

SOUTH VALLEY UNIVERSITY

MSc in PATHOLOGY and MSc MEDICAL MICROBIOLOGY

This will consist of the following programs:

MSc PATHOLOGY

Master of Science Pathology (Clinical pathology) Master of Science Pathology (Chemical Pathology) Master of Science Pathology (Hematology)

MSc MEDICAL MICROBIOLOGY

Master of Science Medical Microbiology

Entry requirements for all:

A good Bachelor of Science degree or medical degree shall be normally required. The major categories of MSc students shall be:

BSc graduates(biological or physical sciences) with a view to a research career in biochemistry. Qualified doctors and others teaching, or intending to teach in medical or other health schools (particularly in developing countries).

Persons with BSc or professional qualifications and experience working in the nursing or paramedical and allied fields.

Duration of the program:

The MSc in Pathology or Medical Microbiology degree course shall run for 24 months. PART I: The first 9 months shall be devoted entirely to course work with lecture content from facilitators. Relevant laboratory practical sessions will be demonstrated during residential school time. Residential school shall also consist of tutorials and seminars.

PART II: In the last 9 months, the students shall undertake a research project and submit the dissertation for examination.

COMPETENCES

The aim is to produce a Clinical Scientist Specialist who upon completing the MSc program possesses the following competences:

1. Demonstrates the essential knowledge, skills and professional attributes necessary for Clinical Laboratory sciences under minimal supervision for the first two years, prior to independent practice within the Zambian health system. In particular, processing of pathology and microbiology specimens and carrying out the diagnostic tests.

- 2. Supports and carries out quality education activities aimed at enhancing knowledge, skills and attitudes in pathology in Colleagues, students and other health professionals, including supervision in the Clinical laboratory.
- 3. Demonstrates the general management skills required at all levels of health provision and conducts relevant quality assurance activities including clinical audits for improvement of practice.
- 4. Assesses and maintains competence and excellent performance through continuing professional education, the awareness of current health policies and the maintenance and development of laboratory medicine skills.
- 5. Collaborates, respects and communicates effectively with multidisciplinary teams and patients and their families, demonstrates appropriate leadership and values the contributions of other health professionals and administrators on topics of relevance to Laboratory medicine.
- 6. Delivers and improves pathology services in the context of the national health policies by initiating, conducting and participating in scientific research and applying safe, high quality, cost effective, evidence based practice within the Zambian health system.
- 7. Respects legal restrictions, rules of conduct, ethics and demonstrates integrity in all circumstances, and in particular understands the key legal matters in handling, reporting, storage and disposal of biological specimens.

PART I : 6 MONTHS PTH5011: Pathology Core course: MM5010: Core Microbiology course This will constitute the topics that enable the student to understand in detail the molecular basis of disease, general pathology and immunology of disease. This will be taken by all postgraduate students taking the MSc Pathology course and Medical Microbiology.	PART II : 9 MONTHS - Specialized topics in respective pathology disciplines: Clinical pathology (PTH5012); Clinical Biochemistry (PTH5022); Haematology (PTH5032); Medical Microbiology (MM5042) This will be specialization in the respective pathology discipline that will enable the student acquire the relevant competencies and skills. The students will be introduced to methods of investigation, pathogenesis, pathophysiology, and clinical manifestations of disease as basis for training others, research and clinical management of patients
PART III: 9 MONTHS - DISSERTATION	
MSc PATHOLOGY	
MODULE 1 : 3 Months PTH 5011 CORE COURSE Research and Clinical Laboratory techniques Molecular Pathology and Immunology	MODULE 2 : 3 Months RESEARCH METHODOLOGY COURSE (RES8020) Research methodology & Biostatistics Research proposal development
MODULE 3 : 9 Months SPECIALISED PATHOLOGY (Clinical Pathology- PTH 5012, Clinical biochemistry – PTH 5022, Haematology – PTH 5032) – SYSTEMATIC DISEASES Aetiology and Predisposing factors, Pathogenesis & pathophysiology of disease, diagnosis and diagnostic skills, Laboratory management Communication skills	MODULE 4 : 3 Months ADVANCED TECHNOLOGY CLINICAL BIOCHEMISTRY – Endocrine disorders, ELIZA technology HAEMATOLOGY - Haemato-Oncology & Immunohistochemical analysis and PCR technology CLINICAL PATHOLOGY – Histopathology technology, Immunohistochemical analysis and PCR technology
MODULE 5 : 6 months DISSERTATION	

DISSERTATION

Data Collection, Write up; Presentation; Submission of dissertation for examination.