Ministry of Higher Education and Scientific Research
Scientific Supervision and Scientific Evaluation Apparatus
Directorate of Quality Assurance and Academic Accreditation
Accreditation Department

Academic Program and Course Description Guide

2024

Introduction:

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work.

In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

Concepts and terminology:

Academic Program Description: The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

Course Description: Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

Program Vision: An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

Program Mission: Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

Program Objectives: They are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

Curriculum Structure: All courses / subjects included in the academic program according to the approved learning system (quarterly, annual, Bologna Process) whether it is a requirement (ministry, university, college and scientific department) with the number of credit hours.

Learning Outcomes: A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

Teaching and learning strategies: They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are followed to reach the learning goals. They describe all classroom and extra-curricular activities to achieve the learning outcomes of the program.

Academic Program Description Form

University Name: .....

Faculty/Institute: .....

Scientific Department: .....

Academic or Professional Program Name: .....

Final Certificate Name: .....

Academic System:……..

Description Preparation Date:

File Completion Date:

Signature:

Head of Department Name:

Date:

Signature:

Scientific Associate Name:

Date:

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

Approval of the Dean

1. Program Vision

Program vision is written here as stated in the university's catalogue and website.

The branch attend gradguation our students will be able to work with the microbiologist team in health sector to ensure the teams optimal functioning and affective patients outcomes .

2. Program Mission

Program mission is written here as stated in the university's catalogue and website.

Our branch seek to get international accreditations ,rise to the global level in terms of the outcomes quality and graduated medical doctors who are highly effective in patients care medical education research and community service .

3. Program Objectives

General statements describing what the program or institution intends to achieve.

1- Avoid making mistakes when writing medical reports.
2- Knowing how to safely send cases
3- Knowing the scientific methods for reading reports upon receiving medical cases from medical institutions.
4- The correct methods for diagnosing general diseases of humans.

4. Program Accreditation

Does the program have program accreditation? And from which agency?

The college has sent a request to get it .

5. Other external influences

Requirements

Is there a sponsor for the program?

College Requirements

teaching hospitals ,library, internet ,community doctors syndicates

1- Field visits to public health laboratories.

2- In-person and electronic blended education via e-learning platforms (Classroom).

6. **Program Structure**				
Program Structure	**Number of Courses**	**Credit hours**	**Percentage**	**Reviews***
Institution Requirements	Two	Micro=190 Parasite=120 Immunity=75	٥٠	
College Requirements	two	Micro=190 Parasite=120 Immunity=75	50	
Department:- Requirements		Micro=190 Parasite=120 Immunity=75		
Summer training:-	in the laboratories of teaching hospital			
other			other	

* This can include notes whether the course is basic or optional.

7. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical
Third	MPR301	First	30	30
	Medical Protozoology	Second	30	30
Third	MBM303	First	**30**	30
	Medical bacteriology and mycology	Second	30	30
Third	BMV305	First	15	
	Basic medical virology and DNA viral diseases	Second	15	

8. Expected learning outcomes of the program

Knowledge	
Learning Outcomes 4 Learning Outcomes 5 **Learning outcome1**:microbes nature with different structures, shapes and size.	Learning Outcomes Statement 4 Learning Outcomes Statement 5 **Learning outcomes statements 1**: gradguated students understanding microbes groups with their different structures.
Skills	
Learning Outcomes 1 **Learning outcomes 2:**diagnoses these different microbes groups . **Learning outcomes3:** using the right tools and equipment's for each microbe .	**Learning outcomes statements 2 :**gradguated doctors diagnosis these microbes. **Learning outcomes statements 3**:gradguated doctors treat with precise drugs or antibiotics targeted against microbes
Ethics	

Ethics **Learning outcomes 4:** permission for screening and isolation of microbes from the patients **Learning outcomes5:** work with the infectious and dangerous species carefully.	**Learning outcomes statements 4:**permission,ethical rules deals with treatment with the microbes. **Learning outcomes statements 5**:awareness and biosafety when handling or isolating these microbes.

9. **Teaching and Learning Strategies**
Teaching and learning strategies and methods adopted in the implementation of the program in general.

1- Theoretical lectures using illustrations.
2- Practical application of the concepts that have been studied in specialized laboratories and teaching hospitals.
3- Seminars (students are assigned a topic within the curriculum for presentation and discussion) .
Solving scientific and medical problems by discussing their merits within small groups to reach the correct solution.

10. **Evaluation methods**
Implemented at all stages of the program in general.

