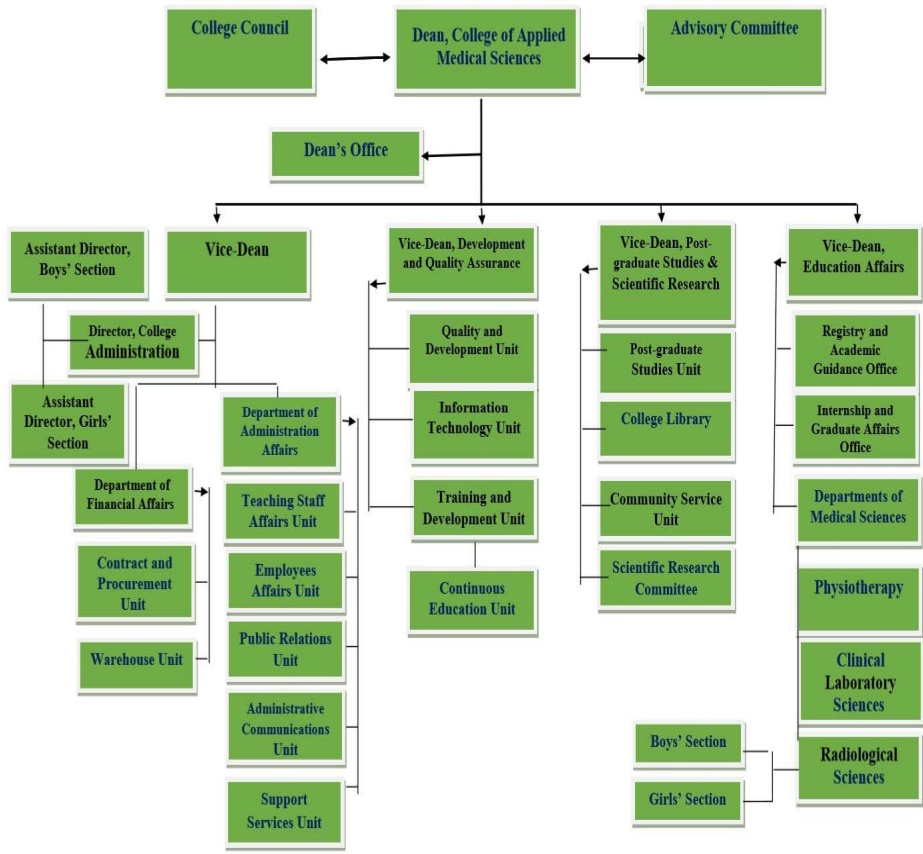


T4. Program Specification

For guidance on the completion of this template, please refer to Chapter 2, of Part 2 of Handbook 2 Internal Quality Assurance Arrangement and to the Guidelines on Using the Template for a Program Specification in Attachment 2 (b).

1. Institution: Najran University	Date : December 2017
2. College/Department :	
3. Dean/ Department Head: Dr. Mohammad Saeed Zayed Aal Aayedh	
4. Insert program and college administrative flowchart:	



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graph TD
    CC[College Council] <--> D[Dean, College of Applied Medical Sciences]
    D <--> AC[Advisory Committee]
    D --> DO[Dean's Office]
    D --> V[Assistant Director, Boys' Section]
    D --> V2[Vice-Dean]
    D --> V3[Vice-Dean, Development and Quality Assurance]
    D --> V4[Vice-Dean, Post-graduate Studies & Scientific Research]
    D --> V5[Vice-Dean, Education Affairs]
    
    V --> DA[Director, College Administration]
    V --> AGS[Assistant Director, Girls' Section]
    DA --> DFA[Department of Financial Affairs]
    DA --> CPU[Contract and Procurement Unit]
    DA --> WU[Warehouse Unit]
    
    V2 --> DAA[Department of Administration Affairs]
    DAA --> TSA[Teaching Staff Affairs Unit]
    DAA --> EAU[Employees Affairs Unit]
    DAA --> PRU[Public Relations Unit]
    DAA --> ACU[Administrative Communications Unit]
    DAA --> SSU[Support Services Unit]
    
    V3 --> QDU[Quality and Development Unit]
    V3 --> ITU[Information Technology Unit]
    V3 --> TDU[Training and Development Unit]
    TDU --> CEU[Continuous Education Unit]
    
    V4 --> PGU[Post-graduate Studies Unit]
    V4 --> CL[College Library]
    V4 --> CSU[Community Service Unit]
    V4 --> SRC[Scientific Research Committee]
    
    V5 --> RAO[Registry and Academic Guidance Office]
    V5 --> IGAO[Internship and Graduate Affairs Office]
    V5 --> DMS[Departments of Medical Sciences]
    DMS --> PT[Physiotherapy]
    DMS --> CLS[Clinical Laboratory Sciences]
    DMS --> RS[Radiological Sciences]
    
    BS[Boys' Section]
    GS[Girls' Section]
    BS --- RS
    GS --- RS
    
```

5. List all branches offering this program :

Branch1 : **Main Campus of Najran University**

Branch 2 : Not applicable

Branch 3 : _____

Branch 4 : _____

A. Program Identification and General Information

1. Program title and code : Clinical Laboratory Sciences , Program Code 1801
2. Total credit hours needed for completion of the program : 138 credit hours
3. Award granted on completion of the program : Bachelor of Applied Medical Science - Clinical Laboratory Sciences Program.
4. Major tracks/pathways or specializations within the program (eg. transportation or structural engineering within a civil engineering program or counselling or school psychology within a psychology program): Not applicable
5. Intermediate Exit Points and Awards (if any) (eg. associate degree within a bachelor degree program): Not applicable
6. Professional occupations (licensed occupations, if any) for which graduates are prepared. (If there is an early exit point from the program (eg. diploma or associate degree) include professions or occupations at each exit point): - The routine Clinical laboratory tests in the medical laboratories of public hospitals, public In addition, private health centers. - Work and research tasks in university Clinical laboratories as well as in research centers. - Work as well as providing technical assistance in the field of development of medical Laboratory tests. - Examination of specimens in forensic medicine laboratories.

