فيرول فيور

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

2024-2025



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.

<u>Course Description</u>: 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.

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

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

<u>Curriculum Structure:</u> 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.

<u>Teaching and learning strategies</u>: 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: Tikrit university

Faculty/Institute: College of Veterinary Medicine

Scientific Department: Microbiology

Academic or Professional Program Name: Advanced Microbiology

Final Certificate Name: Master Science in Microbiology

Academic System: : Courses and thesis **Description Preparation Date: 5\10\2024**

File Completion Date: 6\10\2024

Signature

Head of Department Name:

Prof.Assist.Dr. Sanna Ahmed Sauod

Date:6/10/2024

Signature:

Scientific Associate Name:

Prof. Assist. Dkheel Hussain

Date:6/10/2024

The file is checked by: Ahmel Ab Sullah Sullan

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

The College of Veterinary Medicine / Tikrit University seeks to become an educational, research and extension institution and to be a pioneer and distinguished in order to advance the educational process and advance it regionally and internationally by adhering to Arab and international quality assurance standards and policies and university performance and achieving excellence and creativity in the field of the veterinary medicine profession by creating competencies. Veterinary medicine is able to keep pace with scientific development in the field of the profession, as this is done through developing and updating the curriculum so that graduates can perform their work efficiently in accordance with the need of the labor market and provide the best service to society.

2. Program Mission

The basic outputs of the college are to prepare distinguished, competent graduates in the field of veterinary medicine by relying on the outputs of the College of Veterinary Medicine as basic building blocks for primary and postgraduate studies to serve the country's livestock. This is done by developing the curriculum in a way that is compatible with the spirit of the times and modernity. The college is also committed, through its mission, to honesty and quality in education at all levels. In addition to encouraging distinguished research projects for teachers in accordance with the needs of society and the labor market. The college also seeks to achieve excellence in preparing students with solid academic preparation that qualifies them to serve the community in the field of specialization. It also works to establish values and ideals among the college's members and students.

3. Program Objectives

The College of Veterinary Medicine aims to raise the scientific level of undergraduate and graduate students and build their capabilities at the scientific and applied levels, and work to direct scientific research in the applied direction in the field of veterinary medicine and livestock and protect humans from common diseases by combating them and carrying out awareness and educational campaigns to prevent them, as well as graduating doctors. Veterinarians are able to perform their work in the field of community service with high efficiency through the scientific capabilities available at the college, including laboratories, the consulting office, and the veterinary teaching hospital, examining and treating various field animals, poultry, and fish ponds, supervising and treating them, and providing consultations in the field of care and nutrition of animals, poultry, and fish in order to obtain a food product. Safe from healthy animal origin and free of diseases, spreading environmental and cultural awareness of the importance of veterinary medicine in serving society and developing the environment, focusing on the educational and moral aspect of the student and spreading the spirit of dedication, tolerance and commitment.

4. Program Accreditation

National standards approved for higher education institutions in veterinary medicine colleges in Iraq

5. Other external influences

Laboratories, the animal field, the library and the Internet, the veterinary hospital, veterinary projects, magazines and research, and scientific trips.

6. Program Structure						
Program Structure	Number of Courses	Study Unit	Percentage	Reviews*		
Institution	30 hours	2		Basic		
Requirements	Theory			course		
College Requirements	Yes					
Department Requirements	Yes					
Summer Training	No					
Other						

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

7. Program Description							
Year/Level	Course Code	Course Name		Credit Hours			
2024-2025/M.Sc		Advanced	2				
student		Microbiology	theory				

8. Expected learn	ing outcomes of the program
Knowledge	
	Enabling students to know the precise structure of microorganisms, the functions and physiology of each part in detail. The most important bacterial virulence factors and pathogenicity
Skills	
	Providing the student with skills in giving seminars in his field of specialization through seminars and discussions throughout the study period, and discussing ideas through the method of dialogue and discussion within the lecture.
Ethics	
	Developing students' abilities to share ideas and give lectures, as well as familiarizing them with the most important books in their specialty and specialized scientific journals.

9. Teaching and Learning Strategies

- 1- Lectures
- 2- Discussion
- 3- Holding discussion circles
- 4- Seminars

10. Evaluation methods

- 1- Monthly exam.
- 2- Seminars delivered by the student
- 3- Scientific reports that the student is assigned to prepare during the study period

Faculty Members						
Academic Rank	Specialization		Special Requireme (if applicab	Number of the teaching staff		
	General	Special		Staff	Lecturer	
Professor (PhD)	Biology	Microbiology		staff		

Professional Development

Mentoring new faculty members

Briefly describes the process used to mentor new, visiting, full-time, and part-time faculty at the institution and department level.

