

Course Bulletin

144240	Introduction to Health Informatics and Analytics			
Subject: HIA	Catalog Nbr: 0201	2019 FALL	Primary	Anna Orlova Anna.Orlova@tufts.edu
<p>This required 14-week course provides an overview of the fields/disciplines of informatics and analytics in the context of problem-solution lifecycle (problem identified, characterized, managed with a solution, problem-solution outcomes evaluated) and its correspondent data lifecycle (data design, data collection, data management, data analysis, and data use and re-use). The course explains how these two fields of informatics and analytics emerged overtime following the evolution of information science and technology, and specifically, health information technology (HIT) including electronic health records (EHR), telehealth and digital health. Commonalities of these two disciplines (terminologies, approaches, standards, domains of use, the roles of users) and their complementary roles in the data/information/knowledge generation process are emphasized. Students will learn how these disciplines are used in healthcare, public health and research via specific business cases and use cases.</p>				

144302	Health Data Usage			
Subject: HIA	Catalog Nbr: 0202	2019 FALL	Primary	Olaf Dammann Olaf.Dammann@tufts.edu
<p>This course provides a broad overview of how health data are used today. We discuss the health data ecosystem and technologies, and data in healthcare, clinical research, and public health. Special topics are social determinants of health and environmental data. The asynchronous material is provided by faculty with expertise in these fields. Assessments will be weekly, both individually and in groups, and with a final paper critique group assignment, as well as a final paper about a health data topic relevant to students' interest.</p>				

144303	Digital Health			
Subject: HIA	Catalog Nbr: 0203	2019 FALL	Primary	Lisa Gualtieri Lisa.Gualtieri@tufts.edu
<p>We all generate data through smartphones, sensors, trackers, and other devices, and our physicians generate data about us. In this course, we look at how clinicians, technology professionals, public health professionals, patients, and caregivers use digital health technologies and data to bring value to patients' lives. This course focuses on the wealth of digital health technologies and how they are used, as well as the many other ways people generate data, and how data can be used ethically to assist in behavior change, diagnosis, and treatment for individuals and populations.</p>				

144339	Health Information Systems, Standards, Decision Support			
Subject: HIA	Catalog Nbr: 0204	Health Information Systems, Standards, Decision Support		

Course Bulletin

144340	Analytics, Business Intelligence & Artificial Intelligence for Health	
	Subject: HIA	Catalog Nbr: 0205
Analytics, Business Intelligence & Artificial Intelligence for Health		

144341	Capstone Planning Immersion	
	Subject: HIA	Catalog Nbr: 0301
Capstone Planning Immersion		

144342	Capstone Practicum	
	Subject: HIA	Catalog Nbr: 0302
Capstone Practicum		

144343	Data Wrangling and Exploratory Analysis	
	Subject: HIA	Catalog Nbr: 0216
Data Wrangling and Exploratory Analysis		

144344	Multivariable Data Analysis and Visualization	
	Subject: HIA	Catalog Nbr: 0217
Multivariable Data Analysis and Visualization		

144345	Big Data, Data Mining and Knowledge Discovery	
	Subject: HIA	Catalog Nbr: 0218
Big Data, Data Mining and Knowledge Discovery		

144346	GIS/Spatial Epidemiology	
	Subject: HIA	Catalog Nbr: 0219
GIS/Spatial Epidemiology		

Course Bulletin

144347	Business of Healthcare
Subject: HIA	Catalog Nbr: 0220
Business of Healthcare	

144348	Data Trust: Information Governance in Health
Subject: HIA	Catalog Nbr: 0221
Data Trust: Information Governance in Health	

144349	Fundamentals of Privacy and Security in Health IT
Subject: HIA	Catalog Nbr: 0222
Fundamentals of Privacy and Security in Health IT	

144350	Organizational Behavior, Leadership and Change Management
Subject: HIA	Catalog Nbr: 0223
Organizational Behavior, Leadership and Change Management	

144351	Project Management
Subject: HIA	Catalog Nbr: 0224
Project Management	

144352	Introduction to Python for Health Informatics and Analytics
Subject: HIA	Catalog Nbr: 0225
Introduction to Python for Health Informatics and Analytics	

144353	Informatics Fundamentals
Subject: HIA	Catalog Nbr: 0211
Informatics Fundamentals	

144354	Informatics for Clinicians
---------------	-----------------------------------

Course Bulletin

Subject:	Catalog Nbr:
HIA	0212
Informatics for Clinicians	

144355	Informatics for Public Health Professionals
Subject:	Catalog Nbr:
HIA	0213
Informatics for Public Health Professionals	

144356	Informatics for Clinical Research
Subject:	Catalog Nbr:
HIA	0214
Informatics for Clinical Research	

144357	Quality and Outcomes
Subject:	Catalog Nbr:
HIA	0215
Quality and Outcomes	