

جامعة أم القرى

كلية العلوم الطبية التطبيقية

الدبلوم العالي في سلامة الغذاء ومراقبة

الجودة

Level 1	QUAL1702525-2	Food Toxicology	R	QUAL1702518-3	2
	QUAL1702516-3	Food Chemistry, Processing & Preservation	R		3
	QUAL1702517-3	Food Microbiology	R		3
	QUAL1702518-2	Fundamentals of Food and Nutrition	R		2
	QUAL1702519-2	Food Laws and Standards	R		2
Level 2	QUAL1702524-3	Food Inspection, Investigation and Judgment	R		3
	QUAL1702515-2	Food plant Sanitation and Hygiene		R	3
	QUAL1702526-3	Food Safety and Quality Management Systems (GMPs, HACCP).		R	2
	QUAL1702527-2	Food safety practical in establishments	R		3
	QUAL1702523-3	Research methodology in Nutrition	R		3

4/1/3 Field or Research Components of the Study Plan

**4/1/3/1 Summary of Practical or Medical Clinical Fellowship Components Required by the Program (if any):
N/A**

• Brief Description of Field Experience:
• Program Level (s) of Field Experience:
• Contact Hours of Field Experience and Time Table (Day / Week / Semester)
• Field Experience Credit Hours

4/1/3/2 Requirements of Research Project or Scientific Thesis (if any):N/A

• Brief Description of Research Project or Scientific Thesis Requirements.
• Outline of Targeted Learning Outcomes of Research Project or Scientific Thesis.

4/1/4. Course Specification:

COURSE SPECIFICATIONS

Form

Course Title: **Food Toxicology**

Course Code. **QUAL1702515-2**

Date: 20 18-10-14.	Institution: Umm Al-Qura university
College: Applied Medical Sciences	Department: Clinical Nutrition

A. Course Identification and General Information

1. Course title and code: Food Toxicology – QUAL1702515-2		
2. Credit hours: 2		
3. Program(s) in which the course is offered. Food Safety and Quality Control PgDip (If general elective available in many programs indicate this rather than list programs)		
4. Name of faculty member responsible for the course Dr. El-Sayed H. Bakr Mrs. Haneen Y. Wazzan		
5. Level/year at which this course is offered: 1st Year 1st semester		
6. Pre-requisites for this course (if any): QUAL1702518-2 -		
7. Co-requisites for this course (if any): -		
8. Location if not on main campus: main campus -		
9. Mode of Instruction (mark all that apply):		
a. Traditional classroom	<input checked="" type="checkbox"/> centage?	<input type="text" value="70%"/>
b. Blended (traditional and online)	<input type="checkbox"/> centage?	<input type="text"/>
c. E-learning	<input type="checkbox"/> centage?	<input type="text"/>
d. Correspondence	<input checked="" type="checkbox"/> centage?	<input type="text" value="30%"/>
f. Other	<input type="checkbox"/> centage?	<input type="text"/>
Comments: During semester a field visit to Center for the Control of Poisons and Medicinal Chemistry in Makkah Region will be conducted.		

B Objectives

- The main objective of this course
 - At the end of this course, students will be able to identify the nature, properties, effects and detection of toxic substances in food and their disease manifestation in humans.
- Describe briefly any plans for developing and improving the course that are being implemented. (e.g. increased use of the IT or online reference material, changes in content as a result of new research in the field)
 - Increased use of web based reference material.
 - Changes in content as a result of new research in the field.

C. Course Description (Note: General description in the form used in the program's bulletin or handbook)

Course Description:

The course will cover topics such as formation, characteristics, and control of various toxins (natural and synthetic) that occur in food. Fundamental concepts will be covered including dose-response relationships, absorption of toxicants, distribution and storage of toxicants, biotransformation and elimination of toxicants, target organ toxicity, teratogenesis, mutagenesis, carcinogenesis, food allergy, and risk assessment. The impact of contaminants on nutrient utilization, adverse effects of nutrient excesses, metabolism of food toxicants, and the relationship of the body's biologic defense mechanisms to such toxicants will be covered.

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
Principles of food toxicology	1	2
Food allergies and sensitivity	1	2
Natural Toxins in Plant & Animal Foodstuffs	1	2
Safety and genetically modification foods	1	2
Microbial toxins in foods	2	4
Food Contaminants from Industrial Wastes	1	2
Pesticide residues in the food supply	1	2
Field Visit	1	4
Food additives & pesticide residues in foods	1	2
Analysis of chemical toxicants and contaminants in foods	1	2
Toxicants Formed during Food Processing	1	2
Assessment of food toxicology	1	2
Determination of Toxicants in Foods	1	2
Total	14	28

2. Course components (total contact and credit hours per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other	Total
Contact Hours	Planned	24	-	-	-	4	28
	Actual	24				4	28
Credit	Planned	2	-	-	-	-	2
	Actual	2				-	2

3. Individual study/learning hours expected for students per week.

2

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategies

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategies

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and targeted learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy should fit in together with the rest to form an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Curriculum Map

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Outline the toxicology and toxicity	Lectures	Periodic exams
1.2	Describe all kinds of food toxicology	Class presentation	Oral assessment
1.3	List the types of toxic responses	Small group discussion.	Oral assessment.
2.0	Cognitive Skills		
2.1	Compose how toxicants are classified.	Class presentation	Periodic exams
2.2	Contrast toxic effects of specific food toxicants	Problem solving	Periodic exams
2.3	predict formations of natural Toxins in Plant Foodstuffs	Lectures	Final written exams
3.0	Interpersonal Skills & Responsibility		
3.1	Demonstrate mechanisms of action for specific food toxicants	Problem solving	Final written exams
3.2	Justify the mechanisms for interactions between multiple food compounds and/or drugs	Small group discussion	Class presentations
3.3	Appraise group participation and leadership for display microbial toxins in foods	Class presentation	Oral assessment
4.0	Communication, Information Technology, Numerical		
4.1	Illustrate verbal and nonverbal communication in Food allergies versus food toxicants presentation	Cooperative learning	Oral assessment
4.2	Interpret using IT to mention the issues related to presence and management of food toxicity and potentially toxic compounds in our food supply	Class presentation	Final written exams
4.3	Demonstrate basic math and statistics in analyzing of chemical toxicants and contaminants in foods	Class presentation	Periodic exams

5. Assessment Task Schedule for Students During the Semester

	Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Assignments	8 th	30%
2	Group project	7 th	30%
3	Reports	10 th	20%
4	Case study	12 th	20%
	Total		100%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic counseling. (include the time teaching staff are expected to be available per week)
Students can contact the academic staff for one-to-one consultation regarding specific academic matters from time to time. Information on academic staff contact details are available and appropriately publicized to students.

Additionally, students are able to contact staff members directly with questions and requests for assistance via telephone, email or the online environment when available. Consultation times can be used to proactively work with students over the course of the semester

E Learning Resources

1. List Required Textbooks

Deshpande (2016): Food Toxicology. CRC Press LLC. USA

2. List Essential References Materials (Journals, Reports, etc.)

- J. of Food and Cosmetics Toxicology
- J. of Food Science and Toxicology

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- www.asciencedirect.org
- [Digital Saudi Libraries\(DSL\)](#)

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- CD-ROM containing video presentation for Toxicity Assessment in Humans.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access, etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- Class room
- Data show
- White board.

2. Technology resources (AV, data show, Smart Board, software, etc.)
data show

- Monitors and CPU
- Wireless internet connection.

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

G Course Evaluation and Improvement Procedures

1. Strategies for Obtaining Student's Feedback on Effectiveness of Teaching

- Confidential instructor evaluation questionnaire for the total course in the final lecture
- Students – College meeting

2. Other Strategies for Evaluation of Teaching by the Instructor or the Department

- Regular scientific meeting with the department members
- Departmental council discussion
- Peer consultation in teaching

<p>- Student feedback report to be analyzed by the course instructor and submit the results to the department head.</p> <p>- Video recording</p>
<p>3. Procedures for Teaching Development</p> <ol style="list-style-type: none">1. Review the students' feedback and work on the weak points.2. Conduct departmental workshops to discuss how to support the teaching process.3. Monitoring of teaching activates by senior faculty members4. Periodical departmental revisions of the methods of teaching.5. Attend educational courses of teaching methodology
<p>4. Procedures for Verifying Standards of Student's Achievement (e.g. check marking by an independent member teaching staff of a sample of student's work, periodic exchange and remarking of tests or a sample of assignments with staff members at another institution)</p> <ol style="list-style-type: none">1- independent member teaching staff sharing in the oral and practical final exam2- make an ideal answer for the final exam help to correct some students paper by independent teaching member3- The use of external examiners.4- Providing samples of all kinds of assessment in the departmental course portfolio of each course.5- Periodical changing and remarking test
<p>5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for developing it.</p> <ol style="list-style-type: none">1. Design graduate survey and employee surveys.2. Analyze the results of the two surveys and detect the weakness & strengthens in the course.3. Recognize action plane regarding the course credits, content, depth, breadth, teaching methodology.4. Submit a course report to the curriculum committee in the department to discuss the action plane.5. Submit the final action plane to the department Council for approval6. Stick-holder meeting foe the advantage and the disadvantage in the graduates.7. The course material and learning outcomes are periodically reviewed and the changes to be taken are approved in the departmental and higher councils8. The head of department and faculty take the responsibility of implementing the proposed changes.9. Follow the national researches in the different topics related to the course or new topics can added to the course

Name of Course Instructor: Dr. El-Sayed Hamed Ali Bakr

Signature: _____ Date Completed 5/2/1440

Program Coordinator: Dr. Khloud Ghafouri

Signature:  Date Received: 11/2/1440

Kingdom of Saudi Arabia
Ministry of Education
Umm Al-Qura University
Deanship of Graduate Studies



المملكة العربية السعودية
وزارة التعليم
جامعة أم القرى
عمادة الدراسات العليا

Course Title: Food Processing & Preservation

Course Code: QUAL1702516-3

Date: 20.....-.....-.....	Institution: Umm Al Qura university
College: Faculty of Applied medical science	Department: Clinical nutrition department

A. Course Identification and General Information

1. Course title and code: Food Processing & Preservation – QUAL 1702516-3		
2. Credit hours: 3 CH		
3. Program(s) in which the course is offered. PgDip of Food Safety and Quality Control		
4. Name of faculty member responsible for the course Dr. Seham Zahran		
5. Level/year at which this course is offered: 1 st term		
6. Pre-requisites for this course (if any):		
7. Co-requisites for this course (if any):		
8. Location if not on main campus: ...		
9. Mode of Instruction (mark all that apply):		
a. Traditional classroom	<input checked="" type="checkbox"/> percentage?	<input type="text" value="90%"/>
b. Blended (traditional and on line)	<input type="checkbox"/> percentage?	<input type="text"/>
c. E-learning	<input checked="" type="checkbox"/> percentage?	<input type="text" value="10%"/>
f. Other	<input type="checkbox"/> percentage?	<input type="text"/>
Comments:		

B Objectives

1. The main objective of this course

At the end of this course the student must be able to:

- know the causes of food spoilages
- know and describe the effects of food preservation methods on the nutritional value and quality of food .
- To identify & apply appropriate food processing and preservation methods for food product
- student will take field training in hospitals (food services department) and factories for preparing formula for patients to recognize the sanitation and hygienic instructions.

2. Describe briefly any plans for developing and improving the course that are being **implemented**. (e.g. increased use of the IT or online reference material, changes in content as a result of new research in the field)

- Increased use of IT or web based reference material.
- Changes in content as a result of new research in the field.

C. Course Description (Note: General description in the form used in the program's bulletin or handbook)

Course Description:

This course assists the students in understanding :

- The effect of specific food processing and preservation techniques such as pasteurization, dehydration, thermal sterilization, freezing, chemical additives on storage, shelf-life, sensory and nutritional properties of different foods.
- Colorants, flavors, food additives, and their effect on the quality of food and public health
- The course cover Food preservation Techniques, Protective packaging and interaction of the food with the package

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
Introduction to food processing operations a- Principles of food processing and preservation b- Causes of food spoilage c- Good Manufacturing Practices, d- Food Laws and Regulations e- Traditional and modern methods of food processing and preservation for different food categories	2	4

Food Preservation by Application of Heat a. Principles of Heat Transfer b. Blanching c. Pasteurization d. Heat Sterilization	2	4
Food Preservation through Water Removal a. Forms of Water in Foods b. Water Activity c. Drying Technology d. Evaporation Technology	1	2
Food Preservation through Temperature Reduction a. Chilling different degree and its suitability for different food and shelf life periods b. Freezing different freezing point and its relation to expiry date of meat and milk products c- Effect of freezing on the drug and insecticides residues	1	2
Field visits to work sites	1	2
Food Preservation by Radiation: a. Ionizing Radiation b. Microwave c- Hazards of using radiation and microwaves in cooking or preservation	1	2
Effect of various food preservation technologies on : a- The microbiological stat of the products b- life and safety issues c- Sensory and nutritional quality of foods. d- Physical, chemical and sensory evaluation of processed foods.	2	2
Food Preservation by use of: a. Salt b. Smoke c. Sugar d. Other Chemical Additives e- Health hazards of smoking and other additives	1	2
Food coloring agents and Flavors a- Food Coloring agents or synthetic pigments in Animal and dairy products 1- Different colors and health hazards for each color 2- Methods for determination of synthetic pigments, flavors and food additives	2	4

Field visits to work sites	1	2
Total	14	30

2. Course components (total contact and credit hours per semester):							
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other	Total
Contact Hours	Planned	24	-		28	0	56
	Actual	24			28		56
Credit	Planned	2	-		2	0	2
	Actual	2			2		2

3. Individual study/learning hours expected for students per week.	2
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategies

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and targeted learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy should fit in together with the rest to form an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Curriculum Map

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	<ul style="list-style-type: none"> Recognize the concepts and Approach of Food spoilage list the concepts of food processing Recognize the food law in using food additives, colorants, and flavors in food. label the different methods of food preservatives 	Lectures. Class discussion. Small group discussion. Guided self-learning.	Report assignment.
1.2			
2.0	Cognitive Skills		
2.1	Student is expected to:	Lectures and Homework	Assignment.