Professional development of faculty members

- 1-Time management and setting priorities
- 2-perseverance and teamwork
- 3-Freedom to choose a role model or stage representative for the student

12. Acceptance Criterion

According to the postgraduate system, the bachelor's average, and the competitive examination score

13. The most important sources of information about the program

Textbooks

Ebooks

Websites

Textbooks and Recommended References

Textbook of Microbiology and Immunology, 2nd edition, Parija, Subhash Chandra. Elsevier. 2012

14. Program Development Plan

Linking the theoretical information that the student receives to the practical reality that he will practice after graduation by encouraging him to visit the college library and the central library at the university to view the most important master's theses and doctoral theses in the field of specialization, as well as review scientific periodicals and journals and the most important research in the field of specialization.

	Program Skills Outline														
				Required program Learning outcomes				es							
Year/Level	Course Code	Course Name	Basic or optional	Knowledge		Skills			Ethics						
		l spirous		A1	A2	A3	A4	B1	B2	В3	B4	C1	C2	C3	C4
2024-2025 M.Sc. students	MIC134	Microbiology	Basic												

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

Course Description Form

1. Course Name:

Microbiology

- 2. Course Code:
- 3. Semester / Year:

2024-2025/ M.Sc. Students

4. Description Preparation Date:

5/10/2024

5. Available Attendance Forms:

Attendance

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

30 hours/ 2 Units

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

Name: Prof. Dr. Nihad Abdulhussain Jafar Email: nihadabid73@tu.edu.iq

8. Course Objectives

After completing this course, the student must have general knowledge about microorganisms, their structures, and the function of each

9. Teaching and Learning Strategies

Strategy

- 1- Giving lectures (explanation and clarification).
- 2- Using technological educational means as teaching aids (educational films, electronic lectures).
- Self-learning method by supporting a learner-centered learnin environment.
- 4- Urging students to use the library as a learning method
- 5- Developing students' ability on the subject of microorganism their dangers, methods of transmission between humans and animals, and how to treat them with antibiotics.

10.Course structure

Course level :MS.c

Course Name: Microbiology

Semester: First

Evaluation methods	Learning methods	Subjects name	Learning methods outcomes	Hours	Weeks
discussion and Quiz	Lecture and explanation	Introduction	Introduction & History of Microbiology: Introduction to Microbiology: Definition and branches of Microbiology, Historical introduction including work of Pasteur, Koch, Lister.	2 hours	1

			Recent developments. History of Antibiotics		
=	=	Structure of the Prokaryotic Cell	A precise description of the structure of the prokaryotic cell: cell wall, cell membrane, properties and functions of cellular organelles	4	2,3
=	=	Microbial Growth & Nutrition	Nutrition in bacteria, the most important compounds that they need, and how to obtain nutrients, with an explanation of the mechanism of bacterial growth, growth phases, and their characteristics.	2	4
=	=	Control of Microbial Growth:	Controlling microorganisms through the use of physical and chemical sterilization methods	2	5
=	=	Laboratory diagnosis of bacteria	Types of culture media and cultural methods and identification of bacteria by biochemical methods and serological and molecular techniques	4	6, 7
	=	Bacterial Genetics	Identifying the genetic material in bacteria, the structure of DNA and chromosome, the mechanisms of replication, and the mechanisms of inducing changes in the genetic material and genetic engineering	4	8, 9
		First examination		2	10
=	=	Pathogenesis of bacterial disease	Identify the pathogenicity of bacteria that cause diseases, the most important virulence factors possessed by bacteria, and their role in pathogenesis.	4	11و 12
=	=	Antimicrobial Agents	Classification of antibiotics, their types and chemical composition, in addition to their mechanism of action and the mechanism of bacterial resistance to antibiotics.	6	13, 14. 15
		Course Final Examination			

11. Course Evaluation Grade distribution: Grade distribution: Annual e	ndeavor grade out of 30, according to monthly
and daily exams and reports. Final exam score	_
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Textbook of Microbiology and Immunology, 2 nd edition, Parija, Subhash Chandra. Elsevier. 2012
Main references (sources)	Jawetz, Melnick, Adelbergs Med Microbiology,10th edition
Recommended books and references (scientific journals, reports)	-Journal of Microbiology
Electronic References, Websites	