S.R.M INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED UNIVERSITY)
CHENNAI – 89

SYLLABUS FOR THE MASTER OF OCCUPATIONAL THERAPY

(M.O.T) COURSE

S.R.M. INSTITUTE OF SCIENCE & TECHNOLOGY

DEEMED UNIVERSITY, CHENNAI – 600 089.

Regulations for MOT course

In exercise of the powers conferred by the S.R.M Institute of Science& Technology Deemed university, standing academic board of the S.R.M Institute of Science& Technology Deemed university, hereby makes the following regulations: -

SHORT TITLE AND COMMENCEMENT: -

These regulations shall be called "THE REGULATIONS FOR THE MASTER OF OCCUPATIONAL THERAPY (M.O.T) DEGREE COURSE OF THE S.R.M INSTITUTE OF SCIENCE AND TECHNOLOGY.

They shall come into force from the academic year 2004-2005 session onward.

The regulations and Syllabus are subject to modification by the Standing Academic Board from time to time.

REGULATIONS

1. ELIGIBILITY

Candidates completed Bachelors in Occupational Therapy (B.O.T) including Six months of Internship.

2. PHYSICAL FITNESS CERTIFICATE

Every candidate before admission to the course shall submit to the Head of the Institution a certificate of medical fitness from an authorized medical officer that the candidate is physically fit to undergo the academic course and does not suffer from any disability or contagious diseases.

3. REGISTRATION

A candidate admitted to the course shall register his/her name with this University by remitting the prescribed fee along with the application form for

registration duly filled in and forwarded to this University through the Head of the Institution within the stipulated date.

4. DURATION OF THE COURSE

The duration of certified study for the Masters of Occupational Therapy course shall extend over a period of two academic years. The course shall be non-semester annual pattern.

5. MEDIUM OF INSTRUCTIONS

English shall be the Medium of Instructions for all the subjects of study and for examinations of the Master of Occupational Therapy course.

6. CURRICULUM

The curriculum and the syllabus for the course shall be as prescribed by the standing academic board from time to time.

7. INTERNAL ASSESSMENT

a. There will be internal assessment of students performances in terms of theory and practical as given in the scheme of examination.

b. To qualify for appearing the university examination, the candidate should secure a minimum of 50% of marks prescribed for the internal assessment.

c. Average marks of such internal examinations will be taken into consideration for award of sessional marks.

c. The details of internal marks awarded to the candidates should be submitted to the University by the Head of the Institution at least 15 days prior to the commencement of the theory examinations.

8. MARKS QUALIFYING FOR A PASS

A candidate will be declared to have passed a subject/paper in the University examination if he/she secures not less than 50% of marks in the University theory examination, not less than 50% of marks in the University Practical examination wherever prescribed and not less than 50% of marks in internal assessment.

9. REVALUATION OF ANSWER PAPERS:

There shall be no revaluation of the answer papers.

10. MAINTENANCE OF LOG BOOK AND TIME BOOK:

a. Every candidate shall maintain a record of skills he/she has acquired during the two years of study period, duly certified by various Heads of Departments under whom he/she has undergone training.

b. At the end of the programme, the candidate should summaries the contents and get the Log Book and time book certified by the Head of the Department.

c. The Log Book should be submitted at the time of clinical examination for the scrutiny of the Board of Examiners.

d. In addition to the above, the Head of the Department shall involve the candidates in Seminars, Journal Club, Group discussions, conferences and in the teaching and training programme of undergraduate students.

e. Every candidate should be encouraged to present short title papers in conferences and to make improvements in it and submit them for publication in reputed Occupational Therapy journals.

