اهداء تحضيرية

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

جامعة تكريت
كلية الطب البيطري
شعبة ضمان الجودة والاداء الجامعي

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: Tikrit.....
Faculty/Institute: ...Veterinary Medicine.....
Scientific Department: ..Microbiology.....
Academic or Professional Program Name: ..Parasitology.....
Final Certificate Name: .....
Academic System: …Bachelor in Veterinary Medicine and Surgery……
Description Preparation Date: 5/10/2023
File Completion Date: 20/2/2024

Signature:
Head of Department Name:
Assisst.Prof. Dr. Sanaa Saued Ahmed
Date: 20\2\2024

Signature:
Scientific Associate Name:
Assisst. Proff.Dakheel Hussein Hadri
Date: 20\2\2024

جامعة تكريت
كلية الطب البيطري
شعبة ضمان الجودة والاداء الجامعي

The file is checked by:
Department of Quality Assurance and University Performance
Director of the Quality Assurance and University Performance Department:
Date: 20-2-2024
Signature:

م.م سيف خليل ابراهيم

Approval of the Dean

جامعة تكريت / كلية الطب البيطري
أ.د. بشار صادق نومي
عميد الكلية

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 Requirements	45 hours (theory) for semester 1 45 hours (theory) for semester 2	4 unit for semester 1 And 4 unit for semester 2		Basic course
College Requirements	Yes			
Department Requirements	Yes			
Summer Training	Yes			
Other				

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

7. **Program Description**

Year/Level	Course Code	Course Name	Credit Hours	
٢٠٢٤-٢٠٢٣/Third stage	MIC134	Microbiology 1	3 theory	2 practical
2023-2024/Third stage	MIC234	Microbiology 2	3 theory	2 practical

8. **Expected learning outcomes of the program**	
Knowledge	
	1- Cognitive objectives. 2- Enabling students to know the precise structure of microorganisms, their physiology, and their most important virulence factors. Enabling students to know and understand bacterial and fungal diseases, their methods of transmission, the mechanism of their pathogenesis, how to diagnose them in the laboratory, and know the appropriate treatment for them.

Skills	
	1- Providing the student with skills in how to deal with different types of animals, how to take samples from them, and the type of sample for each disease case. 2- Providing the student with skills in how to use the equipment and tools of the microbiology laboratory. 3- Enabling students to know about diseases and the extent of their impact on public health and economic aspects.
Ethics	
	Developing students' abilities to share ideas
	1- Enabling the student to know how to diagnose the disease and the pathology of the disease 4- Enabling students to know about diseases and the extent of their impact on public health and economic aspects

9. Teaching and Learning Strategies

1- Lectures
2- Discussion
3- Holding discussion circles
4- Holding training courses in the field of practical applications
5- Providing students with basics and additional topics related to the previous learning outcomes of skills, to solve proplems.

10. Evaluation methods

1- Weekly, monthly and daily exams and the end-of-course exam.
2- Scientific reports

11. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Professor (PhD)	Biology	Microbiology			staff	
Professor	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**
The central admission system is based on the applicants choice

13. **The most important sources of information about the program**
Textbooks Ebooks Websites Textbooks and Recommended References □ P.J. Quin, BK Markey, ME Carter, WJ Donnelly and FC Leonard. Veterinary Microbiology and Microbial Disease. Blackwell Science □ Peter Borriello, Patrick R. Murray and Guido Funke. Topley and Wilson's Microbiology and Microbial Infections, Bacteriology Volumes I & II. Hodder Arnold □ Glen Sonder J & Karen W Post. Veterinary Microbiology: Bacterial and Fungal Agents of Animal Diseases. Cold Spring Harbor Lab. Press. □ Veterinary clinical microbiology, By Patrick Quinn Bryan Markey , Mark Carter and G.R. Carter. 2nd Revised edition.2013.

14. Program Development Plan
In order to link the theoretical information that the student receives to clinical reality, several things must be done, the most important of which are the following: - 1- Increasing field visits to government and private projects 2- Encouragement to visit the college library and the central library at the university 3- Urging students to benefit from summer training in veterinary centers and the teaching hospital 4- Improving research projects and graduation projects.

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
2023-2024 Third	MIC134	Microbiology	Basic		x		X	X					x		
	MIC234	Microbiology	Basic												

- Please tick the boxes corresponding to the individual program learning outcomes under evaluatio

Course Description Form

1. Course Name:	2.
Microbiology	
3. Course Code:	4.
MIC134 و MIC234	
5. Semester / Year:	6.
2023-2024/ Third year	
7. Description Preparation Date:	8.
20/2/2024	
9. Available Attendance Forms:	10.
Attendance	
11. Number of Credit Hours (Total) / Number of Units (Total)	12.
90 hours/ 8 Units	
13. Course administrator's name (mention all, if more than one name)	14.
Name: Prof.Dr. Nihad Abdulhussain Jafar Email: nihadabid73@tu.edu.iq Name: Prof. Hiba Younis Khalaf Email: hibamicrobiology@tu.edu.iq.	
15. Course Objectives	16.
After completing this course, the student must be aware of the following: • Providing students with important knowledge about pathogenic microorganisms Veterinary importance • Make students understand the animal aspects of microbial pathogens. • Introduce students to the pathogens that cause food and feed poisoning • Students will be trained on how to handle clinical samples of infectious diseases • Introduce students to the characteristics of macroscopic and microscopic culture and identi pathogens of veterinary microbial diseases	
17. Teaching and Learning Strategies	18.
Strategy 1- Giving lectures (explanation and clarification). 2- Using technological educational means as teaching aids (educational films, electronic lectures). 3- Self-learning method by supporting a learner-centered learning environment. 4- Urging students to use the library as a learning method 5- Developing students' ability on the subject of microorganisms, their dangers, methods of transmission between humans and animals, and how to treat them with antibiotics.	

