



الجامعة السعودية الإلكترونية  
SAUDI ELECTRONIC UNIVERSITY  
2011-1432

**Vice Presidency for Graduate Studies and Scientific Research**

**Deanship of Graduate Studies**

**Program Overview**

**Executive Master of Healthcare Quality and Patient Safety**

## COLLEGE AT A GLANCE:

### History:

The College of Health Sciences at the Saudi Electronic University (SEU) was established in 1432H; by Royal Decree number 37409/B issued by King Abdullah Bin Abdulaziz, the Custodian of the Two Holy Mosques, on 10/8/2011. The College of Health Sciences is the only specialized public health science college that utilizes the blended learning model in the Kingdom of Saudi Arabia. The College of Health Sciences oversees two academic departments: Department of Health Informatics and the Department of Public Health.

### Mission:

Our mission at the College of Health Sciences is to provide high quality academic programs that aim to utilize modern technology, applying the blended learning model, to qualify competent and highly skilled health professionals to meet national and international standards and serve the requirements of health care sector in the Kingdom of Saudi Arabia.

### Vision:

The College of Health Sciences seeks to be a pioneer academic institution that excels regionally and internationally by utilizing advanced learning methods and modern technology to integrate healthcare technology with public health concepts.

### Values:

**Honesty and Allegiance:** We strongly advocate Islamic values and professional ethics such as honesty, integrity, professionalism and loyalty.

**Human Health Awareness:** The drive to build awareness of priority health issues and current challenges in Saudi Arabia and instill the motivation to improve health services and raise health awareness in the community.

**Continual Learning:** Supporting the continual growth of students' knowledge base; viewing them as future health care professionals, encouraging them to develop their skills, confidence and research capabilities.

**Teamwork and Communication:** To instill the principles of teamwork, active citizenship, community and belonging where effective and efficient cooperation contributes to achievement goals and accomplishment of tasks.

**Objectives:**

1. Raise student competence levels to keep pace with the developments the Saudi health sector.
2. Develop the spirit of belonging and proficiency.
3. Fulfill the needs of our society by producing highly qualified national health cadres.
4. Raise health awareness in the community.
5. Provide an appropriate educational environment for students and faculty members.
6. Offer training and workshops to develop the skills of health staff.
7. Present consultations to develop and support the health system.
8. Integrate e-learning and blended learning with the field of health informatics and public health.
9. Promote excellence in research through interdisciplinary research.

**A. PROGRAM IDENTIFICATION AND GENERAL INFORMATION****Program title:**

Executive Master of Healthcare Quality and Patient Safety program

**Total credit hours needed for completion of the program:**

Two years (four semesters). The total credit hours = 36 including the capstone project

**Award granted on completion of the program:**

Executive Master of Healthcare Quality and Patient Safety

**Major tracks/pathways or specializations within the program:**

One Track

**Professional occupations:**

- Director of Clinical Quality and Patient Safety
- Patient Safety Specialist
- Clinical Risk Manager
- Manager of Global Patient Safety, Quality and Compliance
- Chief Quality Officer

## **B. PROGRAM CONTEXT:**

### **1. Rationales of the program:**

Healthcare quality and patient safety have become foundational elements of the healthcare system in Saudi Arabia. Recognizing the significance of an effective healthcare system, most healthcare facilities are developing robust programs and structures committed to enhancing outcomes through rigorous quality improvement and patient safety methods to accomplish their goal of advancing safe care delivery and improving patient outcomes. The widespread movement toward a safer care environment requires healthcare leaders who possess the essential knowledge, skills, and expertise in this field. The Executive Master of Healthcare Quality and Patient Safety program at SEU provides a comprehensive curriculum designed to drive strategic innovation in healthcare, foster a culture of quality and safety utilizing technology, reshape the leadership role focused on health care quality and safety, and promote the improvement of health care processes through evidence-based methods. Such effort is in line with the strategic goals of the Saudi Vision 2030 to improve healthcare quality in the country.

#### **Program Mission:**

Prepare qualified and skilled students to meet the needs of the healthcare organizations in the field of quality and patient safety by providing them with conceptual, analytical and application skills which help students to make a positive impact on quality and patient safety in healthcare.

### **2. Relevance of the program to the mission and goals of the institution:**

The Executive Master of Healthcare Quality and Patient Safety program offers an academic and experiential blended learning experience enriched using technology. The program reflects the university's vision of building knowledge in society and promoting the use of technology in advancing science in the field of health care quality and patient safety to prevent errors and ensure high-quality care and safety measures.

Features of the program that reflect SEU mission and goals include:

- Offering an interdisciplinary structure of knowledge in healthcare quality and patient safety to shape a better future for society.
- Utilizing the latest applied models in the field of healthcare quality and patient safety with an emphasis on using technological innovations and leadership.
- Building an effective partnership with the community to improve healthcare quality and patient safety.

### 3. Relationship to other programs:

#### a. Courses required from other programs.

HCM520	Quality and Patient Safety
HCM500	Healthcare Systems
HCM515	Health Law and Ethics
HCM550	Healthcare Policy Analysis and Development

#### b. Courses provided to other programs.

NA

## C. GOALS AND OBJECTIVES

### Program Goals:

- Provide students with essential information that enables them to attain knowledge, skills, abilities, and values in the core disciplines of healthcare quality and patient safety.
- Develop a proficient workforce capable of developing and implementing quality improvement initiatives in different healthcare organizations.
- Involve students in high-quality scholarly activities using evidence-based best practices to foster critical thinking on the application of healthcare quality and patient safety methods.
- Prepare students with soft skills and values to effectively communicate and collaborate with others professionally, ethically, and legally.