11. SUBMISSION OF DISSERTATION:

a. Every candidate shall be required to submit a dissertation in the speciality concerned, two months before the commencement of 1st year examination.

b. The candidates shall be assigned a topic for dissertation within four months from the date of his/her admission to the programme. The dissertation should be neatly typed on one side only in double line spacing and it should not exceed 60 pages excluding certifications, acknowledgements, annexures and Bibliography.

c. The candidates shall submit four copies of Dissertation four months prior to the commencement of the 2nd year University examinations to the Head of the Department/Institution.

d. The Dissertation shall be evaluated examiner prior to the commencement of the 2nd year University theory examinations.

e. If the dissertation of the candidate is approved, but he/she fails in the University theory/practical examination, the marks awarded for his/her dissertation shall be carried over for the subsequent examinations(s).

f. When the dissertation of a candidate is rejected, the candidate shall submit a fresh dissertation two months prior to the commencement of the subsequent University examination**.**

12. CLASSIFICATION OF SUCCESSFUL CANDIDATES:

A successful candidate

i) Who secures not less than 75% in the aggregate marks shall be declared to have secured 'FIRST CLASS WITH DISTINCTION' provided he/she passes the whole examination in the FIRST ATTEMPT

ii) Who secures not less than 60% in the aggregate marks and completes the course within the stipulated course period shall be declared to have passed the examinations in the 'FIRST CLASS';

iii) Who secures above 50% and less than 60% in the aggregate marks and completes the course within the stipulated course period shall be declared to have passed the examinations in the 'SECOND CLASS'; and

iv) All other successful candidates shall be declared to have PASSED the examinations

13. NUMBER OF APPEARANCE (S):

A candidate registered for the MOT Course must pass the 1st year and 2nd year Examinations within five years from the date of his/her admission; i.e., the candidate should pass the 1st year and 2nd year Examinations within nine attempts in the University examination. If the candidate fails to pass the 1st year and 2nd year

Examination within the period of five years, he/she shall be discharged from the course.

14. RE-ADMISSION AFTER BREAK OF STUDY:

A candidate having a break of study of five years and above from the date of admission and more than two spells of break will not be considered for readmission.

The five years period of break of study shall be calculated from the date of first admission of the candidate to the course inclusive of all the subsequent spells of break of studies.

A candidate having a break of study shall be re-admitted after satisfactory fulfillment of the regulations of the University at the commencement of an academic year only and shall undergo the full duration of the course. No exemption for the period of study already undergone or for the examination already passed shall be granted. The candidate will be required to appear for all the examinations as prescribed in the regulations in vogue at the time of readmission**.**

15. COMMENCEMENT OF THE COURSE

The course will commence from the month of July of every academic year

16. COMMENCEMENT OF EXAMINATIONS

The University will conduct the examination in the month of August and February

If the date of commencement of Examination falls on Saturdays, Sundays or declared Public Holidays, the examination shall begin on the next working day.

17. WORKING DAYS DURING A SEMESTER

Each academic year shall consist of not less than 200 working days.

18. ATTENDANCE REQUIRED FOR ADMISSION TO EXAMINATIONS

a. No candidates shall be permitted to appear in any one of the parts of M.O.T degree course unless he/she has attend the course in the subject for the prescribed period in the University and produces the necessary

certificate of study, attendance and satisfactory conduct from the Head of the institution.

b. A candidate is required to put in minimum 80% of attendance in both theory and practical separately in each subject before admission to the examination.

c. A candidate lacking in the prescribed attendance and progress in any one subject in theory and practical in the first appearance will not be permitted for admission to the entire examinations.

19. MARKS QUALIFYING FOR A PASS

A candidate shall be declared to have passed the examination if he/she obtains the following qualifying marks:

20. CARRY-OVER OF FAILED SUBJECTS

Candidates are permitted to carry-over the failed subject in first year to second year.

21. MIGRATION / TRANSFER OF CANDIDATES

a. Migration / Transfer of candidates from one recognized institution to another institution of this University or from another University shall not generally be considered.

b. However, under extraordinary circumstances, the Vice – Chancellor shall have the powers to place any migration/transfer he deems fit in the Governing council and get its approval for grant of permission migration/ transfer to candidates undergoing course of study in this University.

22. VACATION

The Heads of Institutions shall declare 6 (six) weeks vacation in an academic year to the students. The period(s) of vacation can be decided by the Head of the Institution.

23. AWARD OF DEGREE

The Degree shall be awarded by the University only after the completion of two academic years.

24. AUTHORITY TO ISSUE TRANSCRIPT

The University shall be the Authority for issuing Transcript after remitting the prescribed fee.

