

Course Title	Hospital Operations, Quality and Patient Safety				
Course Code	HSA-522				
Course Type	Required				
Level	2 nd Cycle				
Year / Semester	1 / 2				
Teacher's Name	Professor George Tsiotras				
ECTS	10	Lectures	15	Interactive learning activities	26
Course Purpose and Objectives	<p>Healthcare delivery systems around the world struggle with three fundamental issues: patient access to care, quality and safety in the care process (incl. patient and staff satisfaction), and cost of care. In this course, we look at these issues and selected analysis and improvement approaches that the discipline of Operations Management, Quality and Patient Safety can offer. In doing that, different types of both clinical and non-clinical processes in hospital settings are illustrated. We are also using readings and cases from several countries.</p> <p>The main objectives of the course are to:</p> <ul style="list-style-type: none"> • Introduce operations management concept and methodologies which are employed in a hospital, emphasizing their use in decision making. • Determine a strategic perspective to achieving excellence in five competitive priorities of a hospital operations strategy: quality, cost, on-time and fast delivery, safety and flexibility. • Prepare students to recognize and apply operations management principles to problems encountered in health care planning and management. • Introduce the fundamentals of quality improvement and of patient safety. • Introduce the concepts of quality assurance and total quality management in healthcare. • Understand the terminology and basic methodology of quality measurement. • Compose the principles of designing and evaluating quality measures. • Evaluate various key measures used to assess healthcare system performance. • Provide selected lean tools for analysing and improving healthcare processes. • Understand the fundamental principles and lessons of the patient safety movement. • Analyse problems and issues in measuring and reporting safety. • Provide the students with in depth knowledge on the role of medical simulation in patient safety terminology and basic methodology of quality 				

	<p>measurement.</p> <ul style="list-style-type: none"> Introduce the state of the art definitions of numerical objectives of quality used by leading health institutions in the world. 			
Learning Outcomes	<p>After completion of the course students are expected to be able to:</p> <ol style="list-style-type: none"> Demonstrate knowledge of the theory pertaining to operations management in the healthcare industry and management of healthcare facilities and apply theoretical concepts to real life cases. Recognize and apply operations management principles to problems encountered in health care planning and management. Map patient flows, analyse system capacity, and apply performance metrics. Analyse the management processes, constituents, environmental, operational, and functional influences involved in healthcare operations and the management of facilities. Describe the role of various systems and factors in creating safety and in causing errors and adverse events. Explore solutions to improve patient safety. Analyse problems in healthcare delivery systems and apply lean tools in developing proposals for solution. Define and apply the principles of healthcare quality management in a healthcare facility. Deal with complex issues both systematically and creatively, by using quality improvement tools and techniques to monitor, report, and improve processes in problem solving. Develop strategies, using common quality measures, to implement continuous quality improvement in a variety of healthcare settings. 			
Prerequisites	<table border="1"> <tr> <td>None</td> <td>Required</td> <td>None</td> </tr> </table>	None	Required	None
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Course Content	<ol style="list-style-type: none"> Overview of Hospital Operations Hospital Process Analysis Forecasting Patient Demand Hospital Capacity Planning and Locational Analysis Waiting Lines Supply Chain Management (SCM) The State of Quality Management in Healthcare Quality Assurance and TQM in Hospital Operations Excellence Models and Awards in Healthcare Quality Improvement Tools/Statistical Process Control 11a. The evolution of Patient Safety 11b. Translating Patient Safety Fundamentals into Practice/Patient safety improvement 12a. Lean Hospital 12b. Hospital Operations, Quality and Patient Safety KPIs 			

Teaching Methodology	<p>It is expected that students will demonstrate initiative in seeking learning experiences that will enable them to achieve the course objectives. This includes reviewing all modules, reading required readings, participating in on-line discussions and completing all requirements by the assigned dates.</p> <p>Educational material include recorded PowerPoint presentations, online tutorials, exercises, articles, online videos and book chapters, as indicated for each lecture in the interactive internet-based platform of the course (Moodle). Students are advised to start their studying by the recorded course lecture for each topic, in order to take full benefit of the additional activities as listed in the current guide and described in detail on the Moodle page of the course.</p>																																			
Bibliography	<p>Required Textbooks / Reading:</p> <table border="1" data-bbox="472 730 1451 1667"> <thead> <tr> <th>Title</th> <th>Author(s)</th> <th>Publisher</th> <th>Year</th> <th>ISBN</th> </tr> </thead> <tbody> <tr> <td>Operations and Supply Chain Management</td> <td>F.R. Jacobs R.B. Chase</td> <td>McGraw-Hill Irwin</td> <td>2014</td> <td>978007 802402 3</td> </tr> <tr> <td>Patient Safety and Healthcare Improvement at a Glance</td> <td>S.S. Panesar, A. Garson- Stevens, S.A. Salvilla, A. Sheikh</td> <td>John Wiley & Sons</td> <td>2014</td> <td>978111 836136 8</td> </tr> <tr> <td>Health Care Quality Management, Tools and Applications</td> <td>Thomas K. Ross</td> <td>John Wiley & Sons</td> <td>2014</td> <td>978111 850553 3</td> </tr> <tr> <td>Health Care Operations and Supply Chain Management: Operations, Planning, and Control</td> <td>John F. Kros and Evelyn C. Brown</td> <td>John Wiley & Sons</td> <td>2014</td> <td>978111 841884 0</td> </tr> </tbody> </table> <p>Recommended Textbooks / Reading:</p> <table border="1" data-bbox="472 1745 1451 1852"> <thead> <tr> <th>Title</th> <th>Author(s)</th> <th>Publisher</th> <th>Year</th> <th>ISBN</th> </tr> </thead> <tbody> <tr> <td>The Healthcare</td> <td>M. Joshi, E.</td> <td>Health</td> <td>2014</td> <td>978156</td> </tr> </tbody> </table>	Title	Author(s)	Publisher	Year	ISBN	Operations and Supply Chain Management	F.R. Jacobs R.B. Chase	McGraw-Hill Irwin	2014	978007 802402 3	Patient Safety and Healthcare Improvement at a Glance	S.S. Panesar, A. Garson- Stevens, S.A. Salvilla, A. Sheikh	John Wiley & Sons	2014	978111 836136 8	Health Care Quality Management, Tools and Applications	Thomas K. Ross	John Wiley & Sons	2014	978111 850553 3	Health Care Operations and Supply Chain Management: Operations, Planning, and Control	John F. Kros and Evelyn C. Brown	John Wiley & Sons	2014	978111 841884 0	Title	Author(s)	Publisher	Year	ISBN	The Healthcare	M. Joshi, E.	Health	2014	978156
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	quality book: vision, strategy and tools	Ransom, D. Nash, S. Ransom	Administration Press		793590 5
	Patient Safety	Charles Vincent	Wiley-Blackwell	2010	978140 519221 7
	Operations Management in Health Care: Strategy and Practice	Corinne M. Karuppan Nancy E. Dunlap Michael R. Waldrum	Springer Publishing Company	2016	978082 612652 8
	Healthcare Operations Management	Daniel B. McLaughlin, Julie M. Hays	AUPHA	2008	878156 793288 1
Assessment	<p>The course will be assessed independently by three modes of assessment: (i) coursework (30%); (ii) participation (10%); and (iii) written final exam (60%).</p> <p>Coursework will include assignments and case study exercises (individual and in groups).</p>				
Language	English				