

## Course Description Form

<b>1. Course Name:</b>
Quality Control
<b>2. Course Code:</b>
QUCO473
<b>3. Semester / Year:</b>
Second semester/fourth stage/2023-2024
<b>4. Description Preparation Date:</b>
1/2/2024
<b>5. Available Attendance Forms:</b>
Attendance lesson
<b>6. Number of Credit Hours (Total) / Number of Units (Total): units</b>
Theoretical: 2 hours and practical: 3 hours (5 hours) / 3.5 units
<b>7. Course administrator's name (mention all, if more than one name):</b>
Name: A. P. D. Basmaa Saaduldeen Sheet Email: dr.basmaa@uomosul.edu.iq M.D. Roaa Adil Hamid Email: ruaa.alrashdi@uomosul.edu.iq
<b>8. Course Objectives</b>
<ul style="list-style-type: none"><li>• Helping the student understand the academic material and how to benefit from it in the future at graduation.</li><li>• Enabling students to know the importance of the quality control substance in processed foods, their consumption, and their suitability for consumption.</li><li>• The student understands the components of food and their importance.</li><li>• Introducing the student to methods of detecting fraud.</li><li>• Enabling the student to become familiar with the most important laboratory methods in conducting physical, chemical and sensory tests for foods at all stages of manufacturing and storage.</li><li>• Providing students with skills in how to conduct various tests to detect adulteration of some foods.</li></ul>
<b>9. Teaching and Learning Strategies</b>
<ul style="list-style-type: none"><li>- Interactive lecture using presentations.</li><li>- Dialogue and discussion.</li><li>- Brainstorming.</li><li>- Self-education.</li><li>- Assigning tasks and reports.</li><li>- Assigning group work and revealing students' skills.</li></ul>

## 10. Course Structure

Week	Hours	Required Learning Outcomes	Name of Unit or subject	Learning method	Evaluation method
1	2Theoretical	B1: Explains the concept of quality control or quality control and distinguishing it from quality assurance.	Quality control	Interactive lecture, dialogue and discussion, brainstorming, self-learning	Short test, assignment of tasks
	3Practical	B1: Explains the concept of food spoilage as a result of contamination with molds, yeasts, and bacteria, especially molds.	Mold contamination	Interactive lecture, dialogue and discussion, assigning group work and revealing students' skills	Commissioning a report
2	2Theoretical	C1: The student explains the sampling method	Samples and their types	Interactive lecture, dialogue and discussion, brainstorming, self-learning	Assigning tasks
	3Practical	C1: The student explains how to estimate the total acidity in foods	Determination of acidity.	Interactive lecture, dialogue and discussion, assigning group work and revealing student skills	Commissioning a report
3	2Theoretical	B2: The student is familiar with the properties and disadvantages of different foods	Food properties and disadvantages	Interactive lecture, dialogue and discussion, brainstorming, self-learning	Short quiz
	3Practical	B2: The student is familiar with the most important enzymes and their classifications	Detection of enzymes	Interactive lecture, dialogue and discussion, assigning group work and revealing student skills	A short quiz and assignment of a report
4	2Theoretical	A1: Learn about food arbitration methods and the duties of arbitration committees	Food arbitration	Interactive lecture, dialogue and discussion, brainstorming, self-learning	Short quiz
	3Practical	A1: The student learns about the types of nutritional defects	Defects	Interactive lecture, dialogue and discussion, assigning group work and revealing students' skills	Commissioning a report

5	2Theoretical	C2: The student explains what the HACCP system is and how to apply it in food factories.	HACCP system	Interactive lecture, dialogue and discussion, brainstorming, self-learning	Short quiz
	3Practical	C2: Explains the nature of tomato products and their types	Tomato products	Interactive lecture, dialogue and discussion, assigning group work and revealing students' skills	Semester exam1
6	2Theoretical	C3: The student suggests the best subject	Food additives	Interactive lecture, dialogue and discussion, brainstorming, self-learning	Assigning tasks
	3Practical	C3: The student suggests the best definition of food additives	Food additives	Interactive lecture, dialogue and discussion, assigning group work and revealing students' skills	A short quiz and assignment of a report
7	2Theoretical	C4: The student is familiar with the types of food standards and their importance	Food standard specifications.	Interactive lecture, dialogue and discussion, brainstorming, self-learning	Semester test1
	3Practical	C4: The student familiar the types of food standards and their importance	Physical tests for some food additives	Interactive lecture, dialogue and discussion, assigning group work and revealing students' skills	A short quiz
8	2Theoretical	A2: Learn about inspection, its elements, and test points and types	Inspection	Interactive lecture, dialogue and discussion, brainstorming, self-learning	Assigning tasks
	3Practical	A2: The student learns about methods for detecting benzoic ascorbic, and propionic acids and their salts	Chemical tests of some food additives	Interactive lecture, dialogue and discussion, assigning group work and revealing students' skills	Commissioning a report
9	2Theoretical	B3:The student judges foods terms of their suitability and extent of their adulteration conducting specific tests.	Food adulteration	Interactive lecture, dialogue and discussion, brainstorming, self-learning	A short quiz