7. (a) New Program برنامج جديد	<input type="text" value="No"/>	Planned starting date تاريخ البدء	<input type="text" value="No"/>
(b) Continuing Program برنامج مستمر	<input type="text" value="No"/>	<input type="text" value="21 July 2016 and 2017"/>	
Year of most recent major program review Organization involved in recent major review (eg. internal within the institution) Accreditation review by The program has been accredited by AHPGS (Accreditation Agency in health and social science – German in 21 July 2016 Other : The program has been reviewed by Education and Learning Unit - Deanship of Development and Quality in 2017			
8. Name of program chair or coordinator. If a program chair or coordinator has been appointed for the female section as well as the male section, include names of both. Dr. Bandar Mohammed Elshehri- Assistant Professor – Coordinator of the programme. NB there no female section in the program			
9. Date of approval by the authorized body (MOE)			
Campus Location	Approval By	Date	
Main Campus:	Ministry of Education	1/9/2006	
Branch 1:	Not applicable	Not applicable	
Branch 2:			
Branch 3:			
Branch 4:			

B. Program Context

Explain why the program was established:

1. To Graduate of distinguished national cadres possessing the knowledge and skills required to work as medical laboratory specialists to fill the shortage in the labor market and accompanying development plans.
2. The student acquires loyal professional behaviors and ethics.
3. To qualify students with scientific and practical skills to work on advanced diagnostic devices and quality assurance in laboratories
4. To qualify graduates to develop their scientific and practical skills continuously in line with scientific progress in the field of medical laboratory specialization
5. To develop the community's health awareness about infectious and endemic diseases in Najran region in particular and the Kingdom in general
6. To increase the community awareness in the last and ongoing developments in the role of clinical laboratories in medical diagnosis and follow-up of patients

a. Summarize economic reasons, social or cultural reasons, technological developments, national policy developments or other reasons.

- 1- The lack of contemporary and advanced Clinical laboratory services and equipment for the Accurate diagnosis of certain health issues using, for example, molecular biology techniques.
- 2- Many health problems are found in Najran area. this necessitates the introduction and improvement of the current means of therapy in addition to the of advanced diagnostic Laboratory techniques.

b. Explain the relevance of the program to the mission and goals of the institution.

- 1- The study program is in complete concordance with the aims and objectives of the institution.
- 2- The study program also fulfils the aims and objectives of both Najran University and the College of Applied Medical Sciences.

2. Relationship (if any) to other programs offered by the institution/college/department.

a. Does this program offer courses that students in other programs are required to take?

Yes ☐

No ☒

If yes, what has been done to make sure those courses meet the needs of students in the other programs?

b. Does the program require students to take courses taught by other departments?

Yes ☒

No ☐

If yes, what has been done to make sure those courses in other departments meet the needs of students in this program?

1. An interview for students to learn the skills they have learned
2. Form joint cross departmental committees (of the laboratory medicine) for the periodic Examination and revision of the courses that are related to other departments.
3. Explore the students' opinion of the study programs.
4. evaluate the learning outcomes in the aim of exploring the extent of the needs of other Departments.
5. Consultation of specialist academic bodies involved in the evaluation process.
6. According to assess learning outcomes

3. Do students who are likely to be enrolled in the program have any special needs or characteristics? (eg. Part time evening students, physical and academic disabilities, limited IT or language skills).

Yes ☐

No ☒

4. What modifications or services are you providing for special needs applicants?

C. Mission, Goals and Objectives :

1. Program Mission Statement (insert) : Clinical Laboratory Sciences program works on preparation and graduation of clinical laboratories with high efficiency and ethics of the perfect professional, and be able to work with the latest equipment and techniques.
List program goals (e.g. long term, broad based initiatives for the program, if any) <ul style="list-style-type: none"> - Developing the educational process. - Graduation of students in the field of clinical laboratories with high qualification and able to serve the community

3. List major objectives of the program within to help achieve the mission. For each measurable objective describe the measurable performance indicators to be followed and list the major strategies taken to achieve the objectives.

Measurable objectives	Measurable performance indicators	Major strategies
Graduation of distinguished national cadres possessing the knowledge and skills required to work as medical laboratory specialists to fill the shortage in the labor market and accompanying development plans.	1. Graduation of 80 % of students per batch in the shortest possible period 2. Hold a special session of academic guidance at least every week	1. Provide an adequate number of faculty members 2. Setting up the academic guidance rooms and providing an incentive for the academic mentors
The student acquires loyal professional behaviors and ethics.	Recruiter's satisfaction of professional and personal skills of the program graduates should be at least 80%.	1. Conducting interactive lectures in ethics courses
To qualify students with scientific and practical skills to work on advanced diagnostic devices and quality assurance in laboratories	-Rate of satisfaction of practical instructors should be at least 75%. - Rate of Satisfaction of students with their education should be at least 75%. - Increasing the student and staff satisfaction about institutional capability to 75 %.	- Recruit highly qualified academic staff -Provide a modern education. - Provide suitable practical training opportunities for students. - Provide proper labs containing all education need.
To qualify graduates to develop their scientific and practical skills continuously in line with scientific progress in the field of medical laboratory	- Rate of satisfaction of employers should be at least 50%. - Increasing the rate of student satisfaction with the	- Applying periodically developing and upgrading program. - Provide suitable practical training opportunities for

specialization	<p>quality of learning experiences in the program to 75 %</p> <p>Increasing the student and staff satisfaction about institutional capability to 75 %.</p> <ul style="list-style-type: none"> - Increasing the staff to student's ratio. - Increasing the student satisfaction rate with modules quality to 75 % 	<p>students.</p> <ul style="list-style-type: none"> - Recruit highly qualified academic staff - continues update of infrastructure needs. - Review and auditing the program activities by internal auditing committee and external reviewers.
To develop the community's health awareness about infectious and endemic diseases in Najran region in particular and the Kingdom in general	<ul style="list-style-type: none"> - Conducting at least one session each semester, training course in the field of community service 	<ol style="list-style-type: none"> 1. Activate the role of community service unit in the program 2. - Provide suitable practical training opportunities for students in the field of community service

D. Program Structure and Organization

1. Program Description:

List the core and elective program courses offered each semester from Prep Year to graduation using the below Curriculum Study Plan Table (A separate table is required for each branch IF a given branch/location offers a different study plan).

A program or department manual should be available for students or other stakeholders and a copy of the information relating to this program should be attached to the program specification. This information should include required and elective courses, credit hour requirements and department/college and institution requirements, and details of courses to be taken in each year or semester.

Curriculum Study Plan Table

* Prerequisite – list course code numbers that are required prior to taking this course.