	<ul style="list-style-type: none"> explain the important chemical and physical interactions between food constituents that affect quality and nutritive value Recognize the effect of extrinsic factors on the reactions on food compounds occurring during processing and storage. 	Discussions	
2.2			
3.0	Interpersonal Skills & Responsibility		
3.1	<ul style="list-style-type: none"> Show positive relation with others. Evaluate the various food preservation technologies Illustrate the ethical and professional standard of ethics in the food safety area 	<p>Students will be assigned into small groups and make free discussions.</p> <p>Class presentation.</p> <p>Group discussion.</p>	<ul style="list-style-type: none"> Assessment of student through regular assignments,
3.2			
4.0	Communication, Information Technology, Numerical		
4.1	<p>By the end of the class, students should show the following skills:</p> <ul style="list-style-type: none"> Illustrate the effectiveness of communication with peers and teaching faculty. Operate the technology in analyzing data and information. interpret the practice methods within the ethical, cultural, and professional standards. operate as an active participator on the class with the professor and his colleagues. Demonstrate the using of technology in communication with others. research within the computer software applications related to laboratory testing. 	Students are required to make report and assignments requiring proper style and reference format.	Assessment of student assignments (25% of the assessment is based on proper writing style, and referencing format.
4.2			
5.0	Psychomotor(if any)		
5.1	Examine the expiry date and temperature of preservation	Lectures and Homework Discussions	Assignment.

5.2	Experiment the refractometers for detection the salt and sugar concentration in preserved food	Lectures and Homework Discussions	Assignment.
5.3	Employ the food coloring agents in colored food using colometers and spectrophotometer	Lectures and Homework Discussions	Assignment.

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategies

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and targeted learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy should fit in together with the rest to form an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Curriculum Map

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	<ul style="list-style-type: none"> List concepts and Approach of Food spoilage Recognize concepts of food processing Recognize the food law in using food additives, colorants, and flavors in food. List the different methods of food preservatives 	Lectures. Class discussion. Small group discussion. Guided self-learning.	Report assignment.
1.2			
2.0	Cognitive Skills		
2.1	Student is expected to: <ul style="list-style-type: none"> Have the ability to explain the important chemical and physical interactions between food constituents that affect quality and nutritive value Able to calculate the effect of extrinsic factors on the reactions on food compounds occurring 	Lectures and Homework Discussions	Assignment.

	during processing and storage.		
2.2			
3.0	Interpersonal Skills & Responsibility		
3.1	<ul style="list-style-type: none"> Perform positive relation with others. Work in group. Ability to lead a team. Apply the ethical and professional standard of ethics in the food safety area 	<p>Students will be assigned into small groups and make free discussions.</p> <p>Class presentation.</p> <p>Group discussion.</p>	<ul style="list-style-type: none"> Assessment of student through regular assignments,
3.2			
4.0	Communication, Information Technology, Numerical		
4.1	<p>By the end of the class, students should show the following skills:</p> <ul style="list-style-type: none"> Perform effective communication with peers and teaching faculty. Ability to use technology in analyzing data and information. The ability to practice within the ethical, cultural, and professional standards. The ability to be an active participator on the class with the professor and his colleagues. Document properly following the legal principles of documentation Ability to use technology in communication with others. Awareness of computer software applications related to laboratory testing. 	<p>Students are required to make report and assignments requiring proper style and reference format.</p>	<p>Assessment of student assignments (25% of the assessment is based on proper writing style, and referencing format.</p>
4.2			
5.0	Psychomotor(if any)		
5.1	students should write their comments about the expiry date and temperature of preservation	Lectures and Homework Discussions	Assignment.
5.2	Be able to differentiate between methods of drying food products	Lectures and Homework	Assignment.

		Discussions	
5.3	able to compare between chilled and freezing products according their knowledge from this course	Lectures and Homework Discussions	Assignment.
5.4	Applying refractometers for detection the salt and sugar concentration in preserved food	Lectures and Homework Discussions	Assignment.
5.5	Detecting food coloring agents in colored food using colometers and spectrophotometer	Lectures and Homework Discussions	Assignment.

5. Assessment Task Schedule for Students During the Semester

	Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Assignments	12 th	30%
2	Group project	13 th	30%
3	Reports	6 th	20%
4	Case study	12 th	20%
	Total		100%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic counseling. (include the time teaching staff are expected to be available per week)

Students can contact the academic staff for one-to-one consultation regarding specific academic matters from time to time. Information on academic staff contact details are available and appropriately publicized to students.

Additionally, students are able to contact staff members directly with questions and requests for assistance via telephone, email or the online environment when available. Consultation times can be used to proactively work with students over the course of the semester

E Learning Resources

1. List Required Textbooks:

- a- Dryden C. E., Outlines of Chemical Technology for the 21st Century y, East-West Press, 2017, 7th edition STEVE W. CUI , FOOD
- b- Ramaswamy, H S. & Marcotte, M. 2014. Food processing, principles and applications. 2nd edition Taylor & Francis.

2. List Essential References Materials (Journals, Reports, etc.)

Journal of Food Processing Food Technology- IFT
3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.
4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access, etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) <ul style="list-style-type: none"> • Class room • Labs • Data show • White board.
2. Technology resources (AV, data show, Smart Board, software, etc.) <ul style="list-style-type: none"> • Monitors and CPU Wireless internet connection.
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

G Course Evaluation and Improvement Procedures

1. Strategies for Obtaining Student's Feedback on Effectiveness of Teaching - Confidential instructor evaluation questionnaire for the total course in the final lecture - Students – College meeting
2. Other Strategies for Evaluation of Teaching by the Instructor or the Department - Regular scientific meeting with the department members - Departmental council discussion - Peer consultation in teaching - Student feedback report to be analyzed by the course instructor and submit the results to the department head. - Video recording
3. Procedures for Teaching Development 1. Review the students' feedback and work on the weak points. 2. Conduct departmental workshops to discuss how to support the teaching process. 3. Monitoring of teaching activates by senior faculty members 4. Periodical departmental revisions of the methods of teaching. 5. Attend educational courses of teaching methodology
4. Procedures for Verifying Standards of Student's Achievement (e.g. check marking by an independent member teaching staff of a sample of student's work, periodic exchange and remarking of tests or a sample of assignments with staff members at another institution) 1- The use of external examiners. 2- Providing samples of all kinds of assessment in the departmental course portfolio of each course. 3- Periodical changing and remarking test

5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for developing it.
1. Design graduate survey and employee surveys.
 2. Analyze the results of the two surveys and detect the weakness & strengthens in the course.
 3. Recognize action plane regarding the course credits, content, depth, breadth, teaching methodology.
 4. Submit a course report to the curriculum committee in the department to discuss the action plane.
 5. Submit the final action plane to the department Council for approval
 6. Stick-holder meeting foe the advantage and the disadvantage in the graduates.
 7. The course material and learning outcomes are periodically reviewed and the changes to be taken are approved in the departmental and higher councils
 8. The head of department and faculty take the responsibility of implementing the proposed changes.
 9. Follow the national researches in the different topics related to the course or new topics can added to the course

Name of Course Instructor: Dr. Seham Zahran

Signature: _____ Date Completed 5/2/1440

Program Coordinator: Dr. Khloud Ghafouri

Signature: _____ Date Received: 11/2/1440

Kingdom of Saudi Arabia
Ministry of Education
Umm Al-Qura University
Deanship of Graduate Studies



المملكة العربية السعودية
وزارة التعليم
جامعة أم القرى
عمادة الدراسات العليا

Course Title: Food Microbiology

Course Code: QUAL1702512-3

Date: 20.....-.....-.....	Institution: Umm Al Qurauniversity
College: Faculty of Applied medical science	Department: Clinical nutrition department

A. Course Identification and General Information

1. Course title and code: Food Microbiology - QUAL1702512-3		
2. Credit hours: 3 CH		
3. Program(s) in which the course is offered. PgDip of Food Safety and Quality Control		
4. Name of faculty member responsible for the course		
5. Level/year at which this course is offered: 1st term		
6. Pre-requisites for this course (if any): Fundamentals of nutrition		
7. Co-requisites for this course (if any):		
8. Location if not on main campus: ...		
9. Mode of Instruction (mark all that apply):		
a. Traditional classroom	<input checked="" type="checkbox"/>	percentage? <input type="text" value="90%"/>
b. Blended (traditional and on line)	<input type="checkbox"/>	percentage? <input type="text"/>
c. E-learning	<input type="checkbox"/>	percentage? <input type="text"/>
d. Correspondence	<input checked="" type="checkbox"/>	percentage? <input type="text" value="10%"/>
f. Other	<input type="checkbox"/>	percentage? <input type="text"/>
Comments:		

1. What is the main purpose for this course?

The student should obtain the Specific knowledge about food microbiology and microbial assessment of food for quality and safety.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- **Increased use of the IT or online reference material**
- **changes in content as a result of new research in the field**

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This module is designed to integrate theory and practice of food microbiology and microbial risk assessment. It covers the Sources of microorganisms in nature; structure and reproduction of microbial cell and its implications in the food industry; classification of microorganisms, desirable and undesirable roles of microorganisms in the food industry; sources, growth and destruction of microorganism in foods. Morphology, classification, identification and life cycles of parasites transmitted via food, Food borne diseases and control of microorganisms of importance to food safety.

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
Introduction to food Microbiology	1	2
Classification of different microbes	1	2
Physical control of bacterial growth, Chemical control of bacterial growth	1	2
Factors affecting microbial growth in foods.	2	4
Morphology, classification, identification and life cycles of parasites transmitted via food	1	2
Food spoilage and its causes	1	2
Sources of food contamination	1	2
Food borne diseases	4	8
Indicators microorganisms	1	2

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	28			28		56
	Actual	28			28		56
Credit	Planned	2			14		42
	Actual	2			14		42

3. Additional private study/learning hours expected for students per week.

3

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	List of the Sources of contamination with microorganisms	<ul style="list-style-type: none"> • Lectures • Laboratory practical sessions • Assignment tasks 	<ul style="list-style-type: none"> • Quizzes • practical examination
1.2	List the different methods used to control the bacterial growth in food products		
1.3	Recognize the concept of food spoilage,		
2.0	Cognitive Skills		
2.1	Explain the effect of microorganisms in food and analyze their relationship with each other	<ul style="list-style-type: none"> • Lectures • Laboratory practical sessions • Discussion sessions and solving problems 	<ul style="list-style-type: none"> • Quizzes • practical examination
2.2	Summarizes the negative effects of microorganisms in food and how to benefit from the positive effects of these organisms Evaluate the activity of the antimicrobial agents and the quality of foods		
3.0	Interpersonal Skills & Responsibility		
3.1	Carry out the preparation of food samples	<ul style="list-style-type: none"> • Laboratory practical sessions • Assignment tasks • Self-learning activities. • Discussion sessions and solving problems 	<ul style="list-style-type: none"> • practical examination • Team projects. • Reports and Class activities
3.2	Diagnoses the common symptoms of a food borne disease		
4.0	Communication, Information Technology, Numerical		
4.1	Work hard with others	<ul style="list-style-type: none"> • Laboratory practical sessions • Assignment tasks • Self-learning activities. • Research assignments • Discussion sessions and solving problems 	<ul style="list-style-type: none"> • Team projects. • Reports and Class activities
4.2	Use the modern tool technology in the field of microbiology		
5.0	Psychomotor		
5.1	Implement the tests required for sanitary examination of food.	<ul style="list-style-type: none"> • Laboratory practical sessions 	<ul style="list-style-type: none"> • Team projects. • Reports and Class

		<ul style="list-style-type: none"> • Assignment tasks • Self-learning activities. • Research assignments 	<ul style="list-style-type: none"> • activities • practical examination
	Indirect methods		Course evaluation survey and external evaluators for lab sessions

5. Assessment Task Schedule for Students During the Semester

	Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Assignments	11 th	30%
2	Group project	12 th	30%
3	Reports	10 th	20%
4	Case study	12 th	20%
	Total		100%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Students can contact the academic staff for one-to-one consultation regarding specific academic matters from time to time. Information on academic staff contact details are available and appropriately publicized to students.