	3Practical	B3: The student is familiar with the definition of fiber and the importance estimating it in some foods	Fiber estimation	Interactive lecture, dialogue and discussion, assigning group work and revealing students' skills	Assignment of a report and short quiz
10	2Theoretical	A3: The student learns about the factors affecting food changes, preventing them from occurring, and the food laws surrounding them	Food changes	Interactive lecture, dialogue and discussion, brainstorming, self-learning	Semester test2
	3Practical	A3: The student learns about the technical principles for controlling the quality of fat.	Standard specifications for fats	Interactive lecture, dialogue and discussion, assigning group work and revealing students' skills	Semester test2
11	2Theoretical	B4: Master the different methods in examining some enzymes	enzymes	Interactive lecture, dialogue and discussion, brainstorming, self-learning	Assigning tasks
	3Practical	B4: The student explains what are the technical principles for controlling the quality of oils	Standard specifications for oils	Interactive lecture, dialogue and discussion, assigning group work and revealing students' skills	Commissioning a report
12	2Theoretical	E1: Determines the most important food legislation laws and requirements	Food laws or legislation	Interactive lecture, dialogue and discussion, brainstorming, self-learning	A short quiz
	3Practical	E1: The student is familiar with chemical tests for fats and oils	Quality checks of fats and oils	Interactive lecture, dialogue and discussion, assigning group work and revealing students' skills	Commissioning a report
13	2Theoretical	A4: The student learns about food poisoning, its types, how it occurs, and the food laws surrounding it.	Food poisoning	Interactive lecture, dialogue and discussion, brainstorming, self-learning	Assigning tasks
	3Practical	A4: The student learns about forms of water in foods	Water	Interactive lecture, dialogue and discussion, assigning group work and revealing students' skills	A short quiz

14	2Theoretical	B5: The student is familiar with methods of water purification	Water purification in food factories	Interactive lecture, dialogue and discussion, brainstorming, self-learning	Assigning tasks
	3Practical	B5: The student is familiar with methods for estimating moisture in foods	Estimation of Moisture	Interactive lecture, dialogue and discussion, assigning group work and revealing students' skills	Commissioning a report
15	2Theoretical	C5: Explains how to conduct microbial tests for food by conducting a scientific visit to the Department of Health Nineveh.	Solve the problem	Interactive lecture, dialogue and discussion, brainstorming, self-learning	Commissioning a report on the visit
	3Practical	C5: Explains how to conduct microbial tests for food and estimate food ingredients by making a visit to the Department of Health in Nineveh.	Solve the problem	Interactive lecture, dialogue and discussion, assigning group work and revealing students' skills	Commissioning a report on the visit

## 11. Course Evaluation

Calendar methods	Calendar date (week)	Degree	Relative weight %
A short theoretical test Quiz	Weeks: 1,3,4,5,9,12	12	12
Assigning theoretical tasks	Weeks: 1,2,6,8,11,13,14	10.5	10.5
Semester (1) theoretical test	Seventh	20	20
Semester (2) theoretical test	The tenth	20	20
Assignment of a theoretical report	Fifteenth	2.5	2.5
Semester (1) practical test	Fifth	10	10
Semester (2) practical test	The tenth	10	10
A short practical test Quiz	Weeks: 3, 6, 7, 9, 13	5	5
Commissioning a practical report	Weeks: 1,2,3,4,6,8,9,11,12,14,15	10	10
The total	100	100%	100%

## 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Relying on the prescribed curricula issued by Ministry
Main references (sources)	Relying on the curricula prepared by the subject lectu
Recommended books and references (scientific journals, reports...)	Scientific journals and research in the specialization
Electronic References, Websites	Internet sites such as Google, YouTube, and social media in the field of specialization

Instructor of theoretical part

Instructor of practical part

Dr. Basmaa saaduldeen sheet

Rowa adil hamid

Chairman of the scientific committee

Head of the department of Food science

Prof. Dr. Moafak mahmood ahmed

Prof. Dr. Sumaya khalaf badawi