



YENEPOYA

(DEEMED TO BE UNIVERSITY)

Recognized under Sec 3(A) of the UGC Act 1956

Accredited by NAAC with 'A' Grade

**YENEPOYA INSTITUTE OF ALLIED
HEALTH SCIENCES**

**PROGRAM OUTCOMES AND COURSE OUTCOMES
POSTGRADUATE PROGRAM
MASTERS OF SCIENCE
RENAL DIALYSIS TECHNOLOGY**

ATTESTED

Dr. Gangadhara Somayaji KS
Registrar
Yenepoya (Deemed to be University)
University Road, Deralakatte
Mangalore 575 018, Karnataka.

PROGRAM OUTCOMES
POSTGRADUATE PROGRAM
MASTERS OF SCIENCE
RENAL DIALYSIS TECHNOLOGY

(Knowledge – K, Skill – S, Attitude – A)

- PO 1 Understand how mechanisms operating at the molecular, cell, network and system sub-level serve normal function and how damage or dysfunction at these different levels produces specific disorders of importance to clinical dialysis therapy. (K, S, A)
- PO 2 Have a good working knowledge of modern methods for scientific and clinical investigation of the human excretory system. (K, A)
- PO 3 Be aware of the major recent developments in research in the area of clinical dialysis therapy. (K)
- PO 4 Be able to embark upon a successful career in their chosen direction of advanced nephro- research. (A)
- PO 5 Supervises the activities of hemodialysis assistants, technologists and auxiliary personnel on all shifts, including planning and scheduling (K, S, A)
- PO 6 Providing expert support within the unit in the handling of all hemodialysis and peritoneal dialysis related and patient related issues, e.g. dialysis complications, dietary consultations, psychological care and vascular access issues in coordination with the nephrologists. (K, S, A)
- PO 7 Monitoring the dialysis patients for intra dialytic complications. (K, S)
- PO 8 Guiding and teaching the students about paediatric dialysis. (K, S, A)
- PO 9 Guiding the staff and students on dialysis unit policies, infection control and quality control standards as per unit polices. (K, S, A)
- PO 10 Quality maintenance and overall supervision of special procedures performed by the unit e.g. CRRT, ICU dialysis, paediatric dialysis, plasmapheresis, hemoperfusion, SCUF, and MARS. (K, S, A)
- PO 11 Supervising the conduct of regular ongoing patient education nutritional counselling programs in the dialysis unit. (K, S, A)
- PO 12 Overall care of patient outcomes, addresses patient satisfaction scores and patient safety issues. (K, S, A)

ATTESTED


Dr. Gangadhara Somayaji K S
Registrar
Yenepoya (Deemed to be University)
University Road, Deralakatte
Mangalore 575 018, Karnataka.

COURSE OUTCOMES
POSTGRADUATE PROGRAM
MASTERS OF SCIENCE
RENAL DIALYSIS TECHNOLOGY

1st SEMESTER

	CO	Description
Renal Anatomy & Physiology	CO 1	To understand the anatomy and physiology of the renal system
	CO 2	To comprehend the histology of a human kidney
	CO 3	To understand the mechanism of formation of urine
	CO 4	To understand the renal regulation of blood volume and extracellular fluid volume
	CO 5	To comprehend acid base balance
Renal Pathology and Microbiology	CO	Description
	CO 1	To understand the pathology and microbiology of the renal system
	CO 2	To comprehend the congenital anomalies of a human kidney
	CO 3	To understand the pathogenesis of glomerular injury
	CO 4	To comprehend tumours of the kidney
	CO 5	To understand the infection control practices in dialysis unit
Clinical Dialysis I	CO 6	To comprehend opportunistic infections
	CO	Description
	CO 1	Monitoring the dialysis patients for intra dialytic complications.
	CO 2	Overall care of patient outcomes, addresses patient satisfaction scores and patient safety issues.
	CO 3	Involve in the activities of hemodialysis assistants, technologists and auxiliary personnel on all shifts.
	CO	Description
Biomedical Research and Biostatistics	CO 1	To Understand the Statistical Terms.
	CO 2	To Possess Knowledge and Skill in the use of Basic Statistical and Research Methodology.