	Course Code	Course Title	Required or Elective	Prerequisite	Credit Hours	College or Program
1 st Year (Preparatory) Semester 1	ENG 140	English: Reading	Required	-----	2	Preparatory year
	ENG 141	English: Writing	Required	-----	2	Preparatory year
	ENG 142	English: Listening & speaking	Required	-----	2	Preparatory year
	ENG 143	Language Skills (Grammars)	Required	-----	2	Preparatory year
	Math 140	Math for Health Sciences	Required	-----	2	Preparatory year
	ETHC 140	Learning and thinking skills	Required	-----	2	Preparatory year
	TECH 140	Computer skills	Required	-----	3	Preparatory year
Total					15	

	Course Code	Course Title	Required or Elective	Prerequisite	Credit Hours	College or Department
1 st Year #1 (Preparatory) Semester 2	ENG 150	General English language	Required	-----	3	Preparatory year
	ENG 151	Expository Writing	Required	-----	2	Preparatory year
	ETHC 150	Occupational Ethics	Required	-----	1	Preparatory year
	SCI 150	Communication skills	Required	-----	2	Preparatory year
	Math 150	Math for Health Sciences	Required	-----	4	Preparatory year
Total					12	

2 nd Year Semester 1	Course Code	Course Title	Required or Elective	Prerequisite	Credit Hours	College or Program
	Arb-2 201	Language skills	Required	-----	2	Preparatory year
	SLM 111	Islamic cultures (1)	Required	-----	2	University require
	Ana-2 201	Anatomy (1)	Required	-----	2	Collage require
	Phy-2 223	General physiology	Required	-----	2	Collage require
	Chem 207	Introduction of biochemistry	Required	-----	2	Collage require
	His-2 231	Basic Histology	Required	Ana-2 201	2	Program require
	Phs-2 204	Introduction of physics	Required	-----	2	Collage require
	Res 242	Applied Basics of biostatistics	Required	-----	2	Collage require
	Tec-2 250	Computer uses in applied medical health	Required	-----	3	Preparatory year
Total					19	

2 nd Year Semester 2	Course Code	Course Title	Required or Elective	Prerequisite	Credit Hours	College or Program
	SLM 212	Islamic cultures (2)	Required	-----	2	University require
	His 214	Histology Techniques	Required	Ana-2 201	1	Program require
	Epi 271	Epidemiology	Required	-----	1	Program require
	Mic 251	General Microbiology	Required	-----	4	Program require
	Chem 222	Clinical Chemistry (1)	Required	Chem 207	4	Program require
	Hem 241	Introduction to Hematology	Required	-----	2	Program require
TOTAL					15	

3 rd Year Semester 1	Course Code	Course Title	Required or Elective	Prerequisite	Credit Hours	College or program
	Arb 202	Arabic writing	Required	-----	2	College
	Hem 342	Hematology (1)	Required	Hem 241	4	Program require
	Mic 351	General Microbiology	Required	-----	3	Program require
	Mic 353	General Immunology	Required	Mic 351	2	Program require
	Mic 352	Clinical bacteriology(1)	Required	Mic 351		Program require
	Chem 323	Clinical Chemistry (2)	Required	Chem 207, Chem 222	4	Program require
TOTAL					15	

3 rd Year Semester 2	Course Code	Course Title	Required or Elective	Prerequisite	Credit Hours	College or program
	Hem 343	Hematology (2)	Required	Hem 241, Hem 241	4	Program require
	Mic 356	Medical Mycology	Required	Mic 251	2	Program require
	MIC 354	Clinical Bacteriology (2)	Required	Mic 251	3	Program require
	Mic 355	Medical Virology	Required	Mic 251	2	Program require
	Chem 324	Clinical Chemistry (3)	Required	Chem 207, Chem 222, Chem 323	4	Program require
	SLM 113	Islamic cultures (3)	Required	-----	2	Preparatory year
TOTAL					17	

4 th Year Semester 1	Course Code	Course Title	Required or Elective	Prerequisite	Credit Hours	College or program
	Hist 431	Histopathology (1)	Required	Ana-2 201	3	Program require
	Chem 425	Clinical chemistry (4)	Required	Chem 207, Chem 222, Chem 323 Chem 324	3	Program require
	Mic 457	Medical parasitology	Required	Ana-2 201	2	Program require
	Mic 458	Environmental microbiology	Required	Ana-2 201	2	Program require
	Mic 459	Genetics and molecular techniques	Required	Mic 351	2	Program require
	SLM 114	Islamic cultures (4)	Required	-----	2	College
TOTAL					14	
4 th Year Semester 2	Course Code	Course Title	Required or Elective	Prerequisite	Credit Hours	College or program
	Hem 444	Hematology (3)	Required	Hem 241, Hem 241 Hem 343	2	Program require
	Res 471	Methods of scientific researches	Required	-----	2	Program require
	Mic 460	Clinical Immunology	Required	-----	3	Program require
	Mic 461	Bacteriology and Immunology (Clinical Practice)	Required	Mic 251 Mic 459 Mic 457 MIC 354 Mic 352	2	Program require
	Hist 432	Histopathology (2)	Required	Hist 431 His 214	3	Program require
	Chem - 4(3)	Clinical Chemistry (Clinical Practice)	Required	Chem 207, Chem 222, Chem 323 Chem 324 Chem 425	3	Program require
TOTAL					15	

5 th Year Semester 1	Course Code	Course Title	Required or Elective	Prerequisite	Credit Hours	College or program
	Hem 454	Hematology (Clinical practice)	Required	Hem 241, Hem 241 Hem 343 Hem 444	3	Program require
	Hist 533	Clinical histopathology	Required	Hist 431 His 214 Hist 432	4	Program require
	Qual 573	Laboratory quality management	Required	-----	3	Program require
	Lab574	Student research topics	Required	-----	4	Program require
	Eth572	Ethics of medical health professionals	Required	-----	2	Program require
TOTAL					16	

2. Required Field Experience Component (if any, e.g. internship, cooperative program, work experience).

Summary of practical, clinical or internship component required in the program. Note: see Field Experience Specification.
<ul style="list-style-type: none"> - The courses aim at providing the students with inter program courses integration regarding the theoretical knowledge and practical skills. - This inter link is achieved through teaching the basics and principles of the various subjects of clinical sciences (clinical chemistry, microbiology, immunology, hematology, Clinical chemistry and histopathology) and the interpretation of the clinical findings. - Six-month internship (a log book and evaluation report are attached).
<p>a. Brief description of field experience activity :</p> <ol style="list-style-type: none"> 1- Clinical Practice-1: Clinical Chemistry. 2- Clinical Practice-2: Microbiology and Immunology. 3- Clinical practice-3: Histopathology and cytology. 4- Clinical Practice-4: Haematology. 5- Internship year program: General (6 months).