M.O.T SYLLABUS

SUBJECT - BASIC SCIENCES – ANATOMY & PHYSIOLOGY

Examination at the End of First Year. Instruction hours: 50 hrs

Course Description - Will include Neurophysiology, Anatomy, and Work physiology and its application in Occupational Therapy.

Course Objectives - Student will be able to demonstrates knowledge in Anatomy and Physiology and its application in Occupational Therapy.

Unit I - Neuro Anatomy
Unit II - Neuro Physiology & Work Physiology
Unit III - Applied Anatomy & Applied Physiology
Unit IV - General Anatomy
Unit V - General Physiology

Neuro Anatomy	-	1.1	Neuro anatomy of brain
		1.2	Neuro anatomy of Spinal cord
		1.3	Neuron anatomy of peripheral and cranial nerves.
Neuron Physiology	-	1.1	Neuro Physiology of nervous system
		1.2	Patho physiology of various conditions
		1.3	Functions of nervous system
Work Physiology	-	1.4	Principles of exercise
		1.5	Energy expenditure for various activities.
		1.6	Importance of work physiology in O.T
Applied Anatomy & Applied Physiology	-	1.1	Disorders of nervous system
		1.2	Application in O.T
		1.3	Common investigative procedures used.
General Anatomy		1.1	Anatomy of upper limb
		1.2	Anatomy of lower limb
		1.3	Anatomy of trunk
General Physiology		1.1	Physiology of respiratory system
		1.2	Physiology of CVS
		1.3	Patho Physiology of respiratory system & CVS

Lecture Hours - 50 hrs 4/wk

Books recommended

Human Anatomy -Text book

1. Anatomy by Snell
2. Anatomy by Grace
3. Anatomy of Chaurasia

References Books

1. Snell's Neuroanatomy
2. Anatomy - Grey
3. Anatomy of Grant
4. Neuroanatomy - Iderbirsingh

Human Physiology - Text Books

i. Human Physiology: 1. Chaudhary 2. Bijlani

2. Essentials of Medical Physiology:K. Semubulingam, Jaypee publishers – 1st Edition.

References Books: -

1. Text Books of Medical Physiology: Guyton – Prism, Saunders, Samson and Wright.

SUBJECT - TREATMENT APPROACHES AND MODELS IN O.T.

Examination at the end of First Year Instruction hours: 100 hrs

Course Description - Treatment approaches and Models used for different condition will be discussed.

Course Objectives - Students will be able to demonstrate the principles behind the treatment approaches used in Occupational Therapy and its application in various physical and psychiatry condition.

Unit I - Treatment Approaches for Pediatric condition

Unit II - Treatment Approaches for Psychiatric condition

Unit III - Treatment Approaches for Neuro condition

Unit IV - Treatment Approaches for Orthopedic conditions

Unit V - Treatment Approaches for Cardio respiratory condition

Unit VI - Models used in Occupational Therapy

Pediatrics

- 1.1 Sensory integrative approach
- 1.2 NDT
- 1.3 Roods Approach

Neurosciences

- 2.1 Sensory Integration
- 2.2 NDT
- 2.3 PNF
- 2.4 Motor relearning program
- 2.5 Task Oriented approach.

Psychiatry

- 3.1 Occupational Behaviour Frame of reference
- 3.2 Cognitive Behaviour Frame of reference
- 3.3 Psycho dynamic Frame of reference
- 3.4 Psycho analytical Frame of reference

Orthopedic conditions

- 4.1 Biomechanical approach
- 4.2 Rehabilitative approach
- 4.3 Rood's approach

Cardio Respiratory

- 5.1 Biomechanical approach
- 5.2 Rehabilitative approach
- 5.3 Occupational behaviour approach

Models

- 6.1 Model of human occupation
- 6.2 Activities health model
- 6.3 Psychosocial model

Instruction hours- 70 hrs

Lecture Hours - 50 hrs 5/wk

Practical Hours - 20 hrs 4/wk

Books Recommended

- Willard & Spackman OT by H. Hopkins & H. Smith
- Introduction to OT by Ann Turner
- OT practice skills for physical dysfunction by L.V. Pedretti
- OT for physical dysfunction by CA Trombl

SUBJECT – OT IN GENERAL CONDITIONS

Examination at the end of First Year — Instruction hours: 200hrs.

