

## MESSAGE FROM THE VICE CHANCELLOR

I am pleased to write this message to mark the occasion of the commencement of the second cycle of the MVSc programmes of the Faculty of Veterinary Medicine and Animal Science that commenced in 2006.



Up until 2006, Faculty of Veterinary Medicine & Animal Science has only offered postgraduate study programmes by research and the postgraduate students are required to make full time commitment on their studies. However, this programme has offered only limited opportunities and has excluded many prospective postgraduate veterinary students, particularly practicing veterinarians; as such programme requires long-term commitment. Further, the training provides in-depth knowledge in a few selected fields and is limited only to few disciplines. Therefore, there has been a long-felt need to design and offer appropriate postgraduate training programmes, suitable for practicing veterinarians in wide spectrum of disciplines. Such programmes not only provide opportunities for practicing veterinarians to advance the professional careers but also would cater to manpower needs of the fast growing sector that require veterinarians with advanced training. Further, the country in is urgent need for expertise to cater to the emerging areas of importance in order to sustain the livestock and allied industries; and also to optimise human and animal welfare and well-being.

After several years of meticulous planning, the Faculty of Veterinary Medicine and Animal science has obtained the approval of the University of Peradeniya to offer Master of Veterinary Science degree in seven important fields namely, Diagnostic Veterinary Medicine (Veterinary Pathobiology), Veterinary Public Health, Poultry Health and Management, Animal Reproduction, Wildlife and Zoo animal Health and Management, Veterinary Epidemiology and Preventive Medicine.

The first cycle offered three programmes, namely MVSc in Veterinary Public Health, MVSc in Veterinary Pathobiology, and MVSc in Poultry Health & Management. I am very happy to note that the Faculty of Veterinary Medicine and Animal Science has now taken steps to offer another programme leading to MVSc in Animal Reproduction.

I hope the faculty will take steps over the next few years to offer the other three programmes and thus providing full complement of excellent programmes and opportunities to field veterinarians. This will enable the prospective candidates to acquire specialized knowledge and skills in their chosen fields to advance their professional careers. I strongly believe that the MVSc degree programme designed and offered by the Faculty of Veterinary Medicine and Animal Science would fulfil the expectations and aspirations of Sri Lankan veterinarians and would help to uplift the standard of the veterinary profession.

Professor Harischandra Abeygunawardena  
Vice chancellor  
University of Peradeniya  
18<sup>th</sup> July, 2008

## **A MESSAGE FROM THE DEAN OF THE FACULTY OF VETERINARY MEDICINE AND ANIMAL SCIENCE**

The veterinary profession in Sri Lanka is fast developing into one of excellence in the region and thus a significant requirement to maintain the momentum of progress is the availability of graduate study programmes. The Faculty of Veterinary Medicine and Animal Science of the University of Peradeniya, which offers the only basic degree for our future veterinarians undertook the task of fulfilling this requirement by initiating a state of the art Masters programmes, with specialization in most needed areas. This programme, which has been reviewed by internationally renowned experts, is now in its second cycle, with very successful outcomes. Thus, the Faculty of Veterinary Medicine and Animal Science will be commencing an additional module in Animal Reproduction to the Masters programme, thus expanding the base of specialization. With time, the Faculty hopes to expand this base further, to cater to the growing needs of the veterinary profession.



Science is not static, and new developments take place daily or even hourly. The multitude of research papers in internationally and regionally renowned journals highlights this phenomenon clearly, and our young Veterinarians need to be updated on these developments. The Bachelors degree offered by the Faculty of Veterinary Medicine and Animal Sciences provides a solid foundation to our future veterinarians and the standards maintained are in par with any internationally renowned school for veterinarians, However, currently the BVSc degree is of four years duration, and due to the broad nature of the veterinary training offered to meet the veterinary needs of a developing nation such as Sri Lanka, advanced studies need to be covered by postgraduate programmes such as the Masters degrees

offered by the Faculty. MVSc programme is the outcome of contributions made by the dedicated team at the Faculty for the young veterinarians working in different spheres of activity within Sri Lanka, regionally and even internationally.