<p>b. At what stage or stages in the program does the field experience occur? (eg. year, semester)</p> <ul style="list-style-type: none"> - Fourth year: level 8 – Microbiology and immunology clinical practice. - Fourth year: level 9 – Hematology clinical practice. - Fifth year: level 8 – Clinical Chemistry clinical practice histopathology clinical practice. - Fifth year: level 8 – Histopathology clinical practice. - Sixth year: Internship year.
<p>c. Time allocation and scheduling arrangement. (eg. 3 days per week for 4 weeks, full time for one semester)</p> <ul style="list-style-type: none"> - five days a week for fifteen weeks. - Internship period: 26 weeks.
<p>d. Number of credit hours (if any)</p> <ul style="list-style-type: none"> - Internship period: 26 weeks. - not accounted in the program credit hours

3. Project or Research Requirements (if any)

Summary of any project or thesis requirements in the program. (Other than projects or assignments within individual courses) (A copy of the requirements for the project should be attached.) - Each student is assigned a research project, which, in itself, is one of the subjects of level 9, in addition to a project supervisor.
a. Brief description: - The theme of the research project should address one of the current topics of research in relation with one of the major courses such as haematology, microbiology, etc.
b. List the major intended learning outcomes of the project or research task. - Reinforce the students' understanding of the subjects of interest for them. - The ability to choose the theme of the research project and to determine the objectives that could be achieved. - Explore the different sources of information to help in the preparation of a research project. - Train the students on how to gather research ideas from the different publications and rephrasing what they collected in their own way.:
c. At what stage or stages in the program is the project or research undertaken? (e.g. level) Fifth year: level 9.
d. Number of credit hours (if any) : 4 credit hours.
e. Description of academic advising and support mechanisms provided for students to complete the project. - Through the assignment of a teaching staff member to supervise each student's project. - Hold joint working sessions (students and supervisors) to lay down the plan of the research project. - Follow the student's progress during experimentation. - Guide the student on how to construct a research project plan structure.
f. Description of assessment procedures. (including mechanism for verification of standards) - The supervisor's continuous assessment of the student progress. - Examining the student's dissertation in a public academic session in the presence of a teaching staff member other than the assigned supervisor.

4. Learning Outcomes in Domains of Learning, Assessment Methods and Teaching Strategy
Program 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 and teaching.

The **National Qualification Framework** provides five learning domains. Learning outcomes are required in the first four domains and sometimes are also required in the Psychomotor Domain.

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

First, insert the suitable and measurable learning outcomes required in each of the learning domains. **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 program learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process.

NQF Learning Domains and Learning Outcomes		Teaching Strategies	Assessment Methods
1.0	Knowledge		
1.1	- Describe the scientific bases of the routine clinical Laboratory tests as well as diseases.	- Theoretical lectures. - Practical sessions.	- Continuous assessments. - Written examinations. - Oral exam
1.2	- Recall other knowledge that serve the profession of clinical laboratory diagnosis such as medical Statistics, computer sciences and data bases, etc.	- Theoretical lectures. - Practical sessions.	Continuous assessments. - Written examinations. - Oral exam.
1.3	Outline the methods and practice of quality control both domestically and abroad in the domain of Medical laboratories..	- Theoretical lectures	Continuous assessments. - Written examinations. - Oral exam
1.4	Describe the professional ethics and the regulations of the laboratory practice.	- Theoretical lectures.	Continuous assessments. - Written examinations. - Oral exam
2.0	Cognitive Skills		
2.1	Analyse the laboratory test results and correlate them with the clinician's diagnosis of the relevant case.	- Theoretical lectures. - Practical lectures. - Practical training.	- Written examinations. - Oral exam. - Assignment of research projects to the students.
2.2	Create the skills that are relevant to the development of the laboratory working environment.	- Theoretical lectures. - Practical training.	- Written examinations. - practical evaluation sheet.
2.3	Design decisions to stress the accuracy and quality of laboratory reports as well as maintaining the privacy of the patient's laboratory reports.	- Theoretical lectures. - Practical lectures. - Practical training.	- Written examinations. - Oral exam. - Practical examinations
2.4	- Deduce the characteristics (chemical ,hematological, immunological and histological components) of all types of biological specimens and to conclude the relevant possible diagnosis.	- Practical lectures. - Practical training.	-Written examinations. - Oral exam. - Practical examinations

3.0	Interpersonal Skills & Responsibility		
3.1	Demonstrate the dignified Islamic standards and truthfulness and at the same time admitting any committed professional mistakes in a soul of high responsibility	- Theoretical lectures.	- oral exam. - Written examinations.
3.2	Apply efficiently the routine and technical duties and obtain valid and accurate diagnostic test results even under intense work pressure.	Practical lectures. - Practical training.	- Practical examinations
3.3	Show flexibility, innovation and to cope with the different work conditions and developments.	- Theoretical lectures.	-Written examinations. - Oral exam.
4.0	Communication, Information Technology, Numerical		
4.1	Able to communicate efficiently with the community individuals, patients and the medical team members.	- Theoretical lectures.	-Written examinations. - Oral exam. - Practical examinations
4.2	Operate efficiently with precision the computer and the laboratory data bases and acquire the know-how to use it to the benefit of the laboratory	- computer lab - Supervise the students during their visits to the university library	- Oral exam. - Practical examinations
4.3	Operate the various computer programmes in preparing laboratory reports, material request forms and inventory lists	-computer lab - Practical lectures.	Oral exam. - Practical examinations
5.0	Psychomotor		
5.2	Perform the laboratory tests taking into consideration the accuracy, safety and infection control measures .	- Holding sessions to Discuss. - study the conclusions of research project results to reinforce these skills.	- Group discussions. - Oral exam. - Practical examination.

Program Learning Outcome Mapping Matrix

Identify on the table below the courses that are required to achieve the program learning outcomes.

Insert the program learning outcomes, according to the level of instruction, from the above table below and indicate the courses and levels that are required to teach each one; use your program's course numbers across the top and the following level scale.

Levels:

I = Introduction

P = Proficient

A = Advanced

(see help icon)

(see help icon)

NQF Learning Domains and Learning Outcomes		Level 1						
			ENG 141	ENG 142	ENG 143	Math 140	ETHC 140	TECH 140
1.0	Knowledge							
1.1	- Describe the scientific bases of the routine clinical Laboratory tests as well as diseases.							
