#### INTRODUCTION

The Department of Public Health, Pharmacology and Toxicology (PHPT) is one of the five academic departments in the Faculty of Veterinary Medicine. It offers training, research and consultancy services in the following areas: Veterinary Public Health, Epidemiology, food hygiene (meat, milk and eggs), meat inspection, zoonoses, water hygiene, food microbiology, food safety and quality assurance, livestock economics and business management, pharmacology and toxicology of veterinary drugs and natural products, leather science and technology. Teaching takes place in the department for both undergraduate and post graduate programs.

#### DEPARTMENT BASED ACADEMIC PROGRAMMES

#### UNDERGRADUATE PROGRAMS

The Department coordinates the following undergraduate programs offered in the Faculty.

### **Diploma in Leather Technology**

### **Admission requirements**

Applicants to this course shall be required to have the following qualifications:

- Holders of Kenya Certificate of Education (KCE) aggregate of C and a grade of at least C- in Chemistry, Biology and any other one Science subject.
- 2. Holders of Kenya Certificate of Secondary Education (KCE) division II with at least a credit in Chemistry, Biology and any other one science subject.
- 3. Holders of an "A" level Certificate with a minimum of one principal pass and at least a subsidiary pass in biology and chemistry.
- 4. Holders of a Certificate in Leather Technology from recognized institutions.
- 5. Holders of a Diploma in a Biomedical discipline from recognized institutions.
- 6. Any other qualification recognized by the senate.

**Duration:** Three [2] years

### **Diploma in Veterinary Public Health and Meat Technology**

This program is a two year program that is offered in collaboration with the Meat Training Institute, Ministry of Livestock Development, Athi River

## **Admission requirements**

Applicants with any one of following minimum qualifications shall be admissible:

- Kenya Certificate of Secondary Education (KCSE) mean grade C
  or equivalent with at least grade C- in Biology and any one of the
  following subjects; Chemistry, physics, mathematics, geography
  or Biological Science.
- KCSE mean grade C- with at least grade C- in Biology, and any one of the following subjects; Chemistry, physics, mathematics, geography or Biological Science) plus a Certificate in a relevant biological discipline from an institution recognized by the Senate.
- 3. Kenya Certificate of Education (KCE) Division III or equivalent with at least a pass in Chemistry and Biology.
- 4. 'A' level with a minimum of two subsidiary passes or equivalent; one of which must be in Biology, and the other in Chemistry, Physics, Mathematics, or Geography.
- 5. A Certificate in Animal Health from an institution recognized by Senate.
- 6. Equivalent qualifications to the above from institutions recognized by the Senate.

# **Bachelor of Science in Leather Science and Technology**

# **Admission requirements**

Applicants with any one of following minimum qualifications shall be admissible:-

- 1. Kenya Certificate of Secondary Education (KCSE) with mean grade C+ or equivalent with at least a C in Chemistry, and either one of the following subjects; Biology, or Biological Science, or Physics, or Physical Science or Agriculture or Mathematics.
- 2. KCSE mean grade C or equivalent plus a Certificate and Diploma in a relevant field from an institution recognized by the Senate.

- 3. 'O' level Division II or equivalent with the subjects indicated in 1 above; plus a Diploma in a relevant field from an institution recognized by the Senate.
- 4. 'O' level Division III or equivalent plus a Certificate and Diploma in a relevant field from institutions recognized by the Senate.
- 5. Diploma in Leather Technology or relevant field from the University of Nairobi or institutions recognized by the Senate and a mean grade of C in KCSE or equivalent.
- 6. 'A' level with two principal passes or equivalent in Chemistry, and Biology, or Physics or Mathematics, or Geography.
- Higher National Diploma in Leather Technology, Laboratory Technology or relevant field from institutions recognized by the Senate and should have attained a mean grade C in KCSE or equivalent.
- 8. Bachelor of Science degree from an institution recognized by the Senate.
- 9. Equivalent qualifications to the above from institutions recognized by the Senate.

#### POSTGRADUATE PROGRAMS

# Master of Science in Pharmacology and Toxicology

# **Admission Requirements**

Admission into the Master of Science Degree in Pharmacology and Toxicology shall be open to holders of the following qualifications:

- 1. Bachelor of Veterinary Medicine or Bachelor of Medicine and Bachelor of Surgery of the University of Nairobi.
- 2. Bachelor of Pharmacy of the University of Nairobi.
- 3. Bachelor of Science in Biomedical Technology of the University of Nairobi with at least upper second class honours or a lower second class honours and 1 year working experience.
- 4. Bachelor of Science in Biochemistry of the University of Nairobi with at least an upper second class honours, or a lower second class honours and 1 year working experience. The applicant should have taken pharmacology & toxicology course at undergraduate level.

- 5. Bachelor of Nursing degree of the University of Nairobi.
- Bachelor's degrees equivalent to the above from other Universities recognized and approved by University of Nairobi Senate.

### Master of Science in Natural Products and Bioprospecting

### **Admission Requirements**

Applicants with the following qualifications shall be admissible:-

- Holders of Bachelor of Veterinary Medicine, Bachelor Medicine and Bachelor of Surgery, Bachelor Pharmacy, Bachelor Science in Nursing and Bachelor of Dental Surgery of the University of Nairobi or other university recognized by University of Nairobi senate:
- 2. Holders of Bachelor of Science (Biomedical Technology, Zoology, Biology, Biochemistry, Chemistry, Animal Science and Agriculture) of the University of Nairobi or other university recognized by University of Nairobi senate with at least upper second-class honours or lower second class honours with a minimum of two (2) years work experience in a relevant field.
- 3. Holders of Master of Science degree in related disciplines.
- 4. Holders of a Bachelor's degree or an equivalent qualification in a relevant discipline from other institutions recognized by the Senate of the University of Nairobi.
- 5. Holders of a pass degree or equivalent qualifications in degrees listed above with either a relevant post-graduate diploma or five years work experience.