### Program learning outcomes:

- Identify the essential quality and patient safety concepts, theories, laws, policies, and financial planning required for effective healthcare decision-making.
- Describe the various quality improvement, risk management, and patient safety initiatives implemented at different environmental and structural levels of healthcare systems by leaders employing various leadership styles.
- Analyze various accreditation standards, principles, and methods for enhancing quality and patient safety through the utilization of healthcare information systems.
- Evaluate the quality improvement models and methodologies required to address various healthcare challenges.
- Develop appropriate quality measurements and performance with an emphasis on ergonomic principles for a safer, healthier, and more productive workplace.
- Appraise the ethical practices and principles of healthcare research based on quality and patient safety evidence.

## Degree Requirements

Successful completion of 36 credit hours

## Program Duration

2 years / 6 Semesters

## E- PROGRAM STRUCTURE AND ORGANIZATION

### 1- Program Structure

Kind of Requirements	Course Code	Course Title	Credit Hours	Pre-requisites	Co-requisites
Department Requirements	HCM520	Quality and Patient Safety	3		
	HCM500	Healthcare Systems	3		
	HCM515	Health Law and Ethics	3		
	HQS505	Evidenced-Based Research and Quality Assurance	3	HCM515	
	HQS510	Quality Measurement and Performance Improvement	3	HCM520	
	HQS515	Financial Management for Healthcare Quality and Patient Safety Leaders	3		
	HQS520	Risk Management and Patient Safety	3	HQS510	
	HQS525	Technology and Health Informatics	3	HQS505	
	HQS530	Human Factors and Ergonomics in Health Care	3	HQS510	
	HQS535	Leadership and Management for Healthcare Quality and Patient Safety	3	HQS510	
	HCM550	Healthcare Policy Analysis and Development	3		
Special Topics & Research	HQS590	Capstone: Strategic Management in Healthcare Quality and Patient Safety	3	HQS510	
Internship	HQS599	8 Weeks training period in a healthcare setting			
Total			36		

### 2 - Program Structure by Semesters

- Year 1

Year 1	Course Code	Course Title	Credit Hours	Pre-requisites	Co-requisites
Semester 1	HCM520	Quality and Patient Safety	3		
	HCM500	Healthcare Systems	3		
	HCM515	Health Law and Ethics	3		
<b>Total</b>			<b>9</b>		

Year 1	Course Code	Course Title	Credit Hours	Pre-requisites	Co-requisites
Semester 2	HQS505	Evidenced-Based Research and Quality Assurance	3	HCM515	
	HQS510	Quality Measurement and Performance Improvement	3	HCM520	
	HQS515	Financial Management for Healthcare Quality and Patient Safety Leaders	3		
<b>Total</b>			<b>9</b>		

- Year 2

Year 2	Course Code	Course Title	Credit Hours	Pre-requisites	Co-requisites
Semester 1	HQS520	Risk Management and Patient Safety	3	HQS510	
	HQS525	Technology and Health Informatics	3	HQS505	
	HQS530	Human Factors and Ergonomics in Health Care	3	HQS510	
<b>Total</b>			<b>9</b>		

Year 2	Course Code	Course Title	Credit Hours	Pre-requisites	Co-requisites
Semester 2	HQS535	Leadership and Management for Healthcare Quality and Patient Safety	3	HQS510	
	HCM550	Healthcare Policy Analysis and Development	3		
	HQS590	Capstone: Strategic Management in Healthcare Quality and Patient Safety	3	HQS510	
	HQS599	Internship			
<b>Total</b>			<b>9</b>		

Field Experience (internship, cooperative program....):

**Brief description:**

The internship program aims to give the students a unique opportunity to experience first-hand how the efforts to facilitate the improvement of healthcare quality and patient safety in real-life settings and to understand the interaction between health quality and patient safety and implementation of quality improvement programs and interventions. Students will be rotated between various departments in the internship organizations to learn of the processes and protocols required to design, plan, facilitate and implement quality and patient safety programs and interventions.

**Semester:**

One Semester

**Time allocation and scheduling arrangement:**

Last semester

**The number of credit hours:**

8 weeks

**Intended learning outcomes:**

- Prepare graduates to exercise administrative, leadership, and specialized skills in different fields of work within the discipline of healthcare quality and patient safety.
- Demonstrate the capacity to lead and manage change through collaboration with others.
- Demonstrate an understanding of the ethical issues associated with practitioner research.
- Apply theories, methods, and processes for the design, planning, facilitation, and implementation of healthcare quality and patient safety measures.
- Report research findings in
- Use research findings to advance education in theory and practice in his workplace through written and verbal forms.

**Assessment procedures:**

The students will undergo training across healthcare organizations and quality & patient safety related fields. The training can range from healthcare operations, quality control and assurance to patient safety management ...etc. The student is required to give a presentation at the end of his/her training period.

**4. Project or Research Requirements (if applicable)**

**Brief description**

The purpose of the capstone quality improvement project is to provide a culminating experience that requires the integration and application of knowledge attained in the coursework. Students will apply this knowledge through the completion of a mentored quality improvement project in their healthcare organization. In collaboration with faculty and health organization advisors, students will identify a quality improvement opportunity and use improvement methodology to describe the extent of the problem, analyze the current system, design tests of change (countermeasures), implement, and measure results. Students will be required to write and present their work while reflecting on lessons learned and the process of change.

**Semester:**

The project to be submitted after the final fourth semester to fulfill the master's degree requirement.

**The number of credit hours:**

Three credit hours

**Intended learning outcomes.**

- Apply knowledge in foundational concepts of quality and safety measurement, improvement, and analysis in promoting safe, high-quality care for diverse patients across healthcare systems and environments.
- Identify effective change strategies that can occur within complex health care systems to improve healthcare quality and patient safety.
- Apply theories, methods, and processes for the design, planning, facilitation, and implementation of healthcare quality and patient safety measures.