Course Description - This course follows the study of neurology and Orthopaedics, mental health , paediatrics and cardio respiratory condition and involves the application of Occupational Therapy techniques to this condition and also the aspects of rehabilitation and team members.

Course Objectives - Students will be able to apply the basic principles of therapeutic activities and approaches, discuss psychological factors affecting selection of treatment media and outline the principles and goals in design indication and fitting of hands splints prosthesis calipers and walking aids.

Unit I - OT intervention in orthopedics and neurology conditions
Unit II - OT intervention in Paediatrics conditions
Unit III - OT intervention in mental health conditions
Unit IV - OT intervention in Cardio respiratory conditions

Unit I -OT intervention in orthopedics and neurology conditions

Assessment	1.1	-	Sensory Integrative assessment
	1.2	-	Ergonomic Evaluation
	1.3	-	General Evaluation
Common Orthopaedic condtions	2.1	-	Spinal cord injuries
	2.2	-	Fractures 4e/3e
	2.3	-	Rheumatology
Common Neurologic condition	3.1	-	Head injuries
	3.2	-	CVA
	3.3	-	Parkinsonism & other disorders of nervious system
Investigative Procedures	4.1	-	Investigative procedures in Orthopaedics
	4.2	-	Investigative procedures in Neurology
	4.3	-	Application in O.T
Frames of references	5.1	-	Sensory integrative FOR
	5.2	-	Biomechanical including splinting.
	5.3	-	Rehabilitative
	5.4	-	Neuro Physiological

Instruction Hours - 70 hrs.
Lecture Hours - 50 hrs. 3/wk.
Practical Hours - 20 hrs. 4/wk.
Clinical Hours - 180hrs.

Books Recommended:-

* Occupational Therapy practice skills for physical dysfunction lorraine Pedretti, Barbara Zoltan, 3rd and 4th edn.
* Occupational Therapy and Physical Dysfunction Trombly, 3rd and 4th edition.
* Occupational Therapy and Physical Dysfunction Principles, Skills and Practice – Ann Turner, Foster, Johnson 4th edition.
* Therapeutic Exercise – Basmajiian – 5th edition.
* Willard and Spackman's O.T – Helen Hopkins and Smith A.H.
* Treatment and Rehabilitation of Fractures – by Hoppenfeld and Murthy V.L.

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Unit II - Occupational therapy intervention in pediatrics conditions

Course Description - This course covers the application of the principles of Occupational Therapy to physical mental and emotional disorders of childhood.

Course objectives - Students will be able to demonstrate an understanding of areas of abnormal and delayed development in children, psychological reaction of children to hospitalization and disability, therapeutic approaches and techniques for physical mental emotional disorders of childhood and plan appropriate treatment procedures.

Assessment
- 1.1 Sensory integrative analysis
- 1.2 General Evaluation
- 1.3 Play Evaluation

Common Pediatric conditions
- 2.1 Childhood psychiatric condition
- 2.2 Childhood orthopaedic condition
- 2.3 Childhood Neurological condition.

Early Intervention
- 3.1 Neonatal unit
- 3.2 High risk infants
- 3.3 Sensory stimulation

Investigative procedures
- 4.1 Investigative procedures used in pediatrics
- 4.2 Application in O.T

Frames of references
- 5.1 Sensory integrative frame of reference
- 5.2 Rehabilitative frame of reference
- 5.3 Neuron physiological frame of reference

Instruction Hours - 70 hrs.
Lecture Hours - 50 hrs. 3/wk.
Practical Hours - 20 hrs. 4/wk.
Clinical Hours - 180hrs.

Books Recommended

* Occupational Therapy practice skills for physical dysfunction Lorraine Pedretti, Barbara Zoltan, 3rd and 4th edition.
* Occupational Therapy and Physical Dysfunctions – Trombly, 3rd and 4th edition.