As we look forward and move ahead, it is with great pleasure that the Faculty of Veterinary Medicine and Animal Science offers these programmes, to the veterinarians of Sri Lanka and even overseas. The programmes are well structured with the required blend of theory and practicals, with a research component incorporated in to the last two semesters.

As the Head of the Faculty of Veterinary Medicine and Animal Science, I am very pleased of the developments and strides made by the Faculty and by the reviews received on the program conducted to date. I have the utmost confidence that we at the Faculty will meet our obligations to the profession always and that the programmes offered will culminate in the successful advanced training of the young, dynamic and energetic veterinarians of Sri Lanka and the region.

Professor Preeni Abeynayake

Dean

Faculty of Veterinary Medicine and Animal Science.

18<sup>th</sup> July, 2008

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## **MVSC PROGRAMME BY COURSEWORK AND RESEARCH**

### **Course objectives**

The objectives of this programme are to enable veterinary graduate to acquire specialized knowledge and skills in selected areas of current importance. The identified fields are (a) Veterinary Diagnostic Medicine (Veterinary Pathobiology), (b) Veterinary Public Health, (c) Poultry Health and Management, (d) Veterinary Epidemiology and Preventive Medicine, (e) Wildlife and Zoo Animal Health and Management, (f) Aquatic Animal Health and Management, and (g) Animal Reproduction.

### **Programme Duration**

Each of the programmes will be of two years duration. The first year consisting of two semesters will be devoted to coursework during Fridays and Saturdays of the week. The first semester will be of 22 weeks duration with a mid semester break of two weeks. The second semester will be of 14 weeks duration. The second year will be devoted to full time research in a selected area relevant to the programme chosen by candidate.

### **Programme Structure**

Each programme consists of two components, namely (a) course work and (b) thesis research. Course work is composed of a number of courses, the contents of which will be presented in the form of modules, covering all areas relevant to the programme of study. These courses will provide advanced knowledge, both theoretical and practical, during the first year of the programme. Practical training will include field training and, where relevant, work placement within an organization related to the programme.

### **a) Course Work**

Each programme will comprise of three types of courses:

- i) *Foundation courses*: these must be taken by all candidates, and are designed so as to be relevant and beneficial, irrespective of the programme of study. Three courses will be conducted during the first semester and one course during the second semester.
- ii) *Compulsory Courses*: these are specific for each programme, and candidates must take two such courses during the first semester.
- iii) *Optional Courses*: in addition to the above courses, candidates must also take at least two optional courses, selected from among those that are relevant to their programme of study. These courses are offered during the second semester.

### **b) Thesis Research**

During the second year of the programme, each candidate will undertake a research project in a subject area chosen by him/her and submit a dissertation. The subject chosen must be relevant to the programme that he/she is following and be approved by the Course Coordinator. This component includes proposal preparation, defence of the thesis proposal, conducting the field and/or laboratory experiments/trials, data collection and tabulation, statistical analysis and writing of the dissertation, followed by a *viva-voce* examination in front of a panel of examiners. The supervisor will provide guidance, laboratory facilities and required technical training.

## Eligibility for Admission

Prospective candidates must possess a degree in Veterinary Science of the University of Peradeniya or an equivalent degree, and be registered as a Veterinary Surgeon under the Veterinary Surgeons and Practitioners' Act of 1956. They may be required to sit an MVSc entry examination conducted by the Faculty of Veterinary Medicine and Animal Science, University of Peradeniya, if necessary. The number of candidates registered for any one programme offered during a cycle shall not exceed 7.