**Assessment procedures for the project**

Pass (75 or more out of 100) /Incomplete/Resubmission criteria

**3- Admission Requirements**

- Bachelor's degree from MOE-recognized university. If the certificate is obtained from abroad, it must be accredited according to the equivalency program provided by the Ministry of Education (MOE).
- Accepted bachelor's majors: Medical and Health majors, Health administration and related majors.
- It is preferable to submit documents of work experience in the field of healthcare as support for acceptance when preference is given to applicants.

- Having a cumulative GPA in the bachelor's degree should not be less than (2.00 out of 4.00 or 3.00 out of 5.00).
- Submit the result of one of the approved English language tests:
  - a. IELTS-Academic only: with a score of no less than 5
  - b. STEP: with a score of no less than 76
  - c. TOEFL\_IBT: with a score of no less than 45.
- 2. SEU graduates are exempted from this condition provided that their bachelor's program was taught in English, and a with a cumulative GPA of no less than (3.5 out of 4.00) or higher.
- 3. Students who have obtained a bachelor's degree from universities in countries where the native language is English\* and the universities are recognized by the Ministry of Education are exempted.
- The validity period of the approved English language tests:
  - a. TOEFL\_IBT: 2 Years
  - b. STEP: 3 Years
  - c. IELTS Academic only: 3 Years
- 4. Applicants need to submit only one English language test.
- Applicants who have been initially accepted are required to pay the full amount of first semester tuition to get final admission.

\* USA- Canada – UK - Australia - New Zealand.

#### **4- Attendance and Completion Requirements:**

- Students must attend all face to face and live session virtual classes.

#### **5. Duration of the study: -**

- The duration of the study is 6 semesters.
- The semester is composed of series of modules.
- The curriculum based on credit hours' system, where MSc weight 42 credit hours

#### **6. Students Assessment System:**

According to SEU examinations guidelines and regulations:

- Continuous evaluation
- Midterm and final exams

The general exam frame should include:

- Written Examination ranging according to the curriculum phase and type of module:

- Multiple –choice questions
- Problem solving questions.
- Structured Short Notes

The examination results should be graded and assessed as following, According to SEU examinations guidelines and regulations

Degree		Percentage %
Excellent	A+	95% -100%
	A	90 % -94.9%
Very good	B+	85 - 89.9 %
	B	80 – 84.9%
Good	C+	75 - 79.9 %
Failure	F	Below 75 %

## G. LEARNING FACILITIES AND EQUIPMENT:

- Facilities required:
  - Classrooms
  - Free Internet
  - Computer Laboratories
  - Digital Library
- Classrooms
  - E-Podium
  - Smart Boards
  - White Boards
  - Projectors
- Equipment (including IT)
  - Computers.
  - Laptops
  - Headphones

## Course Descriptions

### Healthcare systems (HCM 500)

College	Health Sciences		Department	Public Health
Course Name	Healthcare Systems	Course Code:	HCM500	
Credit Hours	3 credit Hours	Contact Hours	3 hours	
Teaching Language	<input type="checkbox"/> Arabic		<input checked="" type="checkbox"/> English	
Course Level	Level 1	Prerequisite	None	
<b>Course Description:</b> This course provides a broad overview of healthcare system organization from both a micro and macro level. An introduction to the definitions, concepts related to various systems, and contemporary trends and challenges in healthcare delivery are considered. The course will examine the historical evolution and current state of health care systems in the USA, Canada, the EU, and Asia. Areas of study include the introduction to the various forms of provider models and service delivery systems found in private and public health sectors.				
<b>Course learning outcomes:</b> <ol style="list-style-type: none"> <li>1. Describe global health system regulations with current global challenges and opportunities in ensuring access to healthcare</li> <li>2. Define the key constructs related to the concepts of health, health system, global health, diseases and its etiology.</li> <li>3. Analyze the healthcare systems of Saudi Arabia, UK , Germany, USA, Egypt, Turkey, and Jordan</li> <li>4. Analyze the variables of cost, access, quality, and economic assumptions of healthcare systems.</li> <li>5. Evaluate delivering care methods as Medical &amp; Information Technology and managing utilization of these methods.</li> </ol>				
<b>Major Course Topics:</b> <ul style="list-style-type: none"> <li>• Defining Health Systems, Global Health, Disease and Prevalence and Management of Behavioral Healthcare</li> <li>• Global Health System Regulations</li> <li>• Nature and Etiology of Disease</li> <li>• Access to Care in KSA</li> <li>• Financing Health Systems and Delivering Care: Medical and Information Technology</li> <li>• Healthcare System of Saudi Arabia</li> <li>• Healthcare systems of the United Kingdom and Germany</li> <li>• Healthcare System of the United States of America</li> <li>• Healthcare Systems of Egypt, Turkey, and Jordan</li> <li>• Comparative Perspectives: Global Healthcare Policies and the National Transformation Program</li> </ul>				
Grading:	<input checked="" type="checkbox"/> Mid-Term Exams	<input checked="" type="checkbox"/> Quizzes	<input checked="" type="checkbox"/> Assignments	
	<input checked="" type="checkbox"/> Final Exam	<input type="checkbox"/> Project	<input type="checkbox"/> Lab Work	
Text Book:	- Johnson, J. J., Stoskopf, C. & Shi, L. (2018). Comparative Health Systems: A Global Perspective (2nd ed.). Jones and Bartlett Publishers. ISBN 9781284111736			

