



WARSAW UNIVERSITY OF LIFE SCIENCES

FACULTY OF VETERINARY MEDICINE



SELF-EVALUATION REPORT

SUPPLEMENT ON CATEGORY ONE DEFICIENCIES

APRIL 2014

Compiled by Marcin Bańbura

Faculty of Veterinary Medicine, Warsaw, was evaluated by EAEVE in 2010 and has not been approved. Visiting Team found two category one deficiencies (see enclosed Report, pp 35-36, **Annex 1a**):

Negative decision of ECOVE indicated three category one deficiencies (see enclosed document, **Annex 1b**):

1. Insufficient necropsy caseload
2. Lack of hand-on training in all species
3. Insufficient food animal teaching (Production, individual and herd health management).

We took two types of measures:

- I. **Focused on elimination of 3 category one deficiencies mentioned above**
- II. **Focused on general assurance of quality of education**

I. Measures taken to eliminate 3 category one deficiencies are as follows:

1. **To increase number of necropsies** during Pathomorphology course (semesters 5, 6 and 7) we organize for our students extramural training in animal carcasses repository located in Mszczonow, 60 kilometers from Warsaw. Students perform necropsies under supervision of an academic teacher and prepare necropsy reports which are verified and approved by the teacher.

We also expand the scope of practical training in clinical sciences, i.e. infectious diseases, epidemiology, internal medicine on performing autopsies under teacher's supervision. Students are expected to prepare autopsy reports subsequently verified by the pathologist from the Department of Pathology and Veterinary Diagnostics. Moreover, students perform necropsies during their clinical **rotations, practical extramural training and summer clinical practices**. Necropsies performed during clinical **rotations and practical training** are supervised by the teacher and students are obliged to prepare an autopsy report. All reports on autopsies performed during clinical **rotations** are verified by the pathologist. Students can also perform necropsies during

their summer practices which are held in facilities such as veterinary clinics or farms under supervision of the veterinarian approved by the Faculty and Veterinary Chamber. They are expected to prepare appropriate reports approved by the practice tutor. These reports are verified afterwards at the Faculty of Veterinary Medicine by the pathologist (academic teacher). During last academic year **62 necropsies of farm animals** (pigs, small ruminants, cows) and horses were performed under direct supervision of pathologists within. Another **70 necropsies** were performed during extramural practical training in Farm animal diseases under academic teacher supervision. Students performing necropsies were also obliged to record that in the **First Day Skills Diary** (for details see **Chapter II. B** and **Annex 10**).

All necropsy reports are stored in the Department of Pathology and Veterinary Diagnostics (exemplary report of an autopsy performed in the carcasses repository, **Annex 2**). This approach allows to assure at least one necropsy of farm animal for each student.

2. Measures taken to improve hands-on training

To improve hands on in clinical teaching we have modified our programme by clustering clinical rotations on semesters 10 and 11. These include 24 hrs rotations in the Small Animal Clinic and Monday-Friday extramural rotations on farms. Total hour numbers are:

	Avian diseases	Farm animal diseases	Small animal diseases	Horse diseases
Semester 10	30	45	45	45
Semester 11	-	45	45	45
total	30	90	90	90

Practical teaching also includes obligatory summer practices after semesters 8 and 10, 160 hrs each (total 320 hrs). These practices take place in veterinary field clinics approved by the Faculty and Veterinary Chamber.

Students may also be involved in daily activity of approved field clinics during the academic year and acquire practical skills under supervision of the practitioner. Students are obliged to record all cases in the Student's Diary of Summer

Practice and Clinical Training and First Day Skills Diary (newly introduced, **Annex 10a and b**) mentioned below.

a) Small animals

Total number of recorded visits between Jan. 2010 and Dec. 2013 was 74455. At the same time 691 graduates received a diploma.

Between 01.01.2013 and 01.03.2014 564 animals were treated in the Hospital of the Small Animal Clinic (average duration of stay 3 days).

At the same time average 30-40 surgeries per month were performed.

Patients were referred from veterinarians in the Warsaw area to the Small Animal Clinic

To increase caseload diversity we organize for our students extramural practical training:

- ✓ Sterilization of shelter animals – 172 between 01.01.2013 and 01.03.2014; involvement of students in all these activities was a part of their 24 hr clinical placement and part of the subject Dog and cat diseases.
- ✓ We sign agreements between Faculty and field clinics and our students can gain practical skills, including “Day One Skills” (**Annex 3a**)
- ✓ Based on an agreement between Faculty and Animal Shelter (currently negotiated) treatment of shelter animals will take place at the Faculty in the Small Animal Clinic

b) Food animals

Part of the practical training concerning farm animals and horses takes place in Faculty Large Animal Clinic.

To improve hands on within Farm animal diseases (**Annex 4**, Syllabus), part of practical training takes place in WULS Farm Obory. We hire practitioner who is responsible for preparation of animals for classes.

Based on agreements signed between Faculty and field practitioners, (**Annex 3b, 3c**) part of classes within the subject **Farm animal**

diseases and clinical rotations will take place in large animal clinics owned by them.

Subjects **Farm animal diseases and Horse diseases and clinical rotations** also take place in farms and stud farms what significantly improved hands on:

- Faculty Clinic - Phantoms "Fantomy Breed 'n' Betsy Deluxe Complete Bovine and Breed 'n' Bonny Super Complete Equine Package
- Faculty Clinic – at least 60 horses per year with reproduction disorders, total number of animals – approx. 200; Students carry out clinical examination and additional tests (ultrasound, x-ray, endoscopy, blood tests). Each student fills the patient's medical history, which is presented to teacher.
- In farms and stud farms (agreements with 16 farms, for exemplary documents see **Annex 4a**) each student performs examination of 3-6 horses and 25-30 cows and heifers
- 4-6 isolated genital organs examined by each student during weekly classes
- Slaughterhouse – three visits during semester, each student examines 5-6 cows per visit
- **Annex 4b** contains list of farms visited by our students within Clinical rotations; total 40 visits, (20 groups, 2 visits per group), total number of animals examined – approx. 300 horses, 600 cows, 300 pigs
- Based on agreements with District Veterinarians to conduct classes concerning official veterinary actions required by legal regulations, including bioasecuration and animal welfare as well as monitoring of infectious diseases.

c) Animal production

Hands on training regarding animal production is covered by 80 hours (two weeks) of summer husbandry practices which take place in different farms (facilities) such as dairy cattle farms, pig farms, breeding

centres, stud farms etc. (for list of facilities available in 2013 see **Annex 5a**). Students receive detailed programs of the practice which cover all basic issues of animal husbandry (**Annex 5b**) and are expected to prepare final reports. **These reports are verified by the person who is in charge of husbandry practices. This verification has form of an oral exam and it's results recorded as a final grade.**

In 2012 and 2013 we visited several facilities and controlled the involvement of our students in daily functioning of the facility. We have found that in all cases students had direct contact with animals – daily care, feeding etc.

3. Food animal teaching

Food animal teaching includes:

Production

- a) Animal production
- b) Animal nutrition (nutrition and feeding of food-producing species)
- c) Agronomy (cropping, grazing and land use in relation to food-producing animal species)
- d) Rural economics (animals as a business and their importance in the countryside)
- e) Animal husbandry (housing, management and reproductive management systems, including artificial reproduction techniques, e.g. artificial insemination, multiple ovulation and embryo transfer)
- f) Veterinary hygiene (farm layout, drainage, cleaning, disinfection and bio-security)
- g) Animal ethology and protection (behaviour, social organisation in animal populations and common welfare issues, including behavioural disorders and their remediation)

With one exception, all these subjects listed in **SOP Annex 2** are covered by our curriculum (**Annex 7**). Only **Rural economics** is replaced by **Veterinary economics**. **Veterinary hygiene** is covered by **Veterinary prevention** and, in part, by **Animal production technologies**.

Individual and herd health management

This part is oriented towards the application of prophylactics and clinical treatment on individual and herd basis, preventive veterinary medicine (e.g. herd health) and management of epidemic diseases, reproductive management, housing of animals and feeding regimes. Improvement in this area we have achieved by elaborating a new program of the subject **Veterinary prevention** which is carried entirely at the Faculty of Veterinary Medicine by experienced multidisciplinary team (Annex 7a). Some issues of “**Individual and herd health management**” are covered by the content of **Veterinary epidemiology (Annex 7b)** and **Farm animal diseases (Annex 4, see also Annex 11, Knowledge, skills and competences required by the Ministry of Science and Education Act)**

II. General measures towards an improvement of education quality

To assure adequate quality of education at the Faculty of Veterinary Medicine we have introduced two documents:

- a. Assurance and Improvement of Education Quality**
- b. First Day Skills Diary**

a. Assurance and Improvement of Education Quality

- describes all the activities towards the quality of education,
- defines personal responsibility for carrying out assigned activities,
- indicates how the use information about successes and failures in the implementation of assigned tasks and to use that information to conduct rational educational, financial and personnel policies.

Issues covered: Annex 8

To improve general quality of education and practical teaching **Assurance and Improvement of Education Quality Council** was formed. Members this Council represent external stakeholders such as field practitioners, owners of veterinary clinics, representatives of farms and other key employers hiring our graduates. It's competence is to express an opinions and advices on veterinary degree programs, and especially the expectations of external stakeholders and key employers regarding the practical skills of graduates (for Council Members see **Annex 9**)

b. First Day Skills Diary

This document (**Annex 10**) is intended to be a record of practical skills gained by our students during classes, clinical rotations and summer practices. It is obligatory and students are expected to record all skills gained during classes, clinical rotations, summer practices and other activities, confirmed by the signature of academic teacher, tutor or approved veterinarian.

First part of the Diary covers practical skills listed by the SOP Annex 4 and required by the Ministry of Science and Higher Education Act (Annex 11). All records of individual cases students are expected to keep in the second part of the booklet.

At the end of the 11 semester students have to submit Diaries to the Dean's Office and part of the Diary containing confirmed day one skills will be kept on students' files.

DZIEKAN
Wydziału Medycyny Weterynaryjnej

/ Prof. dr hab. Marian Binek /

PRODZIEKAN ds. DYDAKTYKI
Wydziału Medycyny Weterynaryjnej

/ Dr hab. Marcin Bańbura /
Profesor nadzwyczajny SGGW

ANNEX 1a

European Association of Establishments for Veterinary Education

European System of Evaluation of Veterinary Training

REPORT ON THE STAGE 1 VISITATION TO THE FACULTY OF VETERINARY MEDICINE OF WARSAW, POLAND

10-14 May 2010

VISITING TEAM

Expert Visitor on Training in Basic Sciences

Prof Dr Patricia Fernandez de Troconiz Revuelta, Lugo, Spain

Expert Visitor on Training in Clinical Sciences (Academic)

Prof Dr Frank Gasthuyse, Ghent, Belgium

Expert Visitor on Training in Clinical Sciences (Practitioner)

Dr Mogens Jakobsen, Logstrup, Denmark

Expert Visitor on Training in Animal Production

Prof Dr Petr Horin, Brno, Czech Republic

Expert Visitor on Training in Food Safety

Dr Romano Zilli, Rome, Italy

Student Member

Ms Renata Stavinoanova, Brno, Czech Republic

EAEEVE Programme Coordinator

Dr Robin G Oakley, Graefelfing, Munich, Germany

Annex 2 List of Category 1 Deficiencies

(Note: Each Deficiency should be listed under the relevant paragraph below of the Directive 2005/36)

1) The training of veterinary surgeons shall comprise a total of at least five years of full-time theoretical and practical study at a university or at a higher institute providing training recognised as being of an equivalent level, or under the supervision of a university, covering at least the study programme referred to in Annex V, point 5.4.1.

The content listed in Annex V, point 5.4.1 may be amended in accordance with the procedure referred to in Article 58(2) with a view to adapting it to scientific and technical progress. Such updates may not entail, for any Member State, any amendment of its existing legislative principles relating to the structure of professions as regards training and conditions of access by natural persons.

2) Admission to veterinary training shall be contingent upon possession of a diploma or certificate entitling the holder to enter, for the studies in question, university establishments or institutes of higher education recognised by a Member State to be of an equivalent level for the purpose of the relevant study.

3) Training as a veterinary surgeon shall provide an assurance that the person in question has acquired the following knowledge and skills:

a) Adequate knowledge of the sciences on which the activities of the veterinary surgeon are based;

There appeared to the Visiting Team to be a serious inadequacy in the number of carcasses made available for necropsy (This was considered to be a Potential Category 1 Deficiency)

b) Adequate knowledge of the structure and functions of healthy animals, of their husbandry, reproduction and hygiene in general, as well as their feeding, including the technology involved in the manufacture and preservation of feeds corresponding to their needs;

c) Adequate knowledge of the behaviour and protection of animals;

d) Adequate knowledge of the causes, nature, course, effects, diagnosis and treatment of the diseases of animals, whether considered individually or in groups, including a special knowledge of the diseases which may be transmitted to humans;

e) Adequate knowledge of preventive medicine;

f) Adequate knowledge of the hygiene and technology involved in the production, manufacture and putting into circulation of animal foodstuffs or foodstuffs of animal origin intended for human consumption;

g) Adequate knowledge of the laws, regulations and administrative provisions relating to the subjects listed above;

h) Adequate clinical and other practical experience under appropriate supervision.

Although a 24-hour emergency service is offered 7 days per week by the Small Animal Clinic, there did not appear to be any organized involvement of undergraduate students, the latter being both ad-hoc and voluntary, which was perceived by the Visiting Team as a serious loss of clinical case material. Resulting partially from this, the Visiting Team considered that there was a serious inadequacy in “hands-on” activity in the undergraduate course in terms of case numbers and variety. (This was considered to be a Potential Category 1 Deficiency).

ANNEX 1b

**European Association
of Establishments for Veterinary
Education**

**Association Européenne
des Etablissements d'Enseignement
Vétérinaire**



Prof. Marian Binek
Dean
Warsaw University of Life Sciences
Faculty of Veterinary Medicine
8 Ciszewskiego, 02-786 Warsaw
Poland

Vienna, Oct 4th 2010

Dear Professor Binek,
on behalf of ECOVE who met on June 22-23, 2010, we herewith inform you of the evaluation result, based on the SER and the full on-site visit your faculty from 10.-14. May 2010. The Committee concluded that the following category I deficiencies were present:

1. Insufficient necropsy caseload
2. Lack of hand-on training in all species
3. Insufficient food animal teaching (Production, individual and herd health management).

Those deficiencies were judged as being unrelated to each other.
(for details please see the attached ECOVE Final decision Report)

Therefore, in accordance with our Standards and based on the educational requirements of the EC Directive 2005/36, Article 38,

the status of the university of Warsaw is NOT APPROVED

In line with our agreement, we kindly ask you to publish on your Faculty's Website the SER and the entire visitation report including the ECOVE Final Decision.

Please contact us at your convenience to discuss options and a time frame for any re-evaluation/re-visitation.