## GENERAL INFORMATION

### FEES

|                           | Year 1           | Year 2           |
|---------------------------|------------------|------------------|
| Registration fees         | 5,000.00         | 5,000.00         |
| Examination fees          | 3,000.00         | 3,000.00         |
| Library and internet fees | 2,000.00         | 2,000.00         |
| Tuition/laboratory fees   | 75,000.00        | 75,000.00        |
| <b>Total</b>              | <b>85,000.00</b> | <b>85,000.00</b> |

Scholarships or other awards are not available from the University. Candidates applying for these programmes must be either self-funded or sponsored by their employers or any other body.

## INQUIRIES

- 1. Dr. H.B.S. Ariyaratne**  
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## **APPLICATION PROCEDURE**

Application forms and this Prospectus can be obtained from the Director, VPEU or the Office of the Dean, FVMAS, University of Peradeniya, upon payment of Rs. 250.00.

Duly completed application forms should reach the Director, VPEU, before 31<sup>st</sup> December 2007.

## **Method of Evaluation**

1. Upon completion of each course, an evaluation will be made. This will take the form of a written examination, and where appropriate a practical examination or assignment.
2. Candidates will be permitted to proceed to the second year only after obtaining the necessary grades in the courses offered.
3. At the end of the first year, candidates will be required to make a presentation of the research proposal before a panel. A satisfactory grade will have to be obtained at this presentation before proceeding to the second year programme.
4. Course examinations will be held during the vacations and the results will be released before the end of the vacation (i.e., for the first semester courses, during the vacation between semesters and for the second semester courses, during the vacation following that semester).
5. Candidates, who fail to acquire the required standard in the courses and in the presentation, will have to repeat the specific course or presentation. No more than two repeat examinations will be permitted.
6. Candidates will be required to submit their thesis at the end of the fourth semester, prior to a date stipulated by the respective programme coordinator. At the end of the second year there will be a viva-voce examination
7. The Grade Point Average (GPA) system of grading will be adopted in evaluating the performance of course examinations.
8. A credit-weighted average of grade point average (GPA) is calculated. Candidates are required to score a minimum of 2

points for a pass in individual courses, and a GPA of 3 or above in all courses taken together.

### MVSc Programme 2008-2009 -Course Summary

|  | Course code | Course title   | Credits | Semester & duration | Option     |
|--|-------------|--|---------|---------------------|------------|
| <b>Foundation courses</b>              |             |  |         |                     |            |
| 1                                      | CC 5101     | Basic and epidemiological statistics                       | 4       | 01/60 hrs           | Compulsory |
| 2                                      | CC 5102     | Project planning, Scientific writing and Vet. legislations | 2       | 01/30 hrs           | Compulsory |
| 3                                      | VPB 5101    | General Pathobiology                                       | 3       | 01/45 hrs           | Compulsory |
| 4                                      | CC 5203     | Economics and business management                          | 3       | 02/45 hrs           | Compulsory |
| <b>Diagnostic Veterinary Medicine</b>  |             |  |         |                     |            |
| 1                                      | VBP 5102    | Diagnostic veterinary Pathobiology I                       | 3       | 01/45 hrs           | Compulsory |
| 2                                      | VBP 5103    | Diagnostic veterinary Pathobiology II                      | 3       | 01/45 hrs           | Compulsory |
| 3                                      | VBP 5207    | Poultry Pathology  | 3       | 02/45 hrs           | Optional   |
| 4                                      | VBP 5208    | Mammalian Pathology  | 3       | 02/45 hrs           | Optional   |
| <b>Veterinary Public Health</b>        |             |  |         |                     |            |
| 1                                      | VPHP 5104   | Control of zoonotic diseases                               | 3       | 01/45 hrs           | Compulsory |
| 2                                      | VPHP 5105   | Legislative enactment and environmental protection         | 3       | 01/45 hrs           | Compulsory |
| 3                                      | VPHP 5212   | Food hygiene & safety                                      | 3       | 02/45 hrs           | Optional   |
| 5                                      | VPHP 5208   | Poultry processing technology                              | 3       | 02/45 hrs           | Optional   |
| <b>Poultry Health &amp; Management</b> |             |  |         |                     |            |
| 1                                      | FAPH 5103   | Poultry flock health                                       | 3       | 01/45 hrs           | Compulsory |
| 2                                      | FAPH 5104   | Advanced hatchery hygiene & management                     | 3       | 01/45 hrs           | Compulsory |
| 3                                      | VPB 5207    | Poultry Pathology  | 3       | 02/45 hrs           | Optional   |
| 4                                      | FAPH 5211   | Caged and aviary bird Management & Health                  | 3       | 02/45 hrs           | Optional   |
| 5                                      | FAPH 5212   | Advanced poultry medicine & Epidemiology                   | 3       | 02/45 hrs           | Optional   |
| <b>Animal Reproduction</b>             |             |  |         |                     |            |
| 1                                      | FAPH 5101   | Therigenology of farm animals                              | 4       | 01/60 hrs           | Compulsory |
| 2                                      | FAPH 5104   | Advance Clinical Veterinary Reproduction I                 | 2       | 01/30 hrs           | Compulsory |
| 3                                      | FAPH 5211   | Reproduction of companion and wild animals                 | 4       | 02/60 hrs           | Compulsory |
| 4                                      | FAPH 5212   | Advance Clinical Veterinary Reproduction II                | 2       | 02/30 hrs           | Compulsory |