**Health Law and Ethics (HCM 515)**

College	Health Sciences		Department	Public Health
Course Name	Health Law and Ethics	Course Code:	HCM515	
Credit Hours	3 credit Hours	Contact Hours	3 hours	
Teaching Language	<input type="checkbox"/> Arabic		<input checked="" type="checkbox"/> English	
Course Level	Level 1	Prerequisite	None	
<b>Course Description:</b> This course explores the legal and ethical challenges inherent in the administration of healthcare services. Topics include governmental regulation of healthcare false claims, fraud and abuse, antitrust compliance and litigation, informed consent, principals and legal basis for hospital governance and healthcare malpractice insurance.				
<b>Course learning outcomes:</b> <ul style="list-style-type: none"> <li>• Describe the structure and development of health law and ethics.</li> <li>• Recognize the impacts of legal and regulatory environments on healthcare organizations.</li> <li>• Compare basic ethical theories and perspectives.</li> <li>• Analyze various health laws and standards that affect healthcare administrators and managers.</li> <li>• Evaluate ethical principles in the solution of a personal leadership and organizational dilemma or challenge.</li> </ul>				
<b>Major Course Topics:</b> <ul style="list-style-type: none"> <li>• Influence of Ethical and Structured Principles on Health Law</li> <li>• Governmental Regulation of Public Healthcare</li> <li>• Governance Structures and Internal Regulation</li> <li>• Ethical Implications of Medical Privacy and Informed Consent</li> <li>• Healthcare Organizations</li> <li>• Standards, Regulations, and Reform for Healthcare Administrators</li> <li>• Private Healthcare</li> <li>• Tort Law and Medical Malpractice</li> <li>• Fraud &amp; Abuse</li> <li>• Legal and Ethical Obligations to Provide Care</li> </ul>				
Grading:	<input checked="" type="checkbox"/> Mid-Term Exams <input checked="" type="checkbox"/> Final Exam	<input checked="" type="checkbox"/> Quizzes <input type="checkbox"/> Project	<input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Lab Work	
Text Book:	Pinto, A. D., & Upshur, R. E. (Eds.). (2013). <i>An introduction to global health ethics</i> . New York, NY: Routledge. Print ISBN-13: 978-0-415-68183-4 e-text ISBN: 9781136178016			

**Quality and Patient Safety (HCM520)**

College	Health Sciences		Department	Public Health
Course Name	Quality and Patient Safety	Course Code:	HCM520	
Credit Hours	3 credit Hours	Contact Hours	3 hours	
Teaching Language	<input type="checkbox"/> Arabic		<input checked="" type="checkbox"/> English	
Course Level	Level 2	Prerequisite	None	
<b>Course Description:</b> This course explores the legal and ethical challenges inherent in the administration of healthcare services. Topics include governmental regulation of healthcare false claims, fraud and abuse, antitrust compliance and litigation, informed consent, principals and legal basis for hospital governance and healthcare malpractice insurance.				
<b>Course learning outcomes:</b> <ul style="list-style-type: none"> <li>• Describe the major principles and concepts used in defining and measuring quality.</li> <li>• Define quality improvement, risk management, patient safety initiatives conducted at varied environmental and structural levels within healthcare systems.</li> <li>• Illustrate statistical methods and tools used in quality measurement and improvement, including usage of flowcharts, cause-effect diagrams, Pareto charts, run charts, etc.</li> <li>• Analyze foundational theories, accreditation standards, principles and processes of quality improvement and patient safety as they relate to healthcare and regulatory requirements.</li> <li>• Evaluate quality improvement models and methodologies to address various challenges in healthcare with emphasis on improving quality of healthcare and patient safety.</li> </ul>				
<b>Major Course Topics:</b> <ul style="list-style-type: none"> <li>• Healthcare Quality and the Patient and Human Factors and Teamwork in Healthcare Quality and Improvement</li> <li>• Measuring Quality: Statistical Tools, Qualitative and Quantitative Measures and The Role of Leadership in Managing and Implementing Quality Initiatives</li> <li>• Quality Improvement: Research and Consumer Satisfaction and Implementing Quality as the Core Organizational Strategy</li> <li>• Patient Safety and Outcomes: Healthcare Errors</li> <li>• Information Technology and Healthcare Quality</li> <li>• Creating a Culture of Safety</li> <li>• Accreditation: Impact on Quality</li> <li>• Quality Improvement Trends in Healthcare</li> <li>• Accreditation: Impact on Quality</li> <li>• Quality Improvement Trends in Healthcare</li> <li>• Investigate the Concepts of Healthcare Quality</li> <li>• Planning a Quality Improvement Project and Reducing Hospital Re-admission</li> </ul>				
Grading:	<input checked="" type="checkbox"/> Mid-Term Exams	<input checked="" type="checkbox"/> Quizzes	<input checked="" type="checkbox"/> Assignments	
	<input checked="" type="checkbox"/> Final Exam	<input type="checkbox"/> Project	<input type="checkbox"/> Lab Work	
Text Book:	Nash, D. B., Joshi, M. S., Ransom, E. R., & Ransom, S. B. (Eds.). (2019). <i>The healthcare quality book: Vision, strategy, and tools</i> . (4th ed.). Chicago, IL: Health Administration Press. Print ISBN-9781640550537 Etext ASIN : B07YMQW1J5			

Panesar, S., Carson-Stevens, A., Salvilla, S., & Sheikh, A. (Eds.). (2014). *Patient safety and healthcare improvement at a glance*. John Wiley and Sons, Ltd.  
 Print ISBN- 9781118361368 Etext ASIN : B00L57GMUO