Yours sincerely,

Gert Niebauer
EAeve Executive Director, Evaluation/Accreditation Programme

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1. WSTĘP

Protokół sekcji zwłok krowy, rasy holsztyńsko-fryzyjska, o biało-czarnym umaszczeniu. Sekcję wykonano w dniu 08.10.2013 roku w godzinach 09:00 – 10:45 w Zbiornicy Sanitarnej Padłych Zwierząt znajdującej się w Mszczonowie. Sekcję wykonali obducenci: Ewa Bartczak, Magdalena Chmielewska, Piotr Dobrzeniecki, Sylwester Dobrzycki, Bernadetta Fornalczyk, Katarzyna Gniady, Michał Gołędowski, Magdalena Grędowska i Dagnara Gryglewicz, w obecności dr Hanny Sendeckiej oraz studentów grup 1 i 2 IV roku Wydziału Medycyny Weterynaryjnej SGGW w Warszawie.
Protokołowała Magdalena Kobiałka.

Szczegółowy opis zwierzęcia

Informacje ogólne: Bydło, rasa holsztyńsko-fryzyjska, samica, waga ok. 550 kg, o umaszczeniu biało-czarnym. Zgon nastąpił 4.10.2013 r.

Dane z wywiadu:

Krowa padła nagle, 2 dni po wycieniu. Właściciel nie zauważał wcześniej żadnych niepokojących objawów.

Budowa ciała:

Prawidłowa. Zwłoki pozbawione głowy i fragmentu szyi (zostały zabrane do laboratoryjnego badania w kierunku BSE).

Stan odżywienia:

Dobry.

Stan utrzymania:

Dobry.

2. WYWÓD SEKCJI**Ogledziny zewnętrzne****Ułożenie zwłok:**

Sztuczne prawo-boczne.

Oznaki śmierci:

Oziębienie ciała zupełne.

Naturalne otwory ciała:**Odbyt:**

Okolica odbytu pokryta brunatnym płynem oraz grudkami zaschniętego kału. Otwór odbytnowy otwarty, wypełniony kałem. Błona śluzowa odbytu sino-różowa, swoiste pofałdowana, wilgotna, błyszcząca.

Narządy płciowe:

Okolica sromu nieznacznie ubrudzona żółtawym płynem o swoistym zapachu moczu oraz grudkami zaschniętego kału.

Wargi sromowe wykształcone, symetryczne. Szpara sromu o prawidłowym ukątowaniu. Błona śluzowa ciemnoróżowa, wilgotna, gładka.

Skóra i jej wytwory:

Owłosienie przejściowe. Sierść barwy biało-czarnej. Włos słabo osadzony, matowy, pozlepiany i zanieczyszczony ściółką.

Obecne 2 okrągłe wyłysienia wielkości śliwki węgierki na bocznej powierzchni stawu łokciowego prawej kończyny piersiowej. Skóra w miejscu wyłysienia barwy sino-różowej. Kolejne wyłysienie na dogłownowej powierzchni stawu skokowego lewej kończyny miednicznej o romboidalnym kształcie i wymiarach ok. 10 x 5 cm. Skóra w miejscu wyłysienia jasnoróżowa, nadmiernie zrogowaciała.

Racice i raciczki prawidłowo wykształcone, pokryte znaczną ilością ściółki i kału.

Tkanka podskórna:

Prawidłowo wykształcona, gładka, błyszcząca. Barwa sino-kremowa, z miernie wypełnionymi krwią naczyniami krwionośnymi. Obficie obłożona tkanką tłuszczową.

Mięśnie:

Spoiste, budowa zachowana, konsystencja jadrna. Barwa ciemnowiśniowa, na przekroju wilgotne, z niewielką ilością tkanki tłuszczowej śródmiężowej.

Oględziny wewnętrzne

Jama brzuszna

Znaczne napięcie powłok brzusznego.

Ułożenie narządów:

Prawidłowe.

Otrzewnaścienna:

Przeświecająca, gładka, wilgotna, błyszcząca.

Jama otrzewnej wypełniona ok. 3000 ml mętnego płynu o barwie krwistej.

Przepona:

Wpuklona na wysokość V żebra. Budowa prawidłowa.

Część mięśniowa: gładka, błyszcząca, wilgotna, różowo-sina, ogniskowo ciemnowiśniowa.

Część ścięgnista: opalizująca, barwy kremowej.

Sieć:

Bladoróżowa, gładka, błyszcząca, obficie obłożona tkanką tłuszczową. Naczynia krwionośne silnie wypełnione krwią.

Wątroba:

Budowa prawidłowa.

Barwa od jasnowiśniowej do czerwono-brunatnej.

Powierzchnia gładka, błyszcząca, wilgotna. Konsystencja ciastowata. Brzegi narządu zaokrąglone.

Na przekroju zalewa się pienistym płynem barwy krwistej.

Przedżołydki i trawieniec:

Barwa zewnętrznej powierzchni żołydków od ciemnobieżowej do oliwkowej. Wypełnione znaczną ilością treści pokarmowej o specyficznym zapachu, konsystencji od płynnej do stałej.

Jelita:

Krezka obficie otłuszczona, barwy kremowo-różowej, wilgotna.

Barwa jelit od strony zewnętrznej od oliwkowej do szarej. Jelita w znacznym stopniu wypełnione treścią pokarmową o zbitej konsystencji i ciemnooliwkowej barwie oraz dużą ilością gazu.

Jama klatki piersiowej

Opłucnaścienna:

Gładka, przezierna, wilgotna, błyszcząca.

Płuca:

Budowa prawidłowa.

Opłucna płucna prześwitująca, błyszcząca, wilgotna. Powierzchnia płuc nierówna.

Struktura marmurkowata. Konsystencja ciastowata. Barwa od jasnoróżowej do ciemnowiśniowej.

Słyszalne trzeszczenie podczas omacywania. Brzeg zaokrąglony, nierówny.

Na przekroju budowa zachowana, przekrój intensywnie zalewa się pienistym płynem o krwistej barwie.

Serce:

Worek osierdziowy obficie otłuszczony, wypełniony ok. 20 ml płynu o barwie krwistej.

Serce intensywnie otłuszczone. Obecne skrzepy krwi w obu komorach. Mięśnie brodawkowe obecne, o prawidłowej budowie. Płatki zastawek prawidłowo wykształcone, o barwie ciemnowiśniowej.

Narządy głowy i szyi

Tchawica:

Budowa prawidłowa, chrząstki tchawicze prawidłowo wykształcone. Tchawica drożna, wypełniona niewielką ilością pienistego płynu o jasnoróżowym kolorze. Błona śluzowa od barwy kremowej do sinej.

Przełyk:

Przełyk drożny, wypełniony niewielką ilością mazistej substancji o ciemnozielonym kolorze.

Błona śluzowa gładka, wilgotna, o barwie od różowej do sinej.

3. ROZPOZNANIE ANATOMOPATOLOGICZNE:

1. Obrzęk płuc. (*oedema pulmonum*)
2. Płyn w worku osierdziowym. (*hydropericardium*)
3. Zastój krwi w płucach, wątrobie. (*cyanosis*)

4. ORZECZENIE

Zgon zwierzęcia nastąpił na skutek nagłej niewydolności krażenia.

Obducenci

Ewa Bartczak
Dobrowiecka-Richter
Dagmara Gągolewicz
Bernadeta Tomalaczyk
Brykieska Dobrońska
Magdalena Grędowska
Gołeckowski Michał
Kotwyzna Gniedy
Magdalena Chmielewska

Protokolanci

Małgorzata Kobsztyne

KIEROWNIK ZAKŁADU

/ Dr hab. n. wet. Rafał Sapierzyński /

ANNEX 3a

UMOWA

Pomiędzy Wydziałem Medycyny Weterynaryjnej, Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie z siedzibą przy ul. Nowoursynowskiej 166, 02-787 Warszawa, zwanym dalej Uczelnią, reprezentowaną przez dziekana Wydziału Medycyny Weterynaryjnej prof.dr.hab. Mariana Binka

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Przychodnią Weterynaryjną Andrzej Małkowski z siedzibą w Laskach, ul. 3-go Maja 89, 05-080 Izabelin, zwanej dalej Przychodnią, reprezentowaną przez Andrzeja Małkowskiego specjalistę chirurga.

§1

Umowa dotyczy współpracy w zakresie praktycznego kształcenia studentów kierunku weterynaria prowadzonego przez Wydział Medycyny Weterynaryjnej, Szkoły Głównej Gospodarstwa Wiejskiego, a w szczególności możliwości odbywania ćwiczeń i staży klinicznych wynikających z nauczania przedmiotów z zakresu chorób zwierząt towarzyszących.

§2

Wydział zobowiązuje się do:

- opracowania w porozumieniu z Przychodnią merytorycznego zakresu współpracy oraz terminów prowadzonych zajęć w okresie roku akademickiego z wyprzedzeniem semestralnym,
- zapewnienia prowadzenia zajęć przez nauczyciela akademickiego, w razie takiej konieczności,
- ubezpieczenia studentów od następstw nieszczęśliwych wypadków,
- udzielenia, w zależności od potrzeb, merytorycznych konsultacji przez pracowników Uczelni oraz
- wyrażenia zgody na rozpowszechnianie informacji o współpracy Przychodni z Uczelnią
- poinformowania studentów o konieczności stosowania się do warunków regulaminu pracy Przychodni oraz zasad deontologii i etyki lekarskiej z uwzględnieniem tajemnicy lekarskiej i ochrony danych osobowych, a także informacji dotyczących wszelkich kwestii finansowych Przychodni.

Przychodnia zobowiązuje się do:

- zapoznania studentów z obowiązującym regulaminem pracy i przepisami BHP
- umożliwienia studentom uczestniczenia pod nadzorem nauczyciela akademickiego i pracownika Przychodni w diagnostyce i leczeniu przypadków chorobowych objętych usługą weterynaryjną Przychodni, w zakresie ustalonym w umowie.

§3

Umowa zostaje zawarta od dnia 03.03.2014 na czas nieokreślony z możliwością jej rozwiązania na wniosek jednej ze stron z miesięcznym okresem wypowiedzenia.

§4

Wszelkie spory mogące wynikać z umowy rozstrzygają ze strony SGGW – Dziekan, a ze strony Przychodni - jej właściciel.

§5

Umowa niniejsza sporządzona została w dwóch jednobrzmiących egzemplarzach po jednym dla każdej ze stron.

Lek. wet. spec. chirurg Andrzej Małkowski


Lek. wet. ANDRZEJ MAŁKOWSKI
Specjalista chirurg
ul. Myszkowska 4/51
tel. 22 721-88-18, 0513 064 634


Prof. dr hab. Marian Binek

UMOWA

Pomiędzy Wydziałem Medycyny Weterynaryjnej, Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie z siedzibą przy ul. Nowoursynowskiej 166, 02-787 Warszawa, zwanym dalej Uczelnią, reprezentowaną przez dziekana Wydziału Medycyny Weterynaryjnej prof. dr hab. Mariana Binka

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Prywatną Lecznicą Zwierząt s.c.z siedzibą przy ul. Ks. Jerzego Popiełuszki, 12- 218 Sokoły zwanej dalej Lecznicą reprezentowaną przez lek. wet. Marka Wysockiego, specjalistę chorób bydła..

§1

Umowa dotyczy współpracy w zakresie praktycznego kształcenia studentów kierunku weterynarii, prowadzonego przez Wydział Medycyny Weterynaryjnej, Szkoły Głównej Gospodarstwa Wiejskiego. Dotyczy możliwości odbywania ćwiczeń i staży klinicznych wynikających z nauczania przedmiotów chorób zwierząt gospodarskich - choroby bydła.

§2

Wydział zobowiązuje się do:

- opracowania w porozumieniu z Lecznicą merytorycznego zakresu współpracy oraz terminów prowadzonych zajęć w okresie roku akademickiego z wyprzedzeniem semestralnym
- zapewnienia prowadzenia zajęć przez nauczyciela akademickiego
- ubezpieczenia studentów od następstw nieszczęśliwych wypadków
- udzielenia , w zależności od potrzeb , merytorycznych konsultacji przez pracowników Uczelni oraz świadczenie usług weterynaryjnych w ustalonym zakresie na rzecz Lecznicy po kosztach własnych
- wyrażenia zgody na rozpowszechnianie informacji o współpracy Lecznicy z Uczelnią
- pokrycia kosztów powstających w wyniku prowadzonych zajęć.

Lecznica zobowiązuje się do:

- zapoznania studentów z obowiązującym regulaminem pracy i przepisami o bezpieczeństwie i higieny pracy
- umożliwienia studentom uczestniczenia pod nadzorem nauczyciela akademickiego i pracownika Lecznicy w monitorowaniu zdrowia stada oraz w diagnostyce i leczeniu przypadków chorobowych objętych usługą weterynaryjną Lecznicy, w zakresie ustalonym w umowie.

§3

Umowa zostaje zawarta na czas nieokreślony z możliwością jej rozwiązania na wniosek jednej ze stron z miesięcznym wypowiedzeniem.

§4

Wszelkie spory mogące wynikać z umowy rozstrzygają ze strony SGGW –Dziekan, a ze strony Lecznicy jej właściciel.

§5

Umowa niniejsza sporządzona została w dwóch jednobrzmiących egzemplarzach po jednym dla każdej ze stron.

DZIEKAN
Wydziału Medycyny Weterynaryjnej

Lek. wet. Marek Wysocki

Prof. dr hab. Marian Binek /
Pr. dr hab. Marian Binek /

Marek Wysocki
lekarz weterynarii
18-218 Sokoły
ul. Ks. J. Popiełuszki 2
04143

**PRYWATNA
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M. Wysocki, A. Zalewski, Z. Dziarnowski
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NIP 722-10-00-864 REGON 341165844

UMOWA

Pomiędzy Wydziałem Medycyny Weterynaryjnej, Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie z siedzibą przy ul. Nowoursynowskiej 166, 02-787 Warszawa, zwanym dalej Uczelnią, reprezentowaną przez dziekana Wydziału Medycyny Weterynaryjnej prof. dr hab. Mariana Binka

a

Przychodnią Weterynaryjną –Popławscy s.c. z siedzibą przy ul. Warszawskiej 1, 99-423 Bielawy, zwanej dalej Przychodnią, reprezentowaną przez lek. wet. Roberta Popławsiego specjalistę chorób przejuwaczy.

*
§1

Umowa dotyczy współpracy w zakresie praktycznego kształcenia studentów kierunku weterynarii, prowadzonego przez Wydział Medycyny Weterynaryjnej, Szkoły Głównej Gospodarstwa Wiejskiego. Dotyczy możliwości odbywania ćwiczeń i staży klinicznych wynikających z nauczania przedmiotów chorób zwierząt gospodarskich - choroby bydła.