10-The structure of the course for theoretical bacteriology/ third level / first course

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluation method
1	2	Introduction to medical Microbiology, classification, nutrition, growth, Bacterial virulence and 2 Bacterial genetics ,metabolism	Bacteriology	Electronic and attending lectures	Exam
2	2	Sterilization and disinfection	Bacteriology	Electronic and attending lectures	Exam
3	2	Antibiotics and chemotherapeutic agents	Bacteriology	Electronic and attending	Exam

				lectures	
4	2	Staphylococci	Bacteriology	Electronic and attending lectures	Exam
5	2	Streptococci	Bacteriology	Electronic and attending lectures	Exam
6	2	Gram negative cocci, Neisseria species	Bacteriology	Electronic and attending lectures	Exam
7	2	Gram positive non-spore forming bacilli, Corynebacterium diphtheria, Gram negative bacilli, H. influenza species	Bacteriology	Electronic and attending lectures	Exam
8	2	Exam	Bacteriology	attending lectures	Exam
9	2	Gram positive aerobic spore forming bacilli, Bacillus anthracis, B.subtilis, B. cereus	Bacteriology	Electronic and attending lectures	Exam
10	2	Gram negative spore forming bacilli, Clostridia species	Bacteriology	Electronic and attending lectures	Exam
11	2	Gram negative bacilli, Bordetella species& Yersinia species	Bacteriology	Electronic and attending lectures	Exam
12	2	Gram negative bacilli, Compylobacter, H.pylori	Bacteriology	Electronic and attending lectures	Exam
13	2	Gram negative enteric bacilli, Pseudomonas and other G negative species	Bacteriology	Electronic and attending lectures	Exam
14	2	Gram negative enteric bacilli	Bacteriology	Electronic and attending lectures	Exam
15	2	Exam	Bacteriology	attending lectures	Exam

- **The structure of the course for practical bacteriology/ third level / first course**

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluation method
1	2	Preparation of culture media	Bacteriology	Electronic and attending lectures	Exam
2	2	Mode of Sterilization and	Bacteriology	Electronic and	Exam

		disinfection		attending lectures	
3	2	Antibacterial susceptibility test	Bacteriology	Electronic and attending lectures	Exam
4	2	Diagnostic methods of Staphylococci	Bacteriology	Electronic and attending lectures	Exam
5	2	Diagnostic methods of Streptococci	Bacteriology	Electronic and attending lectures	Exam
6	2	Diagnostic methods of Neisseria	Bacteriology	Electronic and attending lectures	Exam
7	2	Diagnostic methods of Corynebacterium diphtheria& H. influenza species	Bacteriology	Electronic and attending lectures	Exam
8	2	Exam	Bacteriology	attending lectures	Exam
9	2	Diagnostic methods of Bacillus anthracis, B.subtilis, B. cereus	Bacteriology	Electronic and attending lectures	Exam
10	2	Diagnostic methods of Clostridia species	Bacteriology	Electronic and attending lectures	Exam
11	2	Diagnostic methods of Bordetella species& Yersinia species	Bacteriology	Electronic and attending lectures	Exam
12	2	Diagnostic methods of Compylobacter, H.pylori	Bacteriology	Electronic and attending lectures	Exam
13	2	Diagnostic methods of Enterobactereace	Bacteriology	Electronic and attending lectures	Exam
14	2	Diagnostic methods of Enterobactereace	Bacteriology	Electronic and attending lectures	Exam
15	2	Exam	Bacteriology	Electronic and attending lectures	Exam

- **The structure of the course for theoretical bacteriology/ third level / second course**

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluation method
1	2	E. coli	Bacteriology	Electronic and attending lectures	Exam
2	2	Klebsiella	Bacteriology	Electronic and attending lectures	Exam
3	2	Proteus	Bacteriology	Electronic and attending lectures	Exam
4	2	Salmonella	Bacteriology	Electronic and attending lectures	Exam

5	2	Shigella	Bacteriology	Electronic and attending lectures	Exam
6	2	Vibrio cholera	Bacteriology	Electronic and attending lectures	Exam
7	2	Vibrio parahemolyticus	Bacteriology	Electronic and attending lectures	Exam
8	2	Mycobacterium species and Mycobacterium tuberculosis	Bacteriology	Electronic and attending lectures	Exam
9	2	Chlamydia, and Treponema	Bacteriology	Electronic and attending lectures	Exam
10	2	Rickettsia	Bacteriology	Electronic and attending lectures	Exam
11	2	Mycoplasma	Bacteriology	Electronic and attending lectures	Exam
12	2	Exam	Bacteriology	Attending lectures	Exam
13	2	Introduction to medical mycology	Mycology	Electronic and attending lectures	Exam
14	2	Dermatophytes	Mycology	Electronic and attending lectures	Exam
15	2	Aspergillosis	Mycology	Electronic and attending lectures	Exam

