

**Second B.O.Th. Year**  
**205. THERAPEUTICS**

Total hours: 260 (Theory — 100, Practical — 160)

Total Marks: 200 Marks

Theory: 100 Marks (Final exams: 70 Marks, Internal Assessment: 30 marks)

Practicals: 100 Marks (Final exams: 70 Marks, Internal Assessment 30 marks)

**COURSE OBJECTIVES**

The students will be able to fulfill with 75% accuracy the following objective of the course.

**Theory:**

- 1) Describe the theory of spatiotemporal adaptation and explain in brief the assumption on which the theory is based. Illustrate and explain the SMS integrative process. In brief differentiate between reflexes and reactions. Explain the different phases of reflex & or reaction development. Explain the importance of stability and mobility in human development.
- 2) Describe theoretical foundation of human development and explain teaming maturational, psychoanalytical, cognitive, ethologic, and humanistic self those
- 3) Explain principles of various sensory — motor approaches based on neuro - physiological principles.
- 4) Describe tests for functional evaluation of hand. Enumerate the subtests of hand function tests and its relevance to Occupational Therapy.
- 5) Define functional bracing; explain the objectives and scientific basis of functional fracture bracing, its importance in healing of fractures, its advantages over conventional bracing. Enumerate different materials used, indications and contraindications of functional bracing.
- 6) Explain the play behavior; different functions' content and structure of play, theories of play. Briefly outline the role of play in Occupational Therapy treatment process.
- 7) Explain general principles of splintage applied while designing and fabricating common hand splints. Briefly explain uses of the same.
- 8) Explain design and fabrication of common adaptive devices with knowledge of material and equipment used for the same. Briefly explain application of the same in occupational therapy.

## **PRACTICALS:**

- 1) Acquire the skills of designing & fabricating common hand splints viz, resting pan, radial bar cock-up, long opponens, Radial nerve splint using extension outrigger, finger gutter.
- 2) Design and fabricate common adaptive devices viz, universal cuff, writing device, long handled scrubber, enlarged handle spoon, tap opener.
- 3) Demonstrate specific and standardized procedure for hand function test viz. Jebson Taylor, Crawford small part Dexterity test, Purdue Peg board, Complete Minnesota Dexterity Test.

## **COURSE CONTENTS**

- I) Theory of spatiotemporal adaptation : Posture and movements, Sensory — motor- sensory Integration, Reflex and reaction maturation, Stability & mobility development (10 hrs)
- II) Theoretical foundation of Human development : Learning Theories — Behavioral Theory, Social learning theory; Maturation theory of Arnold, Gesell, Psychoanalytic theory of Sigmund Freud, Erik Erikson; Cognitive Theory of Jean Piaget; Humanistic self theory; Ethology (20 hrs)
- III) Overview of Sensory — motor approaches: Rood's approaches, Bobath approach, Brunnstrom's approaches, Sensory integrative approach, Motor Relearning Program (30 hrs)
- IV) Hand Function Tests — Jebson Taylor, Crawford small part dexterity test, Purdue Peg board, Minnesota Rate of Manipulation Test. (15 hrs)
- V) Functional bracing : Definition, concept of functional bracing, objectives and scientific basis of functional fracture bracing, importance in healing of fractures, advantages over conventional bracing, materials used, indications & contraindication of functional bracing. (10 hrs)
- VI) Play in child development: play behavior; Functions of Play — social, physical, sensory, emotional, perceptual, cognitive. Content & structure of play. Theories of play — F. Erikson, A. Freud, J. Piaget, Reilly, Role of play in Occupational therapy treatment process. (15 hrs)

## **BOOKS RECOMMENDED**

Willard & Spackman's Occupational Therapy

An Introduction to Occupational Therapy by A. Turner

Occupational Therapy: Practice skills for Physical Dysfunction by LV. Pedretti

Occupational Therapy for Physical Dysfunction by CA. Trombly.

Closed functional treatment of fractures by A Sarmiento, L. Latta

Hand splinting Principles & methods by E.E. Fess, C. A. Phillips.