§2

Wydział zobowiązuje się do:

- opracowania w porozumieniu z Przychodnią merytorycznego zakresu współpracy oraz terminów prowadzonych zajęć w okresie roku akademickiego z wyprzedzeniem semestralnym
- zapewnienia prowadzenia zajęć przez nauczyciela akademickiego
- ubezpieczenia studentów od następstw nieszczęśliwych wypadków
- udzielenia , w zależności od potrzeb , merytorycznych konsultacji przez pracowników Uczelni oraz świadczenie usług weterynaryjnych w ustalonym zakresie na rzecz Przychodni po kosztach własnych
- wyrażenia zgody na rozpowszechnianie informacji o współpracy Przychodni z Uczelnią
- pokrycia kosztów powstałych w wyniku prowadzonych zajęć.

Przychodnia zobowiązuje się do:

- zapoznania studentów z obowiązującym regulaminem pracy i przepisami o bezpieczeństwie i higieny pracy
- umożliwienia studentom uczestniczenia pod nadzorem nauczyciela akademickiego i pracownika Przychodni w monitorowaniu zdrowia stada oraz w diagnostyce i leczeniu przypadków chorobowych objętych usługą weterynaryjną Przychodni, w zakresie ustalonym w umowie.

§3

Umowa zostaje zawarta na czas nieokreślony z możliwością jej rozwiązania na wniosek jednej ze stron z miesięcznym wypowiedzeniem.

§4

Wszelkie spory mogące wynikać z umowy rozstrzygają ze strony SGGW –Dziekan, a ze strony Przychodni jej właściciel.

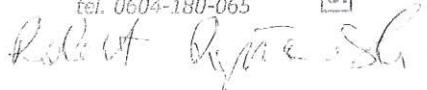
§5

Umowa niniejsza sporządzona została w dwóch jednobrzmiących egzemplarzach po jednym dla każdej ze stron.

*

Lek. wet. Robert Popławski

Robert Popławski
LEKARZ WĘTERYNARII
Specjalista chorób przeżuwaczy
99-423 Bielawy, ul. Parzew 22/9
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Prof. dr hab. Marian Binek

DZIEKAN
Wydziału Nauk o Zwierzętach


Prof. dr hab. Marian Binek

1 października 2009 r

ANNEX 4

Syllabus

Academic Year:	Group of subjects: basic / professional	Catalogue number:	
Module title ¹⁾ :	Farm Animals Diseases	ECTS ²⁾	15
Polish Translation ³⁾ :	Choroby zwierząt gospodarskich		
Faculty ⁴⁾ :	Faculty of Veterinary Medicine		
Person in charge of the module ⁵⁾ :	Prof Dr Sc Zdzisław Gajewski		
Teachers responsible for laboratory classes, workshops and seminars ⁶⁾ :	Prof. Zdzisław Gajewski DVM PhD Dr Sc., Bartosz Pawliński DVM PhD, Ricardo Faundez DVM PhD, Maciej Witkowski DVM PhD, Sławomir Giziński DVM PhD, Katarzyna Siewruk DVM PhD, Dominika Domańska DVM PhD student, Małgorzata Domino DVM, Karolina Gaładyk DVM, Monika Petraitis DVM PhD student, Michał Trela PhD student, Univ. Prof. Zdzisław Kłos DVM, PhD, DVSc , Andrzej Bereznowski DVM, PhD, Bernard Turek DVM,PhD, Mateusz Hecold DVM, Paweł Dukacz, Olga Drewnowska DVM, DVM, Jacek Sikora DVM PhD, Tomasz Jasiński DVM, Małgorzata Wielgosz DVM, Tadeusz Jakubowski DVM, Ph.D., Jarosław Kaba DVM, Ph.D., Lucjan Witkowski DVM, Ph.D., Tomasz Nalbert DVM		
Unit responsible for the module ⁷⁾ :	Department of Large Animal Diseases with Clinic		
Faculty in charge ⁸⁾ :	Faculty of Veterinary Medicine		
Module status ⁹⁾ :	a) mandatory / elective	b) stage 1 year 4	c) intramural
Teaching cycle ¹⁰⁾ :	Semester: winter / summer	Module language ¹¹⁾ :	English
Objectives of the module ¹²⁾ :	Program includes lectures and practical exercises from farm animal reproduction, surgery, internal and infectious diseases. During the course students gain knowledge and practical abilities from all four disciplines. Program of the course includes presentation and use of diagnostics and treatment methods of most common internal, surgical, infectious, reproductive tract diseases and disorders. The aim is to provide knowledge on the aetiology and pathogenesis of farm animal diseases requiring surgical, internal or obstetrical treatment, perform clinical diagnosis and examination and apply proper therapeutical procedures.		
Teaching forms and number of hours ¹³⁾ :	a) Lectures: 105 h b) Classes: 97 h c) Field workshops: 21 h d) Laboratory workshops: 32 h		
Teaching methods ¹⁴⁾ :	Oral presentation with audio-visual techniques e.g. videos, 3D animated visualization or other multimedia presentations with practical training on isolated organs and phantoms, training in the diagnosis and therapy of diseases in slaughter-houses and clinics, flocks and studs, on university owned teaching mares, clinical patients and production animals. Part of the course is conducted with the use of multimedia techniques, e.g. computer programs, videos and computer presentations.		
Detailed module description ¹⁵⁾ :	<p>LECTURES</p> <p>Reproduction:</p> <ol style="list-style-type: none"> 1. Fundamentals of clinical endocrinology in reproduction, hormones of the hypothalamus, gonadotropin releasing hormone, neurotransmitters, steroid hormones, prostaglandins, oxytocin. Hormonal regulation of the oestrous cycle - methods of oestrus and ovulation detection. 2. Physiology of pregnancy, fertilization, blastogenesis, implantation (placenta and foetal development). Endocrinology of pregnancy. Changes in reproductive organs due to pregnancy. Phases of the physiological parturition. Physiology of postpartum period. 3. Pathology of pregnancy. Disorders in pregnancy induced by pathological changes in foetus. Overview of genetic and environmental factors and interactions between them in the pathogenesis of disorders of pregnancy development. Sporadic occurring disease of the foetus. Disorders of pregnancy induced by mothers general and organs illnesses. Pathophysiological and clinical aspects of foetal membranes and waters abnormalities cause pregnancy's problems. Infectious agents and non-infectious agents responsible for the abortion in domestic animals (genetic disorders and myopathies). Effect of chemical and physical agents. Substances toxic to embryo and foetus. 4. Physiology and pathology of parturition. Endocrine profile of the last days of pregnancy and parturition in domestic animals. Species differences that may change the type of therapy during this period. Overview of the progesterone block theory and adrenergic participation in the course of parturition. Effect of stimulation and blocking of alpha and beta receptors of this system and clinical aspects of drug's action on the adrenergic system in clinical practice. Pharmacological actions to prevent preterm birth. The most frequent delivery obstacles from the mother, foetus, foetal membranes and umbilical cord. Pathophysiology and therapy of reproductive system's 		

- damage during parturition. Principles of surgical and pharmacological treatment of these problems.
5. Pathology of postpartum period. Changes in the endocrine profile in the course of post-natal period. Mechanism, process and abnormal involution of uterus in the postnatal period. Observation of changes occurring in the ovaries in the course of postnatal period as one of the methods to assess endocrine changes. Methods of prevention and metafilactic used in domestic animals. Clinical evaluation of changes occurring and the completion of postnatal period. Determination of mating period.
 6. Physiology and pathology of the new-born development. Adaptive processes in the new-born in the external environment. The importance of colostrum and diet in getting resistance by the new-born.
 7. Fertility disorders in cows (abnormal reproductive function), uterus, ovaries and fallopian tubes disease.
 8. Rhythm and intensity disorders of the oestrous cycle.
 9. Causes of fertility problems in pigs and small ruminants.
 10. Infectious causes of infertility. Effect of nutrition on farm animals' fertility.
 11. Anatomy and histology of mammary gland in domestic animals – species differences. Mechanisms of milk secretion. Endocrinology of lactation in domestic animals. Overview of the hormones involved in mamogenesis, lactogenesis and lactopoesis. Discussing the role of oxytocin and catecholamine secretion and milk excretion.
 12. Resistance of mammary gland in domestic animals. Humoral and cellular immunity. The importance of immunological factors in the prevention of mastitis. Discussion of the differences in levels of immunoglobulin's in colostrum and milk in various animal species.
 13. Inflammation of mammary gland in cattle. Aetiology, clinical symptoms, pathological changes, laboratory diagnostics. Recognizing of colimastitis, mastitis catarrhalis, apostematosa mastitis, mastitis mycotica and mammary gland inflammation caused by infection by organisms of the genus Mycoplasma and Chlamydia. Divisions of inflammations.
 14. Treatment of clinical and subclinical inflammation in lactation and dry cows. Infections and inflammations prevention in lactating and dry cows.
 15. Inflammation of mammary glands in small ruminants and sows. Aetiology, clinical and laboratory diagnosis. Prevention and treatment.

Infectious Diseases:

1. Classical swine fever - etiology, pathogenesis, epidemiology, diagnosis and control. African swine fever, erisipelas, pasteurellosis (pigs, cattle and other species) - etiology, pathogenesis, epidemiology, diagnosis and control.
2. Haemorrhagic infectious enteropathies of pigs - etiology, pathogenesis, epidemiology, diagnosis and control. Colibacterioses i salmonelloses of pigs, cattle and other species – etiology, pathogenesis, epidemiology, diagnosis and control. Viral diseases of gastrointestinal tract (TGE, PED, rotaviral and other) – etiology, pathogenesis, epidemiology, diagnosis and control.
3. Cirkoviral infections. Rhinitis atrophicans, pneumonia in pigs caused by mycoplasma – etiology, pathogenesis, epidemiology, diagnosis and control.
4. Aujeszky disease, porcine enteroviral encephalomyelitis - etiology, pathogenesis, epidemiology, diagnosis and control.
5. Porcine pleuropneumonia, streptococcosis, porcine reproductive & respiratory syndrome (PRRS), parvovirosis, SMEDI (stillbirth, mummification, embryonic death, and infertility) syndrome – etiology, pathogenesis, epidemiology, diagnosis and control.
6. Tuberculosis in cattle and other animal species – etiology, pathogenesis, epidemiology, diagnosis and control. Tuberculosis as a zoonotic disease.
7. Brucellosis in cattle and other animal species – etiology, pathogenesis, epidemiology, diagnosis and control. Brucellosis as a zoonotic disease.
8. Enzootic bovine bronchopneumonia, IBR/IPV – etiology, pathogenesis, epidemiology, diagnosis and control. BVD-MD and other viral diarrheas in cattle (rotaviruses, coronaviruses,) – etiology, pathogenesis, epidemiology, diagnosis and control. Rinderpest and peste des petits ruminants, enzootic bovine leukemia, malignant catarrhal fever – etiology, pathogenesis, epidemiology, diagnosis and control.
9. Food and mouth disease in cattle and other animal species – etiology, pathogenesis, epidemiology, diagnosis and control.
10. Bovine spongiform encephalopathy – etiology, pathogenesis, epidemiology, diagnosis and control. Scrapie, anthrax, paratuberculosis in cattle and other animal species – etiology, pathogenesis, epidemiology, diagnosis and control.
11. Clostridial diseases in sheep, listeriosis in sheep and other animal species – etiology, pathogenesis, epidemiology, diagnosis and control. Listeriosis as a zoonotic disease, Maedi-Visna disease, ovine pulmonary adenomatosis, border disease – etiology, pathogenesis, epidemiology, diagnosis and control
12. Chlamydioses and chlamydophiloses in animals, louping-ill, Q fever – etiology, pathogenesis, epidemiology, diagnosis and control. Foot-rot in sheep, poxvirus infections in animals and bovine viral mammillitis - etiology, pathogenesis, epidemiology, diagnosis and control.
13. Main diseases in goats: etiology, pathogenesis, epidemiology, diagnosis and control.
14. Other mandatory and notifiable diseases: vesicular stomatitis, contagious bovine

pleuropneumonia, Rift Valley fever, bluetongue, tularemia, contagious agalactia in sheep and goats, epizootic hemorrhagic disease of deer. Poland in the European Union and the control of animal infectious diseases. Protection from zoonotic diseases

Surgery:

1. General information about the subject
2. History of the farm animals
3. Restraint techniques
4. Elements of anesthesia
5. Castration
6. Dehorning and disbudding
7. Claw trimming
8. Lameness in cattle (2 lectures)
9. Displacement of abomasum (2 lectures)
10. Reticuloperitonitis
11. Rumenotomy
12. Esophagus obstruction

Internal medicine:

1. Dermatology (2 lectures)
2. Diseases of respiratory system
3. Diseases of gastrointestinal system (3 lectures)
4. Cardiology
5. Diseases of urinary system
6. Diseases of nervous system (2 lectures)
7. Metabolic diseases (4 lectures)
8. Pediatrics

CLASSES

Reproduction:

1. Morphological assessment of the reproductive organs in the non-pregnant and pregnant farm animals' females. The reproductive organs in farm animals – clinical examination techniques, e.g. rectal palpation, vaginal examination. The reproductive organs in farm animals – the clinical examination techniques in practice. Isolated reproductive tract – clinical examination techniques in practice.
2. Oestrous cycle in cattle. Oestrous and ovulation detection and induction. Progress of the pregnancy and pregnancy management, methods of pregnancy diagnosis. Oestrous cycle in the sow and small ruminants and its stages detection. Additional tests for the pregnancy detection: e.g. biological, chemical, immune-enzymatic, radio-immunological methods.
3. Ultrasound diagnostic methods in veterinary gynaecology and obstetrics. Presentation of cow reproductive tract ultrasound examination and archive of ultrasound images. Clinical examination of the reproductive tract in farm animals in practice. Evaluation of the uterine and ovarian status. Diagnosis of the pregnancy. Complementary diagnostic techniques to evaluate the reproductive tract, sample collection for bacteriological tests, uterus biopsy, hysteroscopy.
4. Propaedeutic and Reproduction Physiology. Uncomplicated parturition progress, i.e. delivery stages, intra-uterine location of the foetus. The fundamental principles of parturition assistance in farm animals. Obstetric manoeuvres, retropulsion, extension, traction, rotation. Pharmacological and conservative induction methods of the parturition in various species.
5. The complicated birth in cows and its clinical diagnosis. The assisted parturition with the wrong position and proportion of the foetus. Basic equipment required to complete an assisted parturition. The practical presentation on dummies. The fundamental principles of assisted parturition per vaginam in farm animals. Obstetrical equipment. Foetotomy methods. Total and partial foetotomy. Movie demonstration of foetotomy and caesarean section in cattle.
6. Anaesthesia in obstetrics – indications, types, anaesthetic agents and their doses. Selected types of anaesthesia in practice. The caesarean section indications in cattle and small ruminants. The review of different surgical techniques required for different species. The caesarean section techniques. Clinical diagnostics, assisted parturition in the sow.
7. The reproductive tract of farm animals – clinical examination in practice. Basic gynaecological procedures: oestrous detection, stages of the oestrous cycle, pregnancy detection, catheterization, rinse, uterine lavage, intra-uterine infusion.
8. Neonatology of farm animals. The evaluation of vital functions and maturity. Neonatal asphyxia. Basic principles of new-born feeding. Most prevalent diseases and its treatment in first days after parturition. The most common hereditary congenital disorders and its inheritance. The effects of environment and genotype and its correlations. The abnormalities of genital organs of different species females and its main functions.
9. The vaginal and uterine diseases in cows and small ruminants – aetiology, diagnosis and treatment and its congenital disorders. The ovarian and oviduct diseases in cows and small ruminants – aetiology, diagnosis and treatment.
10. The postpartum period disorders – diagnosis and treatment in different farm animal species. Reproductive health programs for dairy herds. Analysis of records for assessment of

