FACULTY OF VETERINARY MEDICINE

DISSERTATION – JUNE 2026

TOPICS AND REFERENCES

FUNDAMENTAL SUBJECTS – WRITTEN PART

I. ANATOMY

TOPICS

1. Lymph System: Topography, afferent and efferent vessels of the lymph nodes of the head, neck, limbs (thoracic and pelvic) and thoracal and abdominal viscera.

2. Thoracic and abdominal viscera in animals: Morphology of the thoracic and abdominal viscera in domestic animals; differentiation criteria; projection areas of the viscera on the walls of the thorax and abdomen; vascular-nervous structures and their distribution in the organs.

3. Hypogastric region: The inguinal region and testicular pouches

4. Regions of the thoracic and pelvic autopodium in horses and cattle

5. Circulatory System. Heart and Arterial system

REFERENCES

1. Dyce, M. K., Sack O.W., Wensing G.J.C., Textbook of Veterinary Anatomy. 3rd Ed. Sanders 2002 SUA.

2. König, H.E.& Liebich, H.G. (2004) Veterinary Anatomy of Domestic Mammals, Textbook and Colour Atlas, ISBN 3-7945-2101-3

3. Spataru, M.C. (2019) Veterinary Anatomy, Splanchnology of domestic animals, Ed. "ion Ionescu de la Brad" din Iași, ISBN 978-973-147-349-9

*Course support – Moodle

II. PATHOPHYSIOLOGY

TOPICS

1. Shock pathophysiology
2. Inflammation pathophysiology
3. Thermal homeostasis pathophysiology
4. Carbohydrates pathophysiology
5. Hydro-electrolytical and acid-base balance pathophysiology

REFERENCES

1. R.N. Malancus - Introduction To Pathophysiology – General Pathophysiology, Ed. Ion Ionescu de la Brad, 2021

2. R.N. Malancus – lecture notes

III. PHARMACOLOGY

TOPICS

1. Autonomic nervous system pharmacology: parasympatholytic drugs and sympathomimetic agents
2. Central nervous system depressant agents
3. Pharmacotherapy of the urinary system: diuretics
4. Cardiovascular pharmacology and basic principles of fluid therapy
5. Antimicrobial pharmacology: antifungal agents, antibiotics, and their use in veterinary medicine

REFERENCES

1. Valentin Nastasa – Pharmacology – Course delivered according to the official syllabus

2. Veterinary Pharmacology & Therapeutics, Jim E. Riviere, Mark G. Papich, 10th Edition; Blackwell Publishing, 2018

3. Veterinary drug handbook. D.C. Plumb, Ed. Blackwell publishing, 6 edition, 2016

IV. ANIMAL WELFARE AND PROTECTION

TOPICS

1. Basic concepts related to animal welfare and protection
2. Assessment of the level of welfare of farm animals
3. Analysis of animal welfare during transport and in the slaughter process
4. Romanian National legislative framework on animal protection
5. Romanian National regulations related to the ownership of dangerous or aggressive dogs

REFERENCES

1. Updated Law 205 / 2004 on Animal Protection- translated

2. EMERGENCY ORDER no. 55 of April 30, 2002 (republished) - regarding the regime for keeping dangerous or aggressive dogs- translated

3. COUNCIL DIRECTIVE 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX: 31998L0058)

*Ailincăi Luminița-Iuliana (2026)- Animal Welfare and Protection (lectures notes)

V. EPIDEMIOLOGY

TOPICS

1. Descriptive epidemiology
2. Analytical epidemiology
3. Experimental (interventional) epidemiology
4. Applied epidemiology
5. Spatial epidemiology

REFERENCES

1. World Organisation for Animal Health (WOAH). Terrestrial Animal Health Code. WOAH, 2024. Available at: https://www.woah.org/en/what-we-do/standards/codes-and-manuals/terrestrial-code-online-access/[reference:0]

2. World Organisation for Animal Health (WOAH). Manual of Diagnostic Tests and Vaccines for Terrestrial Animals (Terrestrial Manual). 2024. Available at: https://www.woah.org/fileadmin/Home/eng/Health_standards/tahm/A_summry.htm