15 - Course level :Third year Course Name :Practical Microbiology Semester: First & second.					
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. Recent developments. History of Antibiotics	**6**	**1 and 2**
=	=	**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**	**3**	**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.	**3**	**4**
=	=	**Control of Microbial Growth: Disinfectants, antibiotics and chemotherapy.**	Controlling microorganisms through the use of physical, chemical, sterilization methods and antibiotic.	**3**	**5**
=	=	**Microbial Metabolism**	Metabolism in bacteria	**3**	**6**
=	=	**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**	**6**	**7&8**
=	=	**Mycology**	Classification of fungi and study of the most important fungi that cause diseases in animals and the mechanism of their transmission and pathogenesis	**3**	**9**

=	=	**Genus: Staphylococcus**	**Description of the bacterium, identifying the most important factors of its virulence and pathogenicity, and the most important diseases it causes in animals.**	3	**10**
=		**Genus: Streptococcus and related cocci**	**Description of the bacterium, identifying the most important factors of its virulence and pathogenicity, and the most important diseases it causes in animals.**	**3**	**11**
=	**Lecture and explanation with preview of samples**	**Genus: Corynebacterium species and Rhodococcus equi**	**Description of the bacterium, identifying the most important factors of its virulence and pathogenicity, and the most important diseases it causes in animals.**	3	**12**
=	**Lecture and explanation with preview of samples**	**Genus: Arcanobacterium Genus: Nocardia Genus: Dermatophilus**	**Description of the bacterium, identifying the most important factors of its virulence and pathogenicity, and the most important diseases it causes in animals.**	3	**13**
=	=	**Genus: Spirochaetes Genus: Leptospira**	**Description of the bacterium, identifying the most important factors of its virulence and pathogenicity, and the most important diseases it causes in animals.**	**3**	**14**
		Genus: Borrelia Genus: Listeria	**Description of the bacterium, identifying the most important factors of its virulence and pathogenicity, and the most important diseases it causes in animals.**	**3**	**15**

15 - Coures level :3nd year
Course Name :Theoritical Microbiology / 3 hours
1. Semester: second

15 - Coures level :3nd year
Course Name :Theoritical Microbiology/ 3 hours
Semester: second

Evaluation methods	Learning methods	Subject name	Learning method outcome	Hours	Weeks
Daily exam questions and discussion	Lecture and explanation with ppt presentation	Genus: Bacillus Genus: Clostridium	Description of the bacterium, identifying the most important factors of its virulence and pathogenicity, and the most important diseases it causes in animals.	6	16 and 17
=	=	Genus: Mycobacterium	Description of the bacterium, identifying the most important factors of its virulence and pathogenicity, and the most important diseases it causes in animals.	3	18
=	=	Genus: Pasteurella Genus: Moraxella	Description of the bacterium, identifying the most important factors of its virulence and pathogenicity, and the most important diseases it causes in animals.	3	19
=	=	Family: Enterobacteriaceae- General features and classification Genus: Escherichia Genus: Salmonella Genus: Klebsiella Genus: Proteus Genus: Yersinia	Description of the bacterium, identifying the most important factors of its virulence and pathogenicity, and the most important diseases it causes	9	20 - 22

			in animals.		
=	=	Genus: Pseudomonas Genus: Burkholderia Genus: Manheimia	Description of the bacterium, identifying the most important factors of its virulence and pathogenicity, and the most important diseases it causes in animals.	3	23
=	=	Genus: Brucella Genus: Campylobacter	Description of the bacterium, identifying the most important factors of its virulence and pathogenicity, and the most important diseases it causes in animals.	3	24
=	=	Genus: Taylorella Genus: Haemophilus	Description of the bacterium, identifying the most important factors of its virulence and pathogenicity, and the most important diseases it causes in animals.	3	25
=	=	Genus: Mycoplasma	Description of the bacterium, identifying the most important factors of its virulence and pathogenicity, and the most important diseases it causes in animals.		26
	=	Rickettsia and Chlamydia	Description of the bacterium, identifying the most important factors of its		27

			virulence and pathogenicity, and the most important diseases it causes in animals.		
=	=	**Systematic Mycology Dermatophytes Genus: Microsporum, Genus: Trichophyton,**	**Description of the fungi, identifying the most important factors of its virulence and pathogenicity, and the most important diseases it causes in animals.**		**28**
=	=	**Genus Aspergillus: Candida albicans Cryptococcus neoformans Malassezia pachydermatis Blastomyces dermatitidis Coccidioides immitis**	**Description of the fungi, identifying the most important factors of its virulence and pathogenicity, and the most important diseases it causes in animals.**		**29**
=	=	**Histoplasma capsulatum Histoplasma farciminosum Sporothrix schenckii Zygomycoses: Mucoqwrmycosis, Entomophthomycosis Rhinosporidium seeberi Fungi associated with mastitis and abortions in animals Mycotoxicoses**	**Description of the fungi, identifying the most important factors of its virulence and pathogenicity, and the most important diseases it causes in animals.**		**30**
Final examination: Semester 2					

1. Course Evaluation	
Grade distribution: The annual endeavor grade is 40: 25 theoretical and 15 practical, according to monthly and daily exams and reports. Final exam score of 60: 40 theoretical and 20 practical	
2. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	**Veterinary Microbiology**
Main references (sources)	Jawetz, Melnick, Adelbergs Medical Microbiology,1 edition
Recommended books and references (scientific journals, reports...)	**-Journal of Microbiology** ..
Electronic References, Websites	