



YENEPOYA

(DEEMED TO BE UNIVERSITY)

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**YENEPOYA INSTITUTE OF ALLIED HEALTH
SCIENCES**

**PROGRAM OUTCOMES AND COURSE OUTCOMES
UNDERGRADUATE PROGRAM
BACHELOR OF OCCUPATIONAL THERAPY**

ATTESTED


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PROGRAM OUTCOMES
UNDERGRADUATE PROGRAM
BACHELOR OF OCCUPATIONAL THERAPY

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

- PO 1 Understanding of normal functioning of human body based on fundamental biophysical and biomechanical principles. (K)
- PO 2 Based on the applied sciences of anatomy, physiology, psychology and biochemistry the student forms a foundation, to relate to diagnosis of performance deficits. (K)
- PO 3 Learning the kinetics and kinematics of purposeful human movement. (K)
- PO 4 Application of knowledge of human anatomy, physiology, physics, biomechanics of human body to allow diagnosis of function and it's components. (S)
- PO 5 Apply the knowledge of bio- engineering, as it relates to human function in Occupational roles. (S)
- PO 6 Prepares the student for assessing and evaluating performance ability in adult and geriatric problems. (K, S)
- PO 7 Prepares the student for assessing and evaluating performance ability in acute and chronic pathological conditions. (K, S)
- PO 8 Prepares to conduct education groups in the pre and post discharge phases for preventive and rehabilitative care. (K, A)
- PO 9 Enhances clinical reasoning with respect to applications in the field of ergonomics, work fitness in industry, work hardening and functional capacity evaluation following discharge and during return-to-work programs. (K, S)
- PO 10 Provides medical basis of clinical reasoning and therapeutic applications in varied diagnosis like Musculoskeletal, Mental health, Developmental disorders, and Neurologic disorders to determine Occupational competency. (K)
- PO 11 Prepares for Theoretical understanding of research and methodology to promote research attitude and evidence-based documentation for future. (K, A)
- PO 12 Offers practice in adaptation to environment to improve quality of life in clients, reintegration of clients in community. (S, A)
- PO 13 Developing appropriate professional values required to work in multidisciplinary sector and private sector. (K, A)

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COURSE OUTCOMES

UNDERGRADUATE PROGRAM

BACHELOR OF OCCUPATIONAL THERAPY

1ST SEMESTER

CO	Description
Human Anatomy - I	<p>CO 1 Understanding of the gross and microscopic structure and development of human body.</p> <p>CO 2 Comprehension of the normal regulation and integration of the functions of the organs and systems on basis of the structure</p> <p>CO 3 Understanding of the clinical correlation of the organs and structures involved and interpret the anatomical basis of the disease presentations.</p>
Human Physiology - I	<p>CO 1 Acquire the knowledge of the relative contribution of each organ system in maintenance of the Homeostasis with special reference to Musculo-skeletal, Cardio-respiratory, and alterations in function with aging.</p> <p>CO 2 Analyse physiological responses & adaptation to environmental stresses- with special emphasis on physical activity & temperature.</p> <p>CO 3 Acquire the skill of basic clinical examination (CVS and RS) and haematological investigations relevant to occupational therapy.</p>
Psychology	<p>CO 1 Understand the concept and the importance Psychology in the health delivery system, also gain knowledge on physical and psychological development during human development. Enumerate the role of hereditary and environment in the physical and psychological development.</p> <p>CO 2 Describe the types of sensation, attention & its determinants, principles and the factors influencing perception.</p> <p>CO 3 Explain motivation, frustration & conflict, emotions & stress management.</p> <p>CO 4 Explain the theories, distribution and assessment of intelligence. Demonstrate the knowledge of creative thinking and be an effective learner.</p> <p>CO 5 Acquire knowledge and approaches to personality, attitude and develop leadership qualities.</p> <p>CO 6 Understand the importance of psychological status of the person in Health & disease, environmental & emotional influence on the mind & personality and acquire the knowledge to deal with the patients. Also knows the therapies used by clinical psychologists.</p>
Introduction to Occupational Therapy - I	<p>CO 1 The student will learn about the philosophy of Occupational Therapy and its historical development.</p> <p>CO 2 The student will understand the definition of occupation and the role of occupation in the development of occupational competence, self-identity, and maintenance of health & well-being.</p> <p>CO 3 The student will also be familiar with the basic diagnostic tools and therapeutic modalities used in Occupational Therapy practice.</p>