## **MVSC PROGRAMMES SCHEDULED FOR THE 2008-2009 CYCLE**

During the second cycle (2008-2009), the MVSc programme will offer training in four areas of specialization, namely Diagnostic Veterinary Medicine (Veterinary Pathobiology), Veterinary Public Health, Poultry Health & Management and Animal Reproduction.

### **1. *MVSc in Diagnostic Veterinary Medicine (Veterinary Pathobiology)***

This programme is designed for veterinarians engaged in disease diagnosis and investigation work and for recent veterinary graduates planning to pursue a career in diagnostic veterinary medicine. The course will provide advanced training in diagnostic pathology, microbiology, parasitology and immunology and introduce the candidates to advanced diagnostic technologies. Candidates who wish to specialize in farm animal health, companion animal medicine, aquatic animal health or wildlife health can follow the course work and select a research project involving the relevant sector.

#### **Course work (*During Semester I & II*)**

##### *Foundation courses*

- Basic and Epidemiological Statistics
- Project Planning, Scientific Writing and Veterinary Legislation
- General Pathobiology
- Economics and Business Management

##### *Compulsory courses*

- Diagnostic Veterinary Pathobiology I
- Diagnostic Veterinary Pathobiology II

*Optional courses* (at least two courses, selected from the following)

- Poultry Pathology
- Mammalian Pathology

**Research work** (*During Semester III & IV*)

Minimum of 12 months of research in the field of candidate's interest

**2. MVSc in Veterinary Public Health**

This programme is designed for veterinarians addressing public health and food safety issues relating to food of animal origin in the state or private sectors. Further, it will be valuable for veterinarians who are responsible for regulatory and quarantine work, engaged in controlling zoonotic diseases or employed in processing plants, and also for recent graduates who seek a career in public health and the food industry. This course will provide advanced training in controlling zoonotic diseases, implementing legislative enactments, food safety, dairy technology and poultry processing technology.

**Course work** (*During Semester I & II*)

*Foundation courses*

- Basic and Epidemiological Statistics
- Project Planning, Scientific Writing and Veterinary Legislation
- General Pathobiology
- Economics and Business Management

*Compulsory courses*

- Control of Zoonotic Diseases
- Legislative Enactments and Environmental Protection

*Optional courses* (at least two courses, selected from the following)

- Food hygiene and Safety
- Poultry Processing Technology

**Research work** (*During Semester III & IV*)

Minimum of 12 months of research in the field of candidate's interest

**3. *MVSc in Poultry Health and Management***

This programme is designed for veterinarians engaged in poultry health and management in public and private sectors and also for recent graduates who seek a career in the poultry industry. The course will provide in-depth training in poultry health and management including diagnosis and control of poultry diseases, breeding and nutrition management of breeder and commercial flocks, and hatchery management.

