

Specification for General Surgery course

2025/2026

1-Basic information

| | | | | | | | | |
|---|---------------------------------------|---|-----------|------|-------|---|-------|------|
| Course title | General Surgery | | | | | | | |
| Course code | SUR.417 | | | | | | | |
| Department/s participating in delivery of the course | Surgery anesthesiology and radiology | | | | | | | |
| Number of units/credit hours | Theoretical | 1 | Practical | 1(3) | Other | 0 | Total | 2(4) |
| Course Type | √ Obligatory Elective | | | | | | | |
| Academic level at which the course is taught | 4 th year | | | | | | | |
| Semester | Fall | | | | | | | |
| Academic program | Bachelor of Veterinary Medicine (BVM) | | | | | | | |
| Faculty | Veterinary medicine | | | | | | | |
| University | Benha University | | | | | | | |
| Name of course coordinator | Prof. Dr. ADEL Badawy. | | | | | | | |
| Course Specification Approval Date | Faculty council 27-8-2025 | | | | | | | |
| Course Specification Approval (Attach the decision/minutes of the department /committee/council) | Department council on 8/7/2025 | | | | | | | |

2-Course overview

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

Asepsis and antisepsis; suturing injections; inflammation abscess; sinus and Fistula; necrosis and Gangrene; Ulcers; burns phlegmon, bones; joints, muscles; tendonsy bursae; nerves vessels; tumors and cysts wounds; Hemorrhage.

3- Course Learning Outcomes CLOs

| | (NARS) outcomes | | Course outcomes | |
|---------------|-----------------|-------------------------|-----------------|-----------------------------------|
| Knowledge and | Code | Text | Code | Text |
| | 2.10 | Toxicology and forensic | a1 | State the general basic knowledge |

| | | | | |
|--|-------------|---|-----------|---|
| understanding | | medicine, animal medicine, theriogenology and veterinary surgery. | | about surgical anatomy. |
| | | | a2 | Identify the basis of the inflammatory process and its consequences, termination and squeal. |
| | | | a3 | Mention the principles of general surgery with special reference to the different types of swellings and their differentiation. |
| | 2.11 | The most appropriate diagnosis and differential diagnosis of animals, poultry and fish diseases | a3 | Mention the principles of general surgery with special reference to the different types of swellings and their differentiation. |
| | | | a4 | Familiarize the different types of incisions, wounds and fracture management. |
| | 2.14 | Basics of law and ethical codes relevant to animals and food hygiene. | a5 | Distinguish the basis of surgical affections of the joint and tendons |
| Intellectual skills | 4.1 | Foster critical thinking and scientific curiosity. | b1 | Differentiate between different types of swellings. |
| | | | b2 | Asses the appropriate suture pattern and dealing with different types of wounds. |
| | | | b3 | Interpret the different types of fractures , joint and tendons affections through collecting the clinical signs and the radiographic pattern. |
| | | | b4 | Conclude the more suitable time for interference in the different surgical conditions |
| Professional and practical skills | 3.3 | Obtain the history of the case whether it is of an individual animal or a group of animals | c1 | Practice the accurate antiseptic procedures before surgery. |
| | | | c2 | Preparing and handling of the different surgical instruments. |
| | 3.8 | Skillfully and appropriately gain and use new information remain current with the emerging biomedical knowledge and therapeutic options | c3 | Implement the basic surgical incisions and suture patterns. |
| | | | c4 | Fixation of simple types of fractures. |
| | 3-9 | Conduct evidence-based problem-solving of field–presented problems tasks | c5 | Performing simple surgical interferences. |
| | 3.10 | Provide emergency care to all species of animals | c6 | Follow up of the surgical cases |
| General skills | 5.1 | Work under pressure and / or contradictory conditions | d1 | Work under pressure during Surgical operations.. |

| | | | | |
|--|------------|---|-----------|---|
| | 5.2 | Function in a multidisciplinary team | d2 | Work in a team during the Surgical operations. |
| | 5.3 | Communicate appropriately verbally and nonverbally | d3 | Communicate & Cooperate with other colleagues during surgical operations. |
| | 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 general surgery. |

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 | Inflammation Antisepsis and aseptic procedures | 2(3) | 1 | 1(3) | | 0 |
| W2 | Buritis Antisepsis and aseptic procedures | 2(3) | 1 | 1(3) | | 0 |
| W3 | Tendon conditions Suture materials | 2(3) | 1 | 1(3) | | 0 |
| W4 | Joint conditions Suture materials | 2(3) | 1 | 1(3) | Formative quiz (Self-learning) | 0 |
| W5 | Phlegmon and gangrene Suture patterns | 2(3) | 1 | 1(3) | | 0 |

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| W6 | Wounds Suture patterns | 2(3) | 1 | 1(3) | | 0 |
| W7 | Semester works (one hour exam) | | | | | |
| W8 | Fracture Suture patterns | 2(3) | 1 | 1(3) | Formative quiz (Self-learning) | 0 |
| W9 | Abscess Suture patterns | 2(3) | 1 | 1(3) | 0 | 0 |
| W10 | Cyst and tumors Dressing and bandage | 2(3) | 1 | 1(3) | 0 | 0 |
| W11 | Haemorrhage and Haemostasis | 2(3) | 1 | 1(3) | Formative quiz (Self-learning) | 0 |
| W12 | Hernia Dressing and bandage | 2(3) | 1 | 1(3) | | 0 |
| W13 | Fistula and sinus Dressing and bandage | 2(3) | 1 | 1(3) | | 0 |
| W14 | Burns and scalds Clinical cases | 2(3) | 1 | 1(3) | | 0 |
| W15 | Practical exam | | | | | |

