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: Tikrit university

Faculty/Institute: College of Veterinary Medicine

Scientific Department: Microbiology

Academic or Professional Program Name: Master

Final Certificate Name: M.Sc. Microbiology

Academic System: Course

Description Preparation Date: 10\10\2023

File Completion Date: 10\12\2023

Signature:
Head of Department Name:
Prof.Assist.Dr. Sanna Ahmed Sauod
Date:10/2//2024

Signature:
Scientific Associate Name:
Prof.Assist. Dkheel Hussain
Date:10/2/2024

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:
Signature:

م.م سيف خليل ابراهيم
10-6-2024

Approval of the Dean

1. **Program Vision**
The College of Veterinary Medicine at Tikrit University seeks to establish the program as a center of excellence in microbiology education and research and creating a stimulating learning environment that fosters student engagement and scientific inquiry and developing strategic partnerships to translate research into practical, impactful applications. In addition, contributing to advancements in human and animal health, food security, environmental sustainability, and technological innovation Supporting the sustainable development of the local and global community..

2. **Program Mission**
The College of Veterinary Medicine at Tikrit University seeks to provide high-quality education and training in Microbiology to equip students with strong theoretical knowledge and practical skills establishing a research-intensive environment, monitoring research projects and plans, and developing them to protect animal resources, and solve problems related to human and animal health, as well as food safety. To promote collaboration and knowledge exchange between students, faculty members, and industry partners to develop critical thinking and communication skills in graduate students. Additionally, Prepare committed researchers who apply ethical principles and technical/scientific knowledge in the field of Microbiology, contributing to the improvement of societal and environmental conditions

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3. **Program Objectives**
• Comprehensive coverage of the core disciplines within Microbiology, from bacteria to parasites, immunology, and vaccinology. • Developing problem-solving and analytical capabilities to address challenges in animal health, zoonotic diseases, and fundamental microbiological sciences • Cultivating robust research skills, critical thinking, and effective communication abilities in students. • Enabling students to actively participate in and contribute to research and academic teams at various levels. • Preparing students to engage in high-level scientific discourse and presentation at conferences and other academic forums.
4. **Program Accreditation**
National program accreditation standards for higher education institutions in Iraq have been prepared based on the European Association of Establishments for Veterinary Education (EAEVE)
5. **Other external influences**
Laboratories Animal facilities, Library and internet resources, Slaughterhouse, Veterinary hospital and Veterinary projects

6. Program Structure				
Program Structure	**Number of Courses**	**Study Unit**	**Percentage**	**Reviews***
Institution Requirements	**2**	**45**		**Basic course**
College Requirements	**Yes**			
Department Requirements	**Yes**			
Summer Training				
Other				

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

7. Program Description				
Year/Level	**Course Code**	**Course Name**	**Credit Hours**	
2024-2023/MSc.		**Immunology**	**2 theoretical Immunology**	

8. Expected learning outcomes of the program	
Knowledge	
	• Recognizing the primary and secondary interactions between antibodies and antigens, • the role of cytokines in activating and regulating the function of immune cells in innate and acquired immunity. • Complement system pathways and its regulations • The immune response through humoral and cell-mediated immunity. • Hypersensitivity and autoimmune diseases.
Skills	
	Students learned laboratory skills to: Prepare seminar presentations on advanced topics in immunology using the latest scientific sources. Develop communication and presentation skills through the interactive presentation and discussion of advanced topics in immunology. Actively participate in scientific discussions and specialized dialogues in the field of immunology. Prepare and write research and scientific reports in the field of immunology.
Ethics	
	• **Strategies** of delivering lectures based on reliable sources for academic purposes • Demonstrate ethical and professional behaviors in conducting research and applying its findings.

	• Contribute to the development of knowledge and practices in the field of immunology. • Participate in advanced academic discussions and events related to the specialization.

Professional Development
Mentoring new faculty members
Conducting Training Programs including seminars, training courses and workshops to provide them with academic skills and experience
Professional development of faculty members
• Participation in specialized workshops and discussion sessions on the latest developments in the field of immunology. • Attending relevant scientific conferences and seminars to keep up with the latest research and applications in immunology. • Conducting research and updating the curriculum to align with the scientific progress in the field of immunology. • Providing training and guidance for faculty members in the area of supervising graduate students.
9. **Acceptance Criterion**
According to the regulations, the postgraduate program in microbiology at the College of Veterinary Medicine, University of Tikrit
10. **The most important sources of information about the program**
• The official website of the Veterinary Medicine Program at the University of Tikrit. • The student handbook or academic guide • Assessments and rankings of the program by accreditation agencies or academic institutions. • The Postgraduate Studies and Follow-up Unit
11. Program Development Plan
Linking the theoretical knowledge that graduate students receive with practical research reality to develop a suitable academic environment. **The formal activities include**: • Regular classroom lectures delivered by graduate students. • Updating teaching methods and following developments in the educational process. • Encouraging students to use multiple resources such as the internet, library holdings, and external experts to enhance student learning in higher education through analyses, resources, and guidance. **The informal activities include**: community service, discussions, research seminar presentations, involving students in research collaboration, training students during breaks, and public lectures featuring speakers from the private practice and veterinary sectors.

12. Teaching and Learning Strategies

- Graduate students delivering lectures based on approved sources to develop presentation and public speaking skills using PowerPoint slides and displaying them through a data projector.
- Conducting training courses in the field of applications and practical skills.
- Encouraging communication and collaboration with advanced immunology research institutions and centers, both locally and internationally.
- Organizing scientific seminars and conferences to exchange knowledge and experiences, and expand the students' scientific networking.
- Discussions, questioning, dialogue, and brainstorming.
- E-learning and blended learning.