*Course notes – Moodle - Aniță Dragoș

VI. HYGIENE, TECHNOLOGY AND FOOD SAFETY

TOPICS

1. Good Hygiene Practices (GHP) in meat processing
2. Cleaning and sanitation in dairy plants
3. Milk general processes in dairy plant
4. Processing of meat at high temperatures
5. Hazard Analysis and Critical Control Points (HACCP)

REFERENCES

1. Bylund G. (2003) Dairy Processing Handbook. Tetra Pak Processing Systems AB.

2. Collins S.D., Huey R. (2014) Gracey's Meat Hygiene, 11th Ed. John Wiley & Sons, Ltd.

3. Feiner G. (2006) Meat products handbook - Practical sciences and technology. Woodhead Publishing Ltd.

*Floriștean V. (2024) Food Hygiene and Technology, Part One - Lecture Notes.

*Borș A. (2024) Food Hygiene and Technology, Part Two - Lecture Notes.

SPECIALIZED SUBJECTS – PRACTICAL PART

SMALL ANIMAL CLINIC

REFERENCES

1. Anton Alina, Solcan Gh., 2019, Animal Internal Medicine. Digestive System Diseases Editura Ion Ionescu de la Brad, Iași

2. Gh. Solcan, I.S. Beșchea Chiriac, Alina Anton, 2021, Veterinary Toxicology- Clinical Principles, Ed. Ion Ionescu de la Brad, Iași

3. Musteață M., 2023, Small Animal Neurology, Ed. Ion Ionescu de la Brad, Iași

4. Hritcu L.D, 2025, Nutritional pathology of domestic animals, Ed. Ion Ionescu de la Brad, Iași

5. Boghian V., Bercea Cazacu D.N., 2025, Veterinary Therapeutics and Emergency Medicine, Ed. Ion Ionescu de la Brad, Iași

6. Nelson, R., Couto, G.-2016, Small Animal Internal Medicine- 4th edition, Academic Press

7. Florentina DARABAN - Bacterial infectious diseases of the animals. Editura Ion Ionescu de la Brad, 2024. ISBN 978-973-147-549-3, 499 pag.

8. Infectious diseases, preventive medicine and clinical lectures by species V-year, 1st and 2nd semester power point presentations.

9. Burtan L., 2019 - Veterinary surgical propedeutics, Ed. Tehnopress, Iași

10. Theresa Welch Fossum, 2019 - Small Animal Surgery, Ed. Elsevier

11. M.V.M.: The Merck veterinary manual. Merial Ltd., New York, 2018

12. Radostis, O. M.; Blood, D. C.; Gay, J., Veterinary Medicine Bailliere Tindall, New York, 2000

13. OIE - Manual of Diagnostic Tests and Vaccines for Terrestrial Animals. https://www.oie.int/en/produit/manual-of-diagnostic-tests-and-vaccines-for-terrestrial-animals2018

14. Bowman, D. Dwight. 2014 –Georgis` Parasitology for Veterinarians, 10th ed., Elsevier Saunders ISBN: 978-1-4557-4006-2.

15. Deplazes, P., Eckert, J., Mathis, A., Georg von Samson-Himmelstjerna, Zahner H. 2016 – Parasitology in Veterinary Medicine. Publisher :Wageningen Academic Publishers, Netherlands, Record Number:20183101920, ISBN :9789086862740

16. Loker S.Eric, Hofkin V. Bruce. 2015 - Parasitology: a conceptual approach, Garland Science, Taylor & Francis Group, LLC, New York and London ISBN 978-0-8153-4473

NECROPSY DIAGNOSIS

REFERENCES

1. M.V.M. - The Merck veterinary manual. Merial Ltd., New York (on line version)

2. Lazăr Mircea, Ozana Hrițcu, Lazăr Roxana (2019) - Veterinary necropsy. Ion Ionescu de la Brad Publishing, Iasi, ISBN 978-973-147-332-1

3. Marcelo De las Heras Guillamon, Jose Antonio Garcia de Jalon (2002) – A guide to necropsy diagnosis in swine pathology. Elanco Animal Health, USA

RUMINANT CLINIC

REFERENCES

1. Anton Alina, Solcan Gh., 2019, Animal Internal Medicine. Digestive System Diseases Editura Ion Ionescu de la Brad, Iași