Additionally, students are able to contact staff members directly with questions and requests for assistance via telephone, email or the online environment when available. Consultation times can be used to proactively work with students over the course of the semester

E Learning Resources

List Required Textbooks

- OKAFOR, Nduka; OKEKE, Benedict C. Modern industrial microbiology and biotechnology. CRC Press, 2017. BANWART, George. Basic food microbiology. Springer Science & Business Media, 2012.
- Basarkar S, Practical Guide Book for Hospital Infection Risk Assessment Prevention and Control, 2016
- Mitchell, R. (2000). Practical Microbiological Risk Assessment, London: Chadwick House Group

2. List Essential References Materials (Journals, Reports, etc.)

- J. of food science
- J. of milk and food technology.
- J. of Food Protection
- J. Food Microbiology
- J. of Dairy Science

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

<https://microbeonline.com/types-of-bacteriological-culture-medium>

4. Other learning material such as computer-based programs/CD, professional standards or regulations and

software.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access, etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

Class rooms: 100

2. Technology resources (AV, data show, Smart Board, software, etc.)

Computing unites, monitors and wireless internet connection

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

G Course Evaluation and Improvement Processes

1. Strategies for Obtaining Student's Feedback on Effectiveness of Teaching

- **Confidential instructor evaluation questionnaire for the total course in the final lecture**

- **Students – College meeting**

2. Other Strategies for Evaluation of Teaching by the Instructor or the Department

- **Regular scientific meeting with the department members**

- **Departmental council discussion**

- **Peer consultation in teaching**

- **Student feedback report to be analyzed by the course instructor and submit the results to the department head.**

- **Video recording**

3. Procedures for Teaching Development

1. Review the students' feedback and work on the weak points.

2. Conduct departmental workshops to discuss how to support the teaching process.

3. Monitoring of teaching activates by senior faculty members

4. Periodical departmental revisions of the methods of teaching.

5. Attend educational courses of teaching methodology

4. Procedures for Verifying Standards of Student's Achievement (e.g. check marking by an independent member teaching staff of a sample of student's work, periodic exchange and remarking of tests or a sample of assignments with staff members at another institution)

1- independent member teaching staff sharing in the oral and practical final exam

2- make an ideal answer for the final exam help to correct some students paper by independent teaching member

3- The use of external examiners.

4- Providing samples of all kinds of assessment in the departmental course portfolio of each course.

5- Periodical changing and remarking test

5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for developing it.

1. Design graduate survey and employee surveys.

2. Analyze the results of the two surveys and detect the weakness & strengthens in the course.

3. Recognize action plane regarding the course credits, content, depth, breadth, teaching methodology.

4. Submit a course report to the curriculum committee in the department to discuss the action plane.

5. Submit the final action plane to the department Council for approval
6. Stick-holder meeting foe the advantage and the disadvantage in the graduates.
7. The course material and learning outcomes are periodically reviewed and the changes to be taken are approved in the departmental and higher councils
8. The head of department and faculty take the responsibility of implementing the proposed changes.
9. Follow the national researches in the different topics related to the course or new topics can added to the course

Name of Course Instructor: Dr. Mohammad Abd Elmoneim Elmadbouly

Signature:  Date Specification Completed: 17/10/2018

Program Coordinator: Dr. Khlood Ghafouri

Signature:  Date Received: 11/2/1440

Kingdom of Saudi Arabia
Ministry of Education
Umm Al-Qura University
Deanship of Graduate Studies



المملكة العربية السعودية
وزارة التعليم
جامعة أم القرى
عمادة الدراسات العليا

Course Title: Fundamentals of Food and Nutrition

Course Code: QUAL1702513-2

Date: 20.....-.....-.....	Institution: Umm Al Qura.
College: Faculty of Applied medical science. Department: . Clinical nutrition.	

A. Course Identification and General Information

1. Course title and code: Fundamentals of Food and Nutrition -QUAL1702513-2		
2. Credit hours: 2 CH		
3. Program(s) in which the course is offered. Food Safety and Quality Control (If general elective available in many programs indicate this rather than list programs)		
4. Name of faculty member responsible for the course		
5. Level/year at which this course is offered: 1 st semester		
6. Pre-requisites for this course (if any):		
7. Co-requisites for this course (if any):		
8. Location if not on main campus:		
9. Mode of Instruction (mark all that apply):		
a. Traditional classroom	<input checked="" type="checkbox"/> centage?	<input type="text" value="80"/>
b. Blended (traditional and online)	<input type="checkbox"/> centage?	<input type="text"/>
c. E-learning	<input type="checkbox"/> centage?	<input type="text"/>
d. Correspondence	<input type="checkbox"/> centage?	<input type="text"/>
f. Other	<input checked="" type="checkbox"/> centage?	<input type="text" value="20%"/>
Comments: Group work		

B Objectives

The main objective of this course : At the end of this course, the student should be able to:

- To posses basic knowledge towards the understanding of self, society, surrounding in order to be well-rounded person
- To process the knowledge related to principles, theories and practice in the course.
- To provide students an opportunity to enhance and test their critical thinking skills through structured problem solving

2. Describe briefly any plans for developing and improving the course that are being implemented. (e.g. increased use of the IT or online reference material, changes in content as a result of new research in the field)

- Increased use of IT or web based reference material.
- Changes in content as a result of new research in the field.

C. Course Description (Note: General description in the form used in the program's bulletin or handbook)

Course Description: This is an integrated lecture/lab/recitation course applying theories of molecular reactivity to model food systems. Lectures focus on the molecular bases of chemical phenomena that dictate the behavior of foods. Laboratories and recitations provide opportunities for students to observe, manipulate, and explore model food systems. The emphasis is on the major food components (water, lipids, proteins, and carbohydrates) and their behavior under conditions of particular relevance to food processing.

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
Water activity and water migration; the basis for food preservation, Sorption isotherms, roles and chemical reaction in foods (concepts emphasized in a laboratory experiment)	2	2
The roles of carbohydrates in food Structure and properties and effect on food system , color, flavor, and texture (concepts emphasized in a laboratory experiment).	2	4
Starch : Structure, properties and application in food industry	1	2
The roles of lipids in food structure, color, flavor, and texture (concepts emphasized in a laboratory experiment)	1	2
The roles of proteins in food structure, color, flavor, and texture (concepts emphasized in a laboratory experiment)	2	4
Fruits and vegetables; ripening and storage quality (concepts emphasized in a laboratory experiment)	1	4
The roles of enzymes in food production, processing, and quality attributes (concepts emphasized in a laboratory experiment) Enzymatic and non-enzymatic browning reactions; influences on color , flavor, and texture (concepts emphasized in a laboratory experiment)	2	4
Vitamins and minerals I: Types, chemical reaction and processing effect (concepts emphasized in a laboratory experiment)	2	4

Food additives and product labeling and Heavy Metals: Definition - Characteristics of heavy Metals - Who gets heavy metal poisoning? - Symptoms of acute and chronic poisoning.	1	2
	14	2

2. Course components (total contact and credit hours per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other	Total
Contact Hours	Planned	14	-	7		0	22
	Actual	14		7			22
Credit	Planned	1	-	1		0	2
	Actual	1		1			2

3. Individual study/learning hours expected for students per week.

2

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategies

On the table below are the five NQF Learning Domains, numbered in the left column. First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). Second, insert supporting teaching strategies that fit and align with the assessment methods and targeted learning outcomes. Third, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy should fit in together with the rest to form an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Curriculum Map

5. Assessment Task Schedule for Students During the Semester

	Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Assignments	12th	40%
2	Reports	10th	30%
3	Group work	12th	30%
	Total		100%

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategies

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and

targeted learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy should fit in together with the rest to form an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Curriculum Map

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	state benefits and functions of each nutrient in food productions	<ul style="list-style-type: none"> Lecture Case studies 	<ul style="list-style-type: none"> Exams
1.2	Describe the industrialized roles of nutrients like vitamins and minerals as preservatives.	<ul style="list-style-type: none"> Group discussion Group assignment 	<ul style="list-style-type: none"> Short essays rubric
2.0	Cognitive Skills		
2.1	Explain the importance of nutrients as coloring, flavoring and textures	<ul style="list-style-type: none"> Lecture Case studies Group discussion 	<ul style="list-style-type: none"> Exams Short essays rubric
2.2	Plan meals for 1 day.		
3.0	Interpersonal Skills & Responsibility		
3.1	Show positive relation with others.	<ul style="list-style-type: none"> Case studies Individual presentation 	<ul style="list-style-type: none"> Oral assessment at the end of each project rubric
4.0	Communication, Information Technology, Numerical		
4.1	Operate effectively in communication with peers and teaching faculty.	-Small group work.	<ul style="list-style-type: none"> group presentations rubric
4.2	Evaluate using technology in analyzing data and information.	-Role playing.	<ul style="list-style-type: none"> Peer evaluation rubric
	Indirect assessment		Indirect: Course evaluation

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic counseling. (include the time teaching staff are expected to be available per week)

Students can contact the academic staff for one-to-one consultation regarding specific academic matters from time to time. Information on academic staff contact details are available and appropriately publicized to students.

Additionally, students are able to contact staff members directly with questions and requests for assistance via telephone, email or the online environment when available. Consultation times can be used to proactively work with students over the course of the semester

E Learning Resources

List Required Textbooks

- Schiff, Wendy. Nutrition Essentials: A Personal Approach 2nd edition. McGraw Hill Publishers, 2015. ISBN1 0: 0073402575 (Stated by the publishers as a text for the non-science major.)
- Fennema, O, Food Chemistry 3rd edition.,1996. Marcel Dekker, N.Y.
- Suzane Nielsen, Food Analysis 2nd Edition, 2003. An Aspen publication, Gaithersburg, Maryland.

<ul style="list-style-type: none"> • Connie Weaver, Food Chemistry Laboratory 1996. CRC Press, N.Y
<p>2. List Essential References Materials (Journals, Reports, etc.)</p> <ul style="list-style-type: none"> • Betancourt JR, Green AR: Commentary: linking cultural competence training to improved health outcomes: perspectives from the field, Acad Med 85:583, 2010. • Diabetes Care and Education Dietetic Practice Group, Goody CM, Drago L, editors: Cultural food practices, Chicago, 2010, American Dietetic Association. • Institute of Medicine (IOM), Food and Nutrition Board, Consensus Report: Dietary reference intakes: water, potassium, sodium, chloride, and sulfate. Accessed 11 March, 2011
<p>3. . List Electronic Materials, Web Sites, Facebook, Twitter, etc.</p> <ul style="list-style-type: none"> • http://www.health24.com/Diet-and-nutrition/Nutrition-basics/Sugar-why-the-bad-rap-2014, 0319 • http://www.srmuniv.ac.in/sites/default/files/downloads/Carbohydrate_Metabolism. • https://opentextbc.ca/anatomyandphysiology/chapter/24-4-protein-metabolism • https://www.fda.gov/downloads/food/guidance%20complianceregulatoryinformation/%20guidance documents/foodlabelingnutrition/foodlabelingguide/ucm265446.
<p>4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.</p> <ul style="list-style-type: none"> • Computer with food analysis programs

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access, etc.)
<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p> <ul style="list-style-type: none"> • Classrooms with smart board
<p>2. Technology resources (AV, data show, Smart Board, software, etc.)</p> <ul style="list-style-type: none"> • Data show, and Smart Board
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

G Course Evaluation and Improvement Procedures

<p>1. Strategies for Obtaining Student's Feedback on Effectiveness of Teaching</p> <ul style="list-style-type: none"> - Confidential instructor evaluation questionnaire for the total course in the final lecture - Students – College meeting
<p>2. Other Strategies for Evaluation of Teaching by the Instructor or the Department</p> <ul style="list-style-type: none"> - Regular scientific meeting with the department members - Departmental council discussion - Peer consultation in teaching - Student feedback report to be analyzed by the course instructor and submit the results to the