### Evidenced-Based Research and Quality Assurance (HQS505)

College	Health Sciences		Department	Public Health
Course Name	Evidenced-Based Research and Quality Assurance	Course Code:	HQS505	
Credit Hours	3 credit Hours	Contact Hours		
Teaching Language	<input type="checkbox"/> Arabic		<input checked="" type="checkbox"/> English	
Track	<input checked="" type="checkbox"/> College Req.	<input type="checkbox"/> Dep. Req.	<input type="checkbox"/> Dep. Spec	<input checked="" type="checkbox"/> Dep. Elective
Course Level	2	Prerequisite	HCM515	
Course Description: This course will provide the students with the basics of research and a broad introduction to the methodological foundations and tools to do research. The course covers the basics of research methodology for graduate level students and introduces the language of research, ethical principles and challenges, and the elements of the research process within quantitative, qualitative, and mixed methods approaches. Participants will use theoretical aspects to begin to critically review literature relevant to their field of interest. Students will learn how to identify problems to study, develop hypotheses and research questions, specify independent and dependent variables, check for the validity and reliability of studies and design research projects. They will be exposed to a broad range of designs used in their research from laboratory and field experiments, surveys, content analysis, focus groups and in-depth interviewing				
Course learning outcomes: <ul style="list-style-type: none"><li>Describe the use of statistical software and other tools in data analysis for contrast, compare methods of collecting and analyzing data .</li><li>Define the research process and its importance to furthering knowledge in the field of healthcare management.</li><li>Explain the range of qualitative, quantitative, and mixed methods research methodologies available, including their strengths and limitations.</li><li>Illustrate a research proposal addressing a healthcare problem.</li><li>Evaluate ethical research practices and principles in healthcare research.</li></ul>				
Major Course Topics: <ul style="list-style-type: none"><li>Planning and Preparing for Research</li><li>Reviewing Literature and Proper Citation</li><li>Quantitative Study Approaches: Observational Studies</li><li>Experimental Studies and Correlational Studies</li><li>Qualitative and Mixed Methods Research Methodologies</li><li>Ethical Considerations</li><li>Designing the Study and Collecting Primary Data and Secondary and Tertiary Data</li><li>Managing and Analyzing Data &amp; Software and Other Tools Used in Quality and Patient Safety Research</li></ul>				

- Article Structure and Disseminating Research
- Article Structure and Disseminating Research

## Text Book:

Jacobsen, K. H. (2020). *Introduction to health research methods* (3rd ed.). Burlington, MA: Jones & Bartlett Learning.

Print ISBN: 9781284197563, 1284197565

E-book ISBN: 9781284211061, 1284211061

<b>Grading:</b>	<input checked="" type="checkbox"/> Mid-Term Exams		<input checked="" type="checkbox"/> Quizzes		<input checked="" type="checkbox"/> Assignments	
	<input checked="" type="checkbox"/> Final Exam		<input type="checkbox"/> Project		<input type="checkbox"/> Lab Work	

## Quality Measurement and Performance Improvement (HQS510)

College	Health Sciences		Department	Public Health
Course Name	Quality Measurement and Performance Improvement	Course Code:	HQS510	
Credit Hours	3 credit Hours	Contact Hours	3 hours	
Teaching Language	<input type="checkbox"/> Arabic		<input checked="" type="checkbox"/> English	
Course Level	Level 3	Prerequisite	HCM520	

## Course Description:

This course covers concepts and methods of quality measurement and performance improvement in healthcare. Topics include methods and tools to design and implement a quality improvement project. In addition, the course will subsequently focus on the most common methods, tools and measurement techniques used to improve healthcare delivery, and fundamentals for sustaining change at a microsystem level.

## Course learning outcomes:

- Describe the history and evolution of quality improvement science.
- Outline the government regulations and accreditation standards related to clinical quality management.
- Identify the components of performance measures, process measures, outcome measures and benchmarking.
- Apply basic improvement tools to a quality improvement project and demonstrate an ability to distinguish the use of specific tools to address different types of improvement challenges.
- Integrate fundamental principles, methods, and tools for quality improvement to design and implement a quality improvement project.
- Demonstrate a commitment to professionalism as a life-long process requiring self-assessment and self-directed education.

## Major Course Topics:

- The History of Continuous Quality Improvement & Factors Influencing the Application of CQI in Healthcare
- Quality Improvement and Population Health
- Integrating Science Approaches in CQI & Quality and Safety Improvement in Surgery
- Understanding Variation, Tools, and Data Sources for CQI
- The Role of the Patient in Continuous Quality Improvement
- Infection Prevention Quality Metrics

<ul style="list-style-type: none"> <li>Assessing Risk and Preventing Harm in Healthcare</li> <li>Lean and Six Sigma Quality Management Processes and Modern Cardiovascular Quality Metrics</li> <li>KSA Accreditation and Government Oversight</li> <li>Classification and the Reduction of Medical Errors</li> </ul>					
Grading:	<input checked="" type="checkbox"/> Mid-Term Exams		<input checked="" type="checkbox"/> Quizzes		<input checked="" type="checkbox"/> Assignments
	<input checked="" type="checkbox"/> Final Exam		<input type="checkbox"/> Project		<input type="checkbox"/> Lab Work
Text Book:	Freund, K., & Weingart, S. (2020). <i>Quality Measures</i> . Boston, MA: Springer. Print ISBN: 9783030371449 e-book ISBN: 9783030371456 Johnson, J., & Sollecito, W. (2020). <i>Continuous Quality Improvement in Health Care</i> (5th ed.). Burlington, MA: Jones & Barlett. Print ISBN: 9781284126594 e-book ISBN: 9781284174410				

### Financial Management for Healthcare Quality and Patient Safety Leaders (HQS515)

College	Health Sciences		Department	Public Health
Course Name	Financial Management for Healthcare Quality and Patient Safety Leaders	Course Code:	HQS515	
Credit Hours	3 credit Hours	Contact Hours	3 hours	
Teaching Language		<input type="checkbox"/> Arabic	<input checked="" type="checkbox"/> English	
Course Level	Level 3	Prerequisite	None	
<b>Course Description:</b> This course focuses on the application of key financial principles and concepts to healthcare organizations. The course enables students to learn how to develop, apply, and interpret various financial tools and concepts including financial statements analysis, costs structure and allocation, dashboards, budgeting and variance analysis, sources of revenue and reimbursement, return on investment analysis, financial ratios, capital budgeting and investment decision making, and working capital management.				
<b>Course learning outcomes:</b> <ul style="list-style-type: none"><li>• Describe functions of financial management, roles, responsibilities of finance managers in Saudi Arabian healthcare organizations, financial forecasting and strategic financial planning for effective decision making.</li><li>• Define the concepts of time value money, revenue cycle, reimbursement, costs structures, cost allocation methods, used by Saudi Arabia’s healthcare organizations to ensure effective control, operation sustainability, and organizational efficiency and effectiveness.</li><li>• Interpret the staffing methods and regulations to find out the direct and indirect costs associated with turnover for a better staffing forecast.</li><li>• Analyze the financial statements, working capital management, break-even analysis, capital budgeting and investment for long-term financing decisions and options, other critical financial plans needed to ensure the organization’s financial viability in the long-term.</li></ul>				