1.2	- Recall other knowledge that serve the profession of clinical laboratory diagnosis such as medical Statistics, computer sciences and data bases, etc.							
1.3	Outline the methods and practice of quality control both domestically and abroad in the domain of Medical laboratories..							
1.4	Describe the professional ethics and the regulations of the laboratory practice.							
2.0	Cognitive							
2.1	Analyse the laboratory test results and correlate them with the clinician's diagnosis of the relevant case.							
2.2	Create the skills that are relevant to the development of the laboratory-working environment.	I		I	A	A		
2.3	Design decisions to stress the accuracy and quality of laboratory reports as well as maintaining the privacy of the patient's laboratory reports.							

2.4	- Deduce the characteristics (chemical , hematological, immunological and histological components) of all types of biological specimens and to conclude the relevant possible diagnosis.						
3.0	Interpersonal skill						
3.1	Demonstrate the dignified Islamic standards and truthfulness and at the same time admitting any committed professional mistakes in a soul of high responsibility			I			
3.2	Apply efficiently the routine and technical duties and obtain valid and accurate diagnostic test results even under intense work pressure.		A		A		
3.3	Show flexibility, innovation and to cope with the different work conditions and developments.			؛		A	
4.0	Communication & numerical						
4.1	Able to communicate efficiently with the community individuals, patients and the medical team members.			I			
4.2	Operate efficiently with precision the computer and the laboratory data bases and acquire the know-how to use it to the benefit of the laboratory		A		A		
4.3	Operate the various computer programmes in preparing laboratory reports, material request forms and inventory lists	A		؛		A	
5.0	Psychomotor						
5.1	Perform the laboratory tests taking into consideration the accuracy, safety and infection control measures						

NQF Learning Domains and Learning Outcomes		Level 2				
1.0	Knowledge	ENG 150	ENG 151	ETHC 150	SCI 150	Math 150
1.1	- Describe the scientific bases of the routine clinical Laboratory tests as well as diseases.		I			
1.2	- Recall other knowledge that serve the profession of clinical laboratory diagnosis such as medical Statistics, computer sciences and data bases, etc.	A		A		
1.3	Outline the methods and practice of quality control both domestically and abroad in the domain of Medical laboratories..		P		A	
1.4	Describe the professional ethics and the regulations of the laboratory practice.		I			I
2.0	Cognitive					
2.1	Analyse the laboratory test results and correlate them with the clinician's diagnosis of the relevant case.		I			
2.2	Create the skills that are relevant to the development of the laboratory-working environment.	A		A		
2.3	Design decisions to stress the accuracy and quality of laboratory reports as well as maintaining the privacy of the patient's laboratory reports.		P		A	
2.4	- Deduce the characteristics (chemical , hematological, immunological and histological components) of all types of biological specimens and to conclude the relevant possible diagnosis.		I			I
3.0	Interpersonal skill					
3.1	Demonstrate the dignified Islamic standards and truthfulness and at the same time admitting any committed professional mistakes in a soul of high responsibility					
3.2	Apply efficiently the routine and technical duties and obtain valid and accurate diagnostic test results even under intense work pressure.					

3.3	Show flexibility, innovation and to cope with the different work conditions and developments.					
4.0	Communication & numerical					
4.1	Able to communicate efficiently with the community individuals, patients and the medical team members.	A	A	A		
4.2	Operate efficiently with precision the computer and the laboratory data bases and acquire the know-how to use it to the benefit of the laboratory					
4.3	Operate the various computer programmes in preparing laboratory reports, material request forms and inventory lists					A
5.0	Psychomotor					
5.1						

NQF Learning Domains and Learning Outcomes		Level 3								
		Arb-2 201	SLM 111	Ana-2 201	Phy-2 223	Chem 207	His-2 231	Phs-2 204	Res 242	Tec-2 250
1.0	Knowledge									
1.1	- Describe the scientific bases of the routine clinical Laboratory tests as well as diseases.						A			
1.2	- Recall other knowledge that serve the profession of clinical laboratory diagnosis such as medical Statistics, computer sciences and data bases, etc.							A		
1.3	Outline the methods and practice of quality control both domestically and abroad in the domain of Medical laboratories..			P		A			P	
1.4	Describe the professional ethics and the regulations of the laboratory practice.		A							
2.0	Cognitive									
2.1	Analyse the laboratory test results and correlate them			P	I				I	

	with the clinician's diagnosis of the relevant case.								
2.2	Create the skills that are relevant to the development of the laboratory-working environment.				I				
2.3	Design decisions to stress the accuracy and quality of laboratory reports as well as maintaining the privacy of the patient's laboratory reports.			A		A			
2.4	- Deduce the characteristics (chemical ,hematological, immunological and histological components) of all types of biological specimens and to conclude the relevant possible diagnosis.		A		P		A		
3.0	Interpersonal skill								
3.1	Demonstrate the dignified Islamic standards and truthfulness and at the same time admitting any committed professional mistakes in a soul of high responsibility		A						
3.2	Apply efficiently the routine and technical duties and obtain valid and accurate diagnostic test results even under intense work pressure.		P		I				I
3.3	Show flexibility, innovation and to cope with the different work conditions and developments.			A		A			
4.0	Communication & numerical								
4.1	Able to communicate efficiently with the community individuals,	A		I	P			I	

	patients and the medical team members.									
4.2	Operate efficiently with precision the computer and the laboratory data bases and acquire the know-how to use it to the benefit of the laboratory		A		A			A		A
4.3	Operate the various computer programmes in preparing laboratory reports, material request forms and inventory lists			I		P			I	
5.0	Psychomotor									
5.1	Perform the laboratory tests taking into consideration the accuracy, safety and infection control measures									

NQF Learning Domains and Learning Outcomes		Level 4					
		SLM 212	His 214	Epi 271	Mic 251	Chem 222	Hem 241
1.0	Knowledge						
1.1	- Describe the scientific bases of the routine clinical Laboratory tests as well as diseases.		P		I		P
1.2	- Recall other knowledge that serve the profession of clinical laboratory diagnosis such as medical Statistics, computer sciences and data bases, etc.			P			
1.3	Outline the methods and practice of quality control both domestically and abroad in the domain of Medical laboratories..	A				P	P
1.4	Describe the professional ethics and the regulations of the laboratory practice.			P	P		
2.0	Cognitive						
2.1	Analyse the laboratory test results and correlate them with the clinician's diagnosis of the relevant case.		A		P		P
2.2	Create the skills that are relevant to the development of the laboratory-working environment.		I			P	
2.3	Design decisions to stress the accuracy and quality of laboratory reports as well as maintaining the privacy of the patient's laboratory reports.			P	A	P	
2.4	- Deduce the characteristics (chemical , hematological, immunological and histological components) of all types of biological specimens and to conclude the relevant possible diagnosis.		P			I	P
3.0	Interpersonal skill						
3.1	Demonstrate the dignified Islamic standards and truthfulness and at the same time admitting any committed professional mistakes in a soul of high responsibility				P		I
3.2	Apply efficiently the routine and technical duties and obtain valid and accurate diagnostic test results even under intense work pressure.		P	I	A	I	I
