



**Ministry of Higher Education and Scientific Research**  
**Supervision and evaluation device**  
**Department of Quality Assurance and Academic**  
**Accreditation**  
**Accreditation Department**

# **Academic program and course description guide**

2024

## **Introduction**

The educational program is considered a coordinated and organized package of academic courses that includes procedures and experiences organized in the form of academic vocabulary, the main purpose of which is to build and refine the skills of graduates, making them qualified to meet the requirements of the labor market. It is reviewed and evaluated annually through internal or external audit procedures and .programs such as the external examiner program

The description of the academic program provides a brief summary of the main features of the program and its courses, indicating the skills that students are working to acquire

based on the objectives of the academic program. The importance of this description is evident because it represents the cornerstone of obtaining program accreditation, and the teaching staff participates in writing it under the supervision of the scientific committees in the scientific departments

This guide, in its second edition, includes a description of the academic program after updating the vocabulary and paragraphs of the previous guide in light of the latest developments in the educational system in Iraq, which included a description of the academic program in its traditional form (annual, quarterly), in addition to adopting the description of the academic program circulated according to the book of the Department of Studies, M. 3/ 2906 on 3/5/2023 with regard to programs that adopt the Bologna Process as a basis for their work

In this area, we can only emphasize the importance of writing descriptions of academic programs and courses to ensure the smooth conduct of the educational process

### Concepts and terminology

**Description of the academic program:** The description of the academic program 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 necessary summary of the most important characteristics of the course and the learning outcomes that the student is expected to achieve, demonstrating whether he or she has 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 a developed, inspiring, motivating, realistic and applicable programme

**The program's mission:** It briefly explains the goals and activities necessary to achieve them, and also defines the program's development paths and directions

### **:Program objectives**

These 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/study subjects included in the academic program according to the approved learning system (semester, annual (Bologna) track, whether it is a ministry requirement), a university college, and a scientific department with multiple .study units

**Learning outcomes:** A consistent set of knowledge, skills, and values that the student has acquired after successfully completing the academic program. The learning outcomes for each course must be determined in a way that achieves the program's .objectives

**Teaching and learning strategies:** They are the strategies used by the faculty member to develop the student's teaching and learning, and they are plans that are followed to reach the learning objectives, that is, they describe all curricular and extracurricular .activities to achieve the learning outcomes of the program

### **Academic program description form**

**Name of the university :- Middle Technical University**

**:Mansour Al-- Medical Technical Institute -Scientific Department**

**Department :- Forensic Evidence Techniques**

**Name of the academic or professional program: Forensic Diploma Name of final . certificate: Technical Diploma in Forensic Techniques**

**Academic system: annual**

**Description preparation date: 20/5/2024**

**Date of filling the file: 20/5/2024**

**Signature: Signature**

**Name of department head Dr. Batoul Abdul Jabbar Hussein**

**Name of Scientific Assistant Eng. Dr . Abd-el-Kader**

**Date: Date**

**Check the file before**

**Division of Quality Assurance and University**

**Authentication of the Dean**

**Program vision-1**

**The graduate will be qualified to work in governmental and private institutions using  
.high technologies**

**Program message -2 .**

This academic program description provides a necessary summary of the most important characteristics of the program and the learning outcomes that the student is expected to achieve, demonstrating whether he or she has made the most of the available opportunities.

.It is accompanied by a description of each course within the program

**Program objectives -3**

Preparing qualified technical personnel to work in the areas of collecting forensic evidence samples and examining them in specialized technical laboratories located in government institutions, including the Ministry of Health and the Ministry of Interior, in addition to the possibility of working in private sector institutions in this field

**Program accreditation -4**

Government accreditation

**Other external influences -5**

**Program structure -6**

*Notes	Percentage	Unit of study	Number of courses	Program structure
				Enterprise requirements
				College requirements
				Department requirements
				summer training
				Other

**Program description -7**

Credit hours		Name of the course or course	Course or course code	Year/level
Practical	Theory	Biology 1		First
3	2			
			<b>Expected learning-8 outcomes of the program</b>	
<b>Knowledge</b>				
			<b>Learning outcomes 1</b>	<b>Statement of learning outcomes 1</b>
<b>Skills</b>				
			<b>Learning outcomes 2</b>	<b>Statement of learning outcomes 2</b>
			<b>Learning outcomes 3</b>	<b>Statement of learning outcomes 3</b>
<b>Value</b>				
			<b>Learning outcomes 4</b>	<b>Statement of learning outcomes 4</b>
			<b>Learning outcomes 5</b>	<b>Statement of learning outcomes 5</b>

#### Teaching and learning strategies-9

In-person (traditional) education, e-learning using the Power Point method, using the smart board and the following applications