- **The structure of the course for practical bacteriology/ third level / second course**

Week	**Hours**	**Required educational goals**	**Unit name and/or topic**	**Education method**	**Evaluation method**
1	2	Rickettsia	Bacteriology	Electronic and attending lectures	Exam
2	2	Mycoplasma	Bacteriology	Electronic and attending lectures	Exam
3	2	Laboratory Diagnosis of Viral Infections	Bacteriology	Electronic and attending lectures	Exam
4	2	Overview of Laboratory Diagnostic Methods.	Bacteriology	Electronic and attending lectures	Exam
5	2	The Basics of Immunofluorescence & Immunohistochemistry.	Bacteriology	Electronic and attending lectures	Exam
6	2	Solid Phase Immunoassay (RIA & ELISA) & Unlabeled Methods.	Bacteriology	Electronic and attending lectures	Exam
7	2	Molecular Techniques (PCR & RT-PCR).	Bacteriology	Electronic and attending lectures	Exam
8	2	Indirect Methods (Virus	Bacteriology	Electronic and	Exam

		Isolation) - Cell Culture.		attending lectures	
9	2	Exam	Bacteriology	Attending lectures	Exam
10	2	Introduction to mycology	Mycology	Electronic and attending lectures	Exam
11	2	Molds medical importance	Mycology	Electronic and attending lectures	Exam
12	2	Candidiases	Mycology	Attending lectures	Exam
13	2	Exam	Mycology	Electronic and attending lectures	Exam
14	2	Rickettsia	Mycology	Electronic and attending lectures	Exam
15	2	Mycoplasma	Mycology	Attending lectures	Exam

- **The structure of the course for theoretical virology / third level / first course**

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluation method
1	1	viral replication	Virology	Electronic and attending lectures	Exam
2	1	pathogenesis of virus	Virology	Electronic and attending lectures	Exam
3	1	viral vaccine	Virology	Electronic and attending lectures	Exam
4	1	herpes virus HSV	Virology	Electronic and attending lectures	Exam
5	1	Varicella _zoster virus	Virology	Electronic and attending lectures	Exam
6	1	Ebstan barr virus (EBV)	Virology	Electronic and attending lectures	Exam
7	1	poxvirus +molluscum contagiosum virus	Virology	Electronic and attending lectures	Exam
8	1	Papillomavirus	Virology	Electronic and attending lectures	Exam
9	1	Parvovirus	Virology	Electronic and attending lectures	Exam
10	1	Adenovirus	Virology	Electronic and attending lectures	Exam
11	1	Hepatitis B virus	Virology	Electronic and attending lectures	Exam
12	1	Exam	Virology	Attending lectures	Exam

- **The structure of the course for theoretical virology / third level / second course**

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluation method

1	1	RSV & Parainfluenza Viruses.	Virology	Electronic and attending lectures	Exam
2	1	Mumps Virus & Measles Morbillivirus.	Virology	Electronic and attending lectures	Exam
3	1	Poliovirus.	Virology	Electronic and attending lectures	Exam
4	1	Rotavirus (Part 1).	Virology	Electronic and attending lectures	Exam
5	1	Rotavirus (Part 2).	Virology	Electronic and attending lectures	Exam
6	1	Hepatitis A Virus.	Virology	Electronic and attending lectures	Exam
7	1	Hepatitis E Virus.	Virology	Electronic and attending lectures	Exam
8	1	Hepatitis C, D, & G Viruses.	Virology	Electronic and attending lectures	Exam
9	1	Rubella Virus.	Virology	Electronic and attending lectures	Exam
10	1	Rabies Virus.	Virology	Electronic and attending lectures	Exam
11	1	Coronaviruses (Part1)	Virology	Electronic and attending lectures	Exam
12	1	Coronaviruses (Part 2)	Virology	Electronic and attending lectures	Exam
13	1	Arthropod Borne & Rodent Borne Viral Diseases (Part 1).	Virology	Electronic and attending lectures	Exam
14	1	Arthropod Borne & Rodent Borne Viral Diseases (Part 2).	Virology	Electronic and attending lectures	Exam
15	1	Exam	Virology	Attending lectures	Exam

