

Department: Chemistry Dept.

College: Education College

University: Salahaddin University

Subject: Elective – Quality Control

Course Book: Stage 4; First semester

Lecturer's name: Assist Prof.Dr.Dler D. Kurda

Academic Year: 2024/2025

Course Book

1. Course name	Elective – Quality Control		
2. Lecturer in charge	Asst. Prof. Dr. Dler D. Kurda		
3. Department/ College	Chemistry/ Education		
4. Contact	e-mail: <u>dler.kurda@su.edu.krd</u>		
5. Time (in hours) per week	Theory: 2		
	Practical: 0		
6. Office hours	Tuesday 12.5pm –2.5 pm or by appointment		
7. Course code			
8. Teacher's academic profile	 I became one of the academic staff at the University of Salahaddin about 23 years ago and graduated from the Faculty of Science Department of Chemistry is the 1996-1997 academic year. Then I was appointed as a University Teaching assistant in 1999 and was accepted in the 2001 M.Sc studies, and got a master's degree in 2003 in the specialty of Industrial organic chemistry In 2009-2010 I accepted a Ph.D. and got a Ph.D. in polymer specialization in 201 On 4/9/2023, I was promoted from Lecturer to assistant professor in Industrial Organic Chemistry - Polymer Synthesis In 2020-2023 Head of Chemistry Department From 2023 till now the Director of the Higher Education and Scientific Affairs ur Participated in many scientific seminars, Symposium, and cultural and sports 		
9. Keywords	Quality, Control, Quality Assurance, ISO, Certificate		
10. Course overview:	ntional source for undergraduate students from oversee		

"Quality Management" is an optional course for undergraduate students from oversea. In the coming 17 weeks, the course will cover the main contents, concept of quality, Review on the development of the theories and practices of Quality Management, Basic concepts of Quality Management such as Quality Management System, quality planning, quality controlling, quality assurance, quality improvement, the relationship between quality with income and quality with cost, the very important quality management theory——Total quality management, some skills Kano Model and QFD method, quality and supplier relationship, and so on.

11. Course objective:

The objective of this course is to provide a systematic survey on

the theory and implementations of quality control and management activities for

different industries (mainly manufacturing and service). It is expected that the concepts and methodologies of quality management will be implemented by the students in them future careers.

2. Requirements : With Management and Operation Management as prerequisites, undergraduate students are expected to get prepared for lectures, finish and submit assignments as required.

12. Student's obligation

The student attendance in class two hours a week, preparation of the homework examinations and participate in the discussion in the classroom.

13. Forms of teaching

Different forms of teaching will be used to reach the objectives of the course: Direct questions, Quizzes, Discussion and conclusions. Power point presentations

14. Assessment scheme

At least one exam for each course (200pts) and answering questions during the year (100pts). Participation in class working in group and presenting short reports, and preparation a PowerPoint presentation for each topic and extra degree to attend the lecture (*).

15. Student learning outcome:

When have completed the course, students should know quality management is a continuing revolution and be familiar with basic methods and tools to achieve quality goals by effective quality planning, controlling and improving. Meanwhile, suppliers will play an important role in your quality management. Students should have skills to work together to reduce quality cost to make profit. Students should also have a good understanding of the role as an organizational member both as a quality management issues

16. Course Reading List and References:

1) Textbook

[1] Total Quality Management and Operational Excellence (4th edition), John S. Oakland,

Routledge, 2014

[2] Juran's Quality Handbook (6th edition), Defeo, Joseph; Juran, J. M., McGRAW-HILL, 2011

2) Online resources

[1] http://www.asq.org

[2] http://www.juse.or.jp

[3] http://www.iso.org/iso/en/ISOO

17. Quality Control Topics		
Week 1: Introduction, Quality, Control, Inspection		
Week 2: CONTROL, Need for Controlling Quality, Objectives of Inspection		
Week 3: Types of Inspection, Suitability, COMBINED INSPECTION		
Week 4: Methods of Inspection, Drawbacks of Inspection	-	
Week 5: Types of Quality Control, Objectives of Quality Control	1	
Week 6: CAUSE AND EFFECT DIAGRAM, SCATTER DIAGRAM (SCATTER PLOTS)		
Week 7: Midterm Exam		
Week 8: CONTROL CHARTS	- period 2 hours	
Week9: Causes of Variation in Quality, ASSIGNABLE CAUSES		
Week 10: STATISTICAL PROCESS CONTROL		
Week 11: Acceptance Sampling, Chemical Quality Controls and Pharmaceuticals		
Week 12: QUALITY CIRCLES, Benefits of QC, ISO certificate	-	
Week 13: TOTAL QUALITY MANAGEMENT		
Week 14: The Benefits of ISO 14000 Certification		
Final examination	-	
18. Practical topics:		
The practical topics is reported in practical course book.		

• The final grade in this course will be based on following assessment.

1. Examination (Mid-	20 %	Date to be announced.)
Term Exam)		
Final results	20 % (35% Quiz,	Last day of class, date to be announced
	Attendance,	(Review)
	Assignment , Activity)	
6. Final Exam	60%	Comprehensive; Date to be announced
Total	100 %	Results date to be announced

20. Academic Dishonesty

• Failure to attend a class for an exam will result in a grade of zero, unless absence is documented for a valid reason (i.e., a doctor's note). Plagiarism, improper collaboration in groups and copying or using unauthorized