13. Evaluation methods

- Mid-term exams and final-course exams to measure knowledge, understanding, and reasoning abilities, and assess the student's level of comprehension of the course content.
- Scientific discussion sessions to assess the student's ability to present information, select appropriate responses, and prepare students for scientific reports by choosing topics of importance in advanced immunology.
- Providing mechanisms to monitor student progress and provide academic feedback and guidance.

14. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Assistant professor	Veterinary medicine and surgery	Immunology			staff	

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		Immunology	Basic		√	√	√		√	√			√	√	

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

Course Description Form

1. Course Name:
Immunology
2. Course Code:
3. Semester / Year:
2023-2024/ Postgraduate
4. Description Preparation Date:
10/10/2024
5. Available Attendance Forms:
Attendance
6. Number of Credit Hours (Total) / Number of Units (Total)
30 theoretical hours 2 theoretical hours per week
7. Course administrator's name (mention all, if more than one name)
Prof.Dr.Bashar Sadeq Noomi email:vetbashae@tu.edu.iq Assist.Prof.Dr. Agharid Ali Hussein email : agharidalrasheed@tu.edu.iq
8. Course Objectives
• The program aims to provide students with a comprehensive and advanced understanding of mechanisms and systems of the immune system at the cellular and molecular level, Knowing of diseases associated with the immune system, and an understanding of the role of cytokines in interactions and their mechanism of action in activating and regulating function of immune cells in the animal body. • Develop students' skills in conducting experimental research and analyzing results in the field of advanced immunology. • Enhance students' abilities in scientific discussion and effective presentation of advanced information in this specialty. • Staying up-to-date with the latest developments in the field of immunology and related medical applications.
9. Teaching and Learning Strategies

Strategy	1. Lectures are delivered by explaining and clarifying. 2. Using modern educational teaching aids, such as educational films, blended learning and e-learning by the google classroom platform. 3. Self-learning method, by learner-centered approach to encourage students to take ownership of their learning, set their own goals, and adapt to new challenges. 4. Encourage students to visit the central library of Tikrit University to improve understanding and learning

10.Course structure

Course level :Postgraduate-Msc
Course Name: Theoretical immunology
Semester: First

Evaluation methods	Learning methods	Subjects name	Learning methods outcomes	Hours	weeks
Proceed with the lecture presentation along with questions and discussion.	Lecture Presentation with PowerPoint Slides	Immunity	Natural (Innate) Immunity, Defenses, and Acquired Immunity and its Types	2	1
Proceed with the lecture presentation along with questions and discussion.	Lecture Presentation with PowerPoint Slides	Antigen	The characteristics of a good antigen, and the different types of :antigens	2	2
Proceed with the lecture presentation along with questions and discussion.	Lecture Presentation with PowerPoint Slides	Antibodies	An overview of the structure and composition of antibodies, as well as the different types of antibodies	2	3
Proceed with the lecture presentation along with questions and discussion.	Lecture Presentation with PowerPoint Slides	Antigen–Antibody Reaction	The primary and secondary interactions between antigens and :antibodies	2	5-4
		Mid-term exam			
Proceed with the lecture presentation along with questions and discussion.	Lecture Presentation with PowerPoint Slides	Complement system	An overview of the complement system, its pathways, and its :biological activities	4	7-6
Proceed with the lecture presentation along with questions and discussion.	Lecture Presentation with PowerPoint Slides	Structure and Function of Immune System	An overview of the primary and secondary lymphoid organs, as well as the key immune cells involved in both innate and adaptive immunity	4	9-8
Proceed with the lecture presentation along with questions and discussion.	Lecture Presentation with PowerPoint Slides	Immune Response	Explain the primary and secondary immune responses, the role of cytokines, and the concept of .immune tolerance	4	11-10
		Mid-term exam			12
Proceed with the lecture presentation along with questions and discussion.	Lecture Presentation with PowerPoint Slides	Hypersensitivity	An overview of the different types :of hypersensitivity reactions	2	13
Proceed with the lecture presentation along with questions and discussion.	Lecture Presentation with PowerPoint Slides	Autoimmunity	Autoimmune diseases	2	14
		Final exam			

11. Course Evaluation	
Student performance is evaluated through the following assessments: Midterm Examination (30%) and Final Examination 70%.	
12. Learning and Teaching Resources	
Required textbooks (curricular books, any)	Textbook of Microbiology and Immunology second edition /2012 by Subhash Chandra Parija
Main references (sources)	Veterinary immunology / Ian Tizard/ Tenth edition /2018 • Textbook of Microbiology and Immunology secor edition /2012 by Subhash Chandra Parija
Recommended books and references (scientific journals, reports...)	• Cellular and Molecular Immunology/ edition/Abbas, Abul K. et al.,2012 • Veterinary Immunology and Immunopathology (https://www.journals.elsevier.com/veterinary-immunology-and-immunopathology • Immunology : (https://onlinelibrary.wiley.com/journal/1365256
Electronic References, Websites	• The PMC (PubMed Central)website (https://www.ncbi.nlm.nih.gov/pmc/) The America Association of Immunologists (AAI) (https://www.aai.org/ • Online immunology courses : Coursera and edX ar Educational videos on YouTube and the Khan Academy website