* Occupational Therapy and Physical Dysfunctions – Principles, Skills and Practice – Ann turner, Foster, Johnson – 4th edition.
* Willard and spackman's O.T – Helen Hopkins and Smith A.H.
* A Manual for Evaluation of perceptual & cognitive Deficits – Zoltan B, Siev C, Freishtat B.
* Neurological rehabilitation – Darcy A.V
* Occupational Therapy for Children – Case Smith J and Pratta
* Neurological rehabilitation, optimizing moter performance – J.H. Carr, R.B. Shephore.

UNIT III- occupational therapy in mental health conditions

Course Description - This course follows the study of clinical psychology and psychiatry it covers the practical application of Occupational Therapy in Psychiatry treatment including a variety of assessment and treatment procedures.

Course Objectives - Students will be able to describe the history of psychiatry Occupational Therapy, define O.T in relation to Psychiatry, discussed the role of activity and treatment approaches in psychiatry treatment.

Mental Health Examination	-	1.1	-	History
		1.2	-	Mental status examination
		1.3	-	Interpersonal/Intra personal/task -behaviour/projective technique
Neuro Psychological tests	-	2.1	-	Commonly used tests.
		2.2	-	Application in O.T
Common Psychiatric Conditions	-	3.1	-	Neuro psychiatric conditions
		3.2	-	Childhood psychiatric conditions
		3.3	-	Acquired psychiatric conditions.
Investigative Procedures	-	4.1	-	Application in O.T
Frames of references	-	5.1	-	Occupation behaviour frame of reference
		5.2	-	Psychodynamic frame of reference
		5.3	-	Psychoanalytical frame of reference
		5.4	-	Cognitive behaviour frame of reference

Instruction hours	-	70 hrs.
Lecture Hours	-	50 hrs.3/wk.
Practical Hours	-	20 hrs.4/wk.
Clinical hours	-	180 hrs.

<u>Books Recommended –</u>

* H. Hopkins & H. Smiths – Willard and Spackman's Occupational Therapy – 8th edition.
* M. Wilson – Occupational Therapy in Short Term Psychiatry 3rd edition.
* M. Wilson – Occupational Therapy in Long Term Psychiatry – 3rd edition.
* G.S. Fidler and J.W. Fidler – Occupational Therapy a communication process (1st edition.)
* K.Reed – Quick reference to Occupational Therapy (Latest)
* Creek J. – Occupational Therapy & Mental Health.

UNIT IV - occupational therapy in cardio respiratory conditions

Course Description - This course introduces the students to the cardio thoracic condition which commonly costs disability and emphasis is given to the application of treatment approaches to various cardio thoracic conditions.

Course Objectives - Students will be able to demonstrates an understanding of Cardio thoracic conditions causing disability and the application of appropriate treatment procedures along with investigative procedures.

Anatomy & Physiology of CVS system	-	1.1	Normal functioning of CVS
	-	1.2	Applied anatomy
	-	1.3	Applied physiology
Work/exercise physiology			
	-	2.1	Principles of exercise physiology
	-	2.2	Energy expenditure during various ADL
	-	3.3	Application in O.T
Patho physiology	-	3.4	Common cardiac conditions
	-	4.1.	Patho Physiology
	-	4.2	Common respiratory conditions & Patho Physiology.
Investigative Procedures	-	5.1	Application in O.T
Frames of references	-	6.1	Rehabilitative frame of reference
	-	6.2	Occupational behaviour frame of reference
	-	6.3	Biomechanical frame of reference

Instruction hours	-	70 hrs.
Lecture Hours	-	50 hrs. 3/wk
Practical Hours	-	20 hrs . 24/wk
Clinical hours	-	**180 hrs.**

Books Recommended-

* Occupational Therapy – Willard & Spackeman 8th edition.
* O.T. Practice Skills for Physical Dysfunction – Pedretti 4th edition.
* O.T. for Physical Dysfunction – Trombly 5th edition.
* McDonald 4th edition.
* Rehab Medicine – Good gold.
* Rehabilitation of Hand – Wynn & Parry.
* Hand Hunter.
* Hand splinting – Fess.

O.T. & Physical dysfunction – Arm Turner 4th edition.

SUBJECT - BIOSTATISTICS & RESEARCH METHODOLOGY

Examinations at the end of 1st Year. Instruction hours: 100 hrs

Course Description - This course introduces the students to various types of research design and the importance of biostatistics and research methodology in the field of Occupational Therapy.