	<p>reproductive performance – computer software in clinical practice, the analysis of fertility in the herds based on selected requirements, work organization for veterinary doctors involved in herd reproduction.</p> <p>11. Basic gynaecological procedures and reproductive tract examination in different farm animal species – practical class.</p> <p>12. Udder and mammary gland morphology and its suitability for mechanical milking, preparation of cows and udder for mechanical milking, milking hygiene. Mechanical milking machines – construction details, principles of operation. Mechanical milking procedures, mamma affects and mammary gland diseases. Inflammatory diseases and infections of the udder and their laboratory detection methods (milk samples, their storage and transport, microbial cultures management, identification and antibiotic sensitivity). Diagnostic kits management in clinical practice. Inflammatory disorders of the udder and their laboratory detection (passive inflammation indicators, including determination of somatic cells proportion, milk pH, serum albumin, lactose, chloride, electric conductivity, activity of N-acetyl-beta-D-glukosaminidase).</p> <p>13. The mammary gland – basic and detailed clinical examination in cows, mammary gland disorders in cows, clinical tests. Ultrasound and endoscopy techniques in detection of udder and reproductive tract disorders in the field practice. Milking demonstration – practical class.</p> <p>14. Basic surgical procedures on the udder in cattle and small ruminants – different surgical techniques, udder amputation, surgical treatment methods for mammas. The mastitis treatment methods and techniques in cows and heifers during the perinatal period.</p>
	<p>Infectious Diseases:</p> <ol style="list-style-type: none"> 1. Classical and African swine fever – diagnosis and management. 2. Erisipelas, pasteurellosis, infectious diseases of gastrointestinal tract, infectious diseases of skin and diseases causing motion disruption – diagnosis and management. 3. Infectious diseases of respiratory tract – diagnosis and management. 4. Infectious diseases causing reproduction disorders – diagnosis and management. 5. Aujeszky disease and other infectious neurologic diseases – diagnosis and management. 6. Differential diagnosis of swine infectious diseases. 7. Tuberculosis test. 8. Diagnosis and control of bovine brucellosis. 9. Enzootic bronchopneumonia and IBR/IPV, alimentary tract infectious diseases in cattle, enzootic bovine leukemia, foot and mouth disease, neurological infectious diseases in cattle. 10. Differential diagnosis and control of clostridial diseases in small ruminants. 11. Differential diagnosis of bovine infectious diseases. 12. Diagnosis and control of listeriosis in small ruminants. 13. Differential diagnosis and control of other neurological diseases and respiratory tract infectious diseases in small ruminants. 14. Differential diagnosis and control of contagious ecthyma, foot-rot, other diseases causing lameness and infectious abortions in small ruminants. 15. Differential diagnosis of ovine and caprine infectious diseases.
	<p>Surgery:</p> <ol style="list-style-type: none"> 1. Castration of the ruminants and pigs 2. Common surgical procedures of the bovine foot. 3. Claw diseases 4. Dehorning and disbudding 5. Displacement of abomasum (video)
	<p>Internal Medicine:</p> <p>Block No 1</p> <ol style="list-style-type: none"> 1.1. Dermatology – diagnosis and treatment of selected non-infectious and allergic diseases 1.2. Differential diagnosis and therapy of diseases of upper and lower respiratory tract in farm animals 1.3. Cardiology – diagnosis and treatment of selected non-infectious and allergic diseases <p>Block No 2</p> <ol style="list-style-type: none"> 2.1. Diseases of gastrointestinal tract diagnosis and therapy of selected diseases in farm animals. 2.2. Influence of nutrition on milk quality <p>Block No 3</p> <ol style="list-style-type: none"> 3.1. Metabolic diseases – diagnosis and therapy of selected diseases in farm animals. <p>Block No 4</p> <ol style="list-style-type: none"> 4.1. Urinary tract diseases – diagnosis and therapy of selected diseases in farm animals. 4.2. Nervous system diseases – diagnosis and therapy of selected diseases in farm animals. 4.3. Neonatology
Formal prerequisites ¹⁶⁾ :	Anatomy, Histology and embryology, Physiology, Pharmacology, Patomorphology, Diagnostic imaging, Clinical and laboratory diagnostics, Surgery and anesthesiology, Veterinary epidemiology, Parasitology, Immunology, Biochemistry, Microbiology

Initial requirements ¹⁷⁾ :	Student should have holistic knowledge and ability to connect and extrapolate previously learned topics into coherent ideas regarding prevention, diagnosis, therapy and management of animal conditions	
Learning outcomes ¹⁸⁾ :	<p>Student:</p> <p>01 – executes anamnesis with the aim of gathering detailed information about single animal, stud and their environment</p> <p>02 – executes clinical examination with the focus on reproductive tract, musculoskeletal system, digestive tract, urogenital system, respiratory system both manually and with the use of appropriate additional methods e.g. instruments and utensils</p> <p>03 – knows proper methods and instruments to diagnose infectious diseases, reproductive tract disorders, internal diseases, and disorders requiring surgical intervention</p>	<p>04 – knows how to prescribe and use drugs, medical materials and vaccines according to legal regulations and rules of their safe storage and utilization; provides clinical documentation of each patient</p> <p>05 – prepares evidence and documentation; uses existing files correlated with herd health, animal welfare and herd productivity</p> <p>06 – creates clear documentation of clinical cases according to current legal regulations in the form that can be easily understood by other veterinarians or owners</p> <p>07 – knows procedures in case of infectious diseases outbreak and when animal is suspected of notifiable infectious disease</p>
Assessment methods ¹⁹⁾ :	01,02,03,04,05,06,07 – oral/written, theory/practice tests from classes. Lectures – oral/written exam and practical exam	
Formal documentation of the learning outcome ²⁰⁾ :	Written tests, student's assessment sheets, exam questions with results – stored and available for assessment of program realization level	
Elements impelling final grade ²¹⁾ :	Classes – written tests 50%, oral test – 50%. Lectures – practical exam 20%, theoretical exam – 80%.	
Teaching base ²²⁾ :	<p>The didactic part of the classes and workshops will be conducted in classrooms of the Department of Large Animal Diseases in the Clinic in Wolica and in classrooms of the Faculty of Veterinary Medicine, Warsaw University of Life Sciences in the Campus Wolica and Ursynów. The rooms are equipped with interactive multimedia equipment and laboratory equipment.</p> <p>Practical courses in the management of farm animal reproduction and reproductive disorders are conducted in the Equine Clinic (Campus Wolica) and during field trips off campus</p>	
Obligatory and supportive materials ²³⁾ :	<p>Textbooks:</p> <ol style="list-style-type: none"> 1. Veterinary Reproduction and Obstetrics. D.E. Noakes, T.J. Parkinson, G.C.W. England 9th ed. Saunders, Elsevier, 2009 2. Large Animal Theriogenology. R.F. Youngquist, W.L. Threlfall. 2nd ed. Saunders, Elsevier. 2007 3. Biotechnologia rozrodu zwierząt udomowionych. A. Bielański i M. Tischner. Drukrol S.C., 1998 4. Pig diseases. D.J. Taylor, St Edmundsbury Press Ltd, Bury St Edmunds, Suffolk 2006 5. Manual of Diagnostic Tests and Vaccines for Terrestrial Animals. OIE, 2008 6. Diseases of Swine. H.W.Dunne, A.D.Leman, Iowa State University Press 7. Large animal internal medicine. Bradford P. Smith, MOSBY St.Louis London Philadelphia Sydney Toronto, 2005. 8. Sheep and goat medicine. Pugh D.G., W.B. Saunders Company. Philadelphia, Pennsylvania, 2002. 9. Diseases of dairy cattle. Thomas J. Divers, Simon F. Peek, Saunders Elsevier. 2008. 10. Free radicals basics of cattle diseases. Kleczkowski M., Kluciński W., Bartosz G, WPALD and BWLSS. Lomza. 2006. <p>Journals:</p> <p>Theriogenology, Animal Reproduction Science, Reproduction of Domestic Animals, Biology of Reproduction, Reproduction, Molecular Reproduction and Development, Reproductive Biology, Cloning, Archives of Andrology, International Journal of Andrology, Life Veterinary, Veterinary Medicine</p>	
Annotations ²⁴⁾ :		

Quantitative summary of the module²⁵⁾:

Estimated number of work hours per student (contact and self-study) essential to achieve presumed learning outcomes of the module ¹⁸⁾ - base for quantifying ECTS ² :	375 h
Total ECTS points, accumulated by students during contact learning:	12 ECTS
Total ECTS points, accumulated by student during practical classes (laboratories, projects, seminars, etc.):	3 ECTS

Learning outcomes of the module relative to the learning outcomes of the subject²⁶⁾.

Outcome No / symbol	Learning outcomes:	Relative to the learning outcomes of the subject:
01	01 – executes anamnesis with the aim of gathering detailed information about single animal, stud and their environment	U_PUZ1

02	02 – executes clinical examination with the focus on reproductive tract, musculoskeletal system , digestive tract, urogenital system, respiratory system both manually and with the use appropriate additional methods e.g. instruments and utensils	W_NK5, U_PUZ3
03	03 – knows proper methods and instruments to diagnose infectious diseases, reproductive tract disorders, internal diseases, and disorders requiring surgical intervention	W_NK3, W_NK4, W_NK7
04	04 – knows how to prescribe and use drugs, medical materials and vaccines according to legal regulations and rules of their safe storage and utilization; provides clinical documentation of each patient	WW_NP10, WW_NP12, U_OUZ3, U_PUZ10
05	05 – prepares evidence and documentation; uses existing files correlated with heard health, animal welfare and herd productivity	U_PUZ17
06	06 – creates clear documentation of clinical cases according to current legal regulations in the form that can be easily understood by other veterinarians or owners	U_OUZ3
07	07 – knows procedures in case of infectious diseases outbreak and when animal is suspected of notifiable infectious disease	W_NK6, U_PUZ8

ANNEX 4a**UMOWA nr 001 /01/2011**

Zawarta w dniu 30.09.2011 pomiędzy spółką ANR:

.....**STADNINA KONI**.....
.....**W DOBRZYNIEWIE**.....
.....**SPÓŁKA Z O.O.**.....
.....**DOBRZYNIEWO 23, 89-311 FALMIEROWO**.....
.....**tel. 067 2863011 fax 067 2863012**.....
.....**Regon 570110460 NIP 764-005-45-34**.....
.....**EKD 0130**.....
reprezentowaną przez**FELICJANA PIKULIKI – PREZESA ZARZĄDU**.....
Spółka zarejestrowana jest.....
w Sądzie Rejonowym w Poznaniu
XXII Wydział Gospodarczy.....
KRS - 0000036219
Kapitał zakładowy - 8.355.600,00 PLN

a Katedrą Dużych Zwierząt z Kliniką, Wydziału Medycyny Weterynaryjnej Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie z siedzibą przy ul. Nowoursynowskiej 159c, 02-767 Warszawa, reprezentowanym przez Dr hab. Zdzisława Gajewskiego, prof. nadzw. SGGW Kierownika Katedry. Umowa zawarta jest na podstawie porozumienia o współpracy zawartego pomiędzy SGGW w Warszawie a ANR, a podписанego przez J.M. Rektora SGGW i Prezesa ANR.

§1

Spółka ANR
STADNINA KONI.....
.....**W DOBRZYNIEWIE**.....
.....**SPÓŁKA Z O.O.**.....
.....**DOBRZYNIEWO 23, 89-311 FALMIEROWO**.....
.....**tel. 067 2863011 fax 067 2863012**.....
.....**Regon 570110460 NIP 764-005-45-34**.....
.....**EKD 0130**.....

wyraża zgodę na przeprowadzanie na terenie działania zakładu zajęć dydaktycznych dla studentów Wydziału Medycyny Weterynaryjnej Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie.

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§4

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Umowę zawiera się na czas nieokreślony, z możliwością jej wypowiedzenia na koniec każdego roku akademickiego. Rok akademicki trwa od 1 października bieżącego roku do 30 września roku następnego.

§13

W sprawach nieuregulowanych niniejszą umową zastosowanie mają przepisy Kodeksu Cywilnego.

§14

Wszelkie spory wynikłe na tle postanowień niniejszej umowy będą rozstrzygane polubownie, a w przypadku braku takiej możliwości, spor zostanie poddany rozstrzygnięciu sądowi właściwemu miejscowo dla siedziby spółki.

§15

Umowę sporządzono w 2 jednобрzmiących egzemplarzach, po jednym egzemplarzu dla każdej ze stron.

Zarząd Spółki

PREZES ZARZĄDU

mer inż. Ewelina Pikulik

STADNINA KONI
W DOBRZYNIEWIE
SPÓŁKA Z O.O.

DOBRZYNIEWO 23, 89-311 FALMIEROWO
tel. 067 2863011 fax 067 2863012
Regon 570110460 NIP 784-005-45-34
EKD 0130

Kierownik

**Katedry Chorób Dużych Zwierząt z Klinika
Wydział Medycyny Weterynaryjnej
SGGW W Warszawie**

29 ✓

Dr hab. Zdzisław Gajewski prof. nadzw. SGGW

UMOWA nr 002 /01/2011

Zawarta w dniu 30.09.2011 pomiędzy spółką ANR:

.....
Ośrodek Praktycznej Wychowanki
Siedziba: ul. Nowoursynowska 159c, 02-767 Warszawa
tel. (02) 643-1468, fax (02) 643-1469

reprezentowaną przez tel. 02-643-1468, Nikielius E.G.W.

a Katedrą Dużych Zwierząt z Kliniką, Wydziału Medycyny Weterynaryjnej Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie z siedzibą przy ul. Nowoursynowskiej 159c, 02-767 Warszawa, reprezentowanym przez Dr hab. Zdzisława Gajewskiego, prof. nadzw. SGGW Kierownika Katedry. Umowa zawarta jest na podstawie porozumienia o współpracy zawartego pomiędzy SGGW w Warszawie a ANR, a podписанego przez J.M. Rektora SGGW i Prezesa ANR.

§1

Spółka ANR
Ośrodek Praktycznej Wychowanki
Siedziba: ul. Nowoursynowska 159c, 02-767 Warszawa
tel. (02) 643-1468, fax (02) 643-1469

wyraża zgodę na przeprowadzanie na terenie działania zakładu zajęć dydaktycznych dla studentów Wydziału Medycyny Weterynaryjnej Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie.

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Zajęcia prowadzone będą w ramach przedmiotów klinicznych w semestrze letnim i zimowym bieżącego roku akademickiego.

§3

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§6

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§7

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§10

Spółka nie rości sobie gratyfikacji finansowych z tytułu umożliwienia organizacji zajęć dydaktycznych na własnym terenie.