<p>department head. - Video recording</p>
<p>3. Procedures for Teaching Development</p> <ol style="list-style-type: none">1. Review the students' feedback and work on the weak points.2. Conduct departmental workshops to discuss how to support the teaching process.3. Monitoring of teaching activates by senior faculty members4. Periodical departmental revisions of the methods of teaching.5. Attend educational courses of teaching methodology
<p>4. Procedures for Verifying Standards of Student's Achievement (e.g. check marking by an independent member teaching staff of a sample of student's work, periodic exchange and remarking of tests or a sample of assignments with staff members at another institution)</p> <ol style="list-style-type: none">1- independent member teaching staff sharing in the oral and practical final exam2- make an ideal answer for the final exam help to correct some students paper by independent teaching member3- The use of external examiners.4- Providing samples of all kinds of assessment in the departmental course portfolio of each course.5- Periodical changing and remarking test
<p>5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for developing it.</p> <ol style="list-style-type: none">1. Design graduate survey and employee surveys.2. Analyze the results of the two surveys and detect the weakness & strengthens in the course.3. Recognize action plane regarding the course credits, content, depth, breadth, teaching methodology.4. Submit a course report to the curriculum committee in the department to discuss the action plane.5. Submit the final action plane to the department Council for approval6. Stick-holder meeting foe the advantage and the disadvantage in the graduates.7. The course material and learning outcomes are periodically reviewed and the changes to be taken are approved in the departmental and higher councils8. The head of department and faculty take the responsibility of implementing the proposed changes.9. Follow the national researches in the different topics related to the course or new topics can added to the course

Name of Course Instructor: _____

Signature: _____ Date Completed 5/2/1440

Program Coordinator: Dr. Khloud Ghafouri

Signature:  Date Received: 11/2/1440

Kingdom of Saudi Arabia
Ministry of Education
Umm Al-Qura University
Deanship of Graduate Studies



المملكة العربية السعودية
وزارة التعليم
جامعة أم القرى
عمادة الدراسات العليا

Course Title: Food Laws and Standards -

Course Code : QUAL1702514-2

Institution: Umm Al-Qura University	Date: 16/10/2018
College/Department : Faculty of Applied Medical Sciences/ Clinical Nutrition Department	

A. Course Identification and General Information

1. Course title and code: Food Laws and Standards - QUAL1702514-2		
2. Credit hours: 2 Credit hours (2 theoretical)		
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) Diploma of Food Safety and Quality Control		
4. Name of faculty member responsible for the course : Abdelelah Sami Jazar		
5. Level/year at which this course is offered:		
6. Pre-requisites for this course (if any) : None		
7. Co-requisites for this course (if any): None		
8. Location if not on main campus:		
9. Mode of Instruction (mark all that apply):		
a. traditional classroom	<input checked="" type="checkbox"/>	What percentage? <input type="text" value="80%"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage? <input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage? <input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage? <input type="text"/>
f. other	<input checked="" type="checkbox"/>	What percentage? <input type="text" value="20%"/>
Comments: Tutorial		

B Objectives

1. What is the main purpose for this course?

At the end of this course the student must be able to:

1. Understand the history of the evolution of food regulation in different regions of the world
2. Explain the importance and purpose of food legislation.
3. Differentiate between laws, regulations.
4. Understand the enforcement of food legislations in Saudi Arabia
5. Explain how regulatory efforts have addressed HACCP, GMPs, food labeling, packaging and pesticide residues.
6. Have knowledge of the Saudi general food regulations.

- Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)
- Increased use of the IT or online reference material
- changes in content as a result of new research in the field

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

The course of food laws and standards is designed to provide the opportunity for in-depth study of the importance and development of food legislation, codes of practice and specifications, and formulations of food standards. In addition this course surveys the food laws and regulations of a variety of countries and regions. After an overview of general concepts in global food regulation and the international food safety agencies, the course compares and contrasts the similarities and differences in food law and regulations around the world. This course gives the student a better understanding of the issues involved in the regulation of foods and food products on a national and global level.

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours

<p>History of food laws and regulations</p> <ul style="list-style-type: none"> • The Need for Food Law • The 1906 Pure Food and Drug Act • Evolution of the Food Low • History of the Saudi Food and Drug Authority (SFDA) regulations. • Programs and standards of the Ministry of Municipal and Rural Affairs in Saudi Arabia 	1	2
<p>Introduction to Global Food Law, General Concepts, and International Agencies</p> <ul style="list-style-type: none"> • Overview of the US and European Food Legal System • Sources of Food Law • Food Laws, Regulations and Policies <ul style="list-style-type: none"> 1. Law: General Principles 2. Regulations: the Rule Making Process 3. Polices • Primary and Secondary Agencies • What Is Food? FDA Jurisdiction and Authority • What Are Meat, Poultry, and Eggs? USDA/FSIS Jurisdiction and Authority 	1	2
<p>Federal Inspections and Enforcement</p> <ul style="list-style-type: none"> • FSIS Inspection Authority and Enforcement Tools • Overview of FDA Inspection Process and Enforcement Tools 	1	2
<p>Adulteration</p> <ul style="list-style-type: none"> • Defining Adulteration • Types of Adulteration • Added Substances and Adulteration 	1	2
<p>Misbranding</p> <ul style="list-style-type: none"> • Defining Misbranding • The USDA and Misbranding • Packaging and Labeling <ul style="list-style-type: none"> 1. Defining the Label and Labeling Terminology 2. Regulatory Components of a Label 3. Misleading Labels 4. Common or Usual Name of Food 5. Country of Origin Labeling 6. Allergen Labeling 7. Organic and Natural Food Labeling • Labeling Claims and Misbranding <ul style="list-style-type: none"> 1. Types of Claims 2. Restrictions on Claims 	2	4

<p>Regulation of Dietary Supplements and Other Specialized Categories</p> <ul style="list-style-type: none"> • Dietary Supplements <ol style="list-style-type: none"> 1. Regulation 1906–1994 2. Regulation Under DSHEA • Other Areas of Specialized Regulations <ol style="list-style-type: none"> 1. Seafood and Juice HACCP 2. Eggs 3. Water and Ice 4. Milk 	1	2
<p>Food Additives</p> <ul style="list-style-type: none"> • Defining Food Additive • Use of Food Additive • Specification for Food Additives • Permitted Food Additives and Maximum limits • Categories of Foods and limits of Usage • Negative List for Food Additives • Labeling of Food Additives • Approval Procedures <ol style="list-style-type: none"> 1. Food Additive Petitions 2. Color Additive Petitions 3. Irradiation 4. Interim Food Additives 	2	4
<p>The Food Safety Modernization Act</p> <ul style="list-style-type: none"> • Introduction and Background on FSMA • FDA’s New Authority Under FSMA • Seven Foundational Rules • Guidance Documents and Early Enforcement 	2	4
<p>Biotechnology and Genetically Engineered Organisms</p> <ul style="list-style-type: none"> • Background • Regulatory Overview • Food Safety • FDA Policy • USDA’s Role 	1	2

<p>Saudi General Food Regulations</p> <ul style="list-style-type: none"> • Food hygiene regulations. • Food additives • Food Packages • Pesticide residues • Food labeling • Comparative food legislations CFR, USDA, EC Directives, and Codex Alimentarius Commission 	2	4
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2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	28					28
	Actual	28					28
Credit	Planned	2					2
	Actual	2					2

3. Additional private study/learning hours expected for students per week.

2

Students are asked to make some pre-reading before each lecture and they need to do some extra reading after the lecture in order to bring the answers for some questions and points raised in the lecture.

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains

(see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Recognize the history, importance, and purposes of food legislation	<ul style="list-style-type: none"> • Lectures • Class discussion 	<ul style="list-style-type: none"> • Short essay • Report assignment
1.2	Outline the food acts and related acts affecting the production and marketing of foods		
1.3	Recognize the main international and local agencies working on food legislation and their roles		
1.4	Define the main classes of food legislation (food additives, packaging, pesticides residues, safety and hygiene, labeling storage and composition)		
2.0	Cognitive Skills		
2.1	Differentiate between food laws, regulations and policies	<ul style="list-style-type: none"> • Problem solving cases • brain storming sessions 	<ul style="list-style-type: none"> • Oral discussion • Short essay • Report assignment
2.2	Interpret the enforcement processes of food legislation		
2.3	Explain the processes of issuing and approval of food laws and standards		
3.0	Interpersonal Skills & Responsibility		
3.1	Write a report on food laws and legislation	<ul style="list-style-type: none"> small groups discussions • Mini seminars 	RUBRIC FOR: <ul style="list-style-type: none"> • Assessment by peer • Research project
3.2	Show positive relationships with others and Collaborate to finish team project		
4.0	Communication, Information Technology, Numerical		
4.1	Demonstrate oral excellence for data presentation and	<ul style="list-style-type: none"> • oral presentations 	rubrics for:

	explanation of food laws-related issues.	<ul style="list-style-type: none"> Use the internet to solve (PBL) 	<ul style="list-style-type: none"> presentation of each group Evaluation of the communication between students
4.2	Use the suitable audiovisual media in the presentation of the data		
	Demonstrate written excellence for data presentation and explanation of food laws-related issues.		
	Indirect methods	Course survey and student portfolio	

5. Assessment Task Schedule for Students During the Semester

	Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Assignments	12 th	40%
2	Group project	10 th	20%
3	Reports	10 th	20%
4	Presentation	12 th	20%
	Total		100%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Students can contact the academic staff for one-to-one consultation regarding specific academic matters from time to time. Information on academic staff contact details are available and appropriately publicized to students.

Additionally, students are able to contact staff members directly with questions and requests for assistance via telephone, email or the online environment when available. Consultation times can be used to proactively work with students over the course of the semester

E Learning Resources

1. List Required Textbooks

- Sanchez. M.C. (2018), Food Law and Regulation for Non-Lawyers, (2nd ed). Pub: by Springer International Publishing.
- Neal D. Fortin (2016), Food Regulation: Law, Science, Policy, and Practice 2nd Edition. Pub: by Wiley
-
- Kenneth R Pina , Wayne L Pines (2017), A Practical Guide to Fda's Food and Drug Law and Regulation, Sixth Edition (6th ed) . Pub: by Food and Drug Law Institute

2. List Essential References Materials (Journals, Reports, etc.)

- Journal of Food Law & Policy
- Food Policy

<ul style="list-style-type: none"> Journal of Food Science
3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.
<ul style="list-style-type: none"> www.fao.org www.fda.gov/AboutFDA/CentersOffices/OfficeofFoods/CFSAN/WhatWeDo/default.htm www.fsis.usda.gov/wps/portal/fsis/home www.efla-aeda.org/about-efla ec.europa.eu/food/safety/general_food_law_en ec.europa.eu/food/safety/general_food_law_en
4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access, etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)
<ul style="list-style-type: none"> Lecture room
2. Technology resources (AV, data show, Smart Board, software, etc.)
<ul style="list-style-type: none"> Smart Board Data show Projector system
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

G Course Evaluation and Improvement Processes

1. Strategies for Obtaining Student's Feedback on Effectiveness of Teaching - Confidential instructor evaluation questionnaire for the total course in the final lecture - Students – College meeting
2. Other Strategies for Evaluation of Teaching by the Instructor or the Department - Regular scientific meeting with the department members - Departmental council discussion - Peer consultation in teaching - Student feedback report to be analyzed by the course instructor and submit the results to the department head. - Video recording
3. Procedures for Teaching Development 1. Review the students' feedback and work on the weak points. 2. Conduct departmental workshops to discuss how to support the teaching process. 3. Monitoring of teaching activates by senior faculty members 4. Periodical departmental revisions of the methods of teaching. 5. Attend educational courses of teaching methodology 6- Invite speakers from the SFDA and the Ministry of Municipal and Rural Affairs to give a lecture on the regulations and laws related to foods which applied in these institutions

7- A field visit to students of various institutions concerned with food laws and legislation in Saudi Arabia

4. Procedures for Verifying Standards of Student's Achievement (e.g. check marking by an independent member teaching staff of a sample of student's work, periodic exchange and remarking of tests or a sample of assignments with staff members at another institution)

1- The use of external examiners.

2- Providing samples of all kinds of assessment in the departmental course portfolio of each course.

3- Periodical changing and remarking test

5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for developing it.