Course Objectives - Students will be able to apply the basic concept of statistics and principles of scientific enquiry in planning and evaluating the results of O.T practice and participate in descriptive, exploratory and survey studies in O.T and apply the results of research studies in Occupational Therapy.

Unit I - Basic principles of research
Unit II - Research design & statistics
Unit III - Critical review of research
Unit IV - Statistical tests
Unit V - Research application

Basic Principles of research	-	1.1	-	Case designs
		1.2	-	Descriptive statistics
		1.3	-	Surveys & sampling
Research design & statistics	-	2.1	-	Scales used in statistics
		2.2	-	Error in research
		2.3	-	Inferential statistics.
Critical review of research	-	3.1	-	putting theory into practice
		3.2	-	Writing up research for publication
	-	3.3	-	Critical review
Statistical tests		4.1	-	Same & matched subject design
		4.2	-	Different subject design
		4.3	-	Co relational designs
Research Application	-	5.1	-	Attitude scates
		5.2	-	Repertory gird analysis
		5.3	-	The Delphi technique

Lecture Hours - 100 hrs 3/wk

Books Recommended:-

* Statistics – Joshi & Chitale
* A Practical approach to PG dissertation – R. Raveendran & B. Gitangali
* 3 Hicks CM – Research Methods for Clinical Therapists.

SUBJECT - OCCUPATIONAL THERAPY MANAGEMENT AND SERVICE

Examination at the end of Second Year. Instruction hours: 50 hrs

Course Description - This course of study involves in the basic principles of Organization and Administration of Occupational Therapy Department and emphasis is given on the Importance of work-study in Occupational Therapy.

Course Objectives - Students will be able to demonstrates an understanding of the principles and methods of organization, administration and work study as appropriate to the O.T delivery system and to patients treatment and training.

Unit I - Aspects of Organization and administration
Unit II - O.T in Work study
Unit III - Ergonomics
Unit IV - General principles
Unit V - Special evaluation
Unit VI - Recent tends in OT

Aspects of Organization and administration -

- 1.1 Organizing, planning, directing and controlling.
- 1.2 Documentation & Budgeting
- 1.3 Marketing

O.T in Work Study

- 2.1 Importance of work
- 2.2 Work study Principles
- 2.3 Working Condition and standardized work samples

Ergonomics

- 3.1 Scope of Ergonomics in O.T
- 3.2 Objectives of Ergonomics
- 3.3 Application of Ergonomics Principles.

General Principles

- 4.1 O.T as consultant
- 4.2 Computers in O.T
- 4.3 Legal Aspects
- 4.4 Ethics in O.T

Special Evaluation

- 5.1 Higher cortical evaluation
- 5.2 Hand Evaluation
- 5.3 Job Analysis & prevocational evaluation
- 5.4 ADL Evaluation & Home Evaluation

Recent trends in OT

	6.1	Recent trends in India
	6.2	Recent trends abroad
	6.3	Application in OT

Lecture Hours - 50 hrs 2/wk

SUBJECT - ADVANCED O.T IN NEUROSCIENCES

Examination at the end of Second Year **Instruction hours: 200 hrs**

Course Description - This course involves a better understanding of neuroscience, the principles of motor control and motor learning, the investigative procedures involved in neurological conditions and the application of recent trends in neurological conditions.

Course Objectives - Students will be able to demonstrates the investigative procedures, application of neurophysiological principles in Occupational Therapy, understand the use of Biofeedback and its application in Occupational Therapy.

Unit I - Neurophysiology of Nervous system
Unit II - Motor control/motor learning
Unit III - Biofeedback
Unit IV - Pathophysiology behind neurological condition.

Neurophysiology -
1.1 Neurophysiology behind skilled movement.
1.2 Neurophysiology behind posture & movement.
1.3 Importance of Neurophysiology in O.T

Motor control/Motor Learning -
2.1 Theories of Motor control
2.2 Theories of Motor learning
2.3 Application in O.T

Biofeed back -
3.1 Neurophysiology behind biofeedback
3.2 Motor learning
3.3 Application in O.T

PathoPhysiology -
4.1 Common affections of Nervous system
4.2 Patho Physiology
4.3 Motor control in various neurological conditions.