**Course work** (*During Semester I & II*)

*Foundation courses*

- Basic and Epidemiological Statistics
- Project Planning, Scientific Writing and Veterinary Legislation
- General Pathobiology
- Economics and Business Management

*Compulsory courses*

- Poultry Flock Health
- Advanced Hatchery Hygiene and Management

*Optional courses* (at least two courses, selected from the following)

- Poultry Pathology
- Poultry Processing Technology

**Research work** (*During Semester III & IV*)

Minimum of 12 months of research in the field of candidate's interest

**3. MVSc in Animal Reproduction**

This programme is designed for veterinarians involved in farm animal reproduction. The course focuses on imparting the students with current knowledge in theoretical aspects and practical skills in the reproductive management of farm, pet and wild animals. During the course, the students will work extensively with senior clinicians in the university and experts in the field in order to acquire hands-on experience in handling reproductive problems in animals. Further, the students will be trained to use modern reproductive biotechnologies in the improvement of productivity of farm animals.

**Course work** (*During Semester I & II*)

*Foundation courses*

- Basic and Epidemiological Statistics
- Project Planning, Scientific Writing and Veterinary Legislation
- General Pathobiology
- Economics and Business Management

*Compulsory courses*

- Theriogenology of Farm Animals
- Advanced Clinical Veterinary Reproduction

*Optional courses* (at least two courses, selected from the following)

- Reproduction of Companion Animals
- Reproduction of Wild and Zoo Animals

**Research work** (*During Semester III & IV*)

Minimum of 12 months of research in the field of candidate's interest

## **COURSE SYNOPSES**

### **FOUNDATION COURSES**

#### **CC 5101 Basic and Epidemiological Statistics**

*Sem. 01/60hr (L40:P40) 4 Credit Units*

This course will encompass principles, theories and applications of basic and epidemiological statistics, which will be required to pursue research for postgraduate training in all specialist programmes. A module in basic statistics will help the student in the designing of experiment and the analysis of data. A special focus will be made on epidemiological statistics. The student will also be introduced to the use of computer software packages in data analysis

#### **CC 5102 Project Planning, Scientific Writing and Veterinary Legislations**

*Sem. 01/30 hr (L20:P20) 2 Credit Units*

This short course will cover a range of areas in which veterinarians in senior managerial positions should be familiar with. It will firstly deal with planning of development programmes, their implementation monitoring and evaluation. It will also cover development of research proposals, including prioritization of research areas, and the different approaches to this exercise. Students will also be given instructions and assignments in scientific/technical writing, including making a presentation. One module will deal with common selected legislative enactments pertaining to the livestock and related industries.

**VPB 5101 General Pathobiology**

*Sem. 01/45 hr (L35:P20) 3 Credit Units*

This course will provide an updated foundation for the other courses and modules within and outside the Pathobiology programme. It will include a review of the structure and function of the cell, the general responses of host and the tissues to injury, a review of disease causing agents and the mechanisms adopted by these agents to cause disease in animals.

**CC 5203 Economics and Business Management**

*Sem. 02/45 hr (L45:P0) 3 Credit Units*

This course will cover three modules. The module on the basic economics will provide the students with the basic theory of economics (micro and macro economics). Microeconomics deals with economic theory of individual units (consumer, firm and single markets) and macroeconomics deals with economic aggregates (consumption, investment, inflation, trade, etc.). The module on business management will provide the students with an understanding of business in context verses approaches to understand business and types of businesses. This will also provide knowledge on identifying objectives, roles of multiple objectives, role of multiple stakeholders, developing on overall strategy, management of changes required by multiple stakeholders, organizational development and personal training and development. The module on organizational management will provide the students with basic concepts, theory and principles of organizational behaviour and management.