2nd SEMESTER

Human Anatomy - II	CO 1	Understanding the gross structure of human body.
	CO 2	Comprehension of the normal regulation and integration of the functions of the organs and systems on basis of the structure.
	CO 3	Understanding of the clinical correlation of the organs and structures involved and interpret the anatomical basis of the disease presentations.
Human Physiology - II	CO 1	Acquire the knowledge of the relative contribution of each organ system in maintenance of the Homeostasis with special reference to Neuro-motor, Female Urogenital function, and alterations in function with aging.
	CO 2	Analyse physiological responses & adaptation to environmental stresses- with special emphasis on physical activity & temperature.
	CO 3	Acquire the skill of basic clinical examination with special emphasis to Peripheral and Central Nervous system.
Biochemistry	CO1	Understanding of biochemical and molecular processes involved in health and disease.
	CO2	Understanding of importance of nutrition in health and disease from occupational therapy perspective
	CO3	Understanding of biochemical basis and rationale of clinical laboratory tests, and demonstrate the ability to interpret these in clinical context from occupational therapy perspective
Basics of Occupational Therapy Assessment	CO 1	The student will understand the purpose and method of evaluation, diagnose conditions based on Occupational performance.
	CO 2	The student will understand the basic principles and procedure for evaluation of Range of Motion, Muscle Testing on normal subjects.
	CO 3	The student will learn the skills required for palpation of different tissues.
Basics of Bioengineering	CO 1	The student will develop concepts of splinting and the appropriate selection of material in relation to prescription and fabrication.
	CO 2	The student will learn care and handling and therapeutic values of Tools and Equipment.
	CO 3	The student will know Indications and contraindications of splinting.

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3rd SEMESTER

	CO	Description
Pathology	CO 1	Comprehension of the causes, evolution and mechanisms of diseases
	CO 2	Knowledge of alterations in gross and cellular morphology of organs in disease states.
	CO 3	Ability to correlate the natural history, structural and functional changes with the clinical manifestations of diseases, their diagnosis and their diagnosis and therapy.
Microbiology	CO 1	Understanding of role of microbial agents in health and disease.
	CO 2	Understand and practice various methods of Sterilisation and disinfection.
	CO 3	Understanding the immune system in health and disease.
	CO 4	Ability to understand the aetiology, pathogenesis, laboratory diagnosis & prevention of common infections.
Human Life Development	CO1	The student will know the general principles of development, the theories of development, and normal stages of development in all specific areas.
	CO2	To distinguish abnormal development from normal in all areas.
	CO3	To improve the students' sensitivity to developmental issues and special considerations of clients in occupational therapy assessment and treatment.
Biomechanics & Kinesiology	CO 1	Focuses on the development of conceptual basis of practice; biomechanical, kinesiology and kinematic aspects of human motion, posture and balance for mobility, transfers.
	CO 2	Introduces assessment procedures for muscle power, strength and compensatory mechanisms used during functional performance.
	CO 3	It emphasizes the importance of normal human movements as they relate to human function in Occupational Roles.