3.3	Show flexibility, innovation and to cope with the different work conditions and developments.						
4.0	Communication & numerical						
4.1	Able to communicate efficiently with the community individuals, patients and the medical team members.						
4.2	Operate efficiently with precision the computer and the laboratory data bases and acquire the know-how		I			A	I

	to use it to the benefit of the laboratory						
4.3	Operate the various computer programmes in preparing laboratory reports, material request forms and inventory lists		○		P		
5.0	Psychomotor						
5.1	Perform the laboratory tests taking into consideration the accuracy, safety and infection control measures			P	P	P	P

NQF Learning Domains and Learning Outcomes		Level 5					
		Arb 202	He m 342	Mic 351	Mic 353	Mic 352	Che m 323
1.0	Knowledge						
1.1	- Describe the scientific bases of the routine clinical Laboratory tests as well as diseases.	I		A	A		
1.2	- Recall other knowledge that serve the profession of clinical laboratory diagnosis such as medical Statistics, computer sciences and data bases, etc.	I	P	A			P
1.3	Outline the methods and practice of quality control both domestically and abroad in the domain of Medical laboratories..	P			A	P	P
1.4	Describe the professional ethics and the regulations of the laboratory practice.	P	P	A			P
2.0	Cognitive						
2.1	Analyse the laboratory test results and correlate them with the clinician's diagnosis of the relevant case.	P	P	A			P
2.2	Create the skills that are relevant to the development of the laboratory-working environment.				P		
2.3	Design decisions to stress the accuracy and quality of laboratory reports as well as maintaining the privacy of the patient's laboratory reports.		P	A		P	P
2.4	- Deduce the characteristics (chemical , hematological, immunological and histological components) of all types of biological specimens and to conclude the relevant possible diagnosis.	P			A		P
3.0	Interpersonal skill						
3.1	Demonstrate the dignified Islamic standards and truthfulness and at the same time admitting any committed professional mistakes in a soul of high responsibility				P		A
3.2	Apply efficiently the routine and technical duties and obtain valid and accurate diagnostic test results even under intense work pressure.	I				I	I
3.3	Show flexibility, innovation and to cope with the different work conditions and developments.		A		A		

4.0	Communication & numerical						
4.1	Able to communicate efficiently with the community individuals, patients and the medical team members.				A		P
4.2	Operate efficiently with precision the computer and the laboratory data bases and acquire the know-how to use it to the benefit of the laboratory		I			I	I
4.3	Operate the various computer programmes in preparing laboratory reports, material request forms and inventory lists						
5.0	Psychomotor						
5.1	Perform the laboratory tests taking into consideration the accuracy, safety and infection control measures	P		P			

	NQF Learning Domains and Learning Outcomes	Level 6					
		Hem 343	Mic 352	MIC 354	Mic 355	Chem 354	SLM 112
1.0	Knowledge						
1.1	- Describe the scientific bases of the routine clinical Laboratory tests as well as diseases.						
1.2	- Recall other knowledge that serve the profession of clinical laboratory diagnosis such as medical Statistics, computer sciences and data bases, etc.						
1.3	Outline the methods and practice of quality control both domestically and abroad in the domain of Medical laboratories..			A	A	A	
1.4	Describe the professional ethics and the regulations of the laboratory practice.					A	P
2.0	Cognitive						
2.1	Analyse the laboratory test results and correlate them with the clinician's diagnosis of the relevant case.			A	I		
2.2	Create the skills that are relevant to the development of the laboratory-working environment.					A	
2.3	Design decisions to stress the accuracy and quality of laboratory reports as well as maintaining the privacy of the patient's laboratory reports.	I		P		P	
2.4	- Deduce the characteristics (chemical ,hematological, immunological and histological components) of all types of biological specimens and to conclude the relevant possible diagnosis.		I	A	A		
3.0	Interpersonal skill						
3.1	Demonstrate the dignified Islamic standards and truthfulness and at the same time admitting any committed professional mistakes in a soul of high responsibility	I					P
3.2	Apply efficiently the routine and technical duties and obtain valid and accurate diagnostic test results even under intense work pressure.			I		I	
3.3	Show flexibility, innovation and to cope with the different work conditions and developments.	A			P		
4.0	Communication & numerical						
4.1	Able to communicate efficiently with the community individuals, patients and the medical team members.		I			P	
4.2	Operate efficiently with precision the computer and the laboratory data bases and acquire the know-how to use it to the benefit of the laboratory		A			I	

4.3	Operate the various computer programmes in preparing laboratory reports, material request forms and inventory lists						
5.0	Psychomotor						
5.1	Perform the laboratory tests taking into consideration the accuracy, safety and infection control measures			A	I	A	

NQF Learning Domains and Learning Outcomes		Level 7					
		Hist 4.2.1	Che	Mic 4.5.7	Mic 4.5.8	Mic 4.5.9	SLM 1.1.4
1.0	Knowledge						
1.1	- Describe the scientific bases of the routine clinical Laboratory tests as well as diseases.						A
1.2	- Recall other knowledge that serve the profession of clinical laboratory diagnosis such as medical Statistics, computer sciences and data bases, etc.	A	A				
1.3	Outline the methods and practice of quality control both domestically and abroad in the domain of Medical laboratories..			A	I	A	
1.4	Describe the professional ethics and the regulations of the laboratory practice.	P					P
2.0	Cognitive						
2.1	Analyse the laboratory test results and correlate them with the clinician's diagnosis of the relevant case.		A	P	A		
2.2	Create the skills that are relevant to the development of the laboratory-working environment.	I		A		A	
2.3	Design decisions to stress the accuracy and quality of laboratory reports as well as maintaining the privacy of the patient's laboratory reports.		P	A		A	
2.4	- Deduce the characteristics (chemical ,hematological, immunological and histological components) of all types of biological specimens and to conclude the relevant possible diagnosis.			P	A		
3.0	Interpersonal skill						
3.1	Demonstrate the dignified Islamic standards and truthfulness and at the same time admitting any committed professional mistakes in a soul of high responsibility	I			P		A
3.2	Apply efficiently the routine and technical duties and obtain valid and accurate diagnostic test results even under intense work pressure.			I		I	
3.3	Show flexibility, innovation and to cope with the different work conditions and developments.			P			
4.0	Communication & numerical						
4.1	Able to communicate efficiently with the community individuals, patients and the medical team members.		I				
4.2	Operate efficiently with precision the computer and the laboratory data bases and acquire the know-how to use it to the benefit of the laboratory			I	I	I	
4.3	Operate the various computer programmes in preparing laboratory reports, material request forms and inventory lists						
5.0	Psychomotor						

5.1	Perform the laboratory tests taking into consideration the accuracy, safety and infection control measures			A	A	A	
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NQF Learning Domains and Learning Outcomes		Level 8					
1.0	Knowledge	Hem 444	Res 471	Mic 460	Mic 461	Hist 432	Chem 433
1.1	- Describe the scientific bases of the routine clinical Laboratory tests as well as diseases.					P	
1.2	- Recall other knowledge that serve the profession of clinical laboratory diagnosis such as medical Statistics, computer sciences and data bases, etc.		I				I
1.3	Outline the methods and practice of quality control both domestically and abroad in the domain of Medical laboratories..			A	A	A	
