

Code of subject	M_WE SEM6 CHIR ANG
Field of study	Veterinary medicine
Name of the programme module	General surgery and anesthesiology Chirurgia ogólna I anestezjologia
Language of instruction	English
Type of the training module	Obligatory
Level of the training module	Master level
Form of studies	Full-time
Location in the programme (year)	III
Location in the programme (semester)	VI
Number of ECTS credits with a division into contact/noncontact	3 (2,3/0,7)
Name and surname of the person in charge	Prof. dr hab. Ireneusz Balicki
Unit offering the subject	Department and Clinic of Animal Surgery, Faculty of Veterinary Medicine, University of Life Sciences in Lublin, Poland
Aim of the module	To learn about the methods for anaesthesia in animals, and about surgical instruments and anaesthetic apparatus, tissue sealing, bleeding control, applying a dressing, the principles of surgical asepsis and antisepsis, the methods for instrument sterilisation, the principles for the management of surgical emergency cases
Learning outcomes – the total number of learning outcomes may not exceed (4-8) for the module. The description of the intended learning outcomes that a student should achieve after the completion of the module should be provided. The outcomes for all forms of classes used should be presented.	<p>Knowledge:</p> <p>K1. Student has the knowledge of drugs that are used for premedication and general anaesthesia, the methods for local and general anaesthesia and the management of surgical emergency cases.</p> <p>K2. Is familiar with the diagnostics and therapy of wounds, closed injuries, haematomas, abscesses, lymphomas.</p> <p>K3. Is familiar with surgical instruments and anaesthetic apparatus, and the methods for tissue cutting and sealing, bleeding control and dressing application.</p> <p>Skills::</p> <p>S1. Is able to apply appropriate sedation and carry out general and local anaesthesia, manage pain and provide first aid to patients with bleeding, wounds, multi-organ injury and anaesthesiological complications.</p> <p>S2. Possesses the skill of applying and using surgical instruments and anaesthetic apparatus.</p> <p>S3. Is able to apply surgical aseptic and antiseptic techniques and sterilise instruments.</p> <p>Social competencies:</p> <p>Sc1. Acts in accordance with the principles of veterinary deontology that pertain to aspects of the management of emergency cases and pain relief.</p> <p>Sc2. Has the understanding of pain in animals, aims to improve animal welfare and to increase the awareness of the subject among animal owners, and cooperates with animal owners as part of the provided therapy.</p>
Preliminary and additional requirements	according to the Resolution on the Sequence

<p>Contents of the training module – a compact description</p>	<p>Contents of the lectures (on a 1 hour basis):</p> <ol style="list-style-type: none"> <li>1. Phenothiazine derivatives</li> <li>2. Benzodiazepine derivatives</li> <li>3. <math>\alpha_2</math> agonists</li> <li>4. Butyrophenone derivatives</li> <li>5. Muscle relaxants, painkillers</li> <li>6. Ketamine</li> <li>7. Tiletamine, propofol, etomidat</li> <li>8. Fundamentals of general anaesthesia</li> <li>9. Inhalation anaesthesia</li> <li>10. Patients with multi-organ injury</li> <li>11. Management of emergency cases</li> <li>12. Closed injuries, abscesses, haematomas, lymphomas</li> <li>13. Wounds</li> <li>14. Wound healing</li> </ol> <p>Contents of the classes (on a 2 hours basis)</p> <ol style="list-style-type: none"> <li>1. Taming animals. Surgical and wound examination plans</li> <li>2. Local analgesia</li> <li>3. Epidural anesthesia. Small animal anesthesia schemes</li> <li>4. Bird anesthesia. Anesthesia of rabbits and rodents</li> <li>5. Anesthesia of horses. Seminar classes</li> <li>6. Infusions, injections, punctures</li> <li>7. Dressings and dressing materials</li> <li>8. Surgical sutures and suturing of tissues</li> <li>9. Surgical sutures and suturing of tissues</li> <li>10. Surgical sutures and suturing of tissues.</li> <li>11. Preparation of the patient for surgery, asepsis, antiseptics, sterilization of surgical instruments. Surgical instruments.</li> <li>12. Equipment for inhalation anesthesia. Seminar classes</li> <li>13. Monitoring of general anesthesia. Inhalation anesthesia, clinical application</li> <li>14. Tissue cutting, hemorrhages. Seminar classes</li> <li>15. Completing exercises</li> </ol>
<p>Recommended and obligatory reading list</p>	<ol style="list-style-type: none"> <li>1. Tranquilli W.J., Thurman J.C., Grimm K.A.: Veterinary anaesthesia and analgesia</li> <li>2. Seymour c., Gleed R.: Manual of small animal anaesthesia and analgesia</li> </ol>
<p>The intended forms/activities/ teaching methods</p>	<ol style="list-style-type: none"> <li>1. Multimedia presentations</li> <li>2. Restraining animals in practice</li> <li>3. Practical demonstration of premedication, infusion and inhalation anaesthesia</li> <li>4. Monitoring of an anaesthetic patient in practice</li> <li>5. Demonstration of surgical instruments and anaesthetic apparatus and their application in practice</li> <li>6. Practical teaching of methods for applying surgical sutures</li> <li>7. Applying a dressing</li> <li>8. Discussion of the action of particular drugs by students</li> </ol>