Classroom-1

Google meet-2

You tube-3

**.Free conference-4**

**Evaluation methods-10**

**.Oral and written tests-1**

**Semester and final exams and daily evaluation-2 .**

**The teaching staff-11**

**Faculty members**

preparation of the teaching staff		special requirements/skills ((if any	specialization		Academic rank
lecturer	angel		private	Public	
	✓	thirty years of experience	Biotechnology	Genetic Engineering &Biotechnology	Assistant Professor

**Professional development**

**.Orienting new faculty members-1**

**Attending with them and giving them advice on how to manage the classroom and -2**

**.compose exam questions**

**Professional development for faculty members**

**Attending conferences, development courses in the specialty, seminars and scientific .workshops**

**Acceptance criterion-12**

**Central admission / scientific / biological branch-1 .**  
**GPA + student's interest in the scientific department-2 .**

**The most important sources of information about the program-13**

**.Vocabulary determined by the Deans' Committee in the scientific specialty-1**

**Teaching lectures from scientific sources and the Internet-2 .**

**Program development plan-14**

**Every year, vocabulary is added and modified according to scientific developments in-1**  
**.the field of specialization**

**The curricula were updated this year to keep pace with scientific development in the-2**  
**.corresponding universities**



**Program skills chart**

**Learning outcomes required from the programme**

Value				skull				Knowledge				Essential or optional	Course Name	Course Code	Year /level
C4	C3	C2	C1	B4	B3	B2	B1	A4	A3	A2	A1				
se ns e of re sp o ns ibi lit y	tr ai ni ng	sincer ity	honesty	speed	skill	Rescu e	techni que	√	√	√	passing the program Successf ully	Essential	(Biology(1		First

### Course description form

<b>(Course Name // Life Sciences (1-1</b>
<b>//Course code -2</b>
<b>Semester/year/First/ first year-3</b>
<b>The date this description was prepared // 20/5/2024-4</b>
<b>Available forms of attendance // classroom / laboratories-5</b>
<b>Number of study hours (total) / Number of units (total) Number of hours (5) hours-6 Number of study units (5) units</b>
<b>Name of the course administrator-7</b>
<b>Mohammed Rafeeq Ali E-mail mohammed-rafeeq@mtu.edu.iq</b>
<b>Course objectives -8</b>
<b>-:By the end of this course the student will be able to</b> <b>.Introduction to biological safety ,biological hazard ,risk of biological hazard-1</b> <b>Know the basic principle of cell &amp; structure, cell division, Genetics, as well as types-2</b> <b>.&amp; structure of selected pathogenic organisms</b> <b>Know &amp; understand the gross anatomy of different organs &amp; the human body and-3</b> <b>.their general function</b>

### Teaching and learning strategies -9

Preparing intermediate staff who specialize in forensic evidence by obtaining a degree in the specialty of forensic evidence, through which they can work in hospitals and

-:forensic medicine. As for the nature of work in this field, it is as follows

Collecting forensic evidence and examining it in specialized technical laboratories-1 located in government institutions, including the Ministry of Health and the Ministry of Interior, in addition to the possibility of working in private sector institutions in this .field

Working in specialized forensic medicine laboratories and searching mass graves to-2 extract bones for the purpose of DNA testing and the return of unidentified bodies to .their families after comparison

### Course structure -10

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	week
Discussion Intervention s with directed questions	Lecture PowerPoint presentation	what is the meaning-1 .of biological safety examples of-2 .biological safety Biosafety Levels-3 ((BSL What are Biological-4 . Hazards and Type	Knowledge of biological risks and their types in laboratories	2 theoretical + 3 practical	1
Oral self-tests And discussion	Lecture presentation power point Practical training (onion cells (experiment	.Cell and cell theory-1 Eukaryotic and-2 .Prokaryotic cells .Cell Structure-3	Distinguish between cell types and structures	2 theoretical + 3 practical	2
Discussion	Lecture, power point presentation, practical training in the laboratory ((experiment Show a movie	Cell -1. organelles Structure-2 .and Function Mitotic Cell -3 .Division	Learn about cell organelles and their importance, as well as understand how cells divide	2 theoretical + 3 practical	3