Frames of references -
5.1 Task oriented approach
5.2 Cardio respiratory & shepherd MRP
5.3 Affolter approach
5.4. Knowledge and application of functional approaches used in Neurological rehabilitation
5.5. Knowledge and application contemporary approaches used in Neurological rehabilitation

Assesment and Evaluation

6.1. Knowledge and assessment for using common standardized & non standardized tools/ instruments/tests/ scales in neurological disorders, cumulative trauma disorder, hand injuries and developmental disorders

6.2 Disability evaluation, functional analysis indices and relevant provisions in the prevalent law

6.3. Investigation procedure used in neurological conditions.

Lecture Hours -	100 hrs	5/wk
Practical Hours-	50 hrs	24/wk
Clinical hours -	400hrs	

SUBJECT - ADVANCED O.T IN PEDIATRICS

Examination at the end of Second Year Instruction hours: 200hrs

Course Description - This course involves a better understanding of child psychology normal and abnormal development and its influence in O. T treatment, emphasis is given on the specific standardized scales used in pediatrics.

Course Objectives - Students will be able to demonstrates the theory and practice of Occupational Therapy as applied to neonates, children and adolescents dysfunction, principles of training in basic motor skills development, use of play and its purpose.

Unit I - Neurophysiological basis behind movement.
Unit II - Motor control / motor learning
Unit III - Normal development
Unit IV - Patho physiology behind abnormal development.
Unit V - Frames of references.

Neurophysiology -
1.1 Neurophysiology behind movement.
1.2 Neurophysiology behind posture.
1.3 Application in O.TMotor control/Motor

Learning -
2.1 Theories of Motor control
2.2 Theories of Motor learning
2.3 Application of MC & ML in O.T

Normal Development -
3.1 Reflex Maturation
3.2 Influence of reflexes in development

Patho Physiology -
4.1 Abnormal development
4.2 Neural causes of abnormal development.

Frames of References -
5.1 Sensory integrative approach
5.2 Task oriented approach
5.3 Neuro physiological approach

Assessment and Evaluation

6.1 Knowledge and assessment for using common standardized & non standardized tools/ instruments/tests/ scales in Pediatric conditions.

6.2 Investigation procedure used in Pediatric conditions

Neonatal Intensive Care Unit (NICU)

7.1. Neonatal Intensive Care Unit environment

7.2. Equipment & assessment used in Neonatal Intensive Care Unit
7.3. Assessment/ test/ evaluation/ investigation procedure for high risk infants
7.4. Application of Occupational Therapy in Neonatal Intensive Care Unit

Lecture Hours	-	100 hrs	5/wk
Practical Hours	-	50 hrs	24/wk
Clinical Hours	-	400 hrs	

SUBJECT - ADVANCED OT IN MENTAL HEALTH

Examination at the end of Second Year Instruction hours: 200hrs

Course Description -This course involves a better understanding of psychiatric conditions,the investigative procedures and application of advanced treatment techniques in O. T , emphasis is given on the specific standardized scales used in pediatrics.

Course objectives -Student will be able to plan out assessment and evaluation using standardized rating scales, indices, tests and investigative procedures, intervention in mental health with current models of practice principles of rehabilitation in long term care, day care centers and school set up.

Unit I	-	Axis Classification of Mental Illness
Unit II	-	Theoretical & Philosophical basis of O.T
Unit III	-	Child Psychiatry
Unit IV	-	Forensic Psychiatry
Unit V	-	Gero Psychiatry
Unit VI	-	Frames of references.