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4th SEMESTER

Community Medicine	CO 1	Demonstrate ability to understand the concepts of health and disease.
	CO 2	Explain the methods of health administration, health education and disease preventive measures.
	CO 3	Understand the epidemiological principles and methods.
	CO 4	Discuss various health programmes in India and explain the types, advantages and disadvantages of family Planning.
	CO 5	Discuss the nutritional problems and the community nutrition program.
	CO 6	Discuss the social and preventive measures to reduce the maternal and infant mortality in India.
	CO 7	Describe the geriatric health problems and measures to address the problems.
	CO 8	Discuss the hospital waste management.
	CO 9	Discuss the steps in disaster management.
	CO 10	Discuss the occupational diseases and its preventive measures.
	CO 11	Discuss the characteristics of mentally healthy person, types of mental illness and aetiology of mental illness and the initiatives under district mental health programs for prevention and control of mental health problems.
	CO 12	Demonstrate the ability to select appropriate health education methods and models in planning health education as per the need.
Pharmacology	CO 1	Understand the general principles of drug action and the handling of drugs by the body.
	CO 2	Describe Pharmacological effects of commonly used drugs by patients referred for Occupational Therapy; list their adverse reactions, precautions to be taken & contraindications, formulation & route of administration.
	CO 3	Identify whether the pharmacological effect of the drug interferes with the Therapeutic response of Occupational Therapy & vice-versa.
Introduction of Occupational Therapy - II	CO 1	The student will know the theoretical foundation for evaluation of performance component, rationale of evaluation of the specific performance component and management principles and techniques of common problems.
	CO 2	The student will also understand the influence of contextual factors on occupational performance and the assessment of personal, social and cultural contextual factors.
	CO 3	The student will learn to apply the assessment skills in clinical practice.
Therapeutic Activities & Exercises	CO 1	The student will learn the therapeutic potential of activities.
	CO 2	The students will also learn the essential skill of activity analysis which will facilitate clinical reasoning in occupational therapy.
	CO 3	It also includes the organisation of theory and its practical application in occupational therapy practice.
	CO 4	The course also involves lab activities for activity analysis, therapeutic exercises, models and frame of reference for practice.
	CO 5	This course discusses the treatment modalities used in Occupational therapy as on a continuum from activities to exercise.

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5th SEMESTER

Clinical Orthopaedics & Traumatology	CO1	Understand orthopaedic conditions causing disability, list the aetiology, clinical features and methods of investigations and management.
	CO2	Discuss the Patho-physiology, clinical manifestations & conservative/Surgical management of various traumatic & cold cases of the Musculo-skeletal Conditions.
	CO 3	Gain the skill of clinical examination & interpretation of the preoperative cold cases & all the post- operative Cases.
	CO 4	Apply the knowledge and skill gained in this course to understand the course on Occupational therapy in Orthopaedics.
General Surgery including burns and plastic surgery	CO1	Describe pre operative evaluation of various surgical indications in abdominal thoracic, Neuro Surgical & Peripheral vascular conditions. Understand the common surgical conditions in ENT & Ophthalmology.
	CO2	Describe the surgical steps & approaches in brief & should be able to describe components of soft tissues cut to reach target tissue & the complications.
	CO 3	Assess post-operative complications & its implications in the treatment. Describe effects of surgical trauma & Anaesthesia in post-operative course.
	CO 4	Classify burns, and briefly explain the evaluation & describe surgical management in wounds, ulcers and Burns.
General Medicine, Paediatrics & psychiatry	CO1	Describe Aetiology, Pathophysiology, Signs &Symptoms &Management of the various Endocrinal, Metabolic and Geriatric &Nutrition Deficiency conditions.
	CO2	Describe Aetiology, Pathophysiology, Signs & Symptoms, Clinical Evaluation & Management of the various Rheumatological, Cardiovascular and Respiratory Conditions.
	CO 3	Interpret Chest X-ray, Blood gas analysis, P.F.T. findings, and Blood investigations done for various medical and Rheumatological conditions.
	CO 4	Describe the principles of Management at the Medical Intensive Care Unit.
	CO 5	Describe aetiology, Pathophysiology, Signs, Symptoms &Management of the various Paediatric conditions.
	CO 6	Acquire skill of clinical examination of a neonate /child with respect to neurological, Musculoskeletal, Respiratory & Cardiovascular conditions.
Occupational Performance-ADL, work, leisure	CO1	It educates the student about the holistic concepts of human development and maturation from birth through adult life for analysis of human performance in terms of activities of daily living, return to work, fitness for work.
	CO2	Theoretical understanding of standardized ADL scales, components and application.
	CO 3	The student will learn definition and elements of work, work assessment, work conditioning, work hardening and job analysis.
	CO 4	The student will learn to apply role of play in OT treatment process.
Occupational Therapy Rehabilitation	CO1	It explores various conditions needing attention, focusing on pathology, as well as primary and secondary clinical characteristics and their management.
	CO2	This course intends to familiarize students with principles of rehabilitation in clients with cancer, traumatic hand injuries and peripheral vascular disease.
	CO 3	Remediate performance components using manual and functional techniques, transfer effects of thereto in real life situations.
	CO 4	The student will learn types of biofeedback system and clinical applications with advantages of biofeedback system as an adjunct to Occupational Therapy.

