



Program Specification

(Bachelor)

Program:	Food Quality and Safety
Program Code (as per Saudi university ranking):	072102
Qualification Level:	Food Quality and Safety
Department:	Clinical Nutrition
College:	Applied Medical Sciences
Institution:	Umm Al-Qura University
Program Specification:	New <input type="checkbox"/> updated* <input checked="" type="checkbox"/>
Last Review Date:	21/03/2025AD

*Attach the previous version of the Program Specification.



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A. Program Identification and General Information

1. Program's Main Location :

Main campus - Al-Abadia - Faculty of Applied Medical Sciences

2. Branches Offering the Program (if any):

NA

3. Partnerships with other parties (if any) and the nature of each:

Applied College – UQU

4. Professions/jobs for which students are qualified

To reach the professional stage in the practical application of food quality and safety, which includes knowledge of all food components, their manufacture, methods of chemical and microbiological analysis, chemical reactions, biochemical properties of food, and the engineering principles involved in food production. Moreover, they are trained in health affairs, food quality control, food legislation and methods practice. Which must be followed to avoid food exposure to any health risks, in addition to the practical practice of the HACCP and GMPs systems.

5. Relevant occupational/ Professional sectors:

Saudi Food & Drug Authority
 Ministry of Municipalities and Housing
 Ministry of Hajj and Umrah
 Ministry of Environment, Water and Agriculture
 Food Catering Sector
 Food Services in Institutions, such as Hospitals and Prisons
 Food Businesses
 Restaurants and Famous Food Chain
 Food Factories
 Ministry of Health
 Ministry of Commerce
 Agricultural Research Institution
 Food Safety Consulting Firms
 Carting Services for Events and Functions
 Food Packaging and Labeling Industry
 Food Supply Chain Mangement
 Culinary Schools and Institutions
 Organic and Sustainable Agriculture Practices
 Wholesale Food Distributor
 Grocery and Retail Food Stores
 Food Technology, Research, and Development
 E-commerce Food Delivery Services
 Food Inspection Services



6. Major Tracks/Pathways (if any):

Major track/pathway	Credit hours (For each track)	Professions/jobs (For each track)
NA		

7. Exit Points/Awarded Degree (if any):

exit points/awarded degree	Credit hours
NA	

8. Total credit hours: (60)

B. Mission, Objectives, and Program Learning Outcomes

1. Program Mission:

Preparing a qualified scientific, professional and research graduate with the ability to actually practice food quality and safety in order to achieve the requirements of maintaining public health in the food field and promoting safe food in the community.

2. Program Goals:

1. Providing the student with basic skills in the field of food quality and safety.
2. Teaching the student sound scientific methods for handling food according to the approved diets.
3. Introducing the student to the rules, regulations and legislation in force in the field of food quality and safety.
4. Training the student on the application of food safety and quality management systems (GMPs & HACCP).
5. Training the student to practice modern technologies for food handling and nutrition services in institutions.

3. Program Learning Outcomes*

Knowledge and Understanding

K1	Demonstrate knowledge of global scientific knowledge of food quality and safety.
K2	Identify the rules, regulations and legislation in the field of food quality and safety.
K3	Recognize the food safety and quality management systems, Good Manufacturing Practices (GMPs) and Hazard Analysis Critical Control Point (HACCP) protocols.

Skills

S1	Practice the skills, rules, regulations and legislation in force in the field of food quality and safety.
S2	Apply proper scientific methods for food handling according to approved food systems.
S3	Evaluate the modern technologies of food handling and nutrition services in institutions.
S4	Implement Food Safety and Quality Management Systems (GMPs & HACCP).

Values, Autonomy, and Responsibility





V1	Exhibit leadership and teamwork by effectively collaborating on projects and taking responsibility for outcomes. Ability to take responsibility, leadership, teamwork, collaboration and effectiveness.
V2	Commit to continuous self-development with having good morals and Islamic teachings.

* Add a table for each track or exit Point (if any)

C. Curriculum

1. Curriculum Structure

Program Structure	Required/ Elective	No. of courses	Credit Hours	Percentage
Institution Requirements	Required	4	12	20.00
	Elective	1	2	3.33
College Requirements	Required			
	Elective			
Program Requirements	Required	15	40	66.67
	Elective			
Capstone Course/Project				
Field Training/ Internship	Required	1	6	10.00
Residency year				
Others				
Total		21	60	100

* Add a separate table for each track (if any).