1. Design graduate survey and employee surveys.

2. Analyze the results of the two surveys and detect the weakness & strengthens in the course.

3. Recognize action plane regarding the course credits, content, depth, breadth, teaching methodology.

4. Submit a course report to the curriculum committee in the department to discuss the action plane.

5. Submit the final action plane to the department Council for approval

6. Stick-holder meeting foe the advantage and the disadvantage in the graduates.

7. The course material and learning outcomes are periodically reviewed and the changes to be taken are approved in the departmental and higher councils

8. The head of department and faculty take the responsibility of implementing the proposed changes.

9. Follow the national researches in the different topics related to the course or new topics can added to the course

Name of Course Instructor: Abdelalah Sami Jazar

Signature: _____ Date Completed 5/2/1440

Program Coordinator: Dr. Khloud Ghafouri

Signature: _____ Date Received: 11/2/1440

Kingdom of Saudi Arabia
Ministry of Education
Umm Al-Qura University
Deanship of Graduate Studies



المملكة العربية السعودية
وزارة التعليم
جامعة أم القرى
عمادة الدراسات العليا

Course Title: Food Inspection, Investigation and Judgment

Course Code : QUAL1702515-3

Institution: Applied medical sciences	Date: 17/10/2018
College/Department : Clinical Nutrition Department	

A. Course Identification and General Information

1. Course title and code: Food inspection-investigation and judgment		
2. Credit hours: 3 CH		
3. Program(s) in which the course is offered. Food Safety and Quality management (If general elective available in many programs indicate this rather than list programs)		
4. Name of faculty member responsible for the course : Dr. Mohammad Abd Elmoneim Elmadbouly		
5. Level/year at which this course is offered: 2nd semester		
6. Pre-requisites for this course (if any):		
7. Co-requisites for this course (if any):		
8. Location if not on main campus:		
9. Mode of Instruction (mark all that apply):		
a. traditional classroom	<input checked="" type="checkbox"/>	What percentage? <input type="text" value="50%"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage? <input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage? <input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage? <input type="text"/>
f. other	<input checked="" type="checkbox"/>	What percentage? <input type="text" value="50%"/>
Comments: practical		

B Objectives

1. What is the main purpose for this course?

Upon completion of this course, the student will be able to:

- **Known and identify the requirements of appropriate equipments, clothing and record keeping for undertaking inspections in a range of food premises and during the food production cycle**
Demonstrate.
 - **Collect and record information in a food safety and control context, and interpret the results of an inspection investigation or audit.**
 - **Identify hazards and assess risks in a range of food safety and control settings and justify solutions or remedial measures to remove, reduce or control the risks.**
 - **Identify and utilise a range of measurement and monitoring techniques within a food safety and control context.**
 - **Write an appropriate reports and notices following the completion of inspections and make recommendation on relevant action to be taken to achieve desired outcome and improvement in food safety and control systems**
 - **Determine the need and priorities for an inspection, including Halal foods and its certification**
-
- **Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)**
 - **Increased use of the IT or online reference material**
 - **changes in content as a result of new research in the field**

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This module is to provide the student with theoretical and practical of knowledge on the operational procedures concerning the inspection of food. It covers the measurement and monitoring techniques within a food safety and control, Identify hazards and assess risks in the food, Food inspection techniques, Appropriate equipment, clothing and record keeping for undertaking inspections in a food premises and during the food production cycle. Administrative systems and procedures and their link to the quality management system, Draft appropriate letters/reports/notices following the completion of inspections

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
Sampling techniques, Sample preparation, Sample identification and sealing, Sample dispatching and Sample handling and storage procedures	1	2
General Aspects of food contamination	1	2
Food Premises Inspection and Basic and advanced food inspection techniques	1	2
Inspection and Control of slaughterhouses, meat industries (Basic functions and hygienic requirements of slaughterhouses, Ruminants meat processing, Inspection and control in poultry a lagomorphs slaughterhouses, Inspection and Control in the meat processing chain, Residues or contaminants in meat and Bacteriological analysis of meat.)	3	6
Inspection and Control of fish and fishery products (inspection of fish products, Hygienic aspects and control of fishery products distribution, Inspection of molluscs, crustaceans and echinoderms, Food safety tools and control in seafood's products, inspection and Control of fresh and frozen seafood's and Inspection and Control of processed seafood's)	1	2
Inspection and Control of raw milk and dairy products (Health requirements for dairy farms and establishments of milk transformation, Performance criteria for drinking milk, Inspection and control of raw milk, Establishments and containers for traceability, Inspection and control of different milk and dairy products processing chain: heat treatments, conserved milk, fermented milks, cream, butter, ice cream)	2	4
Inspection and control of restaurant and catering services.	1	2
Administrative systems and procedures and their link to QMS	1	2
Food contaminants and Investigation analysis	1	2
Food Judgment : Sensory evaluation, Consumer preference and Advance analytical techniques	1	2

Hazard analysis and risk assessment in range of food safety and control settings							1	2
2. Course components (total contact hours and credits per semester):								
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total	
Contact Hours	Planned	28			28		56	
	Actual	28			28		56	
Credit	Planned	2			2		4	
	Actual	2			2		4	
3. Additional private study/learning hours expected for students per week.							2h	
4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy								
<p>On the table below are the five NQF Learning Domains, numbered in the left column.</p> <p>First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). Second, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. Third, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)</p>								
Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies			Course Assessment Methods			
1.0	Knowledge An ability to							
1.1	recognize the sensory properties of foods	<ul style="list-style-type: none"> • Lectures • assignments • Use some educational presentations such as educational films 			<ul style="list-style-type: none"> • Discussion rubric. • quiz and exam 			
1.2	record chemical and microbiological properties of various food products							
1.3	Define food processing methods and their role in food safety and quality.							

1.4	label food borne diseases and how to prevent or resist them and ways to treat them and appropriate methods of risk reduction		
2.0	Cognitive Skills An ability to		
2.1	apply scientific and technical methods in food safety and quality control.	<ul style="list-style-type: none"> • Self-learning activities. • Discussion sessions and solving problems 	<ul style="list-style-type: none"> • Team projects. • Reports and Class activities • Evaluation through feedback strategies during lectures. • Class tests
2.2	Judge the validity of food for human consumption		
2.3	Classify the suitable conditions for safe food that is free of deterioration, spoilage and free of infectious diseases agents.		
2.4	Justify the correct inspection, audit and hazard on food analysis and assessment accordance with the legislation.		
2.5	Appraise the suitable IT skills that are commensurate with a career in food premises inspection		
3.0	Interpersonal Skills & Responsibility		
3.1	Choose the ethical and professional standards for the food safety area in order to apply the appropriate ones.	<ul style="list-style-type: none"> • Laboratory practical sessions • Discussions and the production of written reports. • Individual activities. • individual and group discussion 	<ul style="list-style-type: none"> • practical examination • Team projects. • presentations • Role play • debate
3.2	Apply initiative in problem solving		

3.3	Apply the leadership skills to lead a team.		
4.0	Communication, Information Technology, Numerical		
4.1	Demonstrate IT skill usages in food safety and quality control analysis	<ul style="list-style-type: none"> • Assignment tasks • Self-learning activities. • Group activities 	<ul style="list-style-type: none"> • Team projects. • Reports and Class activities • Evaluation of required activities during the semester.
4.2	Criticize information and published research both orally and in writing in food safety issues		
5.0	Psychomotor		
5.1	Perform experiments with the control risks and safety factors in food	<ul style="list-style-type: none"> • Laboratory practical sessions • visits to commercial businesses of industry 	<ul style="list-style-type: none"> • practical examination quiz • Case studies rubric • filed visit observation card/checklist
5.2	construct food inspection according to the systems		
5. Indirect assessment		Course evaluation	
	Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Assignments	10th	30%
2	Group project	9th	30%
3	Reports	8th	20%
4	Case study	12th	20%
	Total		100%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Students can contact the academic staff for one-to-one consultation regarding specific academic matters from time to time. Information on academic staff contact details are available and appropriately publicized to students.

Additionally, students are able to contact staff members directly with questions and requests for assistance via telephone, email or the online environment when available. Consultation times can be used to proactively work with students over the course of the semester

E Learning Resources

- List Required Textbooks
- RAI, V. Ravishankar; BAI, Jamuna A. Food Safety and Protection. CRC Press, 2017.
- Rahman, Mohd Syaifudin Abdul, et al. Novel sensors for food inspection: Modelling, fabrication and experimentation. Springer International Publishing, 2014.
- Schmidt, Ronald H.; Rodrick, Gary E. Food safety handbook. John Wiley & Sons, 2003.

2. List Essential References Materials (Journals, Reports, etc.)

- J. of food science
- J. of milk and food technology.
- J. of Food Protection
- J. of Dairy Science

- List Electronic Materials, Web Sites, Facebook, Twitter, etc.

<https://www.foodsafety.gov/keep/government/inspections/index.html>

<https://www.fda.gov/default.htm>

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access, etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) Class rooms: 100 seats
2. Technology resources (AV, data show, Smart Board, software, etc.) Computing unites, monitors and wireless internet connection
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

G Course Evaluation and Improvement Processes

1. Strategies for Obtaining Student's Feedback on Effectiveness of Teaching - Confidential instructor evaluation questionnaire for the total course in the final lecture - Students – College meeting
2. Other Strategies for Evaluation of Teaching by the Instructor or the Department - Regular scientific meeting with the department members - Departmental council discussion - Peer consultation in teaching - Student feedback report to be analyzed by the course instructor and submit the results to the department head. - Video recording
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5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for developing it. 1. Design graduate survey and employee surveys. 2. Analyze the results of the two surveys and detect the weakness & strengthens in the course. 3. Recognize action plane regarding the course credits, content, depth, breadth, teaching methodology. 4. Submit a course report to the curriculum committee in the department to discuss the action plane. 5. Submit the final action plane to the department Council for approval 6. Stick-holder meeting foe the advantage and the disadvantage in the graduates. 7. The course material and learning outcomes are periodically reviewed and the changes to be taken are approved in the departmental and higher councils 8. The head of department and faculty take the responsibility of implementing the proposed changes. 9. Follow the national researches in the different topics related to the course or new topics can added to the course

Name of Course Instructor: **Dr. Mohammad Abd Elmoneim Elmadbouly**

Kingdom of Saudi Arabia
Ministry of Education
Umm Al-Qura University
Deanship of Graduate Studies



المملكة العربية السعودية
وزارة التعليم
جامعة أم القرى
عمادة الدراسات العليا

Signature:  Date Specification Completed: 17/10/2018

Program Coordinator: Dr. Khloud Ghafouri

Signature:  Date Received: 11/2/1440

Kingdom of Saudi Arabia
Ministry of Education
Umm Al-Qura University
Deanship of Graduate Studies



المملكة العربية السعودية
وزارة التعليم
جامعة أم القرى
عمادة الدراسات العليا

Course Title: Food Safety and quality management programs.

Course Code: QUAL1702517-3

Date: 11/11/2018	Institution: Umm AL-Qura University
College: Faculty of Applied Medical Science	
Department: Clinical Nutrition	

A. Course Identification and General Information

1. Course title and code: Food Safety and Quality Management - QUAL1702517-3	
2. Credit hours:	3 CH
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs)	
4. Name of faculty member responsible for the course: Dr:	
5. Level/year at which this course is offered: 2 nd semester	
6. Pre-requisites for this course (if any):	
7. Co-requisites for this course (if any): Food Microbiology	
8. Location if not on main campus:	
9. Mode of Instruction (mark all that apply):	
a. Traditional classroom	<input checked="" type="checkbox"/> percentage? 80
b. Blended (traditional and online)	<input checked="" type="checkbox"/> percentage? 10
c. E-learning	<input type="checkbox"/> percentage?
d. Correspondence	<input checked="" type="checkbox"/> percentage? 10
f. Other	<input type="checkbox"/> percentage?
Comments: Seminars and guided self-study	

B Objectives

1. The main objective of this course
1-Explaining the most important rules of food safety.
2-The different microbial, chemical and physical pollutions causing hazard to the consumers.
3-Food safety management systems (good practices and HACCP) and HAZOP studies.
4- What is new in QMs quality assurance standards (e.g. ISO 22000, Global GAP) assuring the food safety in the agri-food chain and the principles of risk analysis and risk assessment.

2. Describe briefly any plans for developing and improving the course that are being implemented. (e.g. increased use of the IT or online reference material, changes in content as a result of new research in the field)

Increased use of IT or web based reference material.

Changes in content as a result of new research in the field.

C. Course Description (Note: General description in the form used in the program's bulletin or handbook)

Course Description:

This course assist postgraduate students to know and compare between physical, chemical and microbiological contaminants, the genetically modified organisms and genetically modified foods, Develop their ability to analyze current articles/reviews in the field of quality management theories, food safety systems, learning how the different contaminates reach food and how we can determined and measure it by the different methods, identifying the microbiology food safety and the significance of foodborne disease. How we can protecting public health and eliminating risk through application of the quality management programs and studying the international and national regulation of novel foods and labelling requirements.

