

UNIVERSITY OF NIGERIA, NSUKKA
FACULTY OF VETERINARY MEDICINE
DEPARTMENT OF VETERINARY MEDICINE
POST GRADUATE PROGRAMMES

PHILOSOPHY

In keeping with the philosophy of University of Nigeria, the postgraduate programme of the Department of Veterinary Medicine emphasizes the production of graduates specialized and advanced in the aetiology, pathogenesis, clinical signs, diagnosis, prevention, treatment and control of infectious and non-infectious diseases of domestic, aquatic, laboratory and wide animals.

OBJECTIVES

The postgraduate programmes are carefully designed to comprehensively equip the students with both theoretical and practical knowledge required to function effectively and successfully as Veterinary physicians with strong clinical orientation, to effectively grapple with the challenges of modern clinical practice. The students are exposed to in-depth and current knowledge in the areas of equine medicine, ruminant medicine, porcine medicine, canine medicine, feline medicine and avian medicine.

SCOPE

The M.Sc degree programme shall be pursued in the mode of course work to be examined in written papers together with research work to be presented in a project report, where course work predominates over research and constitutes not less than two-third ($\frac{2}{3}$) of the total credit units.

The Doctor of Philosophy (Ph.D) programme shall normally be pursued by comprehensive research to be embodied in a thesis. In addition, the candidate shall register for faculty-based courses and seminars. Post graduate research will be carried out in the student's chosen area of specialization.

ADMISSION REQUIREMENTS

M.Sc Programme

The candidate must possess a good Doctor of Veterinary Medicine (DVM) degree from a recognized Veterinary Council of Nigeria-accredited/approved University.

Ph.D Programme

The candidate must possess a good Master's degree in Veterinary Medicine from the University of Nigeria, Nsukka or a recognized university, with a minimum CGPA of 3.0/4.0 or 3.5/5.0 or 60%.

AREAS OF SPECIZATION

The areas of specialization in the department are as follows:

- i. Avian Medicine
- ii. Ruminant Medicine
- iii. Small Animal Medicine
- iv. Swine Medicine
- v. Equine Medicine
- vi. Fish Medicine
- vii. Laboratory and Wildlife Medicine
- viii. Ethnoveterinary Medicine

DURATION OF PROGRAMMES

M.Sc

Full-time	A minimum of 3 semesters A maximum of 5 semesters
Part-time	A minimum of 5 semesters A maximum of 8 semesters

Ph.D

Full-time	A minimum of 6 semesters A maximum of 10 semesters
Part-time	A minimum of 8 semesters A maximum of 12 semesters

REQUIREMENTS FOR GRADUATION

M.Sc PROGRAMME

To be awarded the M.Sc degree, a student must have taken and passed the following:

- i. All M.Sc students are expected to register and take four compulsory faculty-based courses with a total credit unit of 14 and one compulsory post graduate course (PGC 601) Research Methodology and Application of ICT in Research (3 credit units).
- ii. In all cases, M.Sc students must write and submit to the department a Project Report duly supervised by an approved higher degree supervisor whose qualifications are not below Ph.D. Such a project must be sent to an external examiner nominate by the department and appointed by senate for that purpose.
- iii. Other departmental courses as recommended for the student by the Supervisor/Department based on the student's area of specialization shall constitute a minimum of 16 units. The compulsory and required courses must be selected from the approved list.

Ph.D PROGRAMME

To graduate, all Ph.D students must register, take and pass all faculty-based courses totaling 30 credit units, and the postgraduate school-based course. Synopsis and Grant writing (3 credit units). Every Ph.D candidate must submit a thesis on a chosen and approved topic, supervised by an approved supervisor whose qualification is not below Ph.D and who is not lower than a senior lecturer in rank.

The Ph.D thesis must be defended before an External Examiner duly nominated for that purpose and appointed by the senate.

