Department of Health Administration and Policy

College of Public Health

HI 786 Workshop in Health Informatics	
Course Information	HI 786: Workshop in Health Informatics January 20, 2026 - May 13, 2026 Time: Thursdays, 4:30 pm - 7:10 pm Location: Horizon Hall 4008
Instructor	Hong Xue, Ph.D., Associate Professor, Department of Health Administration and Policy, College of Public Health, George Mason University hxue4@gmu.edu Office Hours by appointment
Course Description	Links material learned in the informatics courses with industry needs. Students work on a common challenge/problem in health informatics that can be addressed with material covered in the core courses of the program. All students work on the same problem in small groups of 2-3 people. The instructor has arranged access to data, and lectures on solutions to the problem. Students are expected to implement the solution, reports its performance, and communicate their findings.
Pre-requisite	HAP 671 or an equivalent course in Structured Query Language HAP 618 or an equivalent course in Python HAP 672 or an equivalent course in health data standards The course must be taken prior to taking HAP 792 Practicum.
Course Objectives	Upon completion of the course, one will be able to: 1. Analyze current priorities of Chief Information Officers and other industry experts, using web data and hiring patterns 2. Communicate clearly (in text and video) how the student's preparation meets industry priorities, using the web 3. Analyze project tasks: duration of tasks, and relationships among tasks. 4. Analyze correspondence between project tasks and available resources and time 5. 5. Demonstrate mastery of core health informatics skills, including coding, data stewardship, data preparation, and data analysis

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<tr><td></td><td>6. Demonstrate ability to manage team conflict
7. Demonstrate ability to decide among alternative methods of analysis
8. Analyze data using data mining or other statistical tools
9. Evaluate findings in ways that are easily understood by persons without statistical background
10. Implement a web-based solution reporting statistical findings to individual web-users, including explanation of limitations of the online decision aid
11. Present results and findings using visual media.</td></tr>
<tr><td>Required textbook(s) and/or materials</td><td>Required Text:
Class notes and slides.

Recommended Readings:
Garriott, O., Shifeling, J. & Pollak, L. (2022). Linked: Conquer LinkedIn. Get Your Dream Job. Own Your Future. Workman Publishing; ISBN-13: 978-1523514168.
All readings are identified in the weekly modules. The modules also contain links to articles and videos.</td></tr>
<tr><td>Course Requirements</td><td>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 daily basis.
All communication for the class should use official GMU email.
All the assignments and exams must be submitted via BB to be graded. Works submitted otherwise are not graded.
You will find descriptions of all assignments below in the Assignments section of this syllabus. Additionally, each module in Blackboard presents all assignments, describes them in detail, and lists due dates and assignment submission details.</td></tr>
<tr><td>Evaluation</td><td>Student grades will be derived based upon the following class expectations and deliverables:
<table><tr><th>Assignments</th><th>Weight</th></tr><tr><td>Individual Assignments</td><td>30%</td></tr><tr><td>Course Project</td><td>50%</td></tr><tr><td>Participation</td><td>20%</td></tr><tr><td>Total</td><td>100%</td></tr></table><u>Instructor Grading Scale</u>:
93-100%= A
90- 92 %= A-
88- 89 %= B+
83- 87 %= B</td></tr>
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	80- 82 %= B- 78- 79 %= C+ 73- 77 %= C 70- 72 %= C- 68- 69 %= D+ 63- 67 %= D 60- 62 %= D- 59% ... = F **A**: Excellent performance; sharp insight; articulate; superior writing ability; able to relate material to previous experience and learning; an example for others to follow. **B**: Good performance; active listener and participant; articulates thoughts clearly; accomplishes more than minimum requirements; solid performance. **C**: Satisfactory performance; accomplishes minimum requirements; communicates at generally acceptable level; satisfactory understanding of concepts at basic level. **F**: Quality and quantity of work and participation is below average and unacceptable.
Discussion Boards	There are discussions in this course. Use the introduction discussion to meet your classmates and find team members. Share your group presentation in the presentation discussion at the end of the course to learn from other teams.
Assignments	There are individual assignments. Grades will be based on the accuracy, validity, and professionalism of the content.
Final Course Project	By combining clinical, behavioral, social, and digital health measures, you are asked to work as team to carry out a coding and data analysis intensive course project to develop predictive models to identify individuals at highest risk for developing chronic conditions such as obesity, type 2 diabetes, etc. This aligns with national priorities to reduce chronic disease prevalence, improve prevention strategies, and tailor interventions to individual risk profiles. See course project instructions for group tasks.
Project Management Team	The project management team is composed of students who are in the concentration for management of health informatics. The project managers do not do the work on de-biasing, imputation of missing data, intake, or feedback. They ask other teams in class about their plans and when other teams will produce their findings. Then they follow the teams to check on their work, monitor their progress, adjust plans, and problem solve problems the team is facing. Project management team verifies that other teams have worked independently and the findings from two independent analysis is the same, thus accurate. They verify that the output of analysis is in the format needed by the teams working on modification of feedback. Project managers are evaluated by the degree to which teams that they manage produce the desired output on time and accurately. Project managers present their progress. If you are selected to the project management team, contact your instructor to be waived on the other assignments.
Final Paper and Presentation	Students will work with their Follow-up teammates to compile the results of their analysis into a final paper. The paper will include an abstract/executive

	summary, background, methods, and results. They will also share their results with industry contacts. Students will also create a presentation that can be shared with others during their contact with industry leaders, mentors and peers.
Academic Standards	Academic Standards (https://catalog.gmu.edu/policies/academic-standards/#text) 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. 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: • **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. 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. 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.

	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.
Use of Artificial Intelligence Tools	Students are encouraged to use Generative AI tools to assist in learning in this course. Students will be directed if and when citation or statement-of-usage direction is required. This course aims to provide you with experience in the real-world scenarios that you may encounter once you leave the university.
Accommodations for Students with Disabilities	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. **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.
FERPA and Use of GMU Email Addresses for Course Communication	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 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. **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.
Title IX Resources and Required Reporting	As a part of George Mason University's commitment to providing a safe and non-discriminatory learning, living, and working environment 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. 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. **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.
Common Policies Addendum	https://stearnscenter.gmu.edu/home/gmu-common-course-policies/