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
<p>Food Safety: A Global Perspective</p> <ul style="list-style-type: none"> • Food safety and product testing • Physical, chemical and microbiological contaminants • Genetically modified organisms and genetically modified foods. • Food safety system. • Different definitions and terminology in quality management systems. • History of quality control and quality management. 	1	2

<p>The Food Safety Management Program</p> <ul style="list-style-type: none"> • Commitment to a food safety management program • Organizational structure of the food safety management program • Primary responsibilities of the food safety management • Eliminating the risk to protect public health 	1	2
<p>Food Safety Control and Quality Management</p> <ul style="list-style-type: none"> • Codex Alimentarius Standards: principles of food hygiene • Prerequisite specifications, Current Good Manufacturing Practices (cGMPs) • Global Food Safety Initiative (GFSI) • Hazard Analysis and Critical Control Point (HACCP) concept • Quality Management Systems: ISO 9000. 	2	4
<p>Food Safety Management Systems</p> <ul style="list-style-type: none"> • The ISO 22000 family of International Standards <ul style="list-style-type: none"> • ISO/TS 22001 • ISO/TS 22002 • ISO/TS 22003 • ISO/TS 22004 	2	4
Field visits to food establishments	1	4
ISO/IEC 17025 testing and calibration laboratories	1	2
<p>Integration of Quality Management Systems.</p> <ul style="list-style-type: none"> • Product quality management – ISO 9000 and ISO 2000. • Safety management HACCP – HAZOP (Hazard and Operability Study) • Environmental management – ISO 14000. • Integration of QMS (Special applications). 	2	4

<p>Food Safety Regulations</p> <ul style="list-style-type: none"> • Foodborne outbreaks: surveillance and management. • Food safety issues in Saudi Arabia • Strategies for food safety control. • FDA's food safety program. • Regulation of the production and use of genetically modified organisms. • European regulation of labelling requirements. • International and national regulations of food labeling • Unlabelled ingredients that could cause an allergic reaction. 	1	2
<p>Product Tracing Systems</p> <ul style="list-style-type: none"> • Traceability: meaning • Tracebacks and trace forwards • Traceability system attributes • ISO 22005 • International traceability regulations • Private global traceability standards 	1	2
<p>Food Recall</p> <ul style="list-style-type: none"> • definition • Recalls sparked by food safety issues and identifying a risk • Deciding if a recall is needed • Recalling food and Scope of recalls • Letting consumers know about recalls 	1	2
<p>Field visits to food establishments</p>	1	4
	14	32

2. Course components (total contact and credit hours per semester):

3. Individual study/learning hours expected for students per week.

3

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategies

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and targeted learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy should fit in together with the rest to form an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Curriculum Map

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	List detailed requirements for compliance with national and international food safety legislation.	<ul style="list-style-type: none"> • Lectures. • Class discussion. • Small group discussion. • Guided self-learning. 	<ul style="list-style-type: none"> • Short essays exam. • Report assignment.
1.2	Memorize the history and basic ideas underlying quality management and have a detailed knowledge of the role of Quality Management (QM) in modern management.		
1.3	Record and analysis the risks of food safety .		
2.0	Cognitive Skills		
2.1	Summarize the recent developments in the control of food safety.	Lectures and Homework Discussions	Assignment.
2.2	Judge the risk of food safety problems including genetic modification Interpret data , Identify and solve problems, dealing with food contamination	Problem-based case study presentation	

3.0	Interpersonal Skills & Responsibility		
3.1	Be able to select and apply appropriate Specific Process Control (SPC) techniques and evaluate data generated.	Students will be assigned into small groups and make free discussions. Class presentation. Group discussion.	Assessment of student through regular assignments
3.2	Demonstrate the ability to produce a quality manual.		
4.0	Communication, Information Technology, Numerical		
4.1	Evaluate effectively in oral and written formats where food safety and regulations for HACCP and different QMPs are required.	Students are required to make report and assignments requiring proper style and reference format.	Assessment of student assignments (25% of the assessment is based on proper writing style, and referencing format.
4.2	Ability to use technology in communication with other		
5.0	Psychomotor(if any)		
5.1	<ul style="list-style-type: none"> Demonstrate where food safety and hygiene are not correct. Draw maps for the correct CCPs points for different food production units 	Creation methods	Peer review oral Assessment Small group discussion
5.2	<ul style="list-style-type: none"> Construct and implement the suitable nutrition HACCP and food safety programs and strategies to meet the consumers and society needs. 		

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic counseling. (include the time teaching staff are expected to be available per week)

Students can contact the academic staff for one-to-one consultation regarding specific academic matters from time to time. Information on academic staff contact details is available and appropriately publicized to students.

Additionally, students are able to contact staff members directly with questions and requests for assistance via telephone, email or the online environment when available. Consultation times can be used to proactively work with students over the course of the

semester

E -Learning Resources

1. List Required Textbooks

Mortimore, Sara, and Carol Wallace. HACCP: A practical approach. Springer Science & Business Media, 2013.

- Luning, Pieter A., and Willem J. Marcelis. Food quality management: technological and managerial

- Payne-Palacio, J., & Theis, M. (2012). Foodservice Management: Principles and Practices (12th ed.). Upper Saddle River, NJ: Pearson Education Inc.

Food quality and safety systems: a training manual on food hygiene and the Hazard Analysis and Critical Control Point (HACCP) System: Food and Agriculture Organization of the United Nations;

• website: www.fao.org/docrep/W8088E/w8088e00.htm

• King, H. (2013). Food Safety Management, Pub: Springer, New York

• Bhat, R.; Gómez-López, V. M. (2014). Practical Food Safety, Pub: John Wiley & Sons, Chichester, UK

• Duncan, P., & Jensen, J. (2011). Professional Foodservice (2nd ed.). Auckland: Pearson

• Payne-Palacio, J., & Theis, M. (2012). Foodservice Management: Principles and Practices (12th ed.). Upper Saddle River, NJ: Pearson Education Inc.

International food safety program resources:

• Basic texts on food hygiene. Third edition. Codex Alimentarius Commission; website: www.codexalimentarius.net – ‘Special publications’

• Food Safety Enhancement Program: Canadian Food Inspection Agency; website: www.inspection.gc.ca

Food quality and safety systems: a training manual on food hygiene and the Hazard Analysis and Critical Control Point (HACCP) System: Food and Agriculture Organization of the United Nations; website: www.fao.org/docrep/W8088E/w8088e00.htm

• Safer food better business: Food Standards Agency, United Kingdom; website: www.foodstandards.gov.uk.

2. List Essential References Materials (Journals, Reports, etc.)

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

<http://bc-ciphi.cnx.net/food%20Safety.html>
<http://www.agbiotechnet.com/>
<http://www.ncbe.reading.ac.uk/NCBE/GMFOOD/>
<http://vm.cfsan.fda.gov/>
<http://www.who.int/fsf/GMfood/index.htm>
<http://www.ifst.org/>

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access, etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- I. Lecture room- provided with video , projectors , smart board and Electronic Materials
- II. Handbook, Program Specification and Module Handbooks.
- III. Library and study skills.
- IV. Student e-mail and inter/intranet facilities.

2. Technology resources (AV, data show, Smart Board, software, etc.)

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

G Course Evaluation and Improvement Procedures

1. Strategies for Obtaining Student's Feedback on Effectiveness of Teaching

- Confidential instructor evaluation questionnaire for the total course in the final lecture
- Students – College meeting

2. Other Strategies for Evaluation of Teaching by the Instructor or the Department

- Regular scientific meeting with the department members
- Departmental council discussion
- Peer consultation in teaching
- Student feedback report to be analyzed by the course instructor and submit the results to the department head.
- Video recording

3. Procedures for Teaching Development

1. Review the students' feedback and work on the weak points.
2. Conduct departmental workshops to discuss how to support the teaching process.
3. Monitoring of teaching activates by senior faculty members
4. Periodical departmental revisions of the methods of teaching.

5. Attend educational courses of teaching methodology

4. Procedures for Verifying Standards of Student's Achievement (e.g. check marking by an independent member teaching staff of a sample of student's work, periodic exchange and remarking of tests or a sample of assignments with staff members at another institution)

- 1- independent member teaching staff sharing in the oral and practical final exam
- 2- make an ideal answer for the final exam help to correct some students paper by independent teaching member
- 3- The use of external examiners.
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- 5- Periodical changing and remarking test

5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for developing it.

1. Design graduate survey and employee surveys.
2. Analyze the results of the two surveys and detect the weakness & strengthens in the course.
3. Recognize action plane regarding the course credits, content, depth, breadth, teaching methodology.
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5. Submit the final action plane to the department Council for approval
6. Stick-holder meeting foe the advantage and the disadvantage in the graduates.
7. The course material and learning outcomes are periodically reviewed and the changes to be taken are approved in the departmental and higher councils
8. The head of department and faculty take the responsibility of implementing the proposed changes.
9. Follow the national researches in the different topics related to the course or new topics can added to the course

Name of Course Instructor:

Signature: _____ Date Completed 5/2/1440

Program Coordinator: Dr. Khlood Ghafouri

Signature:  Date Received: 11/2/1440

Kingdom of Saudi Arabia
Ministry of Education
Umm Al-Qura University
Deanship of Graduate Studies



المملكة العربية السعودية
وزارة التعليم
جامعة أم القرى
عمادة الدراسات العليا

Course Title: Food safety practical in establishments
Course Code QUAL1702518-2

Date: 2018.....-.....-.....	Institution: . UMM Al qura university.
College: Applied medical sciences.	Department: .Clinical Nutrition..

A. Course Identification and General Information

1. Course title and code: Food safety practical in establishments -QUAL1702518-2		
2. Credit hours: 2 CH		
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs)		
4. Name of faculty member responsible for the course: Nehal Amin ELfaky		
5. Level/year at which this course is offered: 1 st semester		
6. Pre-requisites for this course (if any): non		
7. Co-requisites for this course (if any): none		
8. Location if not on main campus: Main campus		
9. Mode of Instruction (mark all that apply):		
a. Traditional classroom	<input checked="" type="checkbox"/> percentage?	<input type="text" value="60%"/>
b. Blended (traditional and online)	<input checked="" type="checkbox"/> percentage?	<input type="text" value="10%"/>
c. E-learning	<input type="checkbox"/> percentage?	<input type="text"/>
d. Correspondence	<input checked="" type="checkbox"/> percentage?	<input type="text" value="10%"/>
f. Other	<input checked="" type="checkbox"/> percentage?	<input type="text" value="20%"/>
Comments: group work		

B Objectives

<p>1. The main objective of this course</p> <p>At the end of this course the student must be able to</p> <ul style="list-style-type: none"> • Summary of the main learning outcomes for students enrolled in the course. • Explain the importance of food safety procedures, risk assessment and safe food handling. • To introduce employees to the Basics of Food Safety before they start to handle food and introduce them to good hygiene practices. • Aims to provide food handlers with the skills and knowledge they need to handle food safely and ensure that it remains safe to eat . • To gain the guiding principles that you can then build your food safety implementation plans around.
<p>Describe briefly any plans for developing and improving the course that are being implemented. (e.g. increased use of the IT or online reference material, changes in content as a result of new research in the field).</p> <ul style="list-style-type: none"> • Increased use of IT or web based reference material. • Changes in content as a result of new research in the field.

C. Course Description (Note: General description in the form used in the program's bulletin or handbook)

<p>Course Description:</p> <p>The importance of food safety in terms of industrial food production food in smaller quantities. sanitation and public health as related to the food service industry, including potential hazards that may occur in the operation and production of food.</p> <p>Food Science will focus on currently used food safety programs to control biological, chemical and physical hazards and assure the safety of foods.</p> <p>Topics include prerequisite programs such as Current Good Manufacturing Practices and Sanitation Standard Operating Procedures, Hazard Analysis Critical Control Point (HACCP), food safety management systems (SQF auditing) and the application of current technologies in reducing foodborne illness. Upon successful completion of the course, the students will receive HACCP and SQF implementation certification.</p>		
<p>1. Topics to be Covered</p>		
<p>List of Topics</p> <ul style="list-style-type: none"> • Orientation: Discussion of the Syllabus, Course Description and Evaluation System. 	<p>No. of Weeks</p> <p>1</p>	<p>Contact hours</p> <p>2</p>

• Food safety team	1	2
• Plant Design and Construction Plant, Machinery and production line design, Facilities location and design Implementation of HACCP system	1	2
• Food Safety Management Systems	1	2
• Personnel Hygiene	1	2
• Food Contamination: sources of Contamination and preventive measures, Evaluate the causes of, and hazards associated with physical, biological and chemical contamination	1	2
Food Preparation with No Cook Step Preparation for Same Day Service Complex Food Preparation .	1	2
• Food safety during processing Preparing, Cooking, Holding and Serving	1	2
• Pest control, Waste management, Environmental hygiene,	1	2
• Purchasing, Receiving and Storing: Understanding purchasing points, receiving, storing and issuing control points.	1	2
• Inspection and Control of slaughterhouses, meat industries	1	2
• Inspection and Control of raw milk and dairy products	1	2
• Cleaning, sanitation, and preventive Maintenance programs	1	2
• Establish Monitoring Procedures.	1	2
• Total	14	28

2. Course components (total contact and credit hours per semester):

	Lecture	Tutorial	Laboratory/ Studio	Practical	Other	Total
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Contact Hours	Planned	14			56	0	70
	Actual	14			56		70
Credit	Planned	14			28	0	42
	Actual	14			28		42

3. Individual study/learning hours expected for students per week.

3

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategies

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). Second, insert supporting teaching strategies that fit and align with the assessment methods and targeted learning outcomes. Third, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy should fit in together with the rest to form an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Curriculum Map

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	•An ability to Explain the importance of food safety procedures, risk assessment and safe food handling.	<ul style="list-style-type: none"> lectures case studies 	<ul style="list-style-type: none"> Assignments Group project Reports
1.2	<ul style="list-style-type: none"> . able to state the fundamentals of Food safety practical in establishments An ability to define the skills needed for Food safety practical in establishments 		
2.0	Cognitive Skills		
2.1	<ul style="list-style-type: none"> be able to appraise basic issues of Food safety practical in establishments . be able to analyse basic issues of Food safety practical in establishments interest, hence to suggest the suitable solutions and test them 	<ul style="list-style-type: none"> Lectures Class discussion group discussion. 	<ul style="list-style-type: none"> Assignments Group project Reports
2.2	<ul style="list-style-type: none"> The ability to Use Assess and merge the information from different sources An ability to Handle home and work waste and 		

	safety issues (particularly medical and lab waste. • be able to design the relevant hypothesis Food safety practical in establishments and its applicability		
3.0	• Interpersonal Skills & Responsibility		
3.1	• An able to Work in group	• Lectures • Class discussion • group discussion.	• Assignments • Group project • Reports
3.2	• 2- . be Able to lead a team. • 3- able to use a positive relationship with others		
4.0	Communication, Information Technology, Numerical		
4.1	Be able to communicate effectively in oral and written formats in setting where Food safety practical in establishments is required.	• Lectures • Class discussion	• Assignments • Group project • Reports
4.2	2 Ability to operate technology in analyzing data and information		
5. Assessment Task Schedule for Students During the Semester			
	Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Assignments	8th	30%
2	Group project	10th	30%
3	Reports	5th	20%
4	Case study	13th	20%
	Total		100%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic counseling. (include the time teaching staff are expected to be available per week)

Students can contact the academic staff for one-to-one consultation regarding specific academic matters from time to time. Information on academic staff contact details are available and appropriately publicized to students.