- Evaluate spreadsheets and financial reports used for monitoring, control, reporting, and oversight in the application of basic financial management values.

## Major Course Topics:

- Introduction to Healthcare Financial Management in Saudi Arabia and The Flow of Information and the Role of Technology
- Payments to Providers
- Time Value of Money
- Understanding Financial Statements and Financial Risk and Required Return
- Lease Financing – Is it Better to Purchase or Rent?
- Capital Budgeting and Allocation
- Debt Financing
- Staffing Methods and Regulations
- Revenue Cycle and Current Accounts Management
- Financial Forecasting

Grading:	<input checked="" type="checkbox"/> Mid-Term Exams	<input checked="" type="checkbox"/> Quizzes	<input checked="" type="checkbox"/> Assignments
	<input checked="" type="checkbox"/> Final Exam	<input type="checkbox"/> Project	<input type="checkbox"/> Lab Work
Text Book:	Pink, G. H., & Song, P.H. (2020). <i>Gapenski's understanding healthcare financial management</i> (8th ed.). Chicago: Association of University Programs in Health Administration and Health Administration Press. ISBN: 9781640551091		
Reference Book (s):			

**Risk Management and Patient Safety (HQS520)**

College	Health Sciences		Department	Public Health
Course Name	Risk Management and Patient Safety	Course Code:	HQS520	
Credit Hours	3 credit Hours	Contact Hours	3 hours	
Teaching Language		<input type="checkbox"/> Arabic	<input checked="" type="checkbox"/> English	
Course Level	Level 4	Prerequisite	HQS510	
Course Description: This course covers risk management process (i.e., identification, assessment, mitigation), methods for identifying and ranking top clinical and other risks using data from a range of patient safety and risk management sources. It provides strategies for integrating organizational risk management, quality improvement and patient safety activities, and methods for identifying, managing and investigating critical incidents, and for implementing and sustaining effective recommendations for improvement.				

Course learning outcomes:					
<ul style="list-style-type: none"> <li>Identify link between risk management, quality improvement and patient safety functions.</li> <li>Describe the risk management and continuous improvement methodologies.</li> <li>Apply a structured methodology to identify high priority risks requiring leadership and governance attention.</li> <li>Demonstrate an understanding of the basic principles of Risk management.</li> <li>Illustrate responsibility to collaborate and communicate with a healthcare professional to improve patient health outcomes</li> </ul>					
Major Course Topics:					
<ul style="list-style-type: none"> <li>Organizational Safety Culture for Patient Safety and Quality Improvement</li> <li>Developing a High Reliability Organization Using the Model for Improvement Framework</li> <li>Medical Errors and Root Cause Analysis</li> <li>Communication and Disclosure of an Event</li> <li>Using Data to Drive Change</li> <li>Risk Management and Data Analytics</li> <li>Operationalizing Patient Safety</li> <li>Human Factors, Patient Handoffs, and Checklists to Reduce Risk</li> <li>Improving Clinical Practice and Quality Outcomes</li> <li>Building Resilience to Reduce Risk</li> </ul>					
Grading:	<input checked="" type="checkbox"/> Mid-Term Exams		<input checked="" type="checkbox"/> Quizzes		<input checked="" type="checkbox"/> Assignments
	<input checked="" type="checkbox"/> Final Exam		<input type="checkbox"/> Project		<input type="checkbox"/> Lab Work
Text Book:	Donaldson, L., Ricciardi, W., Sheridan, S., & Tartaglia, R. (Eds.). (2021). <i>Textbook of Patient Safety and Clinical Risk Management</i> . Springer ISBN 978-3-030-59402-2 ISBN 978-3-030-59403-9 (eBook) <a href="https://doi.org/10.1007/978-3-030-59403-9">https://doi.org/10.1007/978-3-030-59403-9</a>				
Reference Book (s):					

### Technology and Health Informatics (HQS525)

College	Health Sciences		Department	Public Health
Course Name	Technology and Health Informatics	Course Code:	HQS525	
Credit Hours	3 credit Hours	Contact Hours	3 hours	
Teaching Language	<input type="checkbox"/> Arabic		<input checked="" type="checkbox"/> English	
Course Level	Level 4	Prerequisite	HQS505	

#### Course Description:

This course is designed to introduce students to the core knowledge and skills needed to oversee information technology in a healthcare environment. This includes how to identify and solve organizational problems affecting the design, implementation, and use of health information management systems throughout the enterprise. In this course, you will gain knowledge on how healthcare administrators can lead, manage, develop, and motivate staff toward meeting changing needs. We'll discuss the functions and interoperability of various systems including regulatory requirements, and how to assure the confidentiality of patient information and recent trends in the changing healthcare landscape.