1.4	Describe the professional ethics and the regulations of the laboratory practice.						
2.0	Cognitive						
2.1	Analyse the laboratory test results and correlate them with the clinician's diagnosis of the relevant case.			A	A		
2.2	Create the skills that are relevant to the development of the laboratory-working environment.		P				
2.3	Design decisions to stress the accuracy and quality of laboratory reports as well as maintaining the privacy of the patient's laboratory reports.					A	
2.4	- Deduce the characteristics (chemical ,hematological, immunological and histological components) of all types of biological specimens and to conclude the relevant possible diagnosis.			A	A		
3.0	Interpersonal skill						
3.1	Demonstrate the dignified Islamic standards and truthfulness and at the same time admitting any committed professional mistakes in a soul of high responsibility	I			A		
3.2	Apply efficiently the routine and technical duties and obtain valid and accurate diagnostic test results even under intense work pressure.			I		I	I
3.3	Show flexibility, innovation and to cope with the different work conditions and developments.						
4.0	Communication & numerical						
4.1	Able to communicate efficiently with the community individuals, patients and the medical team members.		I				
4.2	Operate efficiently with precision the computer and the laboratory data bases and acquire the know-how to use it to the benefit of the laboratory			I	I	I	I

4.3	Operate the various computer programmes in preparing laboratory reports, material request forms and inventory lists						
5.0	Psychomotor						
5.1	Perform the laboratory tests taking into consideration the accuracy, safety and infection control measures			A	A	A	

NQF Learning Domains and Learning Outcomes		Level 9				
		Hem 454	Hist 533	Qual 573	Lab574	Eth572
1.0	Knowledge					
1.1	- Describe the scientific bases of the routine clinical Laboratory tests as well as diseases.			I		P
1.2	- Recall other knowledge that serve the profession of clinical laboratory diagnosis such as medical Statistics, computer sciences and data bases, etc.				P	
1.3	Outline the methods and practice of quality control both domestically and abroad in the domain of Medical laboratories..		A			
1.4	Describe the professional ethics and the regulations of the laboratory practice.					P
2.0	Cognitive					
2.1	Analyse the laboratory test results and correlate them with the clinician's diagnosis of the relevant case.		A		P	
2.2	Create the skills that are relevant to the development of the laboratory-working environment.		P		I	
2.3	Design decisions to stress the accuracy and quality of laboratory reports as well as maintaining the privacy of the patient's laboratory reports.					P
2.4	- Deduce the characteristics (chemical ,hematological, immunological and histological components) of all types of biological specimens and to conclude the relevant possible diagnosis.		A		I	
3.0	Interpersonal skill					
3.1	Demonstrate the dignified Islamic standards and truthfulness and at the same time admitting any committed professional mistakes in a soul of high responsibility	I			A	
3.2	Apply efficiently the routine and technical duties and obtain valid and accurate diagnostic test results even under intense work pressure.		I		I	A
3.3	Show flexibility, innovation and to cope with the different work conditions and developments.					P
4.0	Communication & numerical					
4.1	Able to communicate efficiently with the community individuals, patients and the medical team members.		P			A
4.2	Operate efficiently with precision the computer and the laboratory data bases and acquire the know-how to use it to the benefit of the laboratory		I	I	I	A
4.3	Operate the various computer programmes in preparing laboratory reports, material request forms and inventory lists					
5.0	Psychomotor					
5.1	Perform the laboratory tests taking into consideration the accuracy, safety and infection control measures		A			

5. Admission Requirements for the program

Attach handbook or bulletin description of admission requirements including any course or experience prerequisites.

- In accordance with the university regulations concerning undergraduate tuition and examinations issued by the high education council decision number (5/2) taken in its session (Second) of the High Education Council on 11/06/1416.

6. Attendance and Completion Requirements

Attach handbook or bulletin description of requirements for :

- a. Attendance.
 - b. Progression from year to year
 - c. Program completion or graduation requirements .
- In accordance with the university regulations concerning undergraduate tuition and examinations issued by the high education council decision number (5/2) taken in its session (Second) of the High Education Council on 11/06/1416.

E. Regulations for Student Assessment and Verification of Standards

What processes will be used for verifying standards of achievement (e.g. verify grading samples of test or assignments? Independent assessment by faculty from another institution) (Processes may vary for different courses or domains of learning.)

- Review the correction for a sample of tests or assignments
- Independent evaluation by a faculty member from another educational institution

F Student Administration and Support

1. Student Academic Counselling

Describe the arrangements for academic counselling and advising for students, including both scheduling of faculty office hours and advising on program planning, subject selection and career planning (which might be available at college level).

- Academic guidance and supervision.
- The allocation by the academic staff members of office hours for students' support.
- The formation of students' committees to give consultations to students.

2. Student Appeals

Attach the regulations for student appeals on academic matters, including processes for consideration of those appeals.

- Students' appeals are dealt with according to the academic regulations of the university which was issued by the high education council decision number (5/2), taken in its session (second) of the High Education Council on 11/06/1416.

