



SZKOŁA GŁÓWNA  
GOSPODARSTWA  
WIEJSKIEGO

## General surgery and anesthesiology

### Educational subject description sheet

#### Basic information

<b>Field of study</b> Veterinary Medicine	<b>Didactic cycle</b> 2023/24	
<b>Speciality</b> -	<b>Subject code</b> WETFVMS_D.520.01707.23	
<b>Organizational unit</b> Faculty of Veterinary Medicine	<b>Lecture languages</b> english	
<b>Study level</b> long-cycle	<b>Mandatory</b> Obligatory subjects	
<b>Study form</b> full-time studies	<b>Block</b> Major subjects	
<b>Education profile</b> General academic	<b>Disciplines</b> Veterinary medicine	
<b>Coordinator</b>	Jacek Sterna	
<b>Teacher</b>	Jacek Sterna, Marek Galanty, Beata Degórska, Jan Frymus, Joanna Berczyńska, Mikhal Baranski	
<b>Period</b> Semester 6	<b>Examination</b> Pass with grade	<b>Number of ECTS points</b> 3
	<b>Activities and hours</b> Lecture: 15 Ćwiczenia kliniczne: 30	

## Goals

Code	Goal
C1	The purpose of the course is to provide knowledge of the principles of general surgery and anesthesiology and traumatology.
C2	The aim of the course is to familiarize students with the work of the surgical theater
C3	The aim of the course is to acquire skills in examining animals, preparing for surgery patients and the operating team, and performing basic surgical procedures

## Entry requirements

Animal anatomy 2, Topographical anatomy, Animal physiology 2, Pathophysiology, Parasitology and invasiology 2, Pathomorphology 1, Veterinary pharmacology 1, Clinical and laboratory diagnostics 1

## Subject's learning outcomes

Code	Outcomes in terms of	Effects	Examination methods
<b>Knowledge - Student knows and understands:</b>			
W1	aseptics and antiseptics, injuries and their consequences effects of injuries,wound infections and treatment of wounds, and about the basics of anesthesiology,	B.W1, B.W2, B.W3, B.W4, B.W9	Assessment of speeches during classes, Test (written or computer based)
W2	principles of handling animals, their restraint, and the examination of the organs of the abdomen and musculoskeletal organ examination	B.W1, B.W2, B.W3, B.W4, B.W9	Assessment of speeches during classes, Test (written or computer based)
W3	the preoperative and postoperative management of patient, principles of tissue suturing and placement of knots and dressings	B.W1, B.W2, B.W3, B.W4, B.W9	Assessment of speeches during classes, Test (written or computer based)
<b>Skills - Student can:</b>			
U1	put on sterile surgical gown and gloves,	B.U1, B.U11, B.U14, B.U4	Assessment of speeches during classes, Test (written or computer based)
U2	sew and tie knots on phantoms and biological material,dressings in small and large animals,	B.U1, B.U11, B.U14, B.U4	Assessment of speeches during classes, Test (written or computer based)
U3	selects suture materials, instruments, antiseptics for planned activities including maintenance of aseptic surgery	B.U1, B.U11, B.U14, B.U4	Assessment of speeches during classes, Test (written or computer based)
U4	plan anesthesia and apply restraint and immobilization of animals	B.U1, B.U11, B.U14, B.U4	Assessment of speeches during classes, Test (written or computer based)
<b>Social competences - Student is ready to:</b>			

Code	Outcomes in terms of	Effects	Examination methods
K1	collaborate as part of the medical team with the surgeon, anesthesiologist and support staff,	KS.2, KS.4, KS.7, KS.8, KS.9	Assessment of speeches during classes, Test (written or computer based)
K2	update knowledge and act in accordance with professional ethics,	KS.2, KS.4, KS.7, KS.8, KS.9	Assessment of speeches during classes, Test (written or computer based)
K3	critically evaluate of their knowledge and skills and to use of various sources to supplement them	KS.2, KS.4, KS.7, KS.8, KS.9	Assessment of speeches during classes, Test (written or computer based)
K4	critically evaluate of their knowledge and skills and to use of various sources to supplement them	KS.2, KS.4, KS.7, KS.8, KS.9	Assessment of speeches during classes, Test (written or computer based)

### Study content

No.	Course content	Subject's learning outcomes	Activities
1.	LECTURES ( 15 lectures): Asepsis, disinfection, sterilization; basic instrumentation – surgical principles; wounds – types, wound healing, wound dressings; disorders in wound healing; basics of animal anaesthesiology; pre- and post- surgery assessment of the surgical patient, pain management. Practicals Principles of surgical asepsis, sterilization, preparation of the surgical table and site, preparation of the surgical team, surgical assistance; surgical instrumentation, suture materials, biomaterials; suturing: making knots by hands and instruments, training in different sutures on phantoms; dressing on animals / phantoms; basic surgical examination techniques: head, limbs, abdominal and thoracic cavity; animal restraint; pre- and post- surgery assessment of the animal patient, post-surgery care; anaesthesiology, sedation, treatment of pain, peri-operative analgesia.	W1, W2, W3, U1, U2, U3, U4, K1, K2, K3, K4	Lecture, Ćwiczenia kliniczne

