Course Description Form

1. Course Name:
Sanitary and Environmental Engineering I
2. Course Code:
WCV-41-02
3. Semester / Year:
First Semester / 2024 - 2025
4. Description Preparation Date:
1 September 2024
5. Available Attendance Forms:
Presence
6. Number of Credit Hours (Total) / Number of Units (Total)
Number of hours: 75 hours (30 hours theoretical, 15 hours tutorial, and 30 hours practical) Number of units: 3 units
7. Course administrator's name (mention all, if more than one name)
Name: Lec. Safaa Sabry Mohammed **Email: Safaa.sabry@uowa.edu.iq**
8. Course Objectives

Course Objectives	• **Understand the Fundamentals of Water Supply Systems** • **Analyze Water Quality Parameters** • **Design Water Supply Systems** • **Apply Water Treatment Techniques** • **Evaluate Water Demand and Consumption**

	• **Implement Sustainable Water Management Practices**

9. Teaching and Learning Strategies

Strategy	• **Interactive Lectures and Discussions** • **Practical Labs and Field Visits** • **Project-Based Learning and Case Studies**

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-3	12	**Quantity of water**	**Sanitary and Environmental Engineering I**	**Presence**	**Exams Participation Attendance**
3-6	12	**Collection and distribution of water**			
6-7	4	**Intakes**			
7-9	4	**Pump and pumping stations**			
9-10	4	**Quality of water supply**			
11-15	20	**Treatment of water**			

11. Course Evaluation

10 marks (daily preparation, daily and oral exams, homework, and classroom activities)
10 marks (Practical aspect: Reporting, discussion and exams)
30 marks (monthly exams)
50 marks (final exam)

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	**Steel, E.W. and McGhee, T.J., 1979. Water supply and sewerage (5th edition). New York: McGraw-Hill.**
Main references (sources)	**Baruth, E.E. and American Water Works Association, 2005. Water treatment plant design.**
Recommended books and references (scientific journals, reports...)	**Metcalf, I.N.C., 2003. Wastewater engineering; treatment and reuse. McGrawHill.**

Electronic References, Websites	**Davis, M.L., 2010. Water and wastewater engineering. McGraw-Hill.**