§12

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§13

W sprawach nieuregulowanych niniejszą umową zastosowanie mają przepisy Kodeksu Cywilnego.

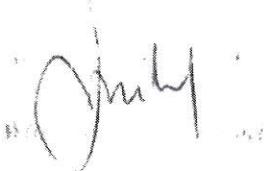
§14

Wszelkie spory wynikłe na tle postanowień niniejszej umowy będą rozstrzygane polubownie, a w przypadku braku takiej możliwości, spor zostanie poddany rozstrzygnięciu sądowi właściwemu miejscowo dla siedziby spółki.

§15

Umowę sporządzono w 2 jednобрzmiących egzemplarzach, po jednym egzemplarzu dla każdej ze stron.

Zarząd Spółki



**Kierownik
Katedry Chorób Dużych Zwierząt z Kliniką
Wydział Medycyny Weterynaryjnej
SGGW W Warszawie**



Dr hab. Zdzisław Gajewski prof. nadzw. SGGW

Ortodoxia Sp. z o.o.
Gospodarka Morska
tel. 511 42 11 44
fax 511 42 11 45

Wydział Medycyny Weterynaryjnej Katedra Chorób Dużych Zwierząt z Kliniką
2011 -10- 17
Wpłynęło dnia

UMOWA nr 003 /01/2011

Zawarta w dniu 30.09.2011 pomiędzy spółką ANR:

Stadnina "Słonie Kucze" Sp. z o.o. N. Juszkinem, ul. Słuckiego 36, 06-408 Troszep
założona dnia 11.01.2007 r. rejestrowym dla M.st. Warszawy, KRS 00000142979
Kapitał 5.926,00 zł, NIP 5261011861, Regon 130145218

reprezentowaną przez

a Katedrą Dużych Zwierząt z Kliniką Wydziału Medycyny Weterynaryjnej Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie z siedzibą przy ul. Nowoursynowskiej 159c, 02-767 Warszawa, reprezentowanym przez Dr hab. Zdzisława Gajewskiego, prof. nadzw. SGGW Kierownika Katedry. Umowa zawarta jest na podstawie porozumienia o współpracy zawartego pomiędzy SGGW w Warszawie a ANR, a podписанego przez J.M. Rektora SGGW i Prezesa ANR.

§1

Spółka ANR
Maciejka Kosińska
.....
.....

wyraża zgodę na przeprowadzanie na terenie działania zakładu zajęć dydaktycznych dla studentów Wydziału Medycyny Weterynaryjnej Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie.

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Zarząd Spółki

PREZES / KIERZĄCY
Lek. wet. Tomasz Gajewski

Kierownik
Katedry Chorób Dużych Zwierząt z Klinika
Wydział Medycyny Weterynaryjnej
SGGW W Warszawie



Dr hab. Zdzisław Gajewski prof. nadzw. SGGW

UMOWA nr 005 /01/2011

Zawarta w dniu 30.09.2011 pomiędzy spółką ANR:

.....
.....
.....
PREZES ZARZĄDU
Dyrektor Spółki

reprezentowaną przez *Marian Dżudzik*

a Katedrą Dużych Zwierząt z Kliniką, Wydziału Medycyny Weterynaryjnej Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie z siedzibą przy ul. Nowoursynowskiej 159c, 02-767 Warszawa, reprezentowanym przez Dr hab. Zdzisława Gajewskiego, prof. nadzw. SGGW Kierownika Katedry. Umowa zawarta jest na podstawie porozumienia o współpracy zawartego pomiędzy SGGW w Warszawie a ANR, a podписанego przez J.M. Rektora SGGW i Prezesa ANR.

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.....
.....

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Zarząd Spółki

**Kierownik
Katedry Chorób Dużych Zwierząt z Klinika
Wydział Medycyny Weterynaryjnej
SGGW W Warszawie**

**PREZES ZARZĄDU
Dyrektor Spółki
Marian Dudzik**

Dr hab. Zdzisław Gajewski prof. nadzw. SGGW

Wydział Medycyny Weterynaryjnej
Katedra Chorób Dużych Zwierząt z Kliniką

2011 -10- 18

Wpłynęło dnia

ANNEX 4b

1. Private Farm in Fiukówka (owner P. Mateńko) – hoof, correction, hoof treatment, decornization of calves, abomasum displacement, removing extra teats
2. Stallion herd Bogusławie - diagnosis of lameness in horses using X-ray, ultrasound and anesthetic techniques nerves and joints, dental disorders, teeth corrections, upper respiratory disorders such as asthma hissing , RAO, air sacs sickness (endoscopy)
3. Stud farm Galewice - skin tumors removal, examination of horses with lameness , castration of stallions , cryptorchidism , perineal plastic surgery
4. Stud farm AKF Poland - Wrońska near Płońsk – examination of horses with lameness, foals examination, hoof correction of hoof after laminitis
5. Private Farm in Kąty Węgierskie - castration of piglets and weaners , scrotal and groin hernias

ANNEX 5a

List of facilities available for students in 2013

1. Breeding Centre Garzyn, cattle, sheep, pigs
2. „DANKO” Farms, Cattle and Horses
3. Stud Farm Golejewko
4. Experimental Station of the Zootechnical Institute, Pawłowice, cattle, sheep, pigs
5. Breeding Centre Osowa Sień, cattle
6. Breeding Centre Długie Stare, cattle
7. Breeding Centre Gałowo, cattle, horses
8. Experimental Station of the Zootechnical Institute, Kołbacz, cattle, sheep, goats, horses
9. Zootechnical Experimental Station Kołuda Wielka, sheep, geese
10. Stud Farm Dobrzyniewo, cattle, pigs
11. Stud Farm Nowe Jankowice, cattle
12. Experimental Station of the Zootechnical Institute Chorzelów, cattle, chickens, rabbits, fyr animals
13. Stud Farm Gładyszów
14. Stud Farm Michałów, cattle
15. Stud Farm Janów Podlaski, cattle
16. WULS Farm Obory, cattle, pigs, poultry
17. Experimental Station of the Technology and Life Sciences Falenty, cattle, fish
18. Breeding Centre Osiećiny, cattle

And others - poultry farms, fur animal farms, game animal centers

ANNEX 5b

Programme of the summer practice at the dairy farm:

1. Animal production organization (technological groups, age groups, housing system, meat herd and milk heard management, staff management)
2. Cattle breeding organization (bonitation, pairing animals, criteria for the selection of bulls for artificial insemination, selection of cows and heifers, selection of animals for the “core of breeding”, genomic programme and embryo transfer)
3. Computerized breeding and animal production management (Alpro, Milcon, Cowshed)
4. Breeding records
5. Cattle feeding (feeding systems, balancing feed rations, importance of feed supplements, organization of feeding groups)
6. Production of volume feeds
7. High protein feeds
8. Rearing of calves and breeding youth
9. Prevention of metabolic disorders
10. Prevention of disorders in calves
11. Artificial insemination (assist to the inseminator)
12. Animal care (decornization, hoof correction)
13. management of cows and heifers condition
14. Treatment of infertility (assist to the veterinarian)
15. Treatment and prevention of diseases (assist to the veterinarian)
16. Assisting the veterinarian during his duties performed on Company's farms (parturitions and all other procedures)

ANNEX 6

ANIMAL PRODUCTION SYLLABI:

- 1. Animal production Technologies**
- 2. Animal nutrition**
- 3. Agronomy**
- 4. Veterinary economics**
- 5. Animal husbandry**
- 6. Ethology**

Academic Year:	Group of subjects:basic / professional	Catalogue number:			
Module title ¹⁾ :	Animal production technologies	ECTS ²⁾	2		
Polish Translation ³⁾ :	Technologie w produkcji zwierzęcej				
Faculty ⁴⁾ :	Faculty of Veterinary Medicine				
Person in charge of the module ⁵⁾ :	Prof. dr hab. Roman Niżnikowski				
Teachers responsible for laboratory classes, workshops and seminars ⁶⁾ :	Employess of the Department of Animal Breeding and Production, Faculty of Animal Sciences,				
Unit responsible for the module ⁷⁾ :	Department of Animal Breeding and Production, Faculty of Animal Sciences,				
Faculty in charge ⁸⁾ :	Faculty of Veterinary Medicine				
Module status ⁹⁾ :	a) mandatory / elective	b) stage1 year 2	c) intramural		
Teaching cycle ¹⁰⁾ :	Semester: winter / summer	Module language ¹¹⁾ : polish			
Objectives of the module ¹²⁾ :	The aim of the training is to familiarize students with the following issues: the rules and directions for use organization and production technologies used in the rearing of large-and małostadnym various species of animal housing systems, the basic legal acts in force in livestock				
Teaching forms and number of hours ¹³⁾ :	a) Lectures: 30 h				
Teaching methods ¹⁴⁾ :	Lecture, problem analysis				
Detailed module description ¹⁵⁾ :	Legal requirements in terms of breeding and animal husbandry. Characteristics of housing systems. Characteristics of the production technology of milk, meat, eggs, wool and leather. Norms of keeping individual production groups and age of the animals. Technologies offspring rearing livestock. The impact of technology on productivity, health, fertility and animal welfare.				
Formal prerequisites ¹⁶⁾ :	none				
Initial requirements ¹⁷⁾ :	none				
Learning outcomes ¹⁸⁾ :	01 - describes the livestock housing systems 02 – characterizes animal production technology	03 - knows the impact of the technology on productivity , health , fertility and welfare 04 - shows a sensitivity to the needs of animals and their welfare			
Assessment methods ¹⁹⁾ :	colloquium				
Formal documentation of the learning outcome ²⁰⁾ :	exemplary colloquia				
Elements impelling final grade ²¹⁾ :	Colloquium - 100%				
Teaching base ²²⁾ :	Lecture room				
Obligatory and supportive materials ²³⁾ :	1. Hodowla i użytkowanie zwierząt gospodarskich. Praca zbiorowa pod red. H. Grodzkiego. Wyd. SGGW, Warszawa, 2005. 2. Metody chowu i hodowli bydła. Praca zbiorowa pod red. H. Grodzkiego. Wyd. SGGW, Warszawa, 2011. 3. Chów i hodowla trzody chlewnej. Praca zbiorowa pod red. A. Rekiel. Wyd. SGGW, Warszawa, 2005. 4. Chów drobiu. Praca zbiorowa pod red. E. Świerczewskiej. Wyd. SGGW, Warszawa, 2008. 5. Hodowla, chów i użytkowanie owiec. Praca zbiorowa pod red. R. Niżnikowskiego, Warszawa, 2011.				
Annotations ²⁴⁾ :					

Quantitative summary of the module²⁵⁾:

Estimated number of work hours per student (contact and self-study) essential to achieve presumed learning outcomes of the module ¹⁸⁾ - base for quantifying ECTS ² :	60 h
Total ECTS points, accumulated by students during contact learning:	1 ECTS
Total ECTS points, accumulated by student during practical classes (laboratories, projects, seminars, etc.):	... ECTS

Learning outcomes of the module relative to the learning outcomes of the subject²⁶⁾:

Outcome No/symbol	Learning outcomes:	Relative to the learning outcomes of the subject:
01	describes the livestock housing systems	W_PZ4, W_NK5
02	characterizes animal production technologies	W_PZ4, W_PZ5, W_PZ6
03	knows the impact of the technology on productivity, health, fertility and welfare	W_PZ2, W_PZ4
04	demonstrate sensitivity to the needs of animals and their welfare	U_OUZ27, K_KP8
05		
06		
07		

Academic Year:		Group of subjects:basic / professional		Catalogue number:	
Module title ¹⁾ :		Animal Nutrition and Feed Science		ECTS ²⁾	4
Polish Translation ³⁾ :		Żywienie Zwierząt i Paszoznawstwo			
Faculty ⁴⁾ :		Faculty of Veterinary Medicine			
Person in charge of the module ⁵⁾ :		Prof. dr hab. Maria Dymnicka			
Teachers responsible for laboratory classes, workshops and seminars ⁶⁾ :		Employess of the Department of Animal Nutrition and Biotechnology, Faculty of Animal Sciences,			
Unit responsible for the module ⁷⁾ :		Faculty of Animal Sciences, Department of Animal Nutrition and Biotechnology,			
Faculty in charge ⁸⁾ :		Faculty of Veterinary Medicine			
Module status ⁹⁾ :	a) mandatory / elective	b) stage1 year 2	c) intramural		
Teaching cycle ¹⁰⁾ :	Semester: winter / summer	Module language ¹¹⁾ :	polish		
Objectives of the module ¹²⁾ :	Implementation of the program in the field: anatomy and physiology of the gastrointestinal tract of animals, the specificity of physiological and biochemical aspects of digestion and utilization of nutrients in feed depending on the animal species, the assessment of the quality and nutritional value of feed, the nutritional requirements of animals, standardization and laying feed rations for animals farm.				
Teaching forms and number of hours ¹³⁾ :	a) Lectures: 30 h b) Auditorium classes 30 h				
Teaching methods ¹⁴⁾ :	Lectures, exercises - to familiarize with the basic analysis of feed ingredients, the use of mathematical techniques to assess the quality of feed in determining the digestibility of nutrients and energy value of feed and biological value of protein; computer programs for the determination of nutritional requirements and laying feed rations for different species and production animals.				
Detailed module description ¹⁵⁾ :	Interspecific comparative analysis of the physiology and biochemistry of digestion of feed nutrients. Characteristics of various types of feed and side products of the food and agriculture industry in terms of: the nutritional and dietetic value and content of anti-nutritional components. Organoleptic evaluation of feed. Feed additives used in animal nutrition. Methods for maintenance, storage and feed preparation for feeding. Nutritional needs of animals in the different types of production (production of milk, meat, eggs), and horses used in sports and recreation. Principles of standardization and laying feed rations and the development of the mixes important for the individual species and production groups. Mistakes made in animal nutrition and their consequences. Ecological aspects of animal nutrition. Effects of feeding on the quality of products of animal origin.				
Formal prerequisites ¹⁶⁾ :	Anatomy, physiology, biochemistry				
Initial requirements ¹⁷⁾ :	Knowledge of the anatomy and physiology of animals, knowledge of basic biochemical processes in the animal, organism, the ability of problem analysis and presentation, the ability of creative thinking				
Learning outcomes ¹⁸⁾ :	01 - describes the principles of animal nutrition (taking into account species differences), collates and analyzes feed rations 02 - describe and evaluates the conditions for ensuring animal welfare	03 - describes the conditions of appropriate utilization and disposal of by-products and waste associated with livestock production 04 - assess the nutritional status of the animal and provides appropriate advice 05 - collects, secures and knows the rules of transportation of samples, knows standard laboratory tests, and properly analyzes and interprets their results			
Assessment methods ¹⁹⁾ :	1. Exam 2. Colloquium 3. Individual projects (feed quality assessment, balancing feed rations for different species)				
Formal documentation of the learning outcome ²⁰⁾ :	1. Exam sheets, 2. colloquium sheets, 3. documentation of feed quality assessment and feed rations				
Elements impelling final grade ²¹⁾ :	1. 50%, 2. 25%, 3. 25%				
Teaching base ²²⁾ :	Lecture room, classroom, computer room				