LIST OF APPROVED SUPERVISORS

Professors/Readers

1. Professor B.M. Anene DVM, M.Sc, Ph.D, FCVSN (Small Animal Internal Medicine)
2. Professor E.I. Ugochukwu DVM, M.Phil, Ph.D (Ruminant Medicine and Veterinary Clinics)

Senior Lecturers

1. Dr. N.E. Nweze DVM, M.Sc, Ph.D (Equine Medicine and Ethnoveterinary Medicine)
2. Dr. O.N. Okoroafor DVM, M.Sc, Ph.D, FCVSN (Avian Medicine)
3. Dr. V. Omeje DVM, M.Sc, Ph.D, Ph.D (Fish Medicine)

JOB OPPURTUNITIES

Successful graduates of the postgraduate programmes of the Department may be employed by the following:

- i. Universities and other Higher Institutions of Learning as Lecturers and /or Research staff.
- ii. Research Institutes officers in relevant sections and Departments.
- iii. Federal/State ministries as veterinary consultants involved in disease prevention, control and in epideminology.
- iv. Private establishment such as drug companies, poultry farms, dairy farms, cattle ranches and piggery farms, banks, insurance companies and oil companies.
- v. Self-employment – Our postgraduate are so well trained that they can be self-employed.
- vi. Armed forces and Law enforcement agencies such as the Police Force, Customs, Immigrations, National Drug Law Enforcement Agency , Road Safety etc.

Compulsory Faculty-based Courses for M.Sc Programme

First semester

<u>Course No.</u>	<u>Title</u>	<u>Units</u>
FVM 701	Research Methods and Scientific Writing	3

Second Semester

<u>Course No.</u>	<u>Title</u>	<u>Units</u>
FVM 702	Biometrics and Computer Application	3
FVM 796	Research Project Final Seminar	2
FVM 790	Research Project	6
Total		14

Compulsory post graduate course

<u>Course No.</u>	<u>Title</u>	<u>Units</u>
PGC 601	Research Methodology and Application in ICT in Reasearch	3

Departmental courses

First semester

<u>Course No.</u>	<u>Title</u>	<u>Units</u>
VMD 701	Advanced Diagnostic Medicine	3
VMD 703	Advanced Veterinary Internal Medicine	3
VMD 705	Advanced Veterinary Clinics and Farm Practice	3
VMD 707	General Medicine	3
VMD 711	Advanced Equine Medicine	3
VMD 713	Companion Animals Medicine	3
VMD 715	Food Animal Medicine	3
Total		21

interpretation of results. Technical report writing. Critique of published papers. Presentation of research findings.

FVM 702 Biometrics and Computer Applications (3 units)

Definitions and value of biometry in scientific research. Variability and normal distribution. Probability, binomial and Poisson distributions. Populations and sampling. Testing differences between means. Student t-test, Chi-square, Correlation and Regression analysis, Analysis of variance. Other relevant statistics. Basics of computer appreciation. Software packages relevant to scientific and veterinary medical research and their uses. Presentation of scientific reports.

FVM 796 Research Project Final Seminar (2 units)

Final seminar on M.Sc research project highlighting background of the study, statement of problem, objectives of the study, methods used in carrying out the study and analysis of data generated, results, discussion of the results and recommendations arising from the findings of the study.

FVM 790 Research Project (3 units)

Research project in the student's area of study, leading to a project report that shall be examined by an External Examiner.

Compulsory Postgraduate Course

PGC 601 Research Methodology and Application of ICT in Research (3 units)

In-dept research work aimed at acquiring full knowledge and presentations in scholarly writing of the concepts, issues, trends in the definition and development of the study area from African and Western perspectives. Major steps in research selection of problem, literature review, design, data collection, analysis and interpretation, conclusions. Studies of various designs, Historical, case studies, surveys, Descriptive, cross-sectional, experimental etc. Analysis, surveys and synthesis of conceptual and philosophical foundations of different disciplines. Identification of research problems and development of research questions and or hypothesis. Detailed treatment of methods of collecting relevant research data and the format for presenting research results from designing a table of contents to referencing bibliography and appendix. Data analysis and results presentation in different disciplines using different analytical tools. Method of

project/dissertation writing. Application of appropriate advanced ICT tools relevant in every discipline for data gathering, analysis and result presentation. Essentials of spread sheets, internet technology, and internet search engines. All registered Master's degree students must attend a solution based interactive workshop to be organized by the school of post graduate studies for a practical demonstration and application of the knowledge acquired from the course, conducted by selected experts.