2. Program Courses

Level	Course Code	Course Title	Required or Elective	Pre- Requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
Level 1	AP1301	English I	Required		4	Institute
	APFQ1510	Professional Skills	Required		2	Institute
	APFQ1101	Nutrition and Body System Functions	Required		3	program
	APFQ1102	Principles of Food Chemistry	Required		3	program
	APFQ1103	Foundation of Human Nutrition	Required		3	program
	APFQ1104	Food Microbiology	Required		3	program
Level 2	APFQ1310	Islamic Culture 1	Required		2	Institute
	APFQ1302	English II	Required		4	Institute
	APFQ2105	Principles of Food Quality and Safety	Required		3	program
	APFQ2106	Food Analysis	Required	APFQ1102	3	program
	APFQ2107	Foodborne Diseases	Required	APFQ1104	2	program



Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
	APFQ2108	Food preservation and processing	Required		2	program
	APFQ2109	Good Manufacturing Practices	Required		2	program
Level 3	APFQ1201	Digital design skills	Elective		2	Institute program
	APFQ3110	Entrepreneurship for Food Quality and Safety	Required		1	program
	APFQ3111	HACCP	Required	APFQ2105	3	program
	APFQ3112	Food Quality Management Systems	Required		3	program
	AP3113	Food Laws and Legislations	Required	APFQ2106	3	program
	AP3114	Food Inspection Technologies	Required		3	program
	AP3115	Guidelines for auditing management systems (ISO 19011)	Required		3	program
Level 4	APFQ414901	Collaborative training	Required		6	program

* Include additional levels (for three semesters option or if needed).

** Add a table for the courses of each track (if any)

3. Course Specifications:

Insert hyperlink for all course specifications using NCAAA template (T-104)

Courses Specification are attached

4. Program learning Outcomes Mapping Matrix:

Align the program learning outcomes with program courses' according to the following desired performance levels (*I = Introduced & P = Practiced & M = Mastered*).

Course code & No.	Program Learning Outcomes										
	Knowledge and understanding				Skills				Values, Autonomy, and Responsibility		
	K1	K2	K3	---	S1	S2	S3	S4	V1	V2	----
English I											
Professional Skills											
Nutrition and Body System Functions	I				I				I		





Course code & No.	Program Learning Outcomes										
	Knowledge and understanding				Skills				Values, Autonomy, and Responsibility		
	K1	K2	K3	---	S1	S2	S3	S4	V1	V2	----
Principles of Food Chemistry	P				P				P		
Foundation of Human Nutrition		I				I				I	
Food Microbiology	I				I				P		
Islamic Culture 1											
English II											
Principles of Food Quality and Safety		P			I	P			P		
Food Analysis		P				P		P	P		
Foodborne Diseases	P				P				M		
Food preservation and processing	P	P			P				I	P	
Good Manufacturing Practices		I	I			I		I			
Digital design skills											
Entrepreneurship for Food Quality and Safety	I		I			I		I		I	
HACCP		P	P					P	P		P
Food Quality Management Systems			M		M	M			M		
Food Laws and Legislations			M					M	M		
Food Inspection Technologies		M	M			M	M			P	





Course code & No.	Program Learning Outcomes										
	Knowledge and understanding				Skills				Values, Autonomy, and Responsibility		
	K1	K2	K3	---	S1	S2	S3	S4	V1	V2	----
Guidelines for auditing management systems (ISO 19011)	P		M			P	M			M	
Collaborative training		M	M			M	M		M		

* Add a separate table for each track (if any).

5. Teaching and learning strategies applied to achieve program learning outcomes.

Describe teaching and learning strategies and curricular and extra-curricular activities adopted to achieve the Program's learning outcomes in all areas.

Lectures,
Seminars,
Laboratory sessions
Workshops
Group projects
Case study analysis
Field training by visiting hospitals, food factories, etc.
Class presentation.
Group discussion
Guest Lectures/Industry Speakers
Online Learning Platforms

6. Assessment Methods for program learning outcomes.

Describe assessment methods (Direct and Indirect) that can be used to measure the achievement of program learning outcomes in all areas.

The Program should devise a plan for assessing Program Learning Outcomes (all learning outcomes should be assessed at least twice in the bachelor program's cycle and once in other degrees).

