



**UNIVERSIDADE FEDERAL RURAL DE PERNAMBUCO**  
**PRÓ-REITORIA DE PESQUISA E PÓS-GRADUAÇÃO**  
**PROGRAMA DE PÓS-GRADUAÇÃO EM MEDICINA VETERINÁRIA**

**SCHEDULE OF CLASS**

**IDENTIFICATION**

**DISCIPLINA:** Diagnostic and pathology of digestive diseases of ruminants

**CÓDIGO:** PVET-7367

**NÍVEL:** Mestrado/Doutorado

**OBRIGATÓRIA:** Não

**RESPONSÁVEL:** Prof. Dr. Francisco Uzal / Prof. Dr. Franklin Riet Correa / Prof. Dr. Fábio Mendonça / Prof. Dr. Francisco Souza

**DEPARTAMENTO:**

**ÁREA:**

**NÚMERO DE CRÉDITOS:** 1

**CARGA HORÁRIA:** TEÓRICAS: 15

**PRÁTICAS:** -

**TOTAL:** 15h

**OBJECTIVE**

Identify the gross, microscopic lesions and determine the diagnostic tests of the main diseases affecting the digestive system of ruminants: abomasal bloat, inflammation, and perforation, bovine viral diarrhea, enterotoxigenic *Escherichia coli*, bovine coronavirus, clostridial enteritis, cryptosporidiosis, rotavirus, salmonellosis and poisonous by plants.

**RESUME**

Approach of specific topics of interest in General Pathology and Especial Veterinary Pathology of digestive diseases of ruminants. Directed studies and discussion of clinical cases applied to the areas of Pathology. Classes taught by the teachers of the discipline, by invited professors and by specialists in the areas of interest of the discipline. Directed studies and works done by the students according to the topics of greater interest of the group. Presentation of seminars by students, with general and specific topics related to pathology. Practical classes: laboratory tests according to the availability of samples (blood, cavity liquids, cerebrospinal fluid, synovial fluid); reading of slides, interpretation and discussion.

**EVALUATION**

Verification of learning through evaluative activities and written test. Discussion and presentation of scientific papers.

**SCHEDULE**

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Origem e história da biologia molecular; estrutura, organização e função dos ácidos nucléicos em seres procariotas, eucariotas e vírus; material e equipamentos para laboratório de biologia molecular; técnicas em biologia molecular (PCR-“polymerase chain reaction” qualitativa, quantitativa e variantes, hibridização *in situ*, Southern, Northern e Western blot”); vetores de clonagem e expressão; enzimas usadas nas técnicas de DNA recombinante (endonucleases de restrição, DNA polimerases, DNA ligases, quinases, fosfatases e nucleases); possibilidades de aplicação da PCR no diagnóstico de doenças infecciosas; noções básicas de bioinformática.

**METHODOLOGY**

The theoretical content will be taught in the Seminar Room of the PPGMV in classes of 4 hours duration. In addition, additional reading and discussion activities will be given to scientific articles related to the objectives of the course; presentation and discussion of a histopathology, specific tests to the research project of the student, lectures in the classroom, with use of data show; use of the internet, analysis and interpretation of clinical cases and scientific articles.

**REFERENCES**

- Cotran R.C., Kumar V., Robbins S.L. Robbins' Pathologic Basis of Disease.: 6th ed., W.B. Saunders Co., 1999. Oxford
- M.D. McGavin, W.W. Carlton and J.F. Zachary. Thomson's Special Veterinary Pathology. 3rd edition, Mosby Press, 2001.
- Slauson D.O., Cooper B.J. Mechanics of Disease A Textbook of Comparative General Pathology by Publisher: Mosby, Inc.; ISBN: 0323002285; 3rd edition (August 1, 2001)
- Summers B.A., Cummings J.F., De Lahunta A. Veterinary Neuropathology by Publisher: Mosby-Year Book; ISBN: 0801650631; (January 1995)
- Jubb K.V.F., Kennedy P.C., Palmer N. Pathology of Domestic Animals: 4th ed., Academic Press, Inc., 1993.
- Jones T.C., Hunt R.D. and King N.W. Veterinary Pathology.: 6th ed., Williams & Wilkins, 1997
- Meuten D.J. Tumors of Domestic Animals. (Editor). 4th Edition. Iowa State Press, Ames, 2002  
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**Journals:**

- Nature  
Science  
Virology  
Veterinary Pathology  
Journal of Veterinary Diagnostic Investigation

Supervisor: Prof. Dr. Fábio S. Mendonça