- **The structure of the course for theoretical parasitology/ third level / first course**

Week	**Hours**	**Required educational goals**	**Unit name and/or topic**	**Education method**	**Evaluation method**
1	2	Introduction of Protozoa	Parasitology	Electronic and attending lectures	Exam
2	2	Sarcodina)Pathogenic Entamoeba & Non-pathogenic Entamoeba	Parasitology	Electronic and attending lectures	Exam
3	2	(Mastigophora)Luminal	Parasitology	Electronic and attending lectures	Exam
4	2	flagellate parasite (Giardia	Parasitology	Electronic and	Exam

		Lumbelia, Chilomestic mesnil)		attending lectures	
5	2	Genital Flagellate (Trichomonas vaginalis)	Parasitology	Electronic and attending lectures	Exam
6	2	Blood flagellate (Trypanosomiasis) Leishmaniasis Plasmodium Apicomplexa (Toxoplasma gondii) (Cryptococcus) (Isospora).	Parasitology	Electronic and attending lectures	Exam
7	2	Ciliated protozoa (Balantidium coli)	Parasitology	Electronic and attending lectures	Exam
8	2	Exam	Parasitology	Attending lectures	Exam

- **The structure of the course for theoretical parasitology / third level / second course**

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluation method
1	2	Helminthology (platyhelminth): (Trematoda)	Parasitology	Electronic and attending lectures	Exam
2	2	Intestinal flukes (Fasciolopsis buski, Heterophyes heterophyes)	Parasitology	Electronic and attending lectures	Exam
3	2	Blood flukes (Schistosoma mansoni, Schistosoma plasmodium, Schistosoma falciparum)	Parasitology	Electronic and attending lectures	Exam
4	2	Liver flukes (Fasciola hepatica, Clonorchis sinensis)	Parasitology	Electronic and attending lectures	Exam
5	2	Lung flukes (Paragonimus westermani)	Parasitology	Electronic and attending lectures	Exam
6	2	Helminthology (platyhelminth): (Cestoda)	Parasitology	Electronic and attending lectures	Exam
7	2	Taenia solium, Taenia saginata	Parasitology	Electronic and attending lectures	Exam
8	2	Echinococcus granulosus	Parasitology	Electronic and attending lectures	Exam
9	2	Hymenolepis nana, Hymenolepis diminuta, dipylidum caninum)	Parasitology	Electronic and attending lectures	Exam
10	2	Nemathelminthes (Nematoda)	Parasitology	Electronic and attending lectures	Exam

11	2	Ascars lumbercoides, Toxicara canis, Toxicara cati	Parasitology	Electronic and attending lectures	Exam
12	2	Ancylostoma species, Necator American	Parasitology	Electronic and attending lectures	Exam
13	2	Strongyloides, Enterobius vermicularis	Parasitology	Electronic and attending lectures	Exam
14	2	Trichonella sparilis, Wuchereria bancrofti, loa loa	Parasitology	Electronic and attending lectures	Exam
15	2	Exam	Parasitology	Electronic and attending lectures	Exam

- **The structure of the course for practical parasitology/ third level / first course**

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluation method
1	2	Lab diagnosis Introduction of Protozoa	Parasitology	Electronic and attending lectures	Exam
2	2	Sarcodina) Pathogenic Entamoeba & Non-pathogenic Entamoeba	Parasitology	Electronic and attending lectures	Exam
3	2	(Mastigophora)Luminal	Parasitology	Electronic and attending lectures	Exam
4	2	flagellate parasite (Giardia Lumbelia, Chilomestic mesnil)	Parasitology	Electronic and attending lectures	Exam
5	2	Genital Flagellate (Trichomonas vaginalis)	Parasitology	Electronic and attending lectures	Exam
6	2	Blood flagellate (Trypanosomiasis) Leishmaniasis Plasmodium Apicomplexa (Toxoplasma gondii) (Cryptococcus) (Isospora).	Parasitology	Electronic and attending lectures	Exam
7	2	Ciliated protozoa (Balantidium coli)	Parasitology	Electronic and attending lectures	Exam
8	2	Exam	Parasitology	Electronic and attending lectures	Exam

- **The structure of the course for practical parasitology / third level / second course**