<b>Oral self-tests And discussion</b>	Lecture Presentation Power Point Practical training in the laboratory (Experiment of extracting DNA (from strawberries	<b>DNA,RNA -1 .Structure &amp; function DNA Replication&amp; -2 Transcription</b>	<b>Learns what DNA and RNA are and their function in the cell as well as DNA replication</b>	<b>2 theoretical + 3 practical</b>	<b>4</b>
<b>Oral examination and .discussion</b>	Lecture, power point presentation, practical laboratory training .on the skeleton	<b>.Human Anatomy -1 a-Head &amp;Neck.</b>	<b>He learns anatomy because he will practice it in forensic medicine briefly (head .(and neck</b>	<b>2 theoretical + 3 practical</b>	<b>5</b>
<b>Written pre-test, oral self-tests and discussion</b>	Lecture, power point presentation, practical training in the laboratory on the skeleton with a movie	<b>b- Skull</b>	<b>The skull, its parts and components</b>	<b>2 theoretical + 3 practical</b>	<b>6</b>
<b>Oral examination and discussion</b>	Lecture, power point presentation, practical laboratory training on the skeleton	<b>c- Brain</b>	<b>The brain and its parts</b>	<b>2 theoretical + 3 practical</b>	<b>7</b>
<b>Oral and written examination and .discussion</b>	Lecture, power point presentation, practical training in the laboratory on the skeleton with a .film	<b>Anatomy of chest (( Thorax</b>	<b>Recognizes the chest area and its divisions</b>	<b>2 theoretical + 3 practical</b>	<b>8</b>
<b>Oral and written examination and discussion</b>	Lecture, power point presentation, practical training in the laboratory on the skeleton with a movie	<b>Cervical Vertebrae ((C.V Thoracic vertebrae</b>	<b>Distinguish between the cervical and thoracic vertebrae</b>	<b>2 theoretical + 3 practical</b>	<b>9</b>
<b>Oral exam And discussion</b>	Lecture, power point presentation, practical training in the laboratory on the skeleton with a movie	<b>Sternum Ribs Pleura Lungs</b>	<b>Recognizes the locations of the sternum, pleura, and lung and their damage</b>	<b>2 theoretical + 3 practical</b>	<b>10</b>

<b>Written test</b>	<b>Lecture, power point presentation, practical training in the laboratory on the skeleton with a movie</b>	<b>Abdomen</b>	<b>learns the division of the abdominal regions and the location of the organs in each part</b>	<b>2 theoretical + 3 practical</b>	<b>11</b>
<b>Discussion written test</b>	<b>Lecture, power point presentation, presentation of an illustrative film</b>	<b>Anatomy of Urinary (Tract ( UT</b>	<b>Learns the parts of the urinary system</b>	<b>2 theoretical + 3 practical</b>	<b>12</b>
<b>Discussion</b>	<b>Lecture, power point presentation, practical training in the laboratory on the skeleton with a movie</b>	<b>Anatomy of Upper limbs</b>	<b>Learns the main parts of the upper limbs and their names</b>	<b>2 theoretical + 3 practical</b>	<b>13</b>
<b>Self-test</b>	<b>Lecture, power point presentation, practical training in the laboratory on the skeleton with a movie</b>	<b>Anatomy Lower limbs</b>	<b>Learns the main parts of the lower limbs and their names</b>	<b>2 theoretical + 3 practical</b>	<b>14</b>
<b>Discussion</b>	<b>Lecture, power point presentation, practical training, making blood slides and viewing ready-made slides</b>	<b>HLA = Human Leukocyte Antigen</b>	<b>Differentiate between the three types of human leukocyte antigens</b>	<b>2 theoretical + 3 practical</b>	<b>15</b>

<b>Course evaluation -11</b>	
<b>Oral exams, written exams, interrogations, final exams, and daily evaluation</b>	
<b>Learning and teaching resources-12</b>	
<b>Educational bag</b>	<b>Required textbooks (methodology, if any</b>
	<b>Main references ((sources</b>
<p><b>The Skull-1</b> Centers for Disease Control and Prevention (US). Injury prevention and control: traumatic brain injury [Internet]. Atlanta, GA; [cited 2013 Mar 18]. Available from: <a href="http://www.cdc.gov/traumaticbraininjury/statistics.html">http://www.cdc.gov/traumaticbraininjury/statistics.html</a>.</p> <p><b>Organs and Structures of the Respiratory System</b> Bizzintino J, Lee WM, Laing IA, Vang F, Pappas T, Zhang G, Martin AC, Khoo SK, Cox DW, Geelhoed GC, et al. Association between human rhinovirus C and severity of acute asthma in children. Eur J Respir J (Internet</p> <p><b>The Small and Large Intestines -3</b> American Cancer Society (US). Cancer facts and figures: colorectal cancer: 2011–2013 [Internet]. c2013 [cited 2013 Apr 3]. Available from: <a href="http://www.cancer.org/Research/CancerFactsFigures/ColorectalCancerFactsFigures/colorectal-cancer-facts-figures-2011-2013-page">http://www.cancer.org/Research/CancerFactsFigures/ColorectalCancerFactsFigures/colorectal-cancer-facts-figures-2011-2013-page</a></p> <p><b>The Urinary System and Homeostasis 4</b> Bagul A, Frost JH, Drage M. Stem cells and their role in renal ischaemia reperfusion injury. Am J Nephrol [Internet]. 2013 - [cited 2013 Apr 15]; 37(1):16–29</p>	<p><b>Recommended supporting books and references (scientific journals, (...reports</b></p> <p>2-</p>
<b>websites</b>	<b>Electronic references, Internet sites</b>