G. Learning Resources, Facilities and Equipment

<p>1a. What processes are followed by faculty and teaching staff for planning and acquisition of textbooks, reference and other resource material including electronic and web based resources?</p> <ul style="list-style-type: none"> - The academic staff members have to determine a number of references for the students that are relevant to the courses. - Also, a number of approved and authorised web sites are indicated for the same purpose. - The coordination with a number of libraries/bookshops to be visited by the students as well as the provision of textbooks and references at a short notice by the concerned libraries/bookshops. - A list of the required textbooks and references is usually submitted to the college administration to be made available. <p>1b. What processes are followed by faculty and teaching staff for planning and acquisition resources for library, laboratories, and classrooms.</p> <ul style="list-style-type: none"> - Works questionnaire for students and faculty members to the contents of the labs and classrooms - Tenders annual work to bring more of the needs of teaching. - Follow-up in the market for new equipment and teaching it to the bushing. - Taking the opinion of the employers to know their needs to produce qualified graduates.
<p>2. What processes are followed by faculty and teaching staff for evaluating the adequacy of textbooks, reference and other resource provisions?</p> <ul style="list-style-type: none"> - Formation of technical academic committees to evaluate the suitability of the various references and textbooks to the needs of the course. - The periodic evaluation of the course programme by these committees. - To conduct a questionnaire in order to explore the students' opinions regarding the availability and suitability of the references and textbooks. - Updating annually the library with the required textbooks. - Training the students on how to use the E-library.
<p>3. What processes are followed by students for evaluating the adequacy of textbooks, reference and other resource provisions?</p> <ul style="list-style-type: none"> - Student evaluation questionnaires (See Appendix 1)
<p>4. What processes are followed for textbook acquisition and approval?</p> <ul style="list-style-type: none"> - The requests from the teaching staff for providing the textbooks are submitted for approval first to the head of the department, then to the dean of the college of applied medical sciences and finally to the deanship of the libraries. (See Appendix 2)

H. Faculty and other Teaching Staff

1. Appointments

<p>Summarize the process of employment of new faculty and teaching staff to ensure that they are appropriately qualified and experienced for their teaching responsibilities.</p> <ul style="list-style-type: none"> - A number of standards and requirements are being laid down for the selection of qualified academic staff members among the candidates. - Conducting interviews with the candidates to assess their qualifications. - Selecting academic staff members on the basis of those with qualifications obtained from distinguished universities. - Priority in selection is given to academics with teaching experience, peer-reviewed publications, authors of textbooks and those involved in research.

2. Participation in Program Planning, Monitoring and Review

- a. Explain the process for consultation with and involvement of teaching staff in monitoring program quality, annual review and planning for improvement.
- Encouraging the soul of initiative and creation.
 - The distribution of cultivating pamphlets concerning development and quality.
 - Encouraging the academic staff members to attend development and quality oriented seminars and workshops.
 - The presentation of successful experiences concerning development and quality.
 - Inviting academic staff members to submit their recommendations and suggestions for the best ways to develop the curricula of the university.
 - Selecting high calibre specialists and trainers to participate in the training sessions regarding development and quality.
- b. Explain the process of the Advisory Committee (if applicable)
- Provide technical advice for the programme.
 - Planning for the work programs of postgraduate.
 - Open channels to run graduates.

3. Professional Development

What arrangements are made for professional development of faculty and teaching staff for:

- a. Improvement of skills in teaching and student assessment.
- Encouraging the soul of initiative and creation.
 - The distribution of cultivating pamphlets concerning development and quality.
 - Encouraging the academic staff members to attend development and quality oriented seminars and workshops.
 - The presentation of successful experiences concerning development and quality.
 - Inviting academic staff members to submit their recommendations and suggestions for the best ways to develop the curricula of the university.
 - Selecting high calibre specialists and trainers to participate in the training sessions regarding development and quality.
- b. Other professional development including knowledge of research?
- Stimulating and encouraging the academic staff members to attend scientific conferences and seminars.
 - Holding scientific meetings of the academic staff members on a regular basis

4. Preparation of New Faculty and Teaching Staff

Describe the process used for orientation and induction of new, visiting or part time teaching staff to ensure full understanding of the program and the role of the course(s) they teach as components within it.

- The department guide.
- Passing teaching experience to newly appointed academic staff members from other experienced academic staff members.
- Field visits.
- Initiation programme.

5. Part Time and Visiting Faculty and Teaching Staff

Provide a summary of Program/Department/College/institution policy on appointment of part time and visiting teaching staff. (ie. Approvals required, selection process, proportion to total teaching staff, etc.) - **Not applicable**

I. Program Evaluation and Improvement Processes

1. Effectiveness of Teaching

<p>a. What QA procedures for developing and assessing learning outcomes?</p> <ul style="list-style-type: none"> - Assessing the evaluations of the graduates by the directors of medical laboratories (in public and private hospitals, health care centres, etc). - Assessing the graduates' evaluations of the courses and the academic programme. - Seeking evaluations of specialist academic bodies. - Advising committee. - Regional standards, benchmarking.
<p>b. What processes are used for evaluating the skills of faculty and teaching staff in using the planned strategies?</p> <ul style="list-style-type: none"> - To hold training sessions and workshops to develop their different skills. - To conduct questionnaires in order to have a feedback from the students, graduates and directors of health care facilities regarding the courses and the academic programme as a whole.

2. Overall Program Evaluation

<p>a. What strategies are used in the program for obtaining assessments of the overall quality of the program and achievement of its intended learning outcomes:</p> <ul style="list-style-type: none"> - Distributing questionnaires to the graduates-to-be in order to explore their opinion regarding the courses and the programme in general. - Employers advisement should be taken.
<p>(i) From current students and graduates of the program?</p> <ul style="list-style-type: none"> - Distributing questionnaires to the students and graduates-to-be in order to explore their opinion regarding the courses and the programme in general.
<p>(ii) From independent advisors and/or evaluator(s) ?</p> <ul style="list-style-type: none"> - external auditing
<p>(iii) From employers and/or other stakeholders.</p> <ul style="list-style-type: none"> - The feedback assessments from the directors of laboratories in health care facilities (hospitals, healthcare centres, etc).

Attachments:

1. Copies of regulations and other documents referred to template preceded by a table of contents.
2. Course specifications for all program courses including field experience specification if applicable.

Authorized Signatures :-

Dean/ Program Chair	Name	Title	Signature	Date
Program Dean or Chair of Board of Trustees Main Campus	Dr.Mohammed Zaied	Dean of the collage		December 2017
Vice Rector	Dr.Bandar Elshehri			December 2017