2. Gh. Solcan, I.S. Beșchea Chiriac, Alina Anton, 2021, Veterinary Toxicology- Clinical Principles, Ed. Ion Ionescu de la Brad, Iași

3. Anton Alina, 2023, Approaches to management and care of the neonatal ruminant, Ed. Ion Ionescu de la Brad, Iași

4. Hritcu L.D, 2025, Nutritional pathology of domestic animals, Ed. Ion Ionescu de la Brad, Iași

5. Boghian V., Bercea Cazacu D.N., 2025, Veterinary Therapeutics and Emergency Medicine, Ed. Ion Ionescu de la Brad, Iași

6. Constable P.D., Hinchcliff K.W., Done S.H., Grunberg W., 2017, Veterinary Medicine. A Textbook of Diseases of Cattle, Horses, Sheep, Pigs, and Goats, Ed. 11, Vol I, Elsevier, Missouri

7. Florentina DARABAN - Bacterial infectious diseases of the animals. Editura Ion Ionescu de la Brad, 2024. ISBN 978-973-147-549-3, 499 pag.

8. Infectious diseases, preventive medicine and clinical lectures by species V-year, 1st and 2nd semester power point presentations.

9. Hopper R.M (2015) - Bovine Reproduction, Edited by Hopper R.M., p. 456, 1st edition,2015 by John Wiley & Sons, Inc. ISBN 978-1-118-47083-1

10. Ciornei S. 2021 - Reproductive biotehnologies, practical guide, Editura "Ion Ionescu dela Brad", ISBN 978-973-147-435-9, in engleza Pg 250 B5

11. Burtan L., 2019 - Veterinary surgical propedeutics, Ed. Tehnopress, Iași,

12. Dean A. Hendrickson, A.N. Baird, 2013 - Turner and McIlwraith's Techniques in Large Animal Surgery, Ed. Wiley-Blackwell

13. M.V.M.: The Merck veterinary manual. Merial Ltd., New York, 2018

14. Radostis, O. M.; Blood, D. C.; Gay, J., Veterinary Medicine Bailliere Tindall, New York, 2000

15. OIE - Manual of Diagnostic Tests and Vaccines for Terrestrial Animals. https://www.oie.int/en/produit/manual-of-diagnostic-tests-and-vaccines-for-terrestrial-animals2018

16. Bowman, D. Dwight. 2014 –Georgis` Parasitology for Veterinarians, 10th ed., Elsevier Saunders ISBN: 978-1-4557-4006-2.

17. Deplazes, P., Eckert, J., Mathis, A., Georg von Samson-Himmelstjerna, Zahner H. 2016 – Parasitology in Veterinary Medicine. Publisher :Wageningen Academic Publishers, Netherlands, Record Number:20183101920, ISBN :9789086862740

18. Loker S.Eric, Hofkin V. Bruce. 2015 - Parasitology: a conceptual approach, Garland Science, Taylor & Francis Group, LLC, New York and London ISBN 978-0-8153-4473

EQUINE CLINIC

REFERENCES

1. Anton Alina, Solcan Gh., 2019, Animal Internal Medicine. Digestive System Diseases Editura Ion Ionescu de la Brad, Iași

2. Gh. Solcan, I.S. Beșchea Chiriac, Alina Anton, 2021, Veterinary Toxicology- Clinical Principles, Ed. Ion Ionescu de la Brad, Iași

3. Hritcu L.D, 2025, Nutritional pathology of domestic animals, Ed. Ion Ionescu de la Brad, Iași

4. Boghian V., Bercea Cazacu D.N., 2025, Veterinary Therapeutics and Emergency Medicine, Ed. Ion Ionescu de la Brad, Iași

5. Constable P.D., Hinchcliff K.W., Done S.H., Grunberg W., 2017, Veterinary Medicine. A Textbook of Diseases of Cattle, Horses, Sheep, Pigs, and Goats, Ed. 11, Vol I, Elsevier, Missouri

6. Florentina DARABAN - Bacterial infectious diseases of the animals. Editura Ion Ionescu de la Brad, 2024. ISBN 978-973-147-549-3, 499 pag.

7. Infectious diseases, preventive medicine and clinical lectures by species V-year, 1st and 2nd semester power point presentations.