Additionally, students are able to contact staff members directly with questions and requests for assistance via telephone, email or the online environment when available. Consultation times can be used to proactively work with students over the course of the semester

E Learning Resources

1. List Required Textbooks

Yasmine Motarjemi, Huub Lelieveld, Food Safety Management: A Practical Guide for the Food Industry 1st Edition, 2013, ISBN-13: 978-0123815040

Steven C. Ricke, Janet R. Donaldson and Carol A. Phillips, Food Safety Emerging Issues, Technologies and Systems, 2015, ISBN 978-0-12-800245-2

Jeffrey T. Barach, FSMA and Food Safety Systems: Understanding and Implementing the Rules, 2017, ISBN: 978-1-119-25807-0

2. List Essential References Materials (Journals, Reports, etc.)

International Journal of Food Safety, Nutrition and Public Health

Journal of Food Safety and Hygiene

Journal of Food Safety

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- **American Meat Institute calls on FDA to Act on three year old Beef Irradiation Petition (<http://www.meatami.org/news911.htm>)**
- **Key Facts: Enforcement under HACCP and Pathogen Reduction (www.usda.gov/agency/fsis/keyenfor.htm)**
- **Timing's not Everything (www.usda.gov/agency/fsis/turktime.htm)**
- **Food Storage Information (<http://info.fmi.org/foodkeeper/brochure.htm>)**
- **Food Service Checklist (www.envirovillage.com/tools/N00112.htm)**
- **Insect Pests of Stored Food in Kitchen and Pantry (<http://ianrwww.unl.edu/ianr/pubs/extnpubs/insects/g1130.htm>)**
- **Cockroach Control Manual (<http://ianrwww.unl.edu/ianr/pat/cocktoc.htm>)**
- **Quality Control: A Model Program (<http://www.ces.uga.edu/pubcd/b997-w.html>)**
- **Flying Insect Monitoring (<http://www.actroninc.com/flymonfi.htm>)**

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access, etc.)
1. Accommodation (Classrooms, demonstration rooms/, etc.) <ul style="list-style-type: none"> • Classrooms • White board
2. Technology resources (AV, data show, Smart Board, software, etc.) <ul style="list-style-type: none"> • data show, • software
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) none

G Course Evaluation and Improvement Procedures

1. Strategies for Obtaining Student's Feedback on Effectiveness of Teaching - Confidential instructor evaluation questionnaire for the total course in the final lecture - Students – College meeting
2. Other Strategies for Evaluation of Teaching by the Instructor or the Department - Regular scientific meeting with the department members - Departmental council discussion - Peer consultation in teaching - Student feedback report to be analyzed by the course instructor and submit the results to the department head. - Video recording
3. Procedures for Teaching Development 1. Review the students' feedback and work on the weak points. 2. Conduct departmental workshops to discuss how to support the teaching process. 3. Monitoring of teaching activates by senior faculty members 4. Periodical departmental revisions of the methods of teaching. 5. Attend educational courses of teaching methodology
4. Procedures for Verifying Standards of Student's Achievement (e.g. check marking by an independent member teaching staff of a sample of student's work, periodic exchange and remarking of tests or a sample of assignments with staff members at another institution) 1- The use of external examiners. 2- Providing samples of all kinds of assessment in the departmental course portfolio of each course. 3- Periodical changing and remarking test
5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for developing it. 1. Design graduate survey and employee surveys. 2. Analyze the results of the two surveys and detect the weakness & strengthens in the course. 3. Recognize action plan regarding the course credits, content, depth, breadth, teaching methodology. 4. Submit a course report to the curriculum committee in the department to discuss the action plane. 5. Submit the final action plane to the department Council for approval 6. Stick-holder meeting foe the advantage and the disadvantage in the graduates.

7. The course material and learning outcomes are periodically reviewed and the changes to be taken are approved in the departmental and higher councils
8. The head of department and faculty take the responsibility of implementing the proposed changes.
9. Follow the national researches in the different topics related to the course or new topics can added to the course

Name of Course Instructor: Dr. Nehal Alfaqi

Signature: _____ Date Completed 5/2/1440

Program Coordinator: Dr. Khloud Ghafouri

Signature: _____ Date Received: 11/2/1440

Kingdom of Saudi Arabia
Ministry of Education
Umm Al-Qura University
Deanship of Graduate Studies



المملكة العربية السعودية
وزارة التعليم
جامعة أم القرى
عمادة الدراسات العليا

Course Title: Food plant Sanitation and Hygiene.

Course Code: QUAL1702525-2

Date: 20.....-.....-.....	Institution: U mm Al-Qura University.
College: Applied of Medical Sciences Department: Clinical Nutrition	
1. Course title and code: : Food plant Sanitation and Hygiene-QUAL1702525-2	
2. Credit hours: 2 CH	
3. Program(s) in which the course is offered. PgDip of Food Safety and Quality Control	
4. Name of faculty member responsible for the course: Dr.Mohamed Elmdboly	
5. Level/year at which this course is offered: Postgraduate Diploma 1st semester	
6. Pre-requisites for this course (if any):	
7. Co-requisites for this course (if any):	
8. Location if not on main campus: Faculty of Applied of Medical Sciences	
9. Mode of Instruction (mark all that apply):	
a. Traditional classroom	<input checked="" type="checkbox"/> centage? <input type="text" value="80%"/>
b. Blended (traditional and online)	<input type="checkbox"/> centage? <input type="text"/>
c. E-learning	<input type="checkbox"/> centage? <input type="text"/>
d. Correspondence	<input type="checkbox"/> centage? <input type="text"/>
f. Other	<input checked="" type="checkbox"/> centage? <input type="text" value="20%"/>
Comments: group work	

B Objectives

<p>1. The main objective of this course</p> <p>Upon completion of this course, the student will be able to:</p> <ol style="list-style-type: none"> 1. Identify causes of and prevention procedures for food-borne illness, intoxication, and infection. 2. Demonstrate good personal hygiene and safe food handling procedures; describe food storage and refrigeration techniques; explain sanitation of dishes, equipment, and kitchens including cleaning material, garbage, and refuse. 3. Discuss Occupational Safety and Health Administration (OSHA) requirements and effective workplace safety programs.
<p>2. Describe briefly any plans for developing and improving the course that are being implemented. (e.g. increased use of the IT or online reference material, changes in content as a result of new research in the field)</p> <ul style="list-style-type: none"> • Increased use of IT or web based reference material. • Changes in content as a result of new research in the field.

C. Course Description (Note: General description in the form used in the program's bulletin or handbook)

Course Description:		
<p>Biological and chemical hazard in food that result from improper processing, packaging, handling and storage, work place safety standards, cleaning of food plant equipment and facilities including characteristics of soil on equipment surfaces, cleaning compounds, clean-in-place, clean-out-of-place, sanitizers and their characteristics, and GMPs. A study of personal hygiene; sanitary practices in food preparation, and Hazard Analysis Critical Control Points</p>		
1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
Microbiological hazards a. Pathogens, Viruses, Bacteria, Parasites, Fungi, and biological, Toxins	2	4
Chemical and Physical Contamination Chemical Contaminants, Physical Contaminates, prevention and control	1	2
Health and hygiene for food handlers How Food handlers Can, Contaminate Food, Disease Not Transmitted Through Food, Components of a Good Personal Hygiene Program, Management's Role in a, Personal Hygiene Program	1	2

Sanitation Standard Operating Procedures (SSOP) General Rules, Development of Sanitation SOPs, Sanitation SOP, Responsible person, Regulatory control action, Pre-operational sanitation procedures, Operational sanitation procedures, Sanitation SOP Implementation & Monitoring, Sanitation SOP Maintenance, Sanitation SOP Corrective Actions and Sanitation SOP Recordkeeping		1	2				
Field visits to work sites		1	4				
Sanitary Facilities and Equipment Designing a Sanitary Establishment, Consideration for Other Areas of the Facility, Sanitation Standards for Equipment, Installing and Maintaining plant equipment and Utilities		1	2				
Food Plant Design and Construction Air Sanitation; Equipment for Effective Sanitation, Water Sanitation, Waste Product Disposal		1	2				
Food Storage Sanitation and Food Transport Sanitation General Storage Guidelines, Types of Storage, Storage Techniques and Storing Specific Food		1	2				
Cleaning Soil and its attachment characteristics; surfactants and detergent auxiliaries; classification of cleaning compounds; detergency; selection and formulation of typical cleaners; cleaning equipment and cleaning technologies.		1	2				
Pest, Rodent, Birds control Pest Management Program, Identifying Pest, chemical and mechanical techniques for control of rodents, birds, cockroaches and other insects; commonly used pesticides and their precaution		1	2				
Field visits to work sites		1	4				
Sanitizing Sanitizing methods; classification of sanitizing agents; properties and applications of chemical sanitizers; sanitizer strength; sanitizing equipment; sanitizer precautions; environmental sanitation and maintenance.		1	2				
Hazard and Critical Control Point (HACCP) Introduction of HACCP; preparation of HACCP; designing safety into products and processes; developing HACCP plan; hazard analysis chart; developing HACCP control chart; implementation of HACCP		2	4				
2. Course components (total contact and credit hours per semester):							
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other	Total
Contact	Planned	24			8		32
Hours	Actual	24			8		32

Credit	Planned	12			4		16
	Actual	12			4		16
3. Individual study/learning hours expected for students per week.							2/ weeks

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategies

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and targeted learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy should fit in together with the rest to form an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Curriculum Map

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge an ability to		
1.1	Define what is Food Plant Design and Construction .	<ul style="list-style-type: none"> Lectures. Class discussion. Small group discussion. Guided self-learning 	Rubrics for: <ul style="list-style-type: none"> Report assignment. Open discussion.
1.2	Distinguish the differences of Microbes		
1.3	Recognize different of Contamination, Food Allergens		
1.4	Express the rules and food safety standards		
2.0	Cognitive Skills The ability to		
2.1	1.appraise different Microbes	<ul style="list-style-type: none"> case study Problem-based case study. Role playing. 	Peer review rubrics: <ul style="list-style-type: none"> Problem solving question
2.2	Review the Flow of Food: an Introduction		
3.0	Interpersonal Skills & Responsibility Ability to		
3.1	Demonstrate effective communication and positive relation with others.	<ul style="list-style-type: none"> groups discussions. Class presentation. Field activities. 	Rubrics for: <ul style="list-style-type: none"> Report assignment. Open discussion
3.2	Illustrate and apply ethical and professional standards of ethics in the food processing area		
4.0	Communication, Information Technology, Numerical the ability to		
4.1	evaluate effective communications with peers and teaching faculty Perform	<ul style="list-style-type: none"> report case study 	Rubrics for: Assessment of student assignments
4.2	Operate using technology in analyzing data and information		
4.3	Practice and criticize properly the legal principles of documentation		

Indirect assessment	Course survey Peer review
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5. Assessment Task Schedule for Students During the Semester

	Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Assignments	12 th	30%
2	Group project	13 th	35%
3	Reports	6 th	15%
4	Case study	12 th	20%
	Total		100%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic counseling. (include the time teaching staff are expected to be available per week)

Students can contact the academic staff for one-to-one consultation regarding specific academic matters from time to time. Information on academic staff contact details are available and appropriately publicized to students.