**COMPULSORY COURSES**

**COURSES COMPULSORY FOR DIAGNOSTIC VETERINARY MEDICINE (VETERINARY PATHOBIOLOGY)**

**VPB 5102 Diagnostic Veterinary Pathobiology I**

*Sem. 01/45 hr (L30:P30) 3 Credit Units*

This course will focus on diagnostic animal pathology with special reference to clinical and anatomic pathology. The course will provide instructions in laboratory procedures and interpretation of common tests used in haematology and clinical chemistry. The anatomic pathology course will include detailed instructions on post-mortem examination and interpretation of tissue changes from a diagnostic perspective. The didactic instructions will be heavily supported through laboratory demonstrations and 'hands-on' exercises.

**VPB 5103 Diagnostic Veterinary Pathobiology II**

*Sem. 01/45 hr (L30:P30) 3 Credit Units*

This course will focus on disease diagnosis with special reference to immunology, parasitology and microbiology. The course will provide instructions in laboratory procedures and interpretation of common tests used in immunology, parasitology and microbiology. The didactic instructions will be heavily supported through laboratory demonstrations and 'hands-on' exercises.

## **COURSES COMPULSORY FOR VETERINARY PUBLIC HEALTH**

### **VPHP 5104 Control of Zoonotic Diseases**

*Sem. 01/45 hr (L35:P20) 3 Credit Units*

This course provides the student with thorough background knowledge of some selected zoonotic diseases, with special emphasis on those prevalent in Sri Lanka. A considerable time in this course will be allocated to Rabies, covering such aspects as clinical disease, laboratory diagnosis, prevention and control strategies of rabies

### **VPHP 5105 Legislative enactments and Environmental protection**

*Sem. 01/45 hr (L35:P20) 3 Credit Units*

This course is designed to give the candidates a comprehensive knowledge of selected relevant legislation relating to livestock and local government, occupational health hazards and the impact of livestock industries on the environment including means of mitigating adverse impacts (A few selected legislation of interest to all students in all Masc. programmes are dealt within course CC5102)

## **COURSES COMPULSORY FOR POULTRY HEALTH AND MANAGEMENT**

### **FAPH 5103 Poultry Flock Health**

*Sem. 01/45 hr (L35:P20) 3 Credit Units*

This course is intended to impart sufficient knowledge and skills to veterinarians to equip him/her to develop and execute a flock health programme in any poultry establishment. It will provide know-how on the global and regional poultry health status. The course will also cover import and export of poultry including quarantine. It will also include modern poultry management, breeding and nutrition in relation to health, and also disease reporting and flock health monitoring.

### **FAPH 5104 Advanced Hatchery Hygiene and Management**

*Sem. 01/45hr (L35:P20) 3 Credit Units*

This course will equip a veterinarian in the management of a hatchery with a view to producing healthy day old chicks. It will deal with planning and establishment of hatcheries and routine management including selection and setting of hatching eggs, incubation and incubator management, handling of day old chicks and hygienic and bio-security measures to ensure healthy chicks. The course will specially benefit veterinarians attached to poultry breeding establishments.

## **COURSES COMPULSORY FOR ANIML REPRODUCTION**

### **FAPH 5101 - Theriogenology of Farm Animals**

*Sem. 01/60 hr (L50:P20); 4 credits*

The course will emphasize on the interactions and relationships between the genetic composition of farm animals and their environment which include management, nutrition and climate, through a consideration of the anatomical, physiological and endocrine factors that govern the normal reproductive health and influence the occurrence of important disorders and diseases that reduce fertility. It will also include the application of advanced reproductive biotechnologies for enhancing reproductive efficiency and genetic improvement.