Obligatory and supportive materials²³⁾:
1. Hodowla i użytkowanie zwierząt gospodarskich. Praca zbiorowa pod red. H. Grodzkiego. Wyd. SGGW, Warszawa, 2005.
2. Metody chowu i hodowli bydła. Praca zbiorowa pod red. H. Grodzkiego. Wyd. SGGW, Warszawa, 2011.
3. Chów i hodowla trzody chlewnej. Praca zbiorowa pod red. A. Rekiel. Wyd. SGGW, Warszawa, 2005.
4. Chów drobiu. Praca zbiorowa pod red. E. Świerczewskiej. Wyd. SGGW, Warszawa, 2008.
5. Hodowla, chów i użytkowanie owiec. Praca zbiorowa pod red. R. Niżnikowskiego, Warszawa, 2011.
Annotations²⁴⁾:

Quantitative summary of the module²⁵⁾:

Estimated number of work hours per student (contact and self-study) essential to achieve presumed learning outcomes of the module ¹⁸⁾ - base for quantifying ECTS ² :	120 h
Total ECTS points, accumulated by students during contact learning:	4 ECTS
Total ECTS points, accumulated by student during practical classes (laboratories, projects, seminars, etc.):	2 ECTS

Learning outcomes of the module relative to the learning outcomes of the subject²⁶⁾:

Outcome No/symbol	Learning outcomes:	Relative to the learning outcomes of the subject:
01	describes the principles of animal nutrition (taking into account species differences), collates and analyzes feed rations	W_PZ3
02	describe and evaluates the conditions for ensuring animal welfare	W_PZ4
03	describes the conditions of appropriate utilization and disposal of by-products and waste associated with livestock production	W_PZ6
04	assess the nutritional status of the animal and provides appropriate advice	OW_PUZ5
05	collects, secures and knows the rules of transportation of samples, knows standard laboratory tests, and properly analyzes and interprets their results	OW_PUZ6
06		
07		

Academic Year:		Group of subjects:basic / professional		Catalogue number:	
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Module title ¹⁾ :	Agronomy			ECTS ²⁾	1			
Polish Translation ³⁾ :	Agronomia							
Faculty ⁴⁾ :	Faculty of Veterinary Medicine							
Person in charge of the module ⁵⁾ :	Dr hab. Stanisław Lenart prof. SGGW							
Teachers responsible for laboratory classes, workshops and seminars ⁶⁾ :	Dr hab. Stanisław Lenart prof. SGGW							
Unit responsible for the module ⁷⁾ :	Faculty of Agriculture and Biology, Department of Agronomy							
Faculty in charge ⁸⁾ :	Faculty of Veterinary Medicine							
Module status ⁹⁾ :	a) mandatory / elective	b) stage 1	year 1	c) intramural				
Teaching cycle ¹⁰⁾ :	Semester: winter/ summer	Module language ¹¹⁾ : polish						
Objectives of the module ¹²⁾ :	The aim of the course is to provide students with knowledge of the most important natural and agronomic conditions of crop production and its importance on the farm and in the country.							
Teaching forms and number of hours ¹³⁾ :	a) Lectures: 15 h							
Teaching methods ¹⁴⁾ :	Lecture, discussion, problem analysis							
Detailed module description ¹⁵⁾ :	Objectives of agriculture and crop production, relationship between plant and animal production , terms related to the plant production. Powierzchnia and structure of agricultural land, crop structure, the economic importance of the major plants of the crop with particular emphasis on forage crops. Natural conditions for crop production: soil (the main soil types, soil bonitation, fertility and productivity), the importance of light and temperature, growing season, water (precipitation as the main source of water, irrigation systems). Conditions of agronomic and their negative and positive impact on the quality of the feed and the environment (the basics): crop rotation and monoculture, tillage systems, fertilizer (mineral, natural and organic), methods of crop plants protection. Economical and natural significance of grassland. Transgenic plants. Farming systems.							
Formal prerequisites ¹⁶⁾ :	none							
Initial requirements ¹⁷⁾ :	none							
Learning outcomes ¹⁸⁾ :	01-describes the purpose of crop production and its relationship with livestock production; 02 - lists the most important plant species growing field and describes the main directions for use; 03 - describes the importance of soil, light, temperature and water in a production plant;		04-defines the basic agricultural practices and their impact on the quality of feed and the environment: crop rotation and monoculture; mineral and organic fertilization, tillage, chemical and integrated pest management, basic irrigation systems; 05-describes the importance of grassland for the nature and economy 06-defines basic principles of three farming systems					
Assessment methods ¹⁹⁾ :	Written test							
Formal documentation of the learning outcome ²⁰⁾ :	Students' written work							
Elements impelling final grade ²¹⁾ :	Colloquium - 100%							
Teaching base ²²⁾ :	Lecture room							

Obligatory and supportive materials ²³⁾ :
1. Gawrońska-Kulesza A. (red.): Produkcja roślinna cz. I., Rea Warszawa 2008
2. Kodeks Dobrej Praktyki Rolniczej. MRiRW 2002.
3. Praca zbiorowa: Podstawy rolnictwa, Rea 2008
Rocznik Statystyczny, GUS.
Annotations ²⁴⁾ :

Quantitative summary of the module²⁵⁾:

Estimated number of work hours per student (contact and self-study) essential to achieve presumed learning outcomes of the module ¹⁸⁾ - base for quantifying ECTS ² :	30 h
Total ECTS points, accumulated by students during contact learning:	0.5 ECTS
Total ECTS points, accumulated by student during practical classes (laboratories, projects, seminars, etc.):	0,0 ECTS

Learning outcomes of the module relative to the learning outcomes of the subject²⁶⁾:

Outcome No/symbol	Learning outcomes:	Relative to the learning outcomes of the subject:
01	describes the purpose of crop production and its relationship with livestock production;	W_PZ3, U_PUZ19
02	lists the most important plant species growing field and describes the main directions for use;	W_PZ3
03	describes the importance of soil, light, temperature and water in a production plant;	W_PZ3
04	defines the basic agricultural practices and their impact on the quality of feed and the environment: crop rotation and monoculture; mineral and organic fertilization, tillage, chemical and integrated pest management, basic irrigation systems;	W_PZ3, U_PUZ19
05	describes the importance of grassland for the nature and economy	W_PZ3, W_PZ4
06	defines basic principles of three farming systems	W_PZ6, U_PUZ19
07		

Academic Year:		Group of subjects:basic / professional		Catalogue number:	
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Module title ¹⁾ :	Veterinary economics			ECTS ²⁾	1			
Polish Translation ³⁾ :	Ekonomika weterynaryjna							
Faculty ⁴⁾ :	Faculty of Veterinary Medicine							
Person in charge of the module ⁵⁾ :	dr hab. Jarosław Kaba							
Teachers responsible for laboratory classes, workshops and seminars ⁶⁾ :	Dr hab. Jarosław Kaba, Faculty of Veterinary Medicine							
Unit responsible for the module ⁷⁾ :	Laboratory of Veterinary Epidemiology and Economics							
Faculty in charge ⁸⁾ :	Faculty of Veterinary Medicine							
Module status ⁹⁾ :	a) mandatory / elective	b) stage1	year 2	c) intramural				
Teaching cycle ¹⁰⁾ :	Semester: winter / summer	Module language ¹¹⁾ : polish						
Objectives of the module ¹²⁾ :	The aim of the course is to familiarize students with the basic concepts of macro-and microeconomics and the economics of conducting a medicinal plant for animals.							
Teaching forms and number of hours ¹³⁾ :	a) Lectures: 15 h							
Teaching methods ¹⁴⁾ :	Lecture, problem analysis							
Detailed module description ¹⁵⁾ :	<p>1 , 2, 3 basic economic concepts . Definition and division of economics ; factors of production ; goods and its' characteristics ; price and its features , price categories ; money and its functions ; market definition , elements, functions ; demand and the factors shaping it , the law of demand, the demand curve; supply and the shaping factors, the law of supply , the supply curve ; equilibrium price ; price elasticity of demand , the income elasticity of demand, price elasticity of supply; concept of consumption.</p> <p>4, 5, 6 economic calculation . Definition and types of economic calculation ; expenditures ; costs and their distribution ; income ; basic methods of economic analysis , cost accounting individual marginal calculus , differential calculations , bill of substitution ; economics investment in veterinary practice ; methods of assessing the effectiveness of development plans for the clinic ; value money over time.</p> <p>7 , 8, 9 The economics of health of companion animals . Start-up costs of the veterinary clinics ; the costs of veterinary services : the method of calculation of indirect costs , direct costs , labor costs of the owner and the clinic staff; methods of determining. Rates of veterinary services ; the impact of price changes on income ; elasticity of demand and the amount of work and price of the service .</p> <p>10 , 11, 12 The economics of the health of farm animals. The disease in terms of micro-and macroeconomic ; animal health and their performance ; costs of the disease , methods of calculation , source of the necessary data; impact of the disease on the economic performance of the agricultural holding; economics in the herd health management : evaluation of the cost-effectiveness of control programs and prevention of diseases in the flock .</p> <p>13 , 14 The costs of disease control from office. The impact of diseases of the office at the micro – and macroeconomics , economic analysis of control programs at the country level and holding , the costs of monitoring studies , the contingency plans .</p> <p>16. Final test</p>							
Formal prerequisites ¹⁶⁾ :	Veterinary epidemiology							
Initial requirements ¹⁷⁾ :	none							
Learning outcomes ¹⁸⁾ :	01-The student knows the basic concepts of macro-and microeconomic. 02-Knows what it is and is able to perform the simplest economic calculation.							

Assessment methods ¹⁹⁾ :	Written work (solution of simple tasks) at the end of each block of lectures. The final test of the whole material.
Formal documentation of the learning outcome ²⁰⁾ :	Written Works and personal answer sheets
Elements impelling final grade ²¹⁾ :	
Teaching base ²²⁾ :	Department of Small Animal Diseases with the Clinic, Auditorium
Obligatory and supportive materials ²³⁾ :	
1. Dijkhuizen A.A., Morris R.S. Animal health economics principles and application, University of Sydney, 1997 2. Heijman W., Krzyżanowska Z., Gędek S., Kowalski Z. Ekonomika rolnictwa. Zarys teorii. Fundacja Rozwój SGGW, 1997 3. Piasecki B. Ekonomika i zarządzanie małą firmą, PWN, 1998 4. Podstawa M. Podstawy finansów teoria i praktyka. Wydawnictwo SGGW, 2005 5. Radostis O.M. Herd health food animal production medicine. Saunders Company, 1994 5. Siudek T. Analiza finansowa podmiotów gospodarczych. Wydawnictwo SGGW, 2004.	
Annotations ²⁴⁾ :	

Quantitative summary of the module²⁵⁾:

Estimated number of work hours per student (contact and self-study) essential to achieve presumed learning outcomes of the module ¹⁸⁾ - base for quantifying ECTS ² :	30 h
Total ECTS points, accumulated by students during contact learning:	1 ECTS
Total ECTS points, accumulated by student during practical classes (laboratories, projects, seminars, etc.):	0.5 ECTS

Learning outcomes of the module relative to the learning outcomes of the subject²⁶⁾:

Outcome No/symbol	Learning outcomes:	Relative to the learning outcomes of the subject:
01	The student knows the basic concepts of macro-and microeconomic.	W_PZ5, U_OUZ4, U_OUZ6
02	Knows what it is and is able to perform the simplest economic calculation.	U_OUZ4, U_OUZ9, U_OUZ13
03		
04		
05		
06		
07		

Academic Year:	Group of subjects:basic / professional	Catalogue number:	
Module title ¹⁾ :	Basics of animal husbandry	ECTS ²⁾	3
Polish Translation ³⁾ :	Podstawy chowu zwierząt		
Faculty ⁴⁾ :	Faculty of Veterinary Medicine		
Person in charge of the module ⁵⁾ :	Prof. dr hab. Roman Niżnikowski		
Teachers responsible for laboratory classes, workshops and seminars ⁶⁾ :	Employess of the Department of Animal Breeding and Production, Faculty of Animal Sciences,		
Unit responsible for the module ⁷⁾ :	Faculty of Animal Sciences, Department of Animal Breeding and Production,		
Faculty in charge ⁸⁾ :	Faculty of Veterinary Medicine		
Module status ⁹⁾ :	a) mandatory / elective	b) stage1 year 2	c) intramural
Teaching cycle ¹⁰⁾ :	Semester: winter / summer	Module language ¹¹⁾ : polish	
Objectives of the module ¹²⁾ :	To familiarize students with the terms of livestock farming (cattle, pigs, poultry and sheep) and the most important factors affecting the effectivity of animal products.		
Teaching forms and number of hours ¹³⁾ :	a) Lectures: 30 h b) Auditorium classes: 15 h		
Teaching methods ¹⁴⁾ :	Lecture, problem analysis		
Detailed module description ¹⁵⁾ :	Characteristics of the most important livestock breeds. Rating habit and condition of the animals. Genetic and environmental determinants of the level of traits. The parameters used in the assessment of the utility of milk, meat, hens, woolly and reproductive performance. Basic documentation of breeding and its use in breeding and prevention. Terms of breeding use of animals and reproduction methods. Basic rules for the safe and humanitarian handling of animals. Principles of feeding various technological groups of animals.		
Formal prerequisites ¹⁶⁾ :	none		
Initial requirements ¹⁷⁾ :	none		
Learning outcomes ¹⁸⁾ :	01 - recognizes breeds of farm animals 02 - characterizes determinants of traits 03 - lists the parameters used in assessing the usefulness of milk, meat, hens, woolly and reproductive performance. 04 - describes the principles for the assessment of conformation 05 - knows the rules of use of breeding livestock.	06 - shows a sensitivity to the needs of animals and their welfare 07 - shows understanding of the need for permanent training in the field of farming and animal husbandry	
Assessment methods ¹⁹⁾ :	01, 02 – exam 03, 04, 05, 06, 07 – written test		
Formal documentation of the learning outcome ²⁰⁾ :	Pool of questions		
Elements impelling final grade ²¹⁾ :	Exam – 60%, written test – 40%		
Teaching base ²²⁾ :	Lecture room, seminar room		
Obligatory and supportive materials ²³⁾ :	1. Hodowla i użytkowanie zwierząt gospodarskich. Praca zbiorowa pod red. H. Grodzkiego. Wyd. SGGW, Warszawa, 2005. 2. Metody chowu i hodowli bydła. Praca zbiorowa pod red. H. Grodzkiego. Wyd. SGGW, Warszawa, 2011. 3. Chów i hodowla trzody chlewnej. Praca zbiorowa pod red. A. Rekiel. Wyd. SGGW, Warszawa, 2005. 4. Chów drobiu. Praca zbiorowa pod red. E. Świerczewskiej. Wyd. SGGW, Warszawa, 2008. 5. Hodowla, chów i użytkowanie owiec. Praca zbiorowa pod red. R. Niżnikowskiego, Warszawa, 2011.		