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluation method
1	2	Helminthology (platyhelminth): (Trematoda)	Parasitology	Electronic and attending lectures	Exam
2	2	Intestinal flukes (Fasciolopsis	Parasitology	Electronic and	Exam

		buski, Heterophyes heterophyes)		attending lectures	
3	2	Blood flukes (Schistosoma mansoni, Schistosoma plasmodium, Schistosoma falciparum)	Parasitology	Electronic and attending lectures	Exam
4	2	Liver flukes (Fasciola hepatica, Clonorchis sinensis)	Parasitology	Electronic and attending lectures	Exam
5	2	Lung flukes (Paragonimus westermani)	Parasitology	Electronic and attending lectures	Exam
6	2	Helminthology (platyhelminth):(Cestoda)	Parasitology	Electronic and attending lectures	Exam
7	2	Taenia solium, Taenia saginata	Parasitology	Electronic and attending lectures	Exam
8	2	Echinococcus granulosus	Parasitology	Electronic and attending lectures	Exam
9	2	Hymenolepis nana, Hymenolepis diminuta, dipylidum caninum)	Parasitology	Electronic and attending lectures	Exam
10	2	Nemathelminthes(Nematoda)	Parasitology	Electronic and attending lectures	Exam
11	2	Ascars lumbercoides, Toxicara canis, Toxicara cati	Parasitology	Electronic and attending lectures	Exam
12	2	Ancylostoma species, Necator American	Parasitology	Electronic and attending lectures	Exam
13	2	Strongyloides, Enterobius vermicularis	Parasitology	Electronic and attending lectures	Exam
14	2	Trichonella sparilis, Wuchereria bancrofti, loa loa	Parasitology	Electronic and attending lectures	Exam
15	2	Exam	Parasitology	Attending lectures	Exam

- **The structure of the course for practical immunology / third level / first course**

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluation method
1	2	Agglutination	immunology	Electronic and attending lectures	Exam
2	2	Precipitation	immunology	Electronic and attending lectures	Exam
3	2	Hemagglutination & Hemagglutination Inhibition	immunology	Electronic and attending lectures	Exam
4	2	Complement Fixation	immunology	Electronic and attending lectures	Exam
5	2	Immunoflourscent assay	immunology	Electronic and	Exam

				attending lectures	
6	2	Radioimmunoassay	immunology	Electronic and attending lectures	Exam
7	2	Enzyme- Linked Sorbent - Immunoassay	immunology	Electronic and attending lectures	Exam
8	2	Enzyme-linked –Immuno-Fluorescent assay	immunology	Electronic and attending lectures	Exam
9	2	Immunochromatography (Lateral Flow Assay)	immunology	Electronic and attending lectures	Exam
10	2	Immunohistochemistry (IHC)	immunology	Electronic and attending lectures	Exam
11	2	Exam	immunology	Attending lectures	Exam

11. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/ (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
1- Doctorate	Medical microbiology	MD medical			**1- Prof.Dr.Ismail Ibrahim Latif**	
2- Doctorate	Biotechnology	mycology medical			**2- Prof.Dr. Luma Taha Ahmed**	
3- Doctorate	Microbiology	bacteriology medical			**3- Prof.Dr.Burooj Mohammad Razooqi**	
4- Doctorate	Microbiology	parasitology			**4- Assist.prof.Dr. Mohammed J.Shaker .**	
5- Doctorate	Medical microbiology	bacteriology			**5- Assist.prof Dr.Anfal sh. Motaab**	
6- Doctorate	Medical microbiology	medical parasitology			**6- Assist.prof Dr. Shaima Raheem Hussein.**	
7- Doctorate	microbiology microbiology				**7- Assist.Proff.Dr. Rawaa Abdul Khaleq Hussein**	
8- Doctorate	Medical microbiology	Genetic engineering			**8- Lec.Dr.Eptissam Younan Bergo**	
9- Doctorate.	Medical microbiology				**9- Lec.Dr. Adnan yaas Khudair**	
10- Master	Medical				**10- Lec. Hiba Hadi Rasheed**	
11- Master	microbiology				**11- Assist. Lec. Noor I. Zaidan**	
12- Master						
13- Master	Medical microbiology					
14- Master						
15- Master						
16- Master						
17- Master						
18- Master						
19-Master						

					12- Assist. Lec. Sarah Ali Daowd **13- Assist. Lec. Sura Adnan** **14- 14-Assist. Lec. Ghazwan Sabah Kamel** **15- Assist. Lec. Aliaa Hashim** **16- Assist. Lec. Mustafa ahmed daowd.** **17- Assist. Lec.Aliaa Younes Hashim** **18- Assist. Lec.Raghad Imad Salman** **19-Assist. Lec Tadhamn Hussain Abdullah**	

Professional Development

Mentoring new faculty members

Resent college members will get orientation simenars end regular meetings to familiarize them with the work ,dialy supervision, going followup, guidance and instruction

Professional development of faculty members

Continous trenning will achieved through participating in varoius lab, attending, simnars and spacielised sientific symposia , and searching for advancement online and in libarires

12. Acceptance Criterion

Compiling the online application will done after the ministry of higher education and scientific research centerally prosesses admessiones based on test scores in the scientific branch of the twevlth grade of the high school.