## **Master of Veterinary Epidemiology and Economics**

# **Admission Requirements**

- 1. Holders of the degree of Bachelor of Veterinary Medicine from the University of Nairobi.
- 2. Other candidates who have obtained relevant degrees from other universities approved by Senate as being equivalent to Bachelor of Veterinary Medicine of the University of Nairobi.

### **Master of Veterinary Public Health**

### **Admission requirements**

The following shall be eligible for admission:-

- Holders of the degree of Bachelor of Veterinary Medicine, or Bachelor of Medicine and Surgery from the University of Nairobi.
- Holders of Bachelor of Biomedical Technology, Bachelor of Science in Wildlife Management, Bachelor of Science in Microbiology and Biotechnology, or Bachelor of Science in Zoology from the University of Nairobi
- 3. Holders of equivalent degrees from other universities recognized by Senate

#### **Master of Science in Leather Science**

### **Admission requirements**

Applicants with the following qualifications shall be admissible:-

- Holders of at least an upper Second Class Honours degree of Bachelor of Science in Leather Science, Chemistry, Biology, Animal Science, Biochemistry, Biomedical Technology or Animal Production of the University of Nairobi or from other institutions recognized by the Senate.
- 2. Holders of at least a Lower Second Class Honours degree in any of the above listed disciplines with at least two years work experience.
- 3. Holders of a pass degree in any of the above listed disciplines with a least five years work experience.
- 4. Holders of the Bachelor of Veterinary Medicine degree of the University of Nairobi.
- 5. Holders of any other appropriate degrees approved by the Senate.

#### For all masters programs:

**Mode of Study:** Full time by coursework, research and thesis

**Commencement Dates:** September of each year.

**Minimum duration:** 18 months **Total Fees:** Ksh. 324,000.00

## Doctor of Philosophy (PhD) degree programs

The department offers the following PHD programs:

- 1. PhD in Pharmacology and Toxicology
- 2. PhD in Veterinary Epidemiology and Economics
- 3. PhD in Veterinary Public Health
- 4. PhD in Natural products and Bio-prospecting
- 5. PhD in Leather Science

Applicants for the Doctor of Philosophy Degree should have a masters degree from the University of Nairobi or an equivalent qualification from

institutions recognized by Senate. In addition, the applicants should submit a research proposal showing that they are capable of carrying out original research.

**Minimum duration:** 36 months

Mode of study: Full time or part-time by research and thesis

## **Application procedure**

Application forms are obtained from the UNES finance offices on payment of a non-refundable application fee of Kshs. 3000/= for Kenyan citizens and US\$ 50 or its equivalent for non-Kenyan citizens. Deadline for applications is April 30 of each year. Late applications are accepted upon payment of late application fees of Kshs. 4000/=. The application fees must be paid in cash at any Barclays Bank branch a/c no. 030-073-1023948 and the banking slip used to collect application forms. The completed forms accompanied with copies of degree certificates and academic transcripts are submitted to the Board of Postgraduate studies which is located at the main Campus on the ground floor of Gandhi Wing.

PhD applicants must submit application forms together with a project proposal duly signed by at least two university supervisors.

## For all PhD programs:

Mode of Study: Full time by coursework, research and thesis

**Commencement Dates:** September of each year.

Minimum duration: 36 months **Total Fees:** Ksh. 824,000.00

#### Deferment

An applicant who for any reason is unable to take up the offer of admission will be required to inform the Director, Board of Postgraduate Studies (BPS) in writing. This information should reach the Director at least one week prior to the date of registration. An applicant will be required to apply to defer admission on an annual basis but after the second year the offer of admission will lapse and the applicant will be required to re-apply afresh for admission. It is important that an applicant who defers admission ensures that he or she receives an official letter of deferment of admission from the Director BPS. An applicant who fails to inform the Director of his/her deferment of admission will be deemed to have forfeited his/her position and will be deregistered from the course admitted to.

# **Consultancy Services**

The Department of PHPT provides consultancy services in the following areas:

- Microbiological quality analysis of food, water and feed
- Toxicity studies for pest control products
- Antibiotic residue analysis of food, honey and animal feeds (HPLC is used for analysis)
- Pesticide residue analysis of food and feed products including meat, fish, milk, honey, feeds, etc (GC) is used for analysis
- Aflatoxin analysis of food, feeds and other samples(using ELISA and HPLC techniques)
- Toxicological analysis of food and animal feeds
- Drug assays and efficacy trials
- Meat speciation tests
- Epidemiological and field surveys on areas of specialization.

### **Research Areas**

The department carries out research mainly in the following areas:

- Food safety and hygiene (Meat milk and fish
- Zoonotic diseases: Epidemiology, diagnosis, control and prevention
- Food borne diseases: Epidemiology, diagnosis, control and prevention
- Chemical residues in foods and feeds (antibiotics, pesticides and mycotoxins)
- Pharmacology and toxicology of medicinal plants
- Epidemiology and economics of livestock diseases
- Toxicity of new pesticides

The department has much more to offer to industries, the public and all stakeholders in public health related issues. Clients are encouraged to visit or call the department for services.

For more information on training, research collaboration consultancy and partnerships, please contact the chairman through the contacts given below.

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FACULTY OF VETERINARY MEDICINE
COLLEGE OF AGRICULTURE AND VETERINARY SCIENCES



UNIVERSITY OF NAIROBI



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