### **FAPH 5102 - Advanced Clinical Veterinary Reproduction**

*Sem 01/30 hr (L0:P60): 2 credits*

This course is comprised of mainly practical training together with case studies, presentations and discussions. It is aimed at developing skills in investigation, diagnosis, treatment and management of sub-fertility and infertility in male and female farm animals for optimising reproductive efficiency. The candidates will work with the senior staff of the Department on a part-time basis (2-3 days per week) during this semester to acquire clinical skills through attendance in the routine activities of the Department, which include the indoor large animal hospital, the ambulatory clinic, pre-planned visits to large livestock farms and field infertility clinics in selected veterinary ranges. In addition, they will undertake directed studies and assignments during their routine work, and will make presentations on these for group discussions.

**OPTIONAL COURSES**

**COURSES OPTIONAL FOR DIAGNOSTIC VETERINARY  
MEDICINE (VETERINARY PATHOBIOLOGY)**

**VPB 5207 Poultry Pathology**

*Sem. 02/45 hr (L30:P30) 3 Credit Units*

This course will contain several modules, which will discuss the diseases of poultry affecting different age groups. The course will be heavily supported by necropsies, demonstrations of lesions, microscopic slides and audiovisuals, discussions of pathogenesis and morphological changes (macroscopic and microscopic) associated with diseases including differential diagnosis.

**VPB 5208 Mammalian Pathology**

*Sem. 02/45 hr (L30:P30) 3 Credit Units*

This course will deal with the aetiology, pathogenesis and morphological changes of diseases responsible for common clinical syndromes in veterinary practice. The instructions will be heavily supported by necropsies, histopathology, microscopic slides and audiovisuals and 'hands-on' exercises.

## **COURSES OPTIONAL FOR VETERINARY PUBLIC HEALTH**

### **VPHP 5212 Food Hygiene and safety**

*Sem. 02/45 hr (L30:P30) 3 Credit Units*

This course will comprehensively cover possible health hazards, hygiene and safety in relation to production of milk, meat, eggs and their products. A considerable time will be spent on processing technologies and quality assurance, including HACCP implementation.

### **FAPH 5208 Poultry Processing Technology**

*Sem. 02/45 hr (L30:P30) 3 Credit Units*

This course will specifically focus on processing of poultry from slaughter to the production of value added products. It will also deal with standards for poultry products, including the problem of chemical residues, and packaging and preservation for marketing. A considerable amount of time will be devoted to visit to processing centres.

## **COURSES OPTIONAL FOR POULTRY HEALTH AND MANAGEMENT**

### **VPB 5207 Poultry Pathology**

*Sem. 02/45 hr (L30:P30) 3 Credit Units*

This course will contain several modules, which will discuss the diseases of poultry affecting age groups. The course will be heavily supported by necropsies, demonstrations of lesions, microscopic slides and audiovisuals, discussions of

pathogenesis and morphological changes (macroscopic and microscopic) associated with diseases including differential diagnosis.

### **FAPH 5208 Poultry Processing Technology**

*Sem. 02/45 hr (L30:P30) 3 Credit Units*

This course will specifically focus on processing of poultry from slaughter to the production of value added products. It will also deal with standards for poultry products, including the problem of chemical residues, and packaging and preservation for marketing. A considerable amount of time will be devoted to visit to processing centres.

## **COURSES OPTIONAL FOR ANIMAL REPRODUCTION**

### **FAPH 5211– Reproduction of Companion and Wild Animals**

*Sem. 02/60 hr (L50:P20): 4 Credit Units*

This course will provide the student with a comprehensive knowledge in reproductive health and management of companion animals (mainly dogs and cats). It also will provide a comprehensive knowledge on the breeding and reproduction of wild animal species, with emphasis on mammals, but also including selected examples of fish, birds, reptiles and amphibians. The course will also update the students' knowledge on the management of wildlife populations through breeding and contraceptive strategies.

### **FAPH 5212- Advanced Clinical Reproduction II**

*Sem. 02/30 hr (L0:P60) 2 credit units*

This is an extension of the Advanced Clinical Reproduction course conducted during the 1<sup>st</sup> semester