Course learning outcomes: <ul style="list-style-type: none"> <li>• Define the role, responsibilities, and challenges of leadership in healthcare information systems objectives, planning, and implementation.</li> <li>• Use software applications designed for healthcare personnel management, electronic medical records, automated patient scheduling, automated prescription generation, and other healthcare clinical functions.</li> <li>• Compare an information system, a healthcare information system, and a departmental information system.</li> <li>• Evaluate the importance of system interoperability and standards-based approaches</li> </ul>					
Major Course Topics: <ul style="list-style-type: none"> <li>• Technology and Health Informatics Landscape and the Kingdom of Saudi Arabia</li> <li>• Informatics: Information Science and the Foundation of Knowledge</li> <li>• Responsible Leadership and Benefits of Healthcare Informatics</li> <li>• Electronic Health Systems and Strategic Planning</li> <li>• The Human-Technology Interface</li> <li>• Applied Health Informatics in System Implementation, Maintenance, and Evaluation</li> <li>• Informatics Tools for Patient Safety and Quality of Care</li> <li>• Informatics to Promote Population Health</li> <li>• Data Mining in Research</li> <li>• Delivering Patient-Centered Care and Managing Organizational Knowledge</li> </ul>					
Grading:	<input checked="" type="checkbox"/> Mid-Term Exams		<input checked="" type="checkbox"/> Quizzes		<input checked="" type="checkbox"/> Assignments
	<input checked="" type="checkbox"/> Final Exam		<input type="checkbox"/> Project		<input type="checkbox"/> Lab Work
Text Book:	Mastrian, K. G. & McGonigle, D. (2021). <i>Informatics for healthcare professionals (2nd ed.)</i> . Jones & Bartlet Learning. ISBN: 9781284182095 (print), ISBN: 978-1-284-18209-5				
Reference Book (s):					

### Human Factors and Ergonomics in Health Care (HQS530)

College	Health Sciences		Department	Public Health
Course Name	Human Factors and Ergonomics in Health Care	Course Code:	HQS530	
Credit Hours	3 credit Hours	Contact Hours	3 hours	
Teaching Language	<input type="checkbox"/> Arabic		<input checked="" type="checkbox"/> English	
Course Level	Level 5	Prerequisite	HQS510	

**Course Description:**

This course provides comprehensive scientific knowledge of Human Factors (HF) and Ergonomics and how it impacts health care safety. The course focuses on key concepts, theories, methods, interventions, and frameworks in HF and Ergonomics research and practice. The course also identifies how these two areas can be applied to health care issues to reduce and mitigate health care performance safety concerns.

**Course learning outcomes:**

- Identify the impact of various personal attributes (anatomical, physiological, anthropometric and psychological) on proper safe working practice.
- Outline principal theories and concepts of human factors and ergonomics, including the organizational culture of healthcare delivery.
- Interpret evidence-based ergonomics and human factors literature to provide high-level advice.
- Apply ergonomic principles to the creation of safer, healthier and more efficient and more effective activities in the workplace.
- Develop appropriate control measures for ergonomic risk factors and practice in an ethical and socially responsible manner

**Major Course Topics:**

- Understanding Human Factors in Health Care
- Assessing Ergonomics Characteristics
- Human Factors and Ergonomics in a Clinical Setting
- Safety Critical Communication Supporting Human Factors
- Environmental Design Considerations with Human Factors and Ergonomics
- Ergonomic Challenges and Physical Distress
- Improving Patient Safety with Human Factors and Ergonomics
- Technical Solutions and Supporting Structures
- Sociotechnical Considerations
- Human-Centered Design

Grading:	<input checked="" type="checkbox"/> Mid-Term Exams		<input checked="" type="checkbox"/> Quizzes		<input checked="" type="checkbox"/> Assignments	
	<input checked="" type="checkbox"/> Final Exam		<input type="checkbox"/> Project		<input type="checkbox"/> Lab Work	
Text Book:	1. Duffy, V. (2019). Advances in human Aspects of Healthcare. CRC Press. ISBN-13:978-0367381097 2. Carayon, P. (2017). Handbook of Human Factors and Ergonomics in Health Care and Patient Safety 2nd Edition. CRC Press. ISBN-13:978-1138074590:					
Reference Book (s):						

### Leadership and Management for Healthcare Quality and Patient Safety (HQS535)

College	Health Sciences		Department	Public Health
Course Name	Leadership and Management for Healthcare Quality and Patient Safety	Course Code:	HQS530	
Credit Hours	3 credit Hours	Contact Hours	3 hours	
Teaching Language	<input type="checkbox"/> Arabic		<input checked="" type="checkbox"/> English	
Course Level	Level 5	Prerequisite	HQS510	
<b>Course Description:</b> This course focuses on the application of theory to develop the knowledge and skills needed to effectively manage individuals and groups in health care organizations. Topics include human behavior, human resource management and labor relation policies. This course serves as an introduction to organizational behavior and human resource management in healthcare, examining organizational theory, change, and leadership. Students will learn the processes and practices involved in these areas: management of individuals and teams, change and conflict management, human resource strategy, human resources and workforce management, training and development, performance appraisals, compensation, retention, and human resource systems effectiveness				
<b>Course learning outcomes:</b> <ul style="list-style-type: none"> <li>• Describe the leadership role focused on healthcare quality and safety.</li> <li>• Explore the importance of leadership in supporting and advancing quality and safety at all levels of the healthcare organization.</li> <li>• Apply key concepts in patient safety, quality, and leadership to real-world health problems.</li> <li>• Evaluate different models of organizational change that can apply as a lead for quality and safety initiatives.</li> </ul>				
<b>Major Course Topics:</b> <ul style="list-style-type: none"> <li>• Leadership Foundations</li> <li>• Leadership Challenges in Healthcare</li> <li>• Leadership Theories and Practice</li> <li>• Leadership Competencies</li> <li>• Leadership Development</li> <li>• Complex Health Organizations</li> <li>• Healthcare Leadership Ethics</li> <li>• Measuring Leadership Initiative Outcomes</li> <li>• Culture of Quality and Patient Safety</li> <li>• Human Resource Development</li> </ul>				
Grading:	<input checked="" type="checkbox"/> Mid-Term Exams	<input checked="" type="checkbox"/> Quizzes	<input checked="" type="checkbox"/> Assignments	
	<input checked="" type="checkbox"/> Final Exam	<input type="checkbox"/> Project	<input type="checkbox"/> Lab Work	
Text Book:	Ledlow, G. R., Bosworth, M., Maryon, T. (2024). <i>Leadership for Health Professionals: Theory, Skills, and Applications</i> , (4 <sup>th</sup> ed.). Jones & Bartlett: Boston, MA. ISBN: 9781284254785			