Methods of verification and documentation forms of the achieved learning outcomes	<p>Verification of the student's knowledge: discussion, oral test, written test, exam. Students' knowledge acquired during classes is assessed on the basis of two tests - oral or written tests, the score of which above good entitles them to be exempted from the anesthesiology part of the exam. The exam is conducted in the form of a test or descriptive exam.</p> <p>Verification of the student's skills: practical credit, which is part of the exam, on surgical instruments and tissue suturing, and evaluation of a practical task.</p> <p>Verification of social competences: discussion, analysis of clinical situations, assessment of cooperation and self-education skills</p>																											
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The workload of activities that requires direct participation of an academic teacher	<table border="1" data-bbox="659 994 1342 1178"> <tbody> <tr> <td>Participation in lectures</td> <td>15</td> <td>0,6</td> </tr> <tr> <td>Participation in exercises</td> <td>30</td> <td>1,2</td> </tr> <tr> <td>Consultation</td> <td>5</td> <td>0,2</td> </tr> <tr> <td>Test and exam</td> <td>8</td> <td>0,3</td> </tr> <tr> <td><b>IN TOTAL</b></td> <td><b>58</b></td> <td><b>2,3</b></td> </tr> </tbody> </table>	Participation in lectures	15	0,6	Participation in exercises	30	1,2	Consultation	5	0,2	Test and exam	8	0,3	<b>IN TOTAL</b>	<b>58</b>	<b>2,3</b>												
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Relationship between subject learning outcomes and veterinary studies learning outcomes	<p>K1 – WE_W16++, WE_W17++ , WE_W18++, WE_W21++  K2 – WE_W16++, WE_W17++, WE_W18++, WE_W21++  K3 – WE_WW16++, WE_W18++,  S1 – WE_U5++, WE_U8A++, WE_U14++, WE_U17++, WE_U24++, WE_U27++,  S2- WE_U8A++, WE_U5++, WE_U20++, WE_U24++,  S3 – WE_U5++, WE_U26++,  Sc1 – WE_K1++, WE_K2++, WE_K5++, WE_K7++, WE_K10++  Sc2 – WE_K1++, WE_K2++, WE_K5++, WE_K7++, WE_K10++</p>																											
Impact of selected compounds to final grade	<p>The final grade is influenced by the result of practical tests for surgical instruments and sewing as well as the result of the exam. They constitute, respectively: 25% - practical test in sewing, 25% - practical test in surgical instruments, 50% - exam. The descriptive exam is graded on the average of the grades obtained from the three questions. Exam in the form of a test - a satisfactory grade is 60% of correct answers.</p>																											