13. The most important sources of information about the program

University and college website in addition to website of the ministry of higher education and scientific research along with college library and university's central library

14. Program Development Plan

Program Skills Outline															
				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
Third	MPR301	First	Basic												
	Medical Protozoology	Second													
Third	MBM303	First	Basic	√	√	√			√	√	√	√	√		
	Medical bacteriology and mycology	Second													
Third	BMV305	First	Basic	√	√	√			√	√	√	√	√		
	Basic medical virology and DNA viral diseases	Second													
Third	BMI307	First	Basic	√	√	√			√	√	√	√	√		
	Basic medical immunology	Second													

- **Please tick the boxes corresponding to the individual program learning outcomes under evaluation.**

Course Description Form

1. Course Name: **Microbiology**

2. Course Code: **MBM303 (Medical bacteriology and mycology)**
2. **MPR301 (Medical Protozoology)**
2. **BMV305 (Basic medical virology and DNA viral diseases)**
BMI307 (Basic medical immunology)

3. Semester / Year: **2023 -2024**

4. Description Preparation Date: **1/2/2024**

5. Available Attendance Forms: : **mandatory attendence**

6. Number of Credit Hours (Total) / Number of Units (Total)

Credit Hours (60) / Number of Units (5) **(Medical bacteriology and mycology)**
Credit Hours (90) / Number of Units (6) **MPR301 (Medical Protozoology)**
Credit Hours (30) / Number of Units (2) **BMV305 (Basic medical virology and DNA viral diseases)**
Credit Hours (75) / Number of Units (4) **BMI307 (Basic medical immunology)**

7. Course administrator's name (mention all, if more than one name)

Name: .....

Name:

Prof. Dr. Ismail Ibrahim Latif

Prof. Dr. Luma Taha Ahmed

Prof. Dr. Burooj Mohammed Razoge

Prof .Dr . Areej Hussein Ateea

Assist. Prof. Dr. Mohammed jasem shaker

Assist. Prof. Dr. Anfal shaker motib

Assist. Prof. Dr. rawaa abdel Khalik

Lecturer Dr . Adnan Yaas Khudair

Email:
lum@uodiyla.edu.iq

8. Course Objectives

Course Objectives	**1-** ● Being able to apply the resul of the theoretical study in practice while dealing with disease states. **2-** Being able to use modern devi in studying the functions of bo organs and diagnosing disease conditions. Being able to conduct scientific studies and research to solve the problems of the individu and society.

9. Teaching and Learning Strategies

Strategy	1-Theoretical lectures using illustrations. 2-Practical application of the concepts that have been studied in specialized laboratories and teaching hospitals. 3-Seminars (students are assigned a topic within the curriculum for presentation and discussion) . **Solving scientific and medical problems by discussing their merits withi small groups to reach the correct solution.**

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name		Learning method	Evaluation method
15	30 30	MPR301	First		lectures	exam
		Medical Protozoology	Second		lectures	exam
15	**30** 30	MBM303	First		lectures	exam
		Medical bacteriology and mycology	Second		lectures	exam
15	15 15	BMV305	First		lectures	exam
		Basic medical virology and DNA viral diseases	Second		lectures	exam
15	22 22	BMI307	First		lectures	exam
		Basic medical immunology	Second		lectures	exam

11.Cours Evaluation

1- Daily theory and practical exams

2- Half-course and end-of-course exams

Seminars (assigning each student a topic for presentation and discussion)

12. Learning and Teaching Resources

Parasites

- Markell and Voges medical parasitology 9th edition 2006
- Roberts and janovy foundation parasitology 1996
- Marquardt ,Dermaree and Grieve parasitology and vector biology 2000

Microbiology

- Madigan M; Martinko J, eds. (2006). Brock Biology of Microorganisms (13th ed.). Pearson Education. p. 1096.
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