Quantitative summary of the module²⁵⁾:

Estimated number of work hours per student (contact and self-study) essential to achieve presumed learning outcomes of the module ¹⁸⁾ - base for quantifying ECTS ² :	85 h
Total ECTS points, accumulated by students during contact learning:	1,5 ECTS
Total ECTS points, accumulated by student during practical classes (laboratories, projects, seminars, etc.):	... ECTS

Learning outcomes of the module relative to the learning outcomes of the subject²⁶⁾:

Outcome No/symbol	Learning outcomes:	Relative to the learning outcomes of the subject:
01	recognizes breeds of farm animals	W_PZ1
02	characterizes determinants of traits	W_PZ1
03	lists the parameters used in assessing the usefulness of milk, meat, hens, woolly and reproductive performance.	W_PZ1
04	describes the principles for the assessment of conformation	W_PZ1
05	knows the rules of use of breeding livestock.	W_PZ2
06	shows a sensitivity to the needs of animals and their welfare	W_PZ4, K_KP8
07	shows understanding of the need for permanent training in the field of farming and animal husbandry	U_OUZ12

Academic Year:		Group of subjects:basic / professional		Catalogue number:	
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Module title ¹⁾ :	Ethology			ECTS ²⁾	2				
Polish Translation ³⁾ :	Etiologia								
Faculty ⁴⁾ :	Faculty of Veterinary Medicine								
Person in charge of the module ⁵⁾ :	Prof. dr hab. Tadeusz Kaleta								
Teachers responsible for laboratory classes, workshops and seminars ⁶⁾ :	Prof. dr hab. Tadeusz kaleta								
Unit responsible for the module ⁷⁾ :	Faculty of Animal Sciences, Department of Genetics and Animal Breeding								
Faculty in charge ⁸⁾ :	Faculty of Veterinary Medicine								
Module status ⁹⁾ :	a) mandatory / elective	b) stage1	year 2	c) intramural					
Teaching cycle ¹⁰⁾ :	Semester: winter / summer	Module language ¹¹⁾ : polish							
Objectives of the module ¹²⁾ :	During the course student of Faculty of Veterinary Medicine acquires basic and latest information and knowledge in the field of the general animal behaviour (e.g. mechanisms, evolution, genetics, methods of analysis etc.) and its application in the field of veterinary and all forms of animal keeping and breeding.								
Teaching forms and number of hours ¹³⁾ :	a) Lectures: 30 h								
Teaching methods ¹⁴⁾ :	Lecture								
Detailed module description ¹⁵⁾ :	Animal Behaviour-introduction, basic concepts and methods of the study; patterns of animal behaviour (part I and II); factors influencing behaviour (evolution, genes, and environment) (part I and II); animal cognition (part I and II); ethology; domestication and applied ethology; overview of farm animal behaviour; behaviour of pet animals; abnormal behaviour of domesticated animals; zoo animal behaviour; behaviour and an animal welfare; movies on animal behaviour (flight and courtship in birds).								
Formal prerequisites ¹⁶⁾ :	none								
Initial requirements ¹⁷⁾ :	Participating students should have a good knowledge of the basics of biology								
Learning outcomes ¹⁸⁾ :	01- Describes and explains behaviour and behavioural process as a kind of homeostasis 02-Explain behaviour as a factor of information concerning normal or abnormal development and functions of organism	03-Describes and evaluates animal welfare on the basis of behaviour and other factors 04-Perform veterinary investigation with application of knowledge concerning animal behaviour							
Assessment methods ¹⁹⁾ :	1) Attendance at lectures 2) Report concerning selected topics of ethology or oral exam								
Formal documentation of the learning outcome ²⁰⁾ :	Lists of participants Reports Oral examination protocols								
Elements impelling final grade ²¹⁾ :	Report or exam: 2/3 (67%), attendance: 1/3 (33%)								
Teaching base ²²⁾ :	Lecture facilities of the Faculty of Veterinary Medicine								
Obligatory and supportive materials ²³⁾ :	M. Breed , J. Moore. Animal Behavior. ACADEMIC PRESS 2011 K. Houpt. Domestic Animal Behavior for Veterinarians & Animal Scientists. WILEY-BLACKWELL 2011								
Annotations ²⁴⁾ :	The grade is calculated according to formula:								

2/3a + 1/3b

Where "a" : is evaluation of report or oral exam and "b" is evaluation of attendance

The points needed to calculate grade is as follows:

"a" : 5 - 100; 4.5 - 90; 4.0 - 80; 3.5 - 70; 3.0 - 60

"b" : 5 - 100; 4.5 - 90 (one absence); 4.0 (two absences); 3.5 (more absences only with validated medical excuse)

Quantitative summary of the module²⁵⁾:

Estimated number of work hours per student (contact and self-study) essential to achieve presumed learning outcomes of the module ¹⁸⁾ - base for quantifying ECTS ² :	50 h
Total ECTS points, accumulated by students during contact learning:	1,0 ECTS
Total ECTS points, accumulated by student during practical classes (laboratories, projects, seminars, etc.):	... ECTS

Learning outcomes of the module relative to the learning outcomes of the subject²⁶⁾:

Outcome No/symbol	Learning outcomes:	Relative to the learning outcomes of the subject:
01	Describes and explains behaviour and behavioural process as a kind of homeostasis	WW_NP5
02	Explain behaviour as a factor of information concerning normal or abnormal development and functions of organism	WW_NP6
03	Describes and evaluates animal welfare on the basis of behaviour and other factors	W_PZ4
04	Perform veterinary investigation with application of knowledge concerning animal behaviour	U_PUZ1
05		
06		
07		

ANNEX 7a

Syllabus

Academic Year:		Group of subjects: basic / professional		Catalogue number:	
Module title ¹⁾ :	Veterinary Prevention			ECTS ²⁾	5
Polish Translation ³⁾ :	Prewencja weterynaryjna				
Faculty ⁴⁾ :	Faculty of Veterinary Medicine				
Person in charge of the module ⁵⁾ :	Prof. Romuald Zabielski				
Teachers responsible for laboratory classes, workshops and seminars ⁶⁾ :	Lectures: Prof. R. Zabielski; prof. Z. Gajewski, prof. Z. Pejsak, prof. M.Z. Kowalski, dr. T. Jakubowski, dr. P. Matyba, dr. K. Pawłowski, M. Krzysiak DVM, A. Czujkowska DVM; classes: dr. P. Matyba, dr. K. Pawłowski.				
Unit responsible for the module ⁷⁾ :	Department of Large Animal Diseases with Clinic				
Faculty in charge ⁸⁾ :	Faculty of Veterinary Medicine				
Module status ⁹⁾ :	a) mandatory / elective	b) stage 1 year 5	c) intramural		
Teaching cycle ¹⁰⁾ :	Semester: winter / summer	Module language ¹¹⁾ :	English		
Objectives of the module ¹²⁾ :	Preventive medicine covers means to assure animal's welfare and productivity, and to protect from epigenetic disorders in foetal life such as premature birth and non-infectious and infectious intrauterine growth retardation which have their consequences in early and late postnatal life. Furthermore it covers topics in neonatology and physiology and pathology of growing production animals and all hygienic procedures associated with nutrition and proper resistance to diseases. The other sub-topics are related to diagnostics of the entire herd condition by feed and water examination and using diagnostic tests, and examination of individual cases. In preventive medicine, farm localization and local environment and related biohazards play important role. Preventive medicine is interdisciplinary, and brings together the knowledge from different areas from physiology, feed science, nutrition and immunology through pathology, microbiology, toxicology diagnostics internal, infectious and reproduction diseases.				
Teaching forms and number of hours ¹³⁾ :	a) Monographic lectures; hours 45; b) Laboratory classes; hours 20; c) Farm visits; hours 5; d) Workshops; hours 5;				
Teaching methods ¹⁴⁾ :	Monography lectures supported by PowerPoint presentations are given by top-class experts in the field. Practical course includes discussion on preparations for visiting livestock farm, collecting and analyzing data, reporting strong and weak points found in farm management and building cost-effective strategies which could be proposed to solve farmer's problem.				
Detailed module description ¹⁵⁾ :	<u>Lectures:</u> Introduction to veterinary prevention: aims, definitions. Neonate at livestock production farm: SGA, IUGR, colostral and suckling period, weaning strategies, feed additives. Review of EU and national regulations. Outline of herd examination – SPIVET forms. Zoohygienic conditions (climate, water, air, equipment, buildings, farm staff). Pig farm, dairy cattle and fur animals management. Nutrition and reproduction herd management. Preventive veterinary medicine at aquaculture. Preventive veterinary medicine at national parks, zoological gardens and wildlife. <u>Classes:</u> Waste product management vs. environment and health protection. Zoohygienic conditions (climate, water, air, equipment, buildings, farm staff). Introduction to farm evaluation. How to collect data? Sampling biological material. Data reading. Visit to farm. Analysis of visited farm, choosing right vp strategy. Consultation of project. Seminar: project presentation.				
Formal prerequisites ¹⁶⁾ :	Passed exams until semester 9				
Initial requirements ¹⁷⁾ :	student possesses knowledge and abilities obtained already during the study course				

Learning outcomes ¹⁸⁾ :	01 - student knows methods of animal houses microclimate analyses; 02 - student knows principles of disinfection, disinsection, deratization and repelling synantropic birds; 03 - student gets abilities of complex evaluation of the farm (evaluation of environmental and zoohigienic conditions, work organization, services, evaluation of feeding and immuneoprevention strategy); 04 - student can perform evaluation of farm productivity including evaluation of the strategy taken by the farm management and current market situation;	05 - student can propose reasonable prevention strategies for evaluated farms; 06 - student is able to monitor the implemented preventive means at farm; 07 – Personal and social competences – student achieves the ability to use principles of veterinary prevention in the herd. 08- student shows the abilities to cooperate with farmer in solving health problems in the animal's herd
Assessment methods ¹⁹⁾ :	Effects 01, 02 – tests during practical classes; effect 03 – test during practical classes, evaluation of student's project; effects 04, 05 – evaluation of student's project; effects 06, 07, 08 – written exam.	
Formal documentation of the learning outcome ²⁰⁾ :	Written tests, submitted report of farm evaluation, written exam.	
Elements impelling final grade ²¹⁾ :	Effects of studying are verified by: 1. test grades, 2. evaluation of student's report, 3. exam grades; A maximum number of points is ascribed for each of the above items (total 100 points). Weights: 1-30%, 2-20%, 3-50%. Grades criteria: <51 points: 2; 52-60 points: 3, 61-70 points: 3+, 71-80 points: 4; 81-90 points: 4+; >91 points: 5. Those who did not submit the report <u>and</u> did not pass the tests <u>and</u> did not pass successfully the exam cannot pass the entire subject.	
Teaching base ²²⁾ :	lecture halls, classrooms, laboratories, production farm	
Obligatory and supportive materials ²³⁾ :	There is no one textbook in Preventive Medicine. Books available at Faculty library, internet materials, supportive materials prepared by the lecturers.	
Annotations ²⁴⁾ :	Veterinary Prevention is taught during the first half of 10 th semester. The module consists of 45 h lectures (5 h/week), and 30 h labs (25 classes, 5 h farm visit). During visiting farm students have to collect all data necessary for evaluation report as well as biological material for evaluation, if necessary. Student will need ca. 35 h of individual studying for preparation to the classes, tests and exam. Verification of teaching effects is made by 2 tests, evaluation of the student's report and exam. After completing the module, a 2 h written exam is made.	

Quantitative summary of the module²⁵⁾:

Estimated number of work hours per student (contact and self-study) essential to achieve presumed learning outcomes of the module ¹⁸⁾ - base for quantifying ECTS ² :	137 h
Total ECTS points, accumulated by students during contact learning:	3 ECTS
Total ECTS points, accumulated by student during practical classes (laboratories, projects, seminars, etc.):	2 ECTS

Learning outcomes of the module relative to the learning outcomes of the subject²⁶⁾:

Outcome No / symbol	Learning outcomes:	Relative to the learning outcomes of the subject:
01	Identifies and describes biology of contagious factors causing diseases transferred between animals and anthropozoonoses, including mechanisms of their transfer and animal's defency mechanisms,	WW_NP8
02	Describes and interprets causes and symptoms of diseases, describes and interprets pathomorphology manifestations and implements principles of prevention in particular diseases	W_NK3
03	Examines clinically the patients and monitors health in production herds	W_NK5
04	Collects, evaluates and properly interprets clinical data and laboratory analysis and other data	W_NK7
05	Describes and evaluates conditions providing animal welfare	W_PZ4
06	Effectively communicates with clients, other veterinarians and officers of control units, state and self-government administration.	U_OUZ2
07	Performs entire case study procedure to obtain precise information on single animals or groups of animals and living environment.	U_PUZ1
08	Elaborates and implements prophylaxis programs appropriate for given animal species	U_PUZ18

ANNEX 7b

Syllabus

Academic Year:		Group of subjects: basic / professional		Catalogue number:	
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Module title ¹⁾ :	Veterinary epidemiology			ECTS ²⁾	2
Polish Translation ³⁾ :	Epidemiologia weterynaryjna				
Faculty ⁴⁾ :	Faculty of Veterinary Medicine				
Person in charge of the module ⁵⁾ :	dr hab. Jarosław Kaba				
Teachers responsible for laboratory classes, workshops and seminars ⁶⁾ :	dr hab. Jarosław Kaba, lek. wet. Michał Czopowicz				
Unit responsible for the module ⁷⁾ :	Department of Large Animals Diseases with the Clinic, Division of Infectious Diseases and Epidemiology				
Faculty in charge ⁸⁾ :	Faculty of Veterinary Medicine				
Module status ⁹⁾ :	a) mandatory / elective	b) stage 1 year 2	c) intramural		
Teaching cycle ¹⁰⁾ :	Semester: winter / summer	Module language ¹¹⁾ :	English		
Objectives of the module ¹²⁾ :	The main objectives of the course cover theoretical and practical information on epidemiological methods used in veterinary sciences. Students acquaint with basic epidemiological concepts, basic knowledge about course of a disease in population, diagnostic tests theory, disease survey, observational studies, evidence based medicine, clinical trials and basics of disease control.				
Teaching forms and number of hours ¹³⁾ :	a) Practicals: 30 hours b) <input type="checkbox"/> c) <input type="checkbox"/>				
Teaching methods ¹⁴⁾ :	multimedia presentations, discussions, solving of problems				
Detailed module description ¹⁵⁾ :	The course covers following subjects: 1. Basic epidemiological concepts. Diseases and their classification. Fields of epidemiology. Population and its characteristic. 2. Emerging and course of a disease in population. Etiology of diseases. Frequency of disease occurrence. Epidemic. 3. Occurrence of diseases in population. Measure of disease spread in population. 4. Sensitivity and specificity of a diagnostic test. Predictive values of test results. 5. Cut-off point and methods of its determination. ROC curve. 6. Questionnaires. Agreement of test results. Multiple testing. Structure of questionnaire. Basics of questionnaires completing. 7. Basics of disease survey conduct. Methods of sampling. 8. Determination of a sample size. 9. Cohort, case-control and cross-sectional studies. 10. Calculation of relative risk and attributable risk. Interpretation of results. 11. Evidence based medicine. Systematic review and meta-analysis. Reliability of results. 12. Clinical trials. The clinical trial protocol. Sponsor, monitor, investigator. 13. Computer systems in animal health protection. National computer systems. Computer systems In EU. Disease control schemes. Contingency plans. 14. Basics of disease control. Data and methods of its collection. Monitoring. Surveillance.				
Formal prerequisites ¹⁶⁾ :	none				
Initial requirements ¹⁷⁾ :	Knowledge of biostatistics				
Learning outcomes ¹⁸⁾ :	Student knows basic concepts of veterinary epidemiology and is able to properly design and supervise simple epidemiological studies.		Student knows how to interpret results of the epidemiological studies.		
Assessment methods ¹⁹⁾ :	Test				
Formal documentation of the learning outcome ²⁰⁾ :	Test papers signed by students				

