



UNIVERSITI TEKNOLOGI MARA

PHY520: QUALITY MANAGEMENT AND INDUSTRIAL SAFETY

Course Name (English)	QUALITY MANAGEMENT AND INDUSTRIAL SAFETY APPROVED
Course Code	PHY520
MQF Credit	3
Course Description	The course will expose the students to basic principles and concepts of quality improvement, assurance, quality management, occupational safety and health. Basic principles of occupational industrial safety and industrial hygiene are explained. Occupational health standards requirement as stipulated in the law and regulations will be briefed in detail. Safety regulation, Safety at work place, Chemical Hazard management, Biological Monitoring, and radiation safety are all discussed.
Transferable Skills	1. Explain the principles and concepts of quality management and industrial safety. 2. Communicate concepts and theories in the selected topics of quality management and industrial safety through oral presentation. 3. Demonstrate information management related to the selected topics of quality management and industrial safety
Teaching Methodologies	Lectures, Blended Learning
CLO	CLO1 Explain the related principles and concepts of quality management and industrial safety CLO2 Explain verbally the related concepts and theories in the selected topics of quality management and industrial safety CLO3 Demonstrate managerial information related to the selected topics of quality management and industrial safety
Pre-Requisite Courses	No course recommendations
Topics	
1. Introduction to Quality 1.1) History of Quality 1.2) Definition of Quality 1.3) Criteria to View Quality 1.4) Quality Dimensions	
2. Philosophies and Framework of Quality 2.1) Philosophies of WE Deming 2.2) Philosophies of JM Juran 2.3) Philosophies of AV Feigenbaum 2.4) Quality Management Awards and Framework	
3. Total Quality Management Principles 3.1) Introduction to Total Quality Management 3.2) Quality management: quality planning, quality control, quality assurance, quality improvement 3.3) TQM principles 3.4) Six sigma 3.5) Cost of quality	
4. ISO 9000 4.1) Introduction to ISO 9000 4.2) Benefits of ISO 9000 4.3) Components in ISO 9000 4.4) Main clauses of ISO 9001 4.5) ISO 9000 Audit	

<p>5. Quality Control Tools</p> <p>5.1) Pareto Chart 5.2) Cause and Effect Diagram 5.3) Check Sheet 5.4) Process Flow Diagram 5.5) Histogram 5.6) Control Charts</p>
<p>6. Introduction to OSHA (Occupational Safety and Health Act 1994) and FMA (Factory and Machinery Act 1967)</p> <p>6.1) Occupational Safety and Health Act 1994 6.2) Factory and Machinery Act 1967</p>
<p>7. Safety at Work Place: Types of Hazards in Workplace</p> <p>7.1) Safety Hazard 7.2) Health Hazard</p>
<p>8. Safety at Work Place : Hazard Assessment and Control</p> <p>8.1) Hazard Assessment in workplace 8.2) Hazard Control: Administrative 8.3) Hazard Control: Engineering 8.4) Hazard Control: PPE</p>
<p>9. Basic Principles of Industrial and Occupational Hygiene and Occupational Health Standards</p> <p>9.1) Introduction to Industrial and Occupational Hygiene 9.2) Principle in Industrial and Occupational Hygiene 9.3) Definition and type of standard exposure 9.4) Occupational Exposure Standards</p>
<p>10. Radiation protection and safety</p> <p>10.1) Atomic Energy Licensing Act 1984 (ACT304) 10.2) Types of ionizing radiation 10.3) Chemical and biological effect of ionizing radiation 10.4) Radiation protection</p>

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Assignment in selected topic in quality management and industrial safety	30%	CLO3
	Presentation	Presentation in selected topic in quality management and industrial safety	20%	CLO2
	Test	Test 1	25%	CLO1
	Test	Test 2	25%	CLO1

Reading List	This Course does not have any book resources
Article/Paper List	This Course does not have any article/paper resources
Other References	This Course does not have any other resources