Specification for Forensic Medicine and veterinary regulations course 2025/2026

1-Basic information

1.	**Course title**	Forensic medicine & veterinary regulations							
2.	**Course code**	**FMT.412**							
3.	**Department/s participating in delivery of the course**	Forensic Medicine and Toxicology							
3.	**Number of units/credit hours**	**Theoretical**	**2**	**Practical**	**1(2)**	**Other**	**0**	**Total**	**3(4)**
4.	**Course Type**	√ **Obligatory** **Elective**							
5.	**Academic level at which the course is taught**	4th year							
6.	**Semester**	Fall							
7.	**Academic program**	Bachelor of Veterinary Medicine (BVM)							
8.	**University**	Benha University							
9.	**Faculty**	Veterinary medicine							
10.	**Name of course coordinator**	Prof. Dr. Nabila mahmoud							
11.	**Course Specification Approval Date**	Faculty council on 27/8/2025							
12.	**Course Specification Approval (Attach the decision/minutes of the department /committee/council ....)**	Department council/8-7-2025							

2-Course overview

- **Course contents written in the program bylaw:**

Identify death ; wounds asphyxia; thermal injuries; forensic toxicology medico legal law and medical ethics and veterinary regulations.

3 Course Learning Outcomes CLOs:

	(NARS) outcomes		Course outcomes	
	Code	**Text**	**Code**	**Text**
Knowledge and understanding	**2.10**	Toxicology and forensic medicine, animal medicine, theriogenology and veterinary surgery.	**a1**	Identify the basic knowledge of forensic medicine and forensic terminology.
			a2	Mention the appropriate steps for identification of living or dead body.
			a3	Identify causes of death and time passing after death , Burn , Wound and Asphyxia
	2.12	The accurate measurements of veterinary quarantine.	**a1**	Identify the basic knowledge of forensic medicine and forensic terminology.
	2.14	Basics of law and ethical codes relevant to animals and food hygiene.	**a4**	Realize the appropriate methods for criminal analysis
			a5	Recognize the medico legal important for each examined point
			a6	Describe steps needed for writing a forensic report
Intellectual skills	**4.1**	Foster critical thinking and scientific curiosity.	**b1**	Illustrate problem list
			b2	Analyze how case history, signs, P.M examination managed
			b3	Interpret the medico legal important of data collected.
			b4	Analyze the results obtained from their investigation and their value.
			b5	Manage to solve criminal problems
Professional and practical skills	**3.4**	Perform clinical examination of diseased cases and collect relevant samples.	**c1**	Apply safely, correctly and humanely restrain animals for examination.
			c2	Carry out the history whether for individual or a group of animals.

			c3	Perform P.M examination and collect relevant samples.
			c4	Apply more recent advanced techniques.
	3.6	Write a report about hygiene and safety of food of animal origin for human consumption.	**c.5**	Write a report to explain causes of the criminal problems.
	3.11	Utilize appropriate safety procedures to protect clients and co-workers	**c6**	Apply appropriate safety procedures to protect themselves and co-workers
General and transferable skills	**5.1**	Work under pressure and / or contradictory conditions	**d1**	Work under pressure during Forensic medicine & veterinary regulations lab session
	5.2	Function in a multidisciplinary team	**d2**	Work in a team during the Forensic medicine & veterinary regulations lab sessions.
	5.3	Communicate appropriately verbally and nonverbally	**d3**	Communicate with other colleagues for reaching diagnosis.
	5.5	Search for new information and technology as well as adopt life–long self-learning ethics	**d4**	Search for new information in the field of Forensic medicine & veterinary regulations.

4- Teaching and learning methods					
Lectures	√	**Discussion & seminar (self-learning)**	√	**Practical**	√
Presentation & movies	√	**Problem solving**	√	**Brain storming**	√
Others	**Field Training**				

- Course contents:

Week [W]	Topics	Weekly hours	Expected number of the Learning Hours			
			Theoretical teaching (lectures/discussion groups/ .....)	Training (Practical/Clinical/ .....)	Self-learning (Tasks/ Assignments/ Projects/ ...)	Other (to be determined)
W1	Signs of death	**3(4)**	**2**	**1 (2)**		**0**
W2	Signs of death	**3(4)**	**2**	**1 (2)**		**0**
W3	Identification	**3(4)**	**2**	**1 (2)**		**0**
W4	Identification	**3(4)**	**2**	**1 (2)**	Formative quiz (Self-learning)	**0**
W5	Blood spots	**3(4)**	**2**	**1 (2)**		**0**
W6	Blood spots	**3(4)**	**2**	**1 (2)**		**0**
W7	**Semester works (one hour exam)**					
W8	Adulteration	**3(4)**	**2**	**1 (2)**	Formative quiz (Self-learning)	**0**
W9	wound,Fire arm &burns	**3(4)**	**2**	**1 (2)**	**0**	**0**
W10	wound,Fire arm &burns	**3(4)**	**2**	**1 (2)**	**0**	**0**
W11	wound,Fire arm &burns	**3(4)**	**2**	**1 (2)**	Formative quiz (Self-learning)	**0**
W12	Asphyxia&Medical ethics	**3(4)**	**2**	**1 (2)**		**0**
W13	Asphyxia&Medical ethics	**3(4)**	**2**	**1 (2)**		**0**
W14	Vet. Jorseprodeuce	**3(4)**	**2**	**1 (2)**		**0**
W15	**Practical exam**					

5- Methods of students' assessment

a- Assessment methods (summative and formative)