Midterm exams
Long written exams
Rubrics for Case studies,
Rubrics for Critical reports,
Rubric for Collaborative Training
Rubrics for Essays and Presentations
~~Rubrics for Case Studies~~
Rubrics for Scientific debate for published articles



D. Student Admission and Support:

1. Student Admission Requirements

Mechanism of Admission to the Diploma Program of the Community Applied College?:

- Admission shall be granted once, before the beginning of the academic year and immediately after the announcement of the results of the secondary school exams, according to the specified period stated on the website (The applicant must have obtained a high school degree or its equivalent).
- The students should apply for admission via the Unified Admission Portal on the UQU website.
- The applicants shall be selected according to the conditions and criteria announced, and the capacity of the university colleges.
- The admission results shall be announced, and the students should pay the fees.
- The university ID number shall be issued after the students pay the fees via the ATM.

Conditions of Admission:

- The applicant must have obtained a high school degree or its equivalent.
- The applicant should be medically fit.
- The applicant must pay the fees of the program, which will last for two years.

2. Guidance and Orientation Programs for New Students

(Include only the exceptional needs offered to the students of the Program that differ from those provided at the institutional level).

Food quality and safety program offers a guidance and orientation for new students. In the orientation, students will receive a guidebook-for program's rules, regulations, students' rights and procedures for lodging appeal. This guidebook will be available in both Arabic and English, ensuring accessibility for all students. An overview of the program's curriculum and structure, detailing the total ~~CR-hr~~ credit hour requirements and essential components related to internships, where applicable, will be provided. Additionally, the guidebook outlines the assessment criteria and examination procedures, alongside the appeals process, enabling students to navigate academic requirements effectively.

To foster a supportive learning environment, the Program organizes a full day presentation where faculty members will welcome new students, provide a thorough overview of the available facilities, and address any questions or concerns. This session will also include contributions from senior students who will participate actively in mentoring and assisting newcomers, facilitating their integration into the academic community. Information regarding library resources and academic support systems will be highlighted to ensure that students are well-informed and equipped to succeed in their studies.

3. Student Counseling Services

(Academic, professional, psychological, and social)

(Include only the exceptional needs offered to the students of the Program that differ from those provided at the institutional level).

New enrollees will receive a detailed guidebook encompassing the program's rules, regulations, students' rights, and procedures for lodging appeals. **Academic Counseling:** Academic counselors support students with course selection, degree progression, and overcoming academic challenges. Workshops and one-on-one sessions are offered to enhance study skills. **Professional Counseling:** The program provides career counseling, assisting with career planning, resume writing, interview preparation, and networking opportunities. **Psychological Counseling:** The program offers psychological counseling services to help students manage stress, anxiety, and personal issues, promoting mental well-being. **Social Support**





Services: To enhance community engagement, the program facilitates student organizations, clubs, and events that encourage social interaction and collaboration.

4. Special Support

(Low achievers, disabled, gifted, and talented students).

NA

E. Faculty and Administrative Staff:

1. Needed Teaching and Administrative Staff

Academic Rank	Specialty		Special Requirements / Skills (if any)	Required Numbers		
	General	Specific		M	F	T
Professor	Nutrition	Nutrition and Food science	-	2	0	2
Associate Professor	Nutrition	Nutrition and Food science	-	3	0	3
Assistant Professor	Nutrition	Clinical Nutrition and Public Health Nutrition	-	1	4	5
Lecturer	Nutrition	Clinical Nutrition, Public Health Nutrition and food analysis	-	1	5	6
Teaching Assistant	Nutrition	Clinical Nutrition and Food Science	-	1	2	3
Technicians and Laboratory Assistants	Nutrition	Food Safety and Hygiene	-	1	2	3
Administrative and Supportive Staff	Nutrition	Food Safety and Hygiene	-	1	2	3
Others (specify)	-	-	-	-	-	-



F. Learning Resources, Facilities, and Equipment:

1. Learning Resources

Learning resources required by the Program (textbooks, references, e-learning resources, web-based resources, etc.)