6th SEMESTER

Occupational Therapy in Orthopaedics	CO1	The student will learn clinical evaluation of upper extremities, lower extremities and spine including special and specific tests and clinical signs.
	CO2	Diagnosis of function and performance using Occupational Therapy tools.
	CO 3	Frames of References & Models of Approaches as applied to Musculoskeletal Rehabilitation.
	CO 4	Definition, Mechanism of Injury, Occupational Therapy intervention in respect of orthopaedic management.
Occupational Therapy in Neurosciences	CO1	Neurological evaluations for cortical, sub cortical, cerebellar, spinal and peripheral nervous system dysfunctions and frames of references as applied to Neuro-rehabilitation.
	CO 2	Clinical reasoning for selection of therapeutic intervention models Preventive, Curative Rehabilitative and Adaptive /compensatory.
	CO 3	Understand and demonstrate symptoms related to affectation, assess motor status, recovery stages, prescribe appropriate intervention.
Clinical Neurology & Neurosurgery	CO1	Acquire the basic knowledge of neurology and neuro-surgery.
	CO2	Describe aetiology, Pathophysiology, Signs, Symptoms & Management of the various Neurological Conditions.
	CO 3	Acquire skill of clinical examination of Neurological System.
	CO 4	Gain knowledge on common neurosurgical procedures and its indications.
	CO 5	Apply the basic knowledge while learning Neuro occupational therapy.
Sociology	CO1	Describe social institutions in relation to the individual, family and community.
	CO2	Explain the social factors affecting the family in rural and urban communities in India.
	CO 3	Apply the knowledge for patient assessment, communication with patient and family members, designing home program involving family members and to understand the background of the patient.

7th SEMESTER

Occupational Therapy in Paediatrics	CO1	The student will understand the principles of normal and abnormal development in children.
	CO2	They will select and use appropriate evaluation methods to identify and train occupational limitation of the child at home and school or community.
Occupational Therapy in Mental Health	CO1	The student will learn to identify psychiatric sign and symptoms and respond to them appropriately.
	CO 2	The student will learn to assess and analyse the occupational performance of individuals with psychiatric impairment.
	CO 3	They will understand the influence of psychiatric impairment on occupational performance and their prognosis.
	CO 4	The student will learn to apply the occupational therapy approaches / frames of reference, assessment methods & specific treatment techniques that guide

Biostatistics & Research Methodology		the intervention for individuals with psychosocial dysfunction.
	CO1	Understand the basic principles and the application of Biostatistics in research.
	CO2	Understand and give examples of different types of data arising in public health and clinical studies.
	CO 3	Understand and select appropriate statistical methods.
	CO 4	Understand the format of scientific documents and interpret results.
	CO 5	Understand research methodology, including theory of science and qualitative and quantitative methods.
	CO 6	The Gain skills for critical reading of research literature and for developing a research proposal for a master's thesis project.
	CO 7	Become competent in planning, conducting, evaluating and presenting a research project.
Clinical cardiovascular & pulmonary conditions	CO1	Explain the anatomy and physiology of cardiovascular and respiratory system.
	CO2	Explain the physical examinations techniques and investigations used in cardiovascular and respiratory systems diseases and disorders.
	CO 3	Describe the definition, aetiology, pathogenesis, clinical features, complications, diagnosis and medical and surgical management of cardiovascular and respiratory systems' diseases and disorders.

8th SEMESTER

Advances in Occupational Therapy practice issues	CO1	The students will learn and practice the essential interaction skills for practice, clinical reasoning, evidence-based practice, administration & organizational skills in managing practice.
	CO2	The students will also learn about professional organizations & socio-legal considerations that influence practice.
	CO 3	The students will learn and practice Adjunctive therapies and Assistive technologies along with occupational therapy intervention.
Occupational Therapy in community practice	CO1	The student will analyse & apply occupationally based activities appropriate to age and client needs, assess client for participation or restriction in community re-entry.
	CO 2	They will evaluate for need of assistive technologic devices, assess for application of orthotics and prosthetics.
	CO 3	They will learn to assist disability rating in various disability states using ICF 2000, assess impact on family system.
	CO 4	They will understand and apply assessment needed for access in community and home environment and also for accommodation of the disabled in community.

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