1. **Formative assessment**: including (weekly quizzes, homework assignments and surveys).
2. **Summative assessment** including (quizzes, class activities, Mid-term exam, practical exam, oral exams and final written exams).

b- Assessment schedule and weight

Assessment method	Assessment Timing (Week Number)	Marks/ Scores	Percentage
Semester work including one hour exam	7th week	10	10%
Assignments / Project /Portfolio/ Logbook	Throughout semester		
Field training			
Formative assessment	Throughout semester	-	-
Practical exam	15th week	30	30%
oral exam	End of semester	10	10%
Written exam	End of semester	50	50%
Total		100	100%

6- Learning resources and supportive facilities:

Learning resources	**Main reference**	Student handbook: Forensic medicine and advance forensic medicine Edit by Staff members
	Essential books (text books)	• Michael Barkly (2013) Recent advances in veterinary toxicology. • Sylvia Engdahl (2011) Forensic Technology
	Recommended books	• Course notes • Michael Barkly (2013) Recent advances in veterinary toxicology. • Atlas of vet. Forensic medicine.
		• Environmental contamination & toxicology.

	Periodicals, Web sites, . . . etc	• Clinical toxicology. • www.ekb.eg
	Learning platform	Thinqi
Supportive facilities	**Devices & instruments**	**<u>Devices</u>** • Microscope • Computer • Water bath • Data show **<u>instruments</u>** • Petri dish • Alcohol:ether • 1:1 • Zylol • Filter paper • Glass slides-cover slides • Canada balsam • Dried blood stain • Teichmann reagent • (1gm Nacl -1gm Na bromide -1gm Na iodide -100ml glacial acetic acid • Takayam reagent • (1gm pyridine – 3ml saturated soln of glucose-3ml koHh-7ml D.W) • Seminal stain • Florence reagent • (1.5gm KI-2.5gm iodine-D.W) • Barberio reagent • (saturated soln of picric acid) • Bone samples of different animal species –bone of fore limb(scapula ,humerus ,radius ,ulna, and metacarpal) • -bone of hind limb • (femur ,tibia, and metatarsal bone • Parts of fire arm weapons (bullet of automatic rifled weapon ,bullet of non-automatic rifled weapon ,cartridge of smooth weapon ,gun powder, • Fibers

		• Equipped teaching hall. • Equipped laboratory of forensic medicine and toxicology. • Forensic medicine and toxicology a fair. • Laboratory animal research unit

Matrices:

A- Content and ILOs matrix:

Topic	A) Knowledge and understanding	B) Intellectual skills	C) Professional and practical skills	D) General and transferable skills
Signs of death	**a3,a5,a6**	**b1,b3,b4**	**c1,c2,c3**	**d1,d2,d3**
Identification	**a2,a5,a6**	**b4,b5**	**c2,c5**	**d1,d2,d3**
Blood spots	**a4,a5,a6**	**b3,b4,b5**	**c1,c4,c5**	**d1,d2,d4**
Adulteration	**a4,a6**	**b1,b5**	**c2,c5,c6**	**d1,d2,d4**
wound,Fire arm &burns	**a4,a6,a5**	**b3,b4,b5**	**c2,c3,c5**	**d1,d2**
Asphyxia&Medical ethics	**a4,a5,a6**	**b1,b2,b5**	**c1,c3,c5,c6**	**d1,d2,d3,d4**
Vet. Jorseprodeuce	**a1,a6**	**b1,b5**	**c4,c5**	**d3,d4**

B- Teaching and learning methods and ILOs matrix:

ILOs		Teaching and Learning methods					
		L	**P&M**	**D**	**P**	**Ps**	**Bs**
Knowledge and understanding	**a1**	√	√	√			√
	a2	√	√	√			√
	a3	√	√	√			√
	a4	√	√	√			√

	a5	√	√	√			√
	a6	√	√	√			√
Intellectual skills	**b1**	√	√	√		√	√
	b2	√	√	√		√	√
	b3	√	√	√		√	√
	b4	√	√	√		√	√
	b5	√	√	√		√	√
Professional and practical skills	**c1**		√	√	√	√	
	c2		√	√	√	√	
	c3		√	√	√	√	
	c4		√	√	√	√	
	c5		√	√	√	√	
	c6		√	√	√	√	
General skills	**d1**				√	√	√
	d2			√	√	√	√
	d3	√	√	√		√	√
	d4				√	√	√

L**: Lecture,** P&M**: Presentations & Movies,** D&S: **Discussions & Seminars P: Practical** Ps: **Problem solving,** Bs: **Brain storming**

C- Assessment methods and ILOs matrix:

ILOs		**Assessment method**				
		Formative assessment	**Semester works (one hour exam)**	**Oral**	**Practical**	**Written**
Knowledge and understanding	**a1**	√	√	√		√
	a2	√	√	√		√

	a3	√	√	√		√
	a4	√	√	√		√
	a5	√	√	√		√
	a6	√	√	√		√
Intellectual skills	b1	√	√	√		√
	b2	√	√	√		√
	b3	√	√	√		√
	b4	√	√	√		√
	b5	√	√	√		√
Professional and practical skills	c1	√			√	
	c2	√			√	
	c3	√			√	
	c4	√			√	
	c5	√			√	
	c6	√			√	
General skills	d1	√	√			
	d2	√	√			
	d3	√	√	√		
	d4	√	√			

Name and Signature
Course Coordinator

Prof. dr. Nabila mahmoud

Name and Signature
Program Coordinator

Prof. Dr. Mahmoud Abouelroos