Books

- Nielsen, S. (2017). *Food analysis*. Springer. ISBN: 9783319457741.
- Singh, O. V. (2017). *Foodborne pathogens and antibiotic resistance*. Wiley. ISBN: 9781119139157.
- Jeantet, R. (2016). *Handbook of food science and technology 1: Food alteration and food quality*. Wiley. ISBN: 9781848219328.
- Foster, W. M. (2015). *Food microbiology*. India CBS Publishers. ISBN: 9788123928296.
- Mishra, L. K. (2015). *Introductory food toxicology*. India Daya Publishing House. ISBN: 9789351243007.
- Chavan, S. (2015). *Food preservation: Principles and practices*. Scitus Academics. ISBN: 9781681170633.
- Gboyega, O. (2014). *Handbook of food safety*. India Agri Horti Press. ISBN: 9789383285426.
- Mahindru, S. N. (2009). *Food contaminants: Origin, propagation, and analysis*. India APH Publishing. ISBN: 9788176485258.

Online Resources

- King Abdullah Library eResources. (n.d.). *King Abdullah Library eResources*. [Available at](www.acknowledge.net/uquv3/Login/tabid/1247/language/en-US/Default.aspx).
- Saudi Digital Library. (n.d.). *Saudi Digital Library*. [Available at](<https://sdl.edu.sa/SDLPortal/EN/Publishers.aspx>).

2. Facilities and Equipment

(Library, laboratories, classrooms, etc.)

- 5 classrooms with a capacity of 50 students per classroom
- Food microbiology Lab with a capacity of 25 Students per lab
- Food Analysis Lab with a capacity of 25 Students per lab
- Food Preparation Lab with a capacity of 25 Students per lab

3. Procedures to ensure a healthy and safe learning environment

(According to the nature of the Program)

There is a safety and lab maintenance committee which has many roles like making check list for firefighting system including fire distinguishers' date of expiry, waste removal and emergency plan and exits. In addition, safety in the lab provided at the beginning of each lab according to its nature, like eye wash, wearing goggles and lab coat, how to handle shrapnel and chemicals. Power supply also run across maintenance system and any problem reported to the head of the department whom in turn communicate to the main faculty and university maintenance units. Annual checking list for the safety system also runs.

G. Program Quality Assurance:

1. Program Quality Assurance System

Provide a link to the quality assurance manual.

The Quality Assurance Manual is Attached

2. Procedures to Monitor Quality of Courses Taught by other Departments

For many years now the committee of quality at the program level is established running many regular and annual base activities to monitor quality. At the level of the faculty the vice dean of quality also follow and support the consistency of quality level. for both levels the system involving the following:





- a) Committees at the program levels will be formed and approved by the head of the department with many activities to run and include several standards, surveys and statistics that are needed for the annual report and the self study and improvement plan.
- b) the program specs and courses specs will be completed according to the updated version of the NCAAA template (2019). It will be reviewed and updated every 2 years or when new template is provided.
- c) the program and courses reports also will be obtained by semester or annually with comments and development plan to be concluded from them.
- d) The quality of assessment and teaching will be followed and monitored by many committees. Any drawback of weaknesses will be spotted and modified as necessary.
- e) Program Advisory Committee (PAC) will be formed to monitor and control over the achievement of the program intended learning outcomes (ILOs) and courses ILOs in regular fashion.
- improvement plan will be set in annual basis to cover these aspects.

3. Procedures Used to Ensure the Consistency between Main Campus and Branches (including male and female sections).

NA

4. Assessment Plan for Program Learning Outcomes (PLOs),

- Reviewing the assessment of courses and academic program conducted by students
- Review the evaluation of the academic program conducted by the graduates
- Review employers 'assessment of graduates' performance
- Take the opinion of an external auditor of the program and identify each of the strengths and weaknesses and make recommendations for improvement and make plans to complete these recommendations
- Organizing regular meetings with employers and the target community
- Taking the views of employers and those in the program advisory committee.

5. Program Evaluation Matrix

Evaluation Areas/Aspects	Evaluation Sources/References	Evaluation Methods	Evaluation Time
Teaching effectiveness	- Course questionnaire evaluation - Program questionnaire evaluation - Student experience questionnaire evaluation - Staff questionnaire evaluation	- Surveys through questionnaires - Report the competence of the faculty member through questionnaires	end of the academic year
Facilities and equipment	Questionnaires of faculty and students And staff	Surveys of beneficiaries	beginning of the academic year
Learning Resources	Questionnaires of faculty, students and staff	Surveys of beneficiaries	beginning of the academic year
Effectiveness of guidance	Questionnaires evaluating the	Survey of student's opinions	beginning of semesters



Evaluation Areas/Aspects	Evaluation Sources/References	Evaluation Methods	Evaluation Time
	effectiveness of counseling		
Student Services	Survey of students' opinions	Survey of student's opinions	Each semester

Evaluation Areas/Aspects: e.g., leadership, effectiveness of teaching & assessment, learning resources, services, partnerships, etc.

