HEALTH INFORMATICS (MHI)

Graduate Studies

MHI 202 — Computer-Based Patient Records (4 units)
Course Description: Introduction and overview of computer-based clinical record systems. Topics include data modeling, health system standards and terminologies; security, privacy and confidentiality; workflow modeling; data visualization; legal; decision support; public health; and evidence-based practice.
Prerequisite(s): Consent of instructor.
Learning Activities: Lecture 4 hour(s).
Grade Mode: Letter.

MHI 207 — Decision Support Systems (4 units)
Course Description: Explores decision support systems for medical application. Topics include medical decision making, uncertainty, review of existing decision support systems, knowledge engineering, data mining, and knowledge based systems.
Prerequisite(s): Consent of instructor.
Learning Activities: Lecture/Discussion 4 hour(s).
Grade Mode: Letter.

MHI 208 — Medical Informatics in Web-Based Enterprise Computing (4 units)
Course Description: Introduction to the decision making processes and technologies that are involved in developing web-based distributed enterprise applications in medicine. Focus on the Informatician's role as a team member.
Learning Activities: Lecture 2 hour(s), Discussion 2 hour(s).
Grade Mode: Letter.

MHI 209 — Data Acquisition & Analysis (4 units)
Course Description: Examines the nature, acquisition, and analysis of medical data. Data ranges from signals of electrical potentials, sounds, text, images (still and motion), and data from nucleic acid and protein expression and sequencing instruments.
Learning Activities: Lecture 2 hour(s), Discussion 1 hour(s), Laboratory 3 hour(s).
Grade Mode: Letter.

MHI 209N — Consumer Digital Health (4 units)
Course Description: Landscape, technologies, and policies involved in data acquisition, storage and analysis in digital and connected health and consumer health informatics. Models of digital health data monitoring, including clinical, mobile health and telehealth, and theories relevant to health and information behavior by consumers and patients. Design, acquisition and analysis of data in the personal and consumer health ecosystem.
Learning Activities: Lecture 4 hour(s).
Grade Mode: Letter.

MHI 210 — Introduction to Health Informatics (4 units)
Course Description: Overview provides broad exposure to the field of Health Informatics. Topics covered include, but are not limited to, networking, information systems, coding, HL7, Security, and HIPPA.
Learning Activities: Lecture 3 hour(s), Discussion 1 hour(s).
Grade Mode: Letter.
MHI 289H — Modeling Biological Systems (4 units)

*Course Description:* Create awareness of how modern computer graphics have led to VR-Sim-Rob applications, and how they are modifying the teaching of medicine and in some cases the diagnosis and treatment of patients.

Prerequisite(s): Consent of instructor.

Learning Activities: Lecture 3 hour(s), Laboratory 1 hour(s).

Enrollment Restriction(s): Limited to 20 students.

Grade Mode: Letter.

MHI 289I — Programming in Health Informatics (3 units)

*Course Description:* Basics of computer programming essential to the study of informatics. Impacts on systems within healthcare, public health, nursing, research, and others.

Prerequisite(s): Consent of instructor.

Learning Activities: Lecture 2 hour(s), Laboratory 2 hour(s).

Grade Mode: Letter.

MHI 290 — Seminar in Medical Informatics (1 unit)

*Course Description:* Discussion of current graduate research and topics in Medical Informatics. Oral presentations of individual study.

Learning Activities: Seminar 1 hour(s).

Enrollment Restriction(s): Restricted to 20 students.

Grade Mode: Satisfactory/Unsatisfactory only.

MHI 298 — Group Study in Health Informatics (1-5 units)

*Course Description:* Directed reading and discussion on select topics.

Prerequisite(s): Consent of instructor; graduate student in good academic standing.

Learning Activities: Variable 1-5 hour(s).

Repeat Credit: May be repeated when topic differs.

Grade Mode: Satisfactory/Unsatisfactory only.

MHI 299 — Research in Health Informatics (1-12 units)

*Course Description:* Independent research in Health Informatics.

Learning Activities: Variable.

Grade Mode: Satisfactory/Unsatisfactory only.