all organizational meetings and related to all institutional correspondence and data is sensitive and always deemed confidential.

General Instructions

1. Capstone Project Proposal Students are expected to have an approved Capstone Project by the date specified in this syllabus.
2. Preceptor's Evaluation: Students are responsible for completing capstone work and answering questions via a survey to support completion of the Preceptor's Evaluation by the date specified in this syllabus. The evaluation will be sent directly to each Preceptor by the course instructor two weeks prior to the end of class.
3. Final Project Presentation: The final project presentation provides an opportunity for students to demonstrate their projects and showcase their skills. (3-5 mins)

Class Participation

Each capstone project is treated as if it is a consulting engagement with the student as project manager. During each seminar, students will present a progress report of their work to date on the capstone project via Canvas. Class members are expected to engage in a lively review and constructive critique of each of the client engagements under discussion. Students are not graded on the basis of how many positive or negative critiques they receive, so there should be no reluctance for their classmates to speak freely and openly.