DIGITAL HEALTH (DH)

Courses primarily for graduate students, open to qualified undergraduates:

DH 5010: Research Methods and Ethics of Health Technology
Credits: 2. Contact Hours: Lecture 2.
Prereq: Graduate Standing or Permission of Instructor
Multidisciplinary nature of harnessing technology in health initiatives. Evolution of digital health, agile methodologies for designing interventions, and symbiotic relationships of innovation and health systems efficiency. Funding strategies and business models for digital health startups. (Typically Offered: Fall, Spring, Summer)

DH 5020: Foundations of Digital Health
Credits: 2. Contact Hours: Lecture 2.
Prereq: Graduate Standing or Permission of Instructor
Methods and techniques for designing and interpreting research in the digital health ecosystem. Ethical, legal, and regulatory dimensions of health technologies to critically appraise research and assess the ethics of various health technologies including wearables, apps, and social media. Ethical intricacies and regulatory landscape of emerging health innovations. (Typically Offered: Fall)

DH 5160: Analytics and AI for Health Strategies
Credits: 3. Contact Hours: Lecture 3.
Prereq: Graduate Standing or Permission of Instructor
Structured query language (SQL), power BI/Tableau BI, R/Python, machine learning, and artificial intelligence (AI) to analyze exercise and health data. Data analytics applications and health systems, data mining and visualization, predictive modeling for health outcomes. (Typically Offered: Spring)

DH 5680: Behavioral Health and Technology: Strategies for Digital Adoption, Policy, and Impact
Credits: 3. Contact Hours: Lecture 3.
Prereq: Graduate Standing or Permission of Instructor
Anthropology of technology and the influence on health and well-being. Strategies for effective health technology adoption and digital tools for promoting physical activity, wellness, and adherence to health guidelines. Evidence-based policy making, regulatory frameworks, and government initiatives in digital health. (Typically Offered: Fall)

DH 5690: Digital Health Solutions for Physical Activity and Health
Credits: 3. Contact Hours: Lecture 3.
Prereq: Graduate Standing or Permission of Instructor
Digital tools from wearables, mobile apps, and telehealth platforms. Methods for assessing digital health interventions, scrutinize design for health solutions, cost effectiveness analysis, and health outcomes assessment. (Typically Offered: Fall)

DH 5710: Health Data Management and Interoperability
Credits: 3. Contact Hours: Lecture 3.
Prereq: Graduate Standing or Permission of Instructor
Strategies to mobilize health information across organizations, regions, and systems using electronic health records and health information exchange. Data sharing across health systems, data security, HIPAA regulations, privacy protection, risk management, and incident response. Ethical dimensions of health technology and data privacy in the digital age. . (Typically Offered: Summer)

DH 5720: Prognostic Insights and Innovative Rehabilitation Techniques for Advancing Health
Credits: 3. Contact Hours: Lecture 3.
Prereq: Graduate Standing or Permission of Instructor
Digital tools for rehabilitation to enhance accessibility, affordability, and scalability. Strategies, frameworks, and determinants for the successful implementation and evaluation of digital interventions, transforming the landscape of healthcare practices such as physical therapy. . (Typically Offered: Spring)

DH 5730: Precision Medicine: Tailoring Digital Health Solutions
Credits: 3. Contact Hours: Lecture 3.
Prereq: Graduate Standing or Permission of Instructor
Digital technology and personalized treatment plans for exercise and nutrition prescriptions, disease prevention, and wellness promotion. Digital tools for precision in prognosis and rehabilitation. Delivery of health and exercise guidelines with Motivational Interviewing (MI). Tailoring prescriptions and guidelines according to individual goals. (Typically Offered: Spring)

DH 5740: Digital Disease Management and Public Health
Credits: 3. Contact Hours: Lecture 3.
Prereq: Graduate Standing or Permission of Instructor
Digital technologies and disease management strategies for individuals and populations. Design of digital interventions with innovative tools such as wearables and implants to address public health challenges. Technology-driven disease management and public health initiatives. (Typically Offered: Summer)

DH 5750: Leading Inter-Professional Teams in Health Initiatives
Credits: 3. Contact Hours: Lecture 3.
Prereq: Graduate Standing or Permission of Instructor
Core principles of leadership and their application in multidisciplinary health settings. Organizational outcomes and metrics to drive success in health initiatives, dynamics of team cohesion, and effective collaboration. Conflict resolution skills to navigate interprofessional healthcare teams. . (Typically Offered: Summer)

DH 5900X: Special Topics: Digital Health
Credits: 1-9. Repeatable, maximum of 9 credits.
Prereq: Instructor Permission for Course
Offered on a satisfactory-fail basis only. (Typically Offered: Fall, Spring, Summer)

DH 5930: Capstone Project in Digital Health
Credits: 1-3. Contact Hours: Lecture 3.
Repeatable, maximum of 6 credits.
Prereq: (18 credits completed or in process from Digital Health courses) or Permission of Program Director
The Digital Health Capstone Project shows substantial evidence of individual accomplishment and serves as a culminating experience for students in the Master of Digital Health program. It provides an opportunity for students to demonstrate their understanding of digital health concepts, apply their acquired skills, and integrate their knowledge into a substantial project. The project can be an applied internship in collaboration with industry partners or healthcare organization, a literature review and analysis, completed either individually or in groups, and will involve documentation and a presentation to faculty and students. Offered on a satisfactory-fail basis only. (Typically Offered: Fall, Spring, Summer)