Additionally, students are able to contact staff members directly with questions and requests for assistance via telephone, email or the online environment when available. Consultation times can be used to proactively work with students over the course of the semester

E Learning Resources

1. List Required Textbooks

Marriott, Norman G., M. Wes Schilling, and Robert B. Gravani. Principles of food sanitation. Springer, 2018. ISBN 978-3-319-67166-6

- Troller, John A. Sanitation in food processing. Academic Press, 2012

- Food Plant Sanitation (Food Science and Technology) 1st Edition

by Y. H. Hui , L. Bernard Bruinsma , J. Richard Gorham , Wai-Kit Nip , Phillip S. Tong , Phil Ventresca

- Hygiene in Food Processing, H. L. M. Lelieveld John Holah David Napper, 2nd Edition, 2013

2. List Essential References Materials (Journals, Reports, etc.)

Scallan E, Hoekstra RM, Angulo FJ, Tauxe RV, Widdowson M-A, Roy SL, et al. 2011. Foodborne illness acquired in the United States—Major pathogens. Emerg Infect Dis. 17(1):7-15.

- Additional references will be provided as needed

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

www.pubmed.com

www.ask.com

- Additional references will be provided as needed

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

CD-ROM containing illustrated topics in food hygiene

CD-ROM containing illustrated topics in food poisoning

CD-ROM containing illustrated topics in food microbiology

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access, etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) Class room with 50 seat Data show White board.
2. Technology resources (AV, data show, Smart Board, software, etc.) data show Smart Board
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) • Monitors and wireless internet connection.

G Course Evaluation and Improvement Procedures

1. Strategies for Obtaining Student's Feedback on Effectiveness of Teaching - Confidential instructor evaluation questionnaire for the total course in the final lecture - Students – College meeting
2. Other Strategies for Evaluation of Teaching by the Instructor or the Department - Regular scientific meeting with the department members - Departmental council discussion - Peer consultation in teaching - Student feedback report to be analyzed by the course instructor and submit the results to the department head. - Video recording
3. Procedures for Teaching Development 1. Review the students' feedback and work on the weak points. 2. Conduct departmental workshops to discuss how to support the teaching process. 3. Monitoring of teaching activates by senior faculty members 4. Periodical departmental revisions of the methods of teaching. 5. Attend educational courses of teaching methodology
4. Procedures for Verifying Standards of Student's Achievement (e.g. check marking by an independent member teaching staff of a sample of student's work, periodic exchange and remarking of tests or a sample of assignments with staff members at another institution) 1- The use of external examiners. 2- Providing samples of all kinds of assessment in the departmental course portfolio of each course. 3- Periodical changing and remarking test
5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for developing it. 1. Design graduate survey and employee surveys. 2. Analyze the results of the two surveys and detect the weakness & strengthens in the course. 3. Recognize action plane regarding the course credits, content, depth, breadth, teaching methodology. 4. Submit a course report to the curriculum committee in the department to discuss the action plane. 5. Submit the final action plane to the department Council for approval 6. Stick-holder meeting foe the advantage and the disadvantage in the graduates. 7. The course material and learning outcomes are periodically reviewed and the changes to be taken are approved in the departmental and higher councils 8. The head of department and faculty take the responsibility of implementing the proposed changes. 9. Follow the national researches in the different topics related to the course or new topics can added to

the course

Name of Course Instructor: _____

Signature: _____ Date Completed 5/2/1440
Program Coordinator: Dr. Khloud Ghafouri

Signature: _____ Date Received: 11/2/1440

COURSE SPECIFICATIONS
Form

Course Title: Research Methods in Nutrition
Course Code: QUAL1702523-3

Date: 14/10/2019	Institution: Umm Aqura University
College: Applied Medical Sciences Department: Clinical Nutrition	

A. Course Identification and General Information

1. Course title and code: : Research Methods in nutrition - QUAL1702523-3	
2. Credit hours: 3 CH	
3. Program(s) in which the course is offered. Food safety and quality control (If general elective available in many programs indicate this rather than list programs)	
4. Name of faculty member responsible for the course: Dr. Khloud Ghafouri	
5. Level/year at which this course is offered: 2nd semester	
6. Pre-requisites for this course (if any):	
7. Co-requisites for this course (if any):	
8. Location if not on main campus:	
9. Mode of Instruction (mark all that apply):	
a. Traditional classroom	<input type="checkbox"/> centage? <input type="checkbox"/>
b. Blended (traditional and online)	<input checked="" type="checkbox"/> centage? <input type="checkbox"/> 70%
c. E-learning	<input type="checkbox"/> centage? <input type="checkbox"/>
d. Correspondence	<input type="checkbox"/> centage? <input type="checkbox"/>
f. Other	<input checked="" type="checkbox"/> centage? <input type="checkbox"/> 30%
Comments: tutorial and group work	

B Objectives

1. The main objective of this course

- Understand research terminology and be aware of the ethical principles of research, ethical challenges and approval processes
- Describe quantitative, qualitative and mixed methods approaches to research

- Describe briefly any plans for developing and improving the course that are being implemented. (e.g. increased use of the IT or online reference material, changes in content as a result of new research in the field)
- Increased use of IT or web based reference material.
- Changes in content as a result of new research in the field.

C. Course Description (Note: General description in the form used in the program's bulletin or handbook)

Course Description:

This course will provide an opportunity for participants to establish or advance their understanding of research through critical exploration of research language, ethics, and approaches. The course 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 these theoretical underpinnings to begin to critically review literature relevant to their field or interests and determine how research findings are useful in forming their understanding of their work, social, local and global environment .

1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
Research Process (Research Ethics: issues, rights, and responsibilities.)	1	3
The Role of Research in Nutritional Studies	1	3
Participatory Research Design	1	3
Introduction to Quantitative Research, Study Designs and Methods Analysis and Interpretation of Quantitative Data	1	6
Introduction to Qualitative Research, Study Designs and Methods Research	1	3
Analysis and Interpretation of Qualitative Data	1	3
Critical Appraisal of Qualitative Research	1	3
Introduction to Mixed Methods Research, Study Designs and Methods	1	3
Analysis and Interpretation of Mixed Methods Data	1	3
Sampling Methods & Instrument Design	1	3

Research Practice Research writing. Issues of research presentation: writing for journals, conference presentations, thesis writing. Postgraduate research - research questions, reviewing literature, understanding and selecting method and methodology, writing/presenting the dissertation (including style and referencing requirements). Research issues - controlling variables, ethical considerations, timelines and budgets. Research funding.	2	6
Research and professional practice Research in the discipline areas of nutrition and food safety Integrating research from different discipline areas. Types of relevant research to use. Professional development, practice and research. Identifying research question, find evidence and support for plan and conduct purposeful practice based research with clients. Review of various courses and aspects of research outlined in each (such as style, citing, relevant research findings etc.). Practical skills in research and completing and reviewing a work based research project. Specific research and the profession across the lifespan and for special issues of clients.	2	6
Total	14	42

2. Course components (total contact and credit hours per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other	Total
Contact Hours	Planned	42					42
	Actual	42					42
Credit	Planned	3					3
	Actual	3					3

3. Individual study/learning hours expected for students per week.

2 H

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategies

On the table below are the five NQF Learning Domains, numbered in the left column. First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). Second, insert supporting teaching strategies that fit and align with the assessment methods and targeted learning outcomes. Third, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy should fit in together with the rest to form an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Curriculum Map

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
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1.0	Knowledge		
1.1	distinguish the types of research studies in nutrition and food safety	<ul style="list-style-type: none"> Lecture Activity session Small group discussion Tutorials 	Rubrics for: <ul style="list-style-type: none"> Course work Assignment
1.2	Recognize the appropriate research design for desired research in nutrition and food safety field		
	outline the components of thesis		
2.0	Cognitive Skills		
2.1	Differentiate between quantitative, qualitative and mixed methods in research	<ul style="list-style-type: none"> Lecture Case studies Small group discussion 	Rubrics for: <ul style="list-style-type: none"> Course work Assignment
2.2	Analyze Research Problems		
2.3	Acquire new analytical and critical thinking skills		
3.0	Interpersonal Skills & Responsibility		
3.1	Appraise information and data analysis and interpretation	<ul style="list-style-type: none"> Small group discussion 	Rubrics for: <ul style="list-style-type: none"> Course work Assignment
3.2	Illustrate ability to be in team and individually		
	Illustrate ability to lead a team		
4.0	Communication, Information Technology, Numerical		
4.1	Acquire high level of skills in the presentation of scientific information, orally.	<ul style="list-style-type: none"> Lectures individual and group presentation 	Rubrics for: <ul style="list-style-type: none"> Study designing Presentation Group discussion
4.2	operate effectively use of information technology to obtain information		
	Acquire high level of skills in the presentation of scientific information, in writing.		
	Indirect assessment		Course evaluation survey
5. Assessment Task Schedule for Students During the Semester			
	Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Designing 3 Studies in a short text (500 words)	6th , 10th and 14th	45%
2	Preparation and participation	All over the term	15%
3	In-class exercises		40%
4	Total		100%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic counseling. (include the time teaching staff are expected to be available per week)

Students can contact the academic staff for one-to-one consultation regarding specific academic matters from time to time. Information on academic staff contact details are available and appropriately publicized to students.

Additionally, students are able to contact staff members directly with questions and requests for assistance via telephone, email or the online environment when available. Consultation times can be used to proactively work with students over the course of the semester.

E Learning Resources

- List Required Textbooks

Julie A. Lovegrove (Editor) , Leanne Hodson (Editor) , Sangita Sharma (Editor) , Dr. Susan A. Lanham-New (Editor) , Lord John Krebs (Foreword by) **Nutrition Research Methodologies**
ISBN: 978-1-118-55467-8

Creswell, J. W. Research design: Qualitative, quantitative and mixed methods **approaches. 5th Ed.**
Thousand Oaks, CA: Sage, 2018.

ISBN: 978-1-5063-8670-6

Older editions of the text are not recommended.

TRU Library. APA Citation Style - Quick Guide. 6th edition. 2011.

Type: Online Guide

- List Essential References Materials (Journals, Reports, etc.)

Author, A. A., Author, B. B., & Author, C. C. (Year of publication). Title of Article. Journal Title. Volume (Issue/Number), Pagination.

Elliott, R. (2009). The same distant places: Bob Dylan's poetics of place and displacement. Popular Music & Society, 32 (2), 249-270. doi:10.1080/03007760802700936

Kostic, B., & Cleary, A. M. (2009). Song recognition without identification: When people cannot "name that tune" but can recognize it as familiar. Journal of Experimental Psychology / General, 138, 146-159. doi: 10.1037/a0014584

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access, etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- Classrooms**
- Computer Laboratories**

2. Technology resources (AV, data show, Smart Board, software, etc.)

- Data show
- Software

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

G Course Evaluation and Improvement Processes

1. Strategies for Obtaining Student's Feedback on Effectiveness of Teaching

- Confidential instructor evaluation questionnaire for the total course in the final lecture
- Students – College meeting

2. Other Strategies for Evaluation of Teaching by the Instructor or the Department

- Regular scientific meeting with the department members
- Departmental council discussion
- Peer consultation in teaching
- Student feedback report to be analyzed by the course instructor and submit the results to the department head.
- Video recording

3. Procedures for Teaching Development

1. Review the students' feedback and work on the weak points.
2. Conduct departmental workshops to discuss how to support the teaching process.
3. Monitoring of teaching activates by senior faculty members
4. Periodical departmental revisions of the methods of teaching.
5. Attend educational courses of teaching methodology

4. Procedures for Verifying Standards of Student's Achievement (e.g. check marking by an independent member teaching staff of a sample of student's work, periodic exchange and remarking of tests or a sample of assignments with staff members at another institution)

- 1- The use of external examiners.
- 2- Providing samples of all kinds of assessment in the departmental course portfolio of each course.
- 3- Periodical changing and remarking test

5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for developing it.

1. Design graduate survey and employee surveys.
2. Analyze the results of the two surveys and detect the weakness & strengthens in the course.
3. Recognize action plane regarding the course credits, content, depth, breadth, teaching methodology.
4. Submit a course report to the curriculum committee in the department to discuss the action plane.
5. Submit the final action plane to the department Council for approval
6. Stick-holder meeting foe the advantage and the disadvantage in the graduates.
7. The course material and learning outcomes are periodically reviewed and the changes to be taken are approved in the departmental and higher councils
8. The head of department and faculty take the responsibility of implementing the proposed changes.
9. Follow the national researches in the different topics related to the course or new topics can added to the course

Name of Course Instructor: Dr. Khlood Ghafouri and Dr. Emad Tashkandi

Signature:



Date Specification Completed: 12/2/1440AH

Kingdom of Saudi Arabia
Ministry of Education
Umm Al-Qura University
Deanship of Graduate Studies



المملكة العربية السعودية
وزارة التعليم
جامعة أم القرى
عمادة الدراسات العليا

Program Coordinator: __Dr. Khlood Ghafouri

Signature:

Date Received: 12/2/1440AH