### Healthcare Policy Analysis and Development (HCM550)

College	Health Sciences		Department	Public Health
Course Name	<b>Healthcare Policy Analysis and Development</b>	Course Code:	HCM550	
Credit Hours	3 credit Hours	Contact Hours	3 hours	
Teaching Language	<input type="checkbox"/> Arabic		<input checked="" type="checkbox"/> English	
Course Level	Level 5	Prerequisite	None	
<b>Course Description:</b> There are five key themes presented in this course. The first is to recognize the multidimensional characteristics of health challenges that need the application of innovative interdisciplinary and collaborative approaches. The second theme is the need for greater innovation in national and global health governance. The third theme is re-engineering the approach to health aid in developing countries. The fourth theme is the creation of a global health policy that balances political and ethical considerations after reviewing the scientific evidence. The fifth theme explores the commitment of the global community to promoting healthcare. This course is presented from the context of the Kingdom of Saudi Arabia and the healthcare challenges faced that can be informed by the global policy challenges and perspectives discussed. The discussions and assignments focus on exploring solutions that could be applied to the Kingdom's healthcare challenges that students identify through their research.				
<b>Course learning outcomes:</b> <ul style="list-style-type: none"> <li>• Define the important concepts, theories, laws, and literature that impact public opinion and policy within the healthcare environment.</li> <li>• Outline the health policy process at both the state and national levels in areas associated with research, funding, and delivery.</li> <li>• Analyze the healthcare policy and politics in the United States, Canada, and the European Union.</li> <li>• Evaluate the political dimensions of an area of national healthcare policy and project its impact over the next five years</li> </ul>				
<b>Major Course Topics:</b> <ul style="list-style-type: none"> <li>• Understanding Global Health Policy</li> <li>• Contemporary Global Health Governance: Origins, Functions, and Challenges</li> <li>• Measuring the World's Health and Politics of Global Health Policy</li> <li>• Kingdom of Saudi Arabia Health Policy</li> <li>• Ethical Reflections and Economic Perspectives</li> <li>• Social Determinants of Health</li> <li>• Pros and Cons of Securitizing Global Health</li> <li>• Understanding Vision 2030, Global Financing, and Social Determinants of Health</li> <li>• Health Systems and Delivery in the Kingdom of Saudi Arabia</li> <li>• Global Health Partnerships and Future Trends in KSA Healthcare in Contrast with Globalization Efforts</li> </ul>				
Grading:	<input checked="" type="checkbox"/> Mid-Term Exams <input checked="" type="checkbox"/> Final Exam	<input checked="" type="checkbox"/> Quizzes <input type="checkbox"/> Project	<input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Lab Work	
Text Book:	Blank, R., Burau, V., & Kuhlmann, E. (Eds.). (2017). <i>Comparative health policy</i> (5th ed.). London, England: Palgrave. Print ISBN: 978-1137544957, Etext ASIN: B07ZRYJCJ5			

**Capstone: Strategic Management in Healthcare Quality and Patient Safety (HQS590)**

College	Health Sciences		Department	Public Health
Course Name	Research Project	Course Code:	HQS590	
Credit Hours	3 credit Hours	Contact Hours	3 hours	
Teaching Language	Arabic <input type="checkbox"/>		English <input checked="" type="checkbox"/>	
Course Level	Level 6	Prerequisite	HQS510	
<b>Course Description:</b> The purpose of the capstone quality improvement project is to provide a culminating experience that requires the integration and application of knowledge attained in the coursework. Students will apply this knowledge through the completion of a mentored quality improvement project in their healthcare organization. In collaboration with faculty and health organization advisors, students will identify a quality improvement opportunity and use improvement methodology to describe the extent of the problem, analyze the current system, design tests of change (countermeasures), implement, and measure results. Students will be required to write and present their work while reflecting on lessons learned and the process of change.				
<b>Course learning outcomes:</b> <ul style="list-style-type: none"> <li>Identify effective change strategies that can occur within complex health care systems to improve healthcare quality and patient safety.</li> <li>Apply knowledge in foundational concepts of quality and safety measurement, improvement, and analysis in promoting safe, high-quality care for diverse patients across healthcare systems and environments.</li> <li>Apply theories, methods, and processes for the design, planning, facilitation, and implementation of healthcare quality and patient safety measures</li> <li>Evaluate gained experiences through the completion of a mentored quality improvement project in healthcare organization research</li> </ul>				
<b>Major Course Topics:</b> <ul style="list-style-type: none"> <li>Selecting research topic and submit research project title (Form 1)</li> <li>Writing research proposal (Form 2)</li> <li>Conduct literature review in the area of study.</li> <li>Prepare data collection tools.</li> <li>Data collection</li> <li>Analysis of data and writing the result part</li> <li>Discuss the results and write the discussion part.</li> <li>Writing the final research project paper (Form 3)</li> <li>Final research project presentation (Form 4)</li> </ul>				
Grading:	Mid-Term <input type="checkbox"/>		Quizzes <input type="checkbox"/>	Assignments <input type="checkbox"/>
	Exams			
	Final Exam <input type="checkbox"/>		Project <input checked="" type="checkbox"/>	Lab Work <input type="checkbox"/>
Text Book:	None			