ATTESTED
 Dr. Gangadhara Somayaji K S
 Registrar
 Yenepoya (Deemed to be University)
 University Road, Casuarina
 City 560075 KTE, Karnataka.

2nd SEMESTER

	CO	Description
Renal Pharmacology	CO 1	Understand the general pharmacological principle.
	CO 2	To Possess Knowledge and Skill in the use of common medications used by patient with renal failure.
	CO 3	Understand the use of hemodialysis solutions and chemicals.
Nephrology and Kidney Disease	CO	Description
	CO 1	Understand the clinical syndromes of renal diseases.
	CO 2	To Possess Knowledge on glomerular diseases
	CO 3	Understand the causes, consequences and management of End Stage Renal Disease.
	CO 4	Understand the renal disorders caused by acid base electrolyte disorders
Biomedical Instrumentation	CO	Description
	CO 1	To gain basic knowledge on transducer principles
	CO 2	To understand the parameter measurement setups of dialysis machine
	CO 3	To make the student understand the functions of Dialysis machine
	CO 4	To provide basic ideas about dialysis machine alarms
Clinical Dialysis II	CO	Description
	CO 1	Monitoring the dialysis patients for intra dialytic complications.
	CO 2	Overall care of patient outcomes, addresses patient satisfaction scores and patient safety issues.
	CO 3	Involve in the activities of hemodialysis assistants, technologists and auxiliary personnel on all shifts.

ATTESTED


Dr. Gangadhara Somayaji K S
Registrar
Yenepoya (Deemed to be University)
University Road, Deralakatte
Mangalore 575 018, Karnataka.

3rd SEMESTER

	CO	Description
Complications of Dialysis and Dialysis Equipment	CO 1	Understand the complications of dialysis
	CO 2	Understand the patient related complications and its management
	CO 3	Gain knowledge on treatment and management of complications in special condition
Psychosocial Issues & Rehabilitation in Dialysis Patient	CO 1	Understand and discuss the psychosocial issues in dialysis patients
	CO 2	Understand and discuss rehabilitation in dialysis patients
Nutrition and Quality Assurance in Dialysis	CO 1	Discuss the various aspects of nutrition, nutritional assessments and recommended dietary allowance.
	CO 2	To explore the basic knowledge of quality assurance in dialysis equipment's.
Health Care Management	CO 1	Concepts of Hospitals– The student will gain knowledge about hospital administration &
	CO 2	Workflow in hospitals - Enumerate and identify various Clinical Services like OPD, IPD, ward Management, OT, Emergency, disaster Management and ICU.
	CO 3	Organizational Structures - To learn to meet special challenges posed by human behaviour in workplace of 21st century
	CO 4	Quality management - To create awareness about the process of applying for and implementing various accreditation process in healthcare facilities.
Clinical Dialysis III	CO 1	Monitoring the dialysis patients for intra dialytic complications.
	CO 2	Overall care of patient outcomes, addresses patient satisfaction scores and patient safety issues.
	CO 3	Involve in the activities of hemodialysis assistants, technologists and auxiliary personnel on all shifts.

ATTESTED


Dr. Gangadhara Somayaji K S
Registrar
Yenepoya (Deemed to be University)
University Road, Deralakatte
Mangalore 575 018, Karnataka.

4th SEMESTER

	CO	Description
Recent Advances in Dialysis and Nephrology	CO 1	Discuss the clinical consideration and evaluation of renal diseases and dialysis patients.
	CO 2	To explore knowledge on recent advances in dialysis therapy
	CO 3	Understanding paediatric dialysis
Psychosocial Issues & Rehabilitation in Dialysis Patient	CO	Description
	CO 1	To explore knowledge on renal transplantation
	CO 2	Understanding transplant immunology
Clinical Dialysis IV	CO	Description
	CO 1	Monitoring the dialysis patients for intra dialytic complications.
	CO 2	Overall care of patient outcomes, addresses patient satisfaction scores and patient safety issues.
	CO 3	Involve in the activities of hemodialysis assistants, technologists and auxiliary personnel on all shifts.

 **ATTESTED**

Dr. Gangadhara Somayaji K S
Registrar
Yenepoya (Deemed to be University)
University Road, Derlakatte
Mangalore 575 018, Karnataka.