### Course advanced

Activities	Methods of conducting classes
Lecture	Lecture
Ćwiczenia kliniczne	Presentation, Mastery of movement and stabilization of the technique, Teaching technique in the form of play, exact, task, Display

Activities	Examination method	Percentage
Lecture	Test (written or computer based)	50%
Ćwiczenia kliniczne	Assessment of speeches during classes	50%

<b>Activities</b>	<b>Credit conditions</b>
Lecture	<p>Student is entitled to 20% absences.</p> <p>The final grade in the course is the average of the theoretical and practical parts, with the student having to get a minimum grade of satisfactory in each part. The value in the interval (3.3; 3.7) is rounded to 3.5, a value in the interval (4.3; 4.7) is rounded up to 4.5, values of 3.8 and 4.8 are rounded up to the full grade, values of 3.2 and 4.2 are rounded down to the full grade.</p> <p>Theoretical knowledge of lectures and classe is assessed during single-choice test of 25 questions, 1 point per question. To pass student must accumulate at least 17 points with subsequent grades allocated progressively for each point over the passing line (Point scale for test scores: 17-18points=3.0; 19-20 points=3.5; 21-22points=4.0; 23-24points=4.5; 25points=5.0</p>
Ćwiczenia kliniczne	<p>Assessment of practical skills demonstrated during practical classes and/or practical challenges: 1. correct recognition (naming) of the indicated 4 surgical instruments with the purpose of their use, 2. application of a dressing on a model of a dog limb, 3. correct tying of a knot and application of a suture, 4. recognition of parts of the anesthetic apparatus and description of the use of the indicated anesthetic drug, 5. application of a dressing on a horse or horse limb specimen, 6. partial examination of the musculoskeletal organ.</p> <p>Student must pass 5 from 6 challenges to progress. Failing 2 challenges requires retake of the practical assessment. Each challenge is graded in 2-5 scale with 2 being a failing grade.</p>

## Literature

### Obligatory

1. 1. Small Animal Surgery, Theresa Welch Fossum, Mosby Elsevier 2007
2. 2. M.Karen, S, Tobias, Johston A: Veterinary Surgery Small Animal. Saunders, 2012

### Optional

1. Swaim, Renberg, Shike: Small Animal Bandaging, Castingand Splinting Techniques, Wiley-Blackwell

## Calculation of ECTS points

<b>Activity form</b>	<b>Activity hours*</b>
Lecture	15
Ćwiczenia kliniczne	30
Preparation for the test	45
<b>Student workload</b>	<b>Hours</b> 90
<b>Number of ECTS points</b>	<b>ECTS</b> 3

\* hour means 45 minutes

## Effects

Code	Content
KS.2	Absolwent jest gotów do prezentowania postawy zgodnej z zasadami etycznymi i podejmowania działań w oparciu o kodeks etyki w praktyce zawodowej oraz do wykazywania tolerancji dla postaw i zachowań wynikających z odmiennych uwarunkowań społecznych i kulturowych
KS.4	Absolwent jest gotów do korzystania z obiektywnych źródeł informacji
KS.7	Absolwent jest gotów do rzetelnej samooceny, formułowania konstruktywnej krytyki w zakresie praktyki weterynaryjnej, przyjmowania krytyki prezentowanych przez siebie rozwiązań, ustosunkowywania się do niej w sposób jasny i rzeczowy, także przy użyciu argumentów odwołujących się do dostępnego dorobku naukowego w dyscyplinie
KS.8	Absolwent jest gotów do pogłębiania wiedzy i doskonalenia umiejętności
KS.9	Absolwent jest gotów do komunikowania się ze współpracownikami i dzielenia się wiedzą
B.U1	Absolwent potrafi bezpiecznie i humanitarnie postępować ze zwierzętami oraz instruować innych w tym zakresie
B.U4	Absolwent potrafi udzielać pierwszej pomocy zwierzętom w przypadku krwotoku, ran, zaburzeń oddechowych, urazów oka i ucha, utraty przytomności, wyniszczenia, oparzenia, uszkodzenia tkanek, obrażeń wewnętrznych i zatrzymania pracy serca
B.U11	Absolwent potrafi stosować metody bezpiecznej sedacji, ogólnego i miejscowego znieczulenia oraz oceny i łagodzenia bólu
B.U14	Absolwent potrafi wdrożyć zasady aseptyki i antyseptyki chirurgicznej oraz stosować właściwe metody sterylizacji sprzętu
B.W1	Absolwent zna i rozumie zaburzenia na poziomie komórki, tkanki, narządu, układu i organizmu w przebiegu choroby
B.W2	Absolwent zna i rozumie mechanizmy patologii narządowych i ustrojowych
B.W3	Absolwent zna i rozumie przyczyny i objawy zmian anatomopatologicznych, zasady leczenia i zapobiegania w poszczególnych jednostkach chorobowych
B.W4	Absolwent zna i rozumie zasady postępowania diagnostycznego, z uwzględnieniem diagnostyki różnicowej, oraz postępowania terapeutycznego
B.W9	Absolwent zna i rozumie zasady zapewniania dobrostanu zwierząt