Departmental Courses

VMD 701 Advanced Diagnostic Medicine (3 units)

Study of different techniques employed in the diagnosis of disease using specific instrumentation for general clinical examination, clinics and pathological diagnosis, treatment and control of some specific diseases affecting various systems of domestic and wild animals. Clinico-diagnostic study of cases as well as chemotherapeutic approach to cases.

VMD 703 Advanced Internal Medicine (3 units)

The mechanism of disease production particularly on some selected disease entities will be taught. The rational approach to diagnosis in various domestic and pet animals as well as the effective application of chemotherapy on these diseases will be discussed. Also the application of epidemiological parameters in selected herds for effective interpretation and management of disease outbreaks of livestock and pet animals will be emphasized.

VMD 705 Veterinary Clinics and Farm Practice (3 units)

The application of the theoretical and practical knowledge to diagnosis, treatment and prevention of diseases of pet and farm animals. Routine herd health visits. Candidate will be expected to attach or liaise with their supervisors during routine clinical duties. Candidate will be required to submit detailed clinical investigation of at least 20 attested clinical cases spanning two semesters. Candidates may be allowed to present one of such important cases as a seminar.

VMD 707 General Medicine (3 units)

Study of different techniques employed in the diagnosis of diseases. General examination of patients and instrumentation. Methods of detailed examination of various body systems, namely-digestive, respiratory, urinary, musculoskeletal, cutaneous, cardiovascular and nervous systems.

Clinical diagnosis, clinico-pathological study, treatment and control of diseases affecting various systems of the body e.g. pneumonia, diarrhea, uremia etc. of domestic and wild animals.

VMD 711 Advanced Equine Medicine (3 units)

Introduction, aetiology, symptoms, transmission, diagnosis, treatment and control of bacterial, parasitic, viral, rickettsial and mycotic diseases of equine species. Diseases caused by nutritional deficiency, special problems of equine species such as lameness, fracture etc. Special focus on the clinical diagnosis and clinico-pathological study of economically important diseases of equine in the tropics.

VMD 713 Companion Animal Medicine (3 units)

Introduction, aetiology, symptoms, transmission, diagnosis, treatment and control of bacterial, parasitic, viral, rickettsial and mycotic diseases of small animals (dogs and cats). Diseases caused by non-infectious agents, metabolic and nutritional deficiency. Special focus on the clinical diagnosis and clinicopathological study of economically important diseases of companion animals in the tropics.

VMD 715 Food Animal Medicine (3 units)

Introduction, aetiology, symptoms, transmission, diagnosis, treatment and control of bacterial, parasitic, viral, rickettsial and mycotic diseases of ruminants; diseases caused by nutritional deficiency and metabolic disorders. Clinical diagnosis and clinicopathological study of economically important diseases of food animals.

VMD 712 Advanced Avian and Aquatic Medicine (3 units)

Introduction, aetiology, symptoms, transmission, diagnosis, treatment and control of bacterial, parasitic, viral, rickettsial and mycotic diseases of avian and aquatic species. Special emphasis on clinical diagnosis and clinicopathological study of economically important diseases of avian and aquatic species in the tropics.

VMD 714 Advanced Zoo and Wildlife Medicine (3 units)

Important zoo and wildlife animal diseases will be taught. Instructions on some aspects of wildlife management will be provided. Laboratory courses will consist of demonstration in form

Identification of types and nature of grant writing, mining of grant application. Study of various grant application structure and contents and writing concept notes, detailed project description, budgeting and budget defence. Study of sample grant writings in various forms and writing of mock research and other grants. Identification of university of Nigeria synopsis structure requirements (Introduction, Methodology and Results). Determining the content of each subunit of the synopsis, steps in writing of synopsis from the dissertation/thesis document. Structural and language uses. Common errors in synopsis writing and strategies for avoiding them. The roles of the student and the supervisor in the production of a synopsis. Writing of mock synopsis. All registered Ph.D students must attend a solution-based interactive workshop to be organized by the school of post graduate studies for a practical demonstration and application of the knowledge acquired from the course conducted by selected experts.