Elements impelling final grade ²¹⁾ :	Results of the test, to pass student needs to accumulate at least 50% + 1 point
Teaching base ²²⁾ :	Computer laboratory of the Department of Small Animal Diseases with Clinic
Obligatory and supportive materials ²³⁾ :	<p>1. Noordhuizen J.P.T.M., Frankena K., Thrusfield M., Graat E.A.M. (2001) Application of Quantitative Methods in Veterinary Epidemiology. Wageningen Pers</p> <p>2. Thrusfield M. (2007) Veterinary Epidemiology. Blackwell Science</p> <p>3. Smith R.D. (1995) Veterinary Clinical Epidemiology. CRC Press</p>
Annotations ²⁴⁾ :	

Quantitative summary of the module²⁵⁾:

Estimated number of work hours per student (contact and self-study) essential to achieve presumed learning outcomes of the module ¹⁸⁾ - base for quantifying ECTS ² :	30 h
Total ECTS points, accumulated by students during contact learning:	2 ECTS
Total ECTS points, accumulated by student during practical classes (laboratories, projects, seminars, etc.):	2 ECTS

Learning outcomes of the module relative to the learning outcomes of the subject²⁶⁾:

Outcome No / symbol	Learning outcomes:	Relative to the learning outcomes of the subject:
01	Student collects, analyses and correctly interprets the information about course of a disease in population	W_NK7, U_PUZ1, U_PUZ8, U_PUZ17
02	Student collects analyses and correctly interprets the information about effects of disease occurrence in population.	K_KP9, K_KP5, U_OUZ10
03		
04		
05		
06		
07		

ANNEX 7c

Heard Health and Reproduction management

Lectures 30hrs

1. Review of EU and national regulations animal production 3hrs
2. Neonate at livestock production farm: 3hrs
3. Outline of herd examination – SPIVET forms 3 hrs
4. Dairy cattle and pigs nutrition management 3
5. Pig farm health management 4hrs
6. Dairy and beef cattle health management 6hrs
7. Equine reproduction management 2hrs
8. Reproduction herd management in the cattle and pigs farm 6hrs

Labs 30 hrs

1. Introduction to farm evaluation. How to collect data? Sampling biological material. Data reading. 4 hrs
2. Introduction to farm evaluation (continued). 4 hrs
3. Visit to farm(2x5 hrs)
4. Analysis of visited farm, choosing health management strategy. Consultation of project. 8 hrs
5. Seminar: project presentation. 4hrs

ANNEX 8

FACULTY OF VETERINARY MEDICINE

WARSAW UNIVERSITY OF LIFE SCIENCES

EDUCATION QUALITY ASSURANCE AND IMPROVEMENT

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ANNEX 9

Assurance and Improvement of Education Quality Council

I. Chairman

Dr hab. Marcin Bańbura , Associate professor,
Associate Dean for Student Affairs, Faculty of Veterinary Medicine

II. Deputy Chairman ,

Dr hab. Marta Kupczyńska , Associate professor, Dean's Representative for Quality of Education , Faculty of Veterinary Medicine

III. Members

Faculty of Veterinary Medicine

1. Prof. dr hab. Roman Zabielski, Associate Dean for Foreign Studies
2. Prof . dr hab. Tomasz Motyl , Head of the Department of Physiology
3. Prof. dr hab. Peter Szeleszczuk , Head of the Department of Pathology and Laboratory Diagnostics
4. Prof . dr hab. Roman Lechowski , Head of Department of Medicine Small Animal Clinic
5. Prof. dr hab. Zdzisław Gajewski , Director of the Department of Large Animal Diseases Clinic
6. Assoc. prof. Jarosław Kaba , Laboratory of Veterinary Epidemiology and Economics ,

Representatives of the Veterinary Chamber

7. Dr Jacek Lukaszewicz - President of the National Veterinary Chamber
Tel: 22 628 93 35 or 609 483 058 A. Friends 1 00-950 Warszawa
8. Dr hab. Krzysztof Anusz , Associate professor, Faculty of Veterinary Medicine, President of the local Warsaw Veterinary Chamber of Medical

Representatives of the State Administration

9. Dr. Jan Prandota - Director of the Department of Veterinary and Food Safety , Ministry of Agriculture and Rural Development

Representatives of Employers

10. Dr Andrzej Kruszewicz - Director of ZOO in Warsaw, ul. Ratuszowa str 1/3 , 03-461 Warsaw
11. Dr. Ing. Andrew Mandecki - director Stud Farm New Jankowice, Ltd. , Nowe Jankowice 17 , 86-320 Łasin
12. MSc. Marian Pankowski – President of the Agriculture and Breeding Enterprise Gałopol Ltd. , Gałowo near Poznan, Wierzbowa Str. 10 , 64-500 Szamotuły

Representatives of Practitioners of Free Practice and Veterinary Inspection

13. Stanislaw Bednarski, DVM - large animals, Wiśniowa str 204-757 Warsaw
14. Jacek Potter, DVM - small animals, Ophthalmology Veterinary Clinic, Grupy AK "Północ" Str. 10, 00-713 Warszawa
15. Dr Antoni Gibowicz – Meat Processing Plant " Sokolow SA " Enterprise, Quality Manager Łomżyńska Str 1 , 18-400 Lomża
16. Paweł Kowalczyk, DVM - small animals, 01-495 Warsaw, Powstańców Śląskich Str. 101
17. Dr Tomasz Kruszyński – poultry, Animal Pharma "Pomorze" Kwiatkowskiego Str. 15/1 80-209 Gdańsk Osowa
18. Robert Poplawski, DVM - large animals , Łowicz , Starościńska Str. 5b
19. Marek Wysocki, DVM - large animals, 18-218 Sokoły, Żytnia Str. 1

Representatives of students

20. Anna Iwankowska - President of the Student Government, Faculty of Veterinary Medicine

ANNEX 11

KNOWLEDGE, SKILLS AND COMPETENCES required by the Ministry of Science and Higher Education Act from the graduates of the Faculty of Veterinary Medicine

KNOWLEDGE	
BASIC SCIENCES	
WW_NP1	knows the correct structure and describes the animal organism: cells, tissues , organs and systems
WW_NP2	knows the structure, describes and explains the function of each animal body systems (respiratory, digestive, circulatory, excretory , nervous movement, reproductive, endocrine, immune, and skin)
WW_NP3	describes and interprets the development of organs and the whole organism in relation to an adult
WW_NP4	describes and explains the metabolic processes at the molecular , cellular, organ and systemic levels
WW_NP5	describes and explains the phenomenon of homeostasis , neurohormonal regulation of reproduction, aging and death
WW_NP6	describes, explains and interprets the principles and mechanisms underlying health of the animals, the emergence of diseases and their treatment - from the level of the cell, the organ, individual animal, herd to the level of the entire population
WW_NP7	knows and interprets the pathophysiological changes in the organs and systems and the biological mechanisms (including immunological and pharmacological) allowing recovery
WW_NP8	identifies and describes the biology of infectious agents causing diseases transmitted between animals and antropozoonoses , including the mechanisms of transmission of the disease and the organism's defense mechanisms ,
WW_NP9	defines and describes the principles and processes of inheritance, recognizes genetic disorders and knows the basics of genetic engineering
WW_NP10	defines and describes the mechanisms of action of specific classes of drugs , their fate in the organism and interactions ,
WW_NP11	uses antibiotics
WW_NP12	prescribes drugs
WW_NP13	knows and uses Polish and Latin medical terminology
WW_NP14	speaks a foreign language to the extent that allows communication with experts in the field of veterinary medicine and related fields and reads veterinary texts in a foreign language
CLINICAL SCIENCE	
W_NK1	describes, explains and interprets disturbances at the cellular, tissue, organ, and organism during the course of the disease
W_NK2	describes, explains and interprets mechanisms of organ and systemic pathology
W_NK3	describes and interprets causes and symptoms of the disease, describes and interprets pathological changes, applies fundamental rulesof treatment and prevention of diseases

W_NK4	implements diagnostic and therapeutic procedures (including differential diagnosis)
W_NK5	carries out a clinical examination of the patient and monitors the health of animals in large scale breeding units
W_NK6	applies the appropriate course of action in case of notifiable diseases
W_NK7	collects, analyzes and properly interprets clinical data and laboratory test results
W_NK8	identifies and interprets the relevant provisions of the law, knows the rules of judicial decisions and draws up opinions for the courts, state administrative institutions, local authorities and professional organizations
W_NK9	knows the rules of functioning of the state veterinary service, also in terms of public health protection

ANIMAL PRODUCTION	
W_PZ1	describes breed within the species of animals and explains the principles of farming and animal husbandry
W_PZ2	describes the principles of the selection of animals for mating; breeding methods and selection of animals
W_PZ3	describes the principles of animal nutrition (taking into account species differences), collates and analyzes feed rations
W_PZ4	describes and assesses the conditions for ensuring animal welfare
W_PZ5	describes and interprets the principles of production economics
W_PZ6	describes the conditions appropriate to develop and disposal of by-products and waste associated with livestock production

FOOD HYGIENE	
W_HZ1	describes and interprets the rules for the protection of consumer health through proper supervision of the production of foodstuffs of animal origin
W_HZ2	describes, interprets and evaluates the conditions of hygiene and technology of production and food security, and uses the relevant legislation governing veterinary inspection
W_HZ3	carries out a pre-and post-slaughter inspection of animals
W_HZ4	describes and implements procedures related to HACCP (Hazard Analysis and Critical Control Points) - System of Hazard Analysis and Critical Control Points

SKILLS	
GENERAL SKILLS	
U_OUZ1	effectively communicates with clients, other veterinarians and administrative staff and supervision authorities, central and local government
U_OUZ2	demonstrates the ability to listen and to respond in an understandable manner, appropriate to the situation
U_OUZ3	draws up a clear case reports and keeps records in accordance with the applicable rules comprehensible to the animal's owner and readable for other doctors
U_OUZ4	demonstrates the ability to work in a multidisciplinary team

U_OUZ5	correctly interprets the responsibility of a veterinarian in relation to the animal and its owner and in relation to society and the environment
U_OUZ6	assess the economic and social conditions in which the veterinarian profession
U_OUZ7	is aware of the need to maximize the use of professional skills in order to improve the quality of veterinary care, animal welfare and public health
U_OUZ8	has the ability to organize and conduct of veterinary practice, is aware of their own and the employer's knowledge of and compliance with labor laws and safety rules and precautions
U_OUZ9	can make the calculation of fees and invoices, and is aware of the importance of proper keeping of financial and medical records
U_OUZ10	uses computer systems and networks for effective communication, gathering, processing, transmission and analysis of information
U_OUZ11	is able to act in accordance with the applicable standards and ethical principles
U_OUZ12	demonstrates understanding of the need and necessity of lifelong learning for continuing professional development
U_OUZ13	can adjust your job to the changing situation on the labor market
U_OUZ14	is aware of his own limitations and can benefit from the advice and assistance of specialized institutions or persons in solving difficult problems
U_OUZ15	knows Polish and Latin medical nomenclature
U_OUZ16	is able to communicate and read in a foreign language

PRACTICAL SKILLS	
U_PUZ1	conducts veterinary interviews in order to obtain precise information about the individual animal or group of animals and their environment or their habitat
U_PUZ2	safely and humanely acts with animals and instructs others in this field
U_PUZ3	performs a full clinical examination of the animal
U_PUZ4	gives first aid to all species of animals in the case of bleeding, wounds, respiratory, eye or ear injuries, internal injuries, cardiac arrest, loss of consciousness, cachexia, burns, tissue damage
U_PUZ5	assess the nutritional status of the animal proper and provide advice in this area
U_PUZ6	collects, protects and knows the rules of transportation of samples and knows standard laboratory tests, and properly analyzes and interprets laboratory results
U_PUZ7	uses diagnostic equipment, including radiographic, ultrasound, and others, in accordance with its intended use and safety precautions
U_PUZ8	implements appropriate procedures in the case of the notifiable disease
U_PUZ9	collects and uses information about certified medicines
U_PUZ10	prescribes and uses drugs and medical materials in accordance with applicable regulations, including the safe storage and disposal
U_PUZ11	uses a secure method of sedation, general and local anesthesia assessment and alleviation of pain
U_PUZ12	selects and applies appropriate treatment
U_PUZ13	implements the principles of aseptic and antiseptic surgery, and applies appropriate equipment and methods of sterilization

U_PUZ14	assess the need for euthanasia, properly informs the owner of the animal and performs euthanasia according to the rules of professional ethics, properly handles the corpse
U_PUZ15	performs an autopsy along with the report, takes samples and protects them for transport,
U_PUZ16	performs pre-and post-slaughter examination and assess the quality of products of animal origin
U_PUZ17	documents and uses the collected information related to health and welfare, and in some cases the productivity of the herd
U_PUZ18	develops and introduces prevention programs specific to each animal species
U_PUZ19	evaluates and implements recommendations to minimize the risk of contamination, cross contamination and accumulation of pathogens in veterinary facilities and the environment

PERSONAL COMPETENCES	
K_KP1	has a responsibility for the decisions concerning humans and animals
K_KP2	follows the rules of ethical code
K_KP3	shows tolerance for attitudes and behaviors arising from different social and cultural conditions
K_KP4	has the ability to resolve conflicts and flexibility in reactions to social changes
K_KP5	can critically evaluate their own and others' actions and improve the proposed solutions
K_KP6	has a habit of continuing improvement of the knowledge and skills
K_KP7	is aware of his own limitations
K_KP8	puts the good of the patient in the first place
K_KP9	can work with other professionals in the field of public health protection
K_KP10	has the ability to function in an environment of uncertainty and stress
K_KP11	is able to organize the team work
K_KP12	is aware of the need to engage in activities of professional organizations
K_KP13	is aware of the consequences of his decisions, especially those that interfere with the natural environment
K_KP14	knows the legal basis and the principles of protection of intellectual property
Other 1	has knowledge necessary to continuing education of education in terms of subjects sequence
Other 2	Another knowledge and skills