5- Methods of students' assessment

a- Assessment methods (summative and formative)

- Formative assessment:** including (weekly quizzes, homework assignments and surveys).
- 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 | Percent |
|---|------------------------------------|---------------|---------|
| Semester works including one hour exam | 7 th week | 10 | 10% |
| Assignments / Project /Portfolio/ Logbook | Throughout semester | | |
| Field training | | | |
| Formative assessment | Throughout semester | - | - |
| Practical exam | 15 th 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:

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|------------------------------|--|---|
| Learning resources | Main reference | Student handbook: A concise guide of General Veterinary Surgery Edit by Staff members |
| | Essential books (text books) | <ul style="list-style-type: none"> • Teresa F. Sonsthagen (2011) Veterinary instruments and equipment :a pocket guide. • E. R Frank. Veterinary Surgery • Kirby I. Bland (2002) The Practice of General Surgery |
| | Periodicals, Web sites, . . . etc | <ul style="list-style-type: none"> • Journal of Veterinary Surgery. • American Journal of Veterinary Medical Association. • American Journal of Veterinary Research • Veterinary Record • www.ekb.eg |
| | Learning platform | Thinqi |
| Supportive facilities | Devices & instruments | Autoclave , hot air oven, Scissors, scalpels, needles, artery forceps, dissectors, needle holders, suture materials, x ray films, |

Matrices:

A- Content and ILOs matrix:

| Topic | A) Knowledge and understanding | B) Intellectual skills | C) Professional and practical skills | D) General and transferable skills |
|-----------------------|-----------------------------------|---------------------------|---|---------------------------------------|
| Inflammation | a1-a2 | b4 | c1-c2-c3-c4- c5-c6 | d1-d2-d3-d4 |
| Buritis | a1-a3-a4 | b3-b4 | c1-c2-c3-c4- c5-c6 | d1-d2-d3-d4 |
| Tendon conditions | a1- a4- a5 | b3-b4 | c1-c2-c3-c4- c5-c6 | d1-d2-d3-d4 |
| Joint conditions | a1- a4- a5 | b4 | c1-c2-c3-c4- c5-c6 | d1-d2-d3-d4 |
| Phlegmon and gangrene | a1-a2 | b4 | c1-c2-c3-c4- c5-c6 | d1-d2-d3-d4- |

| | | | | |
|--------------------------------------|-------------|--------|--------------------|--------------|
| Wounds | a1- a4 | b2- b4 | c1-c2-c3-c4- c5-c6 | d1-d2-d3-d4 |
| Fracture | a1- a4 | b3-b4 | c1-c2-c3-c4- c5-c6 | d1-d2-d3-d4 |
| Abscess | a1-a3-a4 | b1 -b4 | c1-c2-c3-c4- c5-c6 | d1-d2-d3-d4 |
| Cyst and tumors | a1-a3-a4 | b1 -b4 | c1-c2-c3-c4- c5-c6 | d1-d2-d3-d4 |
| Haemorrhage and Haemostasis | a1-a3-a4 | b1 -b4 | c1-c2-c3-c4- c5-c6 | d1-d2-d3-d4- |
| Hernia | a1-a2-a3-a4 | b1 -b4 | c1-c2-c3-c4- c5-c6 | d1-d2-d3-d4 |
| Fistula and sinus | a1- a4 | b4 | c1-c2-c3-c4- c5-c6 | d1-d2-d3-d4 |
| Burns and scalds | a1-a2 | b4 | c1-c2-c3-c4- c5-c6 | d1-d2-d3-d4 |
| Antisepsis and aseptic procedures | a1-a2 | b4 | c1-c2-c3-c4- c5-c6 | d1-d2-d3-d4 |
| Suture materials | a1-a2 | b3-b4 | c1-c2-c3-c4- c5-c6 | d1-d2-d3-d4 |
| Suture patterns | a1-a2 | b3-b4 | c1-c2-c3-c4- c5-c6 | d1-d2-d3-d4 |
| Dressing and bandage | a1-a2 | b3-b4 | c1-c2-c3-c4- c5-c6 | d1-d2-d3-d4 |
| Clinical cases | a1-a2 | b4 | c1-c2-c3-c4- c5-c6 | d1-d2-d3-d4 |

B- Teaching and learning methods and ILOs matrix:

| ILOs | | Teaching and Learning method | | | | | | |
|-----------------------------------|----|------------------------------|-----|-----|--------|----|----|-----|
| | | L | P&M | D&s | P(TPL) | Ps | Bs | FTP |
| Knowledge and understanding | a1 | √ | √ | √ | √ | √ | √ | |
| | a2 | √ | √ | √ | √ | √ | √ | |
| | a3 | √ | √ | √ | √ | √ | √ | |
| | a4 | √ | √ | √ | √ | √ | √ | |
| | a5 | √ | √ | √ | √ | √ | √ | |
| Intellectual skills | b1 | √ | | √ | | | | √ |
| | b2 | √ | | √ | | | | √ |
| | b3 | √ | | √ | | | | √ |
| | b4 | √ | | √ | | | | √ |
| 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 (self-learning),
P(TPL): Practical, **Ps:** Problem solving, **Bs:** Brain storming, **FTP:** field trip, Training, Project

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

Name and Signature
Course Coordinator

Prof. dr. Adel M Badawy

Name and Signature
Program Coordinator

Prof. Dr. Mahmoud Abouelroos