8. Burtan L., 2019 - Veterinary surgical propedeutics, Ed. Tehnopress, Iași,

9. Dean A. Hendrickson, A.N. Baird, 2013 - Turner and McIlwraith's Techniques in Large Animal Surgery, Ed. Wiley-Blackwell

10. M.V.M.: The Merck veterinary manual. Merial Ltd., New York, 2018

11. Radostis, O. M.; Blood, D. C.; Gay, J., Veterinary Medicine Bailliere Tindall, New York, 2000

12. OIE - Manual of Diagnostic Tests and Vaccines for Terrestrial Animals. https://www.oie.int/en/produit/manual-of-diagnostic-tests-and-vaccines-for-terrestrial-animals2018

13. Bowman, D. Dwight. 2014 –Georgis` Parasitology for Veterinarians, 10th ed., Elsevier Saunders ISBN: 978-1-4557-4006-2.

14. Deplazes, P., Eckert, J., Mathis, A., Georg von Samson-Himmelstjerna, Zahner H. 2016 – Parasitology in Veterinary Medicine. Publisher :Wageningen Academic Publishers, Netherlands, Record Number:20183101920, ISBN :9789086862740

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SWINE, POULTRY AND LEPORIDAE CLINIC

REFERENCES

1. Anton Alina, Solcan Gh., 2019, Animal Internal Medicine. Digestive System Diseases Editura Ion Ionescu de la Brad, Iași

2. Gh. Solcan, I.S. Beșchea Chiriac, Alina Anton, 2021, Veterinary Toxicology- Clinical Principles, Ed. Ion Ionescu de la Brad, Iași

3. Hritcu L.D, 2025, Nutritional pathology of domestic animals, Ed. Ion Ionescu de la Brad, Iași

4. Boghian V., Bercea Cazacu D.N., 2025, Veterinary Therapeutics and Emergency Medicine, Ed. Ion Ionescu de la Brad, Iași

5. Constable P.D., Hinchcliff K.W., Done S.H., Grunberg W., 2017, Veterinary Medicine. A Textbook of Diseases of Cattle, Horses, Sheep, Pigs, and Goats, Ed. 11, Vol I, Elsevier, Missouri

6. Clinical lectures – swine, poultry and rabbits - power point presentations, VI-year, first semester (Lecturer dr. Anca Dascalu)

7. Florentina DARABAN - Bacterial infectious diseases of the animals. Editura Ion Ionescu de la Brad, 2024. ISBN 978-973-147-549-3, 499 pag.

8. Infectious diseases, preventive medicine and clinical lectures by species V-year, 1st and 2nd semester power point presentations.

9. Burtan L., 2019 - Veterinary surgical propedeutics, Ed. Tehnopress, Iași

10. M.V.M.: The Merck veterinary manual. Merial Ltd., New York, 2018

11. Radostis, O. M.; Blood, D. C.; Gay, J., Veterinary Medicine Bailliere Tindall, New York, 2000

12. OIE - Manual of Diagnostic Tests and Vaccines for Terrestrial Animals. https://www.oie.int/en/produit/manual-of-diagnostic-tests-and-vaccines-for-terrestrial-animals2018

13. Bowman, D. Dwight. 2014 –Georgis` Parasitology for Veterinarians, 10th ed., Elsevier Saunders ISBN: 978-1-4557-4006-2.

14. Deplazes, P., Eckert, J., Mathis, A., Georg von Samson-Himmelstjerna, Zahner H. 2016 – Parasitology in Veterinary Medicine. Publisher :Wageningen Academic Publishers, Netherlands, Record Number:20183101920, ISBN :9789086862740

15. Loker S.Eric, Hofkin V. Bruce. 2015 - Parasitology: a conceptual approach, Garland Science, Taylor & Francis Group, LLC, New York and London ISBN 978-0-8153-4473

LABORATORY MEDICINE

REFERENCES

1. Manual of Diagnostic Tests and Vaccines for Terrestrial Animals. World Organisation for Animal Health (https://www.woah.org/en/what-we-do/standards/codes-and-manuals/)

*Lecture notes for Hematology, Biochemistry, Cytology, Immunology and immunopathology