MASTER SYLLABUS

COURSE NO. AND TITLE:

HCM 410-3 Operations Management and Quality Improvement in Health Care; M, W 2:00-3:15 pm Room 0014

COURSE DESCRIPTION:

Examines the applications of operations management in the framework of health care organizations. Focus will be placed on supply chain and inventory management, forecasting, queuing models, and capacity planning. Determinants to achieve quality management in health care facilities will be explored. Utilizes analytical methods of systematic monitoring and evaluation and the application of quality improvement initiatives. Includes impact on quality of accreditations, credentialing, liability, and governmental regulations. Not for graduate credit. Restricted to SAH majors/minors.

PREREQUISITES TO: N/A


COURSE OBJECTIVES:

Upon completion of this course, the student will be able to:

- Understand the importance of effective and efficient operations management in healthcare settings.
- Discuss the historical issues and the evolution of quality improvement initiatives in health care settings.
- Identify varying types of quality management processes (CQI, Lean, Six Sigma, Statistical Process Control, etc).
- Apply project management tools related to tracking and implementing quality improvement initiatives.
- Acquire the fundamental techniques for assessing, managing, and implementing quality in health care environments, especially focusing on patient care improvement.
- Understand how to determine optimal capacity, productivity measures, process analysis and design, and scheduling of staff/patients/jobs through capacity and demand in a health care organization.
- Understand concepts associated with supply chain management, inventory, and forecasting.
- Identify how information systems management is a vital component to proper operations, process improvement, managerial decision-making and risk management.
- Discuss the role of patients, physicians, and regulatory bodies when considering continuous quality improvement as an expectation in health care environments.
• Exhibit an understanding of the interrelationships of access, quality, costs, resource allocation, and accountability.
• Follow detailed instructions without deviation, meet deadlines, take initiative to self-resolve problem issues, communicate in a professional manner in both written and verbal form, and exercise good time management skills and other managerial competencies.

COURSE DELIVERABLES (may vary based on instructor): Assignments, Exams, Quizzes

GRADING SCALE (may vary based on instructor): A=100-90%; B=89.9-80%; C=79.9-70%; D=69.9-60%; F=59.9% and below

LEARNING/ASSESSMENT METHOD(S): Pre-post Test, Final Grade Percentage

TOPICAL OUTLINE:

Topics                                                                 Percentages

I. Operations Management                                              35%
   a. Exploring efficient and effective operations management
   b. Understanding return on investment and measuring impact
   c. Supply chain management – issues for healthcare providers
   d. Inventory – management models
   e. Optimal capacity and demand, productivity measures, scheduling
   f. Modeling formulations, queueing models, infinite-source models, and system performance
   g. Forecasting techniques
   h. Facility location choices – CPV, factor rating models, multi-attribute methods, capacity planning and productivity measures.

II. Quality Improvement Theories and Framework                          35%
   a. History of the continuous quality improvement initiative
   b. TQM, CQI, Six Sigma, Lean, Process Control, etc.
   c. Control charts and quality management tools
   d. Assessing, managing, and implementing quality improvement in healthcare
   e. The role of regulatory bodies, physicians, and patients in quality improvement
   f. Impact on the bottom line, patient satisfaction, organizational performance and patient care improvement

III. Project Management                                                30%
   a. Use of information systems management to determine appropriate improvement initiatives
   b. Project management
      i. Goals/objectives, project identification, scope, and key players
      ii. Critical path methods, root cause analysis, CBA, Gantt Charts, Histograms, flow charts, check sheets, scatter plots, cause and effect, etc.
      iii. Project life cycles, managing time, risk analysis