



M.S. HEALTHCARE SYSTEMS MANAGEMENT PROGRAM

IE 686: Introduction to Healthcare Systems

Fall 2024 – Online only – see weekly course material schedule Instructor: Dr. Shivon

Boodhoo

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Meetings appointment – please email to schedule

COURSE DESCRIPTION:

An introduction to the operational processes and activities that describe the U.S. Healthcare system. Provides a detailed 'systems view' of healthcare from economic, quality, enterprise data and activity costing perspectives. Introduces primary components of the healthcare system including: facilities, delivery methods, treatment systems, and personnel. System costs, reimbursement methods and financial aspects in healthcare are also considered as are the roles of care providers, regulatory agencies, insurance payers, and patients in the care process value chain. Course focuses on the application of information technologies and systems engineering tools to effectively create and deliver value in the care process. System performance measures including access, cost effectiveness and quality of care are detailed.

COURSE OBJECTIVES

At the conclusion of this course students will -

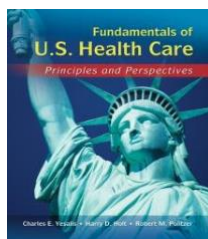
1. Understand the structure, facts, and key issues in the U.S. health industry system
2. Become familiar with the sources of information for further study
3. Analyze common problems in the healthcare sector from a systems perspective

GRADING

- 10% Moodle discussion Forums (posts are required each week)
- 20% Homework 1
- 20% Midterm
- 20% Homework 2
- 15% Final Exam
- 15% Final Paper

COURSE DELIVERY MODE

Online: Delivery of instruction in which all course activity can be completed online through the learning management system. There are no required face-to-face sessions, but **students are expected to follow a week- by-week schedule as outlined in the syllabus**. Work is typically done in an asynchronous mode and students can complete the coursework without coming to campus. Note: some instructors may require occasional synchronous online meetings or proctored exams.



TEXTBOOK

Fundamentals of US Health Care: Principles and Perspectives by Charles E. Yesalis, Robert M. Politzer, Harry Holt

CANVAS

The course will make extensive use of the Canvas system to optimize student-instructor communication. All course materials including lecture slides and homework etc. will be distributed through Canvas. To access the system please go to <https://canvas.njit.edu>, you will need a valid UCID to login.

COURSE SCHEDULE

Although the class will not meet each week in person, please be sure to keep up with the material weekly to complete assignments and discussion posts

Week	Start date	Lecture Topic	Textbook Chapter	Submission due
1	Sep 3	Intro to U.S. Healthcare	Ch1 - The Big Picture	Bio slide
2	Sep 9	Definitions of Health	Ch 2 - Health Status	
3	Sep 16	Overview of U.S. Public Health System	Ch 3 - Health Services in Perspective. Ch 6 - Public Health	
4	Sep 23	Systems Engr in H.C.; Toyota Method	Supplemental reading	HW 1
5	Sep 30	Healthcare Personnel and Org Structure	Ch 4 - Organization of H.C. Ch 5 - Manpower	
6	Oct 7	Long term care	Ch 7 - Long term care	
7	Oct 14	Healthcare Facilities	Ch 9 - H.C. Facilities	Midterm
8	Oct 21	Medicare and Medicaid	Ch 8 - Medi - Medi	
9	Oct 28	Managed care and Impact of Regulation	Ch 15 - Health Regulations. Ch 12 - Managed Care	
10	Nov 4	Utilization and Cost of Care	Ch 10 - Cost of H.C. Ch 13 - Utilization of H.C.	HW 2
11	Nov 11	Finance	Ch 11 - H.C. Financing	<i>Last day to withdraw</i>
12	Nov 18	Quality of Care	Ch 14 - Quality	
13	Nov 25	Underserved populations and policy	Ch 16 - National Health Policy	Final paper
14	Dec 2	Healthcare Performance	Supplemental reading	
15	Dec 9	Special Topic: Voluntary Licensing and Access to Medicines	Guest lecture	
16	Dec 15 – Dec 21	Final Exam period		Final Exam