Evaluation Sources: students, graduates, alumni, faculty, program leaders, administrative staff, employers, independent reviewers, etc.

Evaluation Methods: e.g., Surveys, interviews, visits, etc.

Evaluation Time: e.g., beginning of semesters, end of the academic year, etc.





6. Program KPIs*

The period to achieve the target (__2__) year(s).

No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
1	KPI-P-01	Percentage of achieved indicators of the program operational plan objectives	75%	Calculating percentage of performance indicators of the operational plan objectives of the program that have achieved the targeted annual level to the total number of indicators targeted for these objectives in the same year	One academic Year
2	KPI-P-02	Students' Evaluation of quality of learning experience in the program	4.5	Calculating the average of overall rating of final year students for the quality of learning experience in the program on a five point scale in an annual survey.	One Academic Year
3	KPI-P-03	Students' evaluation of the quality of the courses	4	Calculating the average students overall rating for the quality of courses on a five-point scale in an annual survey	Every semester
4	KPI-P-04	Students' evaluation of the quality of scientific supervision	4.5	Computation the average rating of quality of scientific supervision on a five point scale in an annual survey.	Academic Year
5	KPI-P-05	Average time for students' graduation	95%	computation the average time (in semesters) spent by students to graduate from the program.	Academic Year





No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
6	KPI-P-06	Rate of students dropping out of the program	5%	Calculating the percentage of students who did not complete the program to the total number of students in the same cohort.	2 Months after graduates
7	KPI-P-07	Graduates' employability	70%	Calculating the graduates from the program who within a year of graduation were employed to the total number of graduates in the same year	End of each year
8	KPI-P-08	Employers' evaluation of the program graduates' competency	4	Counting the average overall rating of employers for the competency of the program graduates on a five point scale in an annual survey	Annually
9	KPI-P-09	Students' satisfaction with the provided services	4	Computing the average of overall rating of employers for the proficiency of the program graduates on a five-point scale in an annual survey	End of each year
10	KPI- G-10	Percentage of students' publication	20%	Percentage of students who: a. published their research in refereed journals b. presented papers in conferences to the total number of students in the program during the year.	During the year
11	KPI- G-11	Number of patents, innovative products, and awards of excellence	3	Number of: a. Patents and innovative products b. National and international excellence awards	Annually





No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
				obtained annually by the students and staff of the program.	
12	KPI-P-12	Ratio of students to faculty members	1:10	Ratio of the total number of students to the total number of full-time and fulltime equivalent faculty members participating in the program.	End of every semester
13	KPI-P-13	Percentage of faculty members' distribution based on academic ranking	2 Prof. 3 Associate Prof. 5 Assistant Prof. 5 Teaching Assistant	Percentage distribution of faculty members participating in the program based on academic ranking.	End of every semester
14	KPI-P-14	Proportion of faculty members leaving the program	3%	Proportion of faculty members leaving the program annually for reasons other than age retirement to the total number of faculty members.	Annually
15	KPI- G-15	Percentage of publications of faculty members	2/1	Percentage of faculty members participating in the program with at least one research publication during the year to total faculty members in the program.	During the year
16	KPI- G-16	Rate of published research per faculty member	80%	The average number of refereed and/or published research per each faculty member participating in the program during the year (total number of refereed and/or published research to the total number of faculty members during the year)	During the year





No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
17	KPI- G-17	Citations rate in refereed journals per faculty member	5/1	The average number of citations in refereed journals from published research (total number of citations in refereed journals from published research for faculty members to the total published research)	During the year
18	KPI-P-18	Satisfaction of beneficiaries with learning resources	4.5	Computing the proportion of teaching staff leaving the program annually for reasons other than age retirement to the total number of teaching staff.	Annually

*including KPIs required by NCAAA

H. Specification Approval Data:

COUNCIL /COMMITTEE	Umm Al-Qura University Council
REFERENCE NO.	851141114462/190392
DATE	22/11/1446