Axis classification of Mental Illness

a. Diagnostic Statistical Manual of Mental Disorder –IV (DSM – IV)
b. International Classification of Diseases – 10 (ICD- 10)
c. Psychological history, General & Occupational therapy assessment methods

Theoritical & Philosophical basis of O.T

	-	1.1 History of psychiatric O.T in India 1.2 Biological (Psychosocial theories behind psychiatric conditions. 1.3 Major psychiatric conditions relevant to O.T
Child Psychiatry	-	2.1 Sensory integrative dysfunction 2.2 O.T in School system 2.3 Child Psychology
Gero Psychiatry	-	3.1 Theories of aging
	-	3.2 Human Occupational Model in Geri care.
	-	3.3 Features of gero psychiatry.
Forensic Psychiatry	-	4.1 Assessment & evaluation 4.2 Standardised scales 4.3 Investigative procedures. 4.4. Legal & Ethical issues in psychiatry relevant to occupational therapy 4.5. Emergency psychiatry
Frames of references	-	5.1 Psycho dynamic FOR 5.2 Occupational behavior FOR 5.3 Psycho analytical FOR 5.4 Cognitive Behaviour FOR
Psycho Pharmocology:		
		6.1. Psycho pharmacology & relevance to Occupational therapy 6.2. Psychological and other Biological methods of treatment

Lecture Hours	-	100 hrs	5/wk
Practical Hours	-	50 hrs	24/wk
Clinical hours	-	400hrs	

SUBJECT - ADVANCED O.T IN ORTHOPEDICS

Examination at the end of the Second Year. Instruction hours: 200 hrs

Course description — This course involves a better understanding of Musculo skeletal system, the principles of biomechanics and its application, the investigative procedures involved in orthopedic conditions and the application of recent trends in orthopedic conditions.

Course objectives — Student will be able to demonstrate the advanced treatment techniques involved in the treatment of musculo skeletal conditions, apply the principle of biomechanics and do a job analysis and vocational fitness programme.

Unit I	-	Bio mechanics
Unit II	-	Evaluation & Investigative Procedures
Unit III	-	Splinting/adaptive devices
Unit IV	-	Pathophysiology & O.T Intervention

Unit V - Frames of references

Biomechanics - 1.1 Functional anatomy of musculo skeletal system
1.2 Evolutionary functions of hand
1.3 Applied biomechanics

Evaluation & Investigative Procedures - 2.1 Disability evaluation
a. Functional Evaluation & Job analysis
b. Vocational Fitness programme.
2.4 EMG
2.5 NCV
2.6 Application in O.T
2.7. Bone Scan –
Magnetic Resonance Imaging Scan (MRI),
Computerized Tomography(CT)
Positrun Emission Tomography (PET)
2.8. X- Ray, Biopsy, Densitometry, Arthoroscopy, etc.,

Splinting/adaptive devices - 3.1 Principles of splinting
3.2 Fabrication of splints
3.3 Fabrication of adaptive devices.

Ambutation – Upper limb, Lower limb

3.4. Orthosis & Prosthosis (prescription, fabrication & Check out)
3.5. Wheel Chair (prescription, modifications, training, advanced transfers)
3.6. Assistive Technology
3.7. Ergonomics and work study
3.8. Architectural Barriers
3.9. Total Hip Replacement, Total Knee replacement

PathoPhysiology & O.T. Intervention - 4.1 Common affections of Musculo skeletal system
4.2 Patho Physiology
4.3 Biomechanical application in various orthopedic conditions.
4.4 Intervention for congenital conditions.
4.5. Bio mechanics upper limb, lower limb, spine & neck

Frames of references - 5.1 Biomechanical FOR
5.2 Rehabilitation FOR

Lecture Hours - 100 hrs 5/wk
Practical Hours - 50- hrs 24/wk

Clinical hours - 400hrs

SUBJECT -ADVANCED O.T IN CARDIO RESPIRATORY CONDITIONS.

Examination at the end of Second Year Instruction hours: 100hrs

Course Description - This course involves a better understanding of cardiovascular and pulmonary conditions, the treatment approaches used for the same and a basic understanding of the investigative procedures used in cardio pulmonary conditions.

Course Objectives - Students will be able to demonstrates the intervention and application of advanced treatment techniques, do a therapeutic functional work assessment, work simulatory training and functional training.

Unit I - Review of Cardiorespiratory physiology
Unit II - Functional work assessment.
Unit III - Exercise stress testing /investigations
Unit IV - Disability evaluation/Gen. Evaluation.
Unit V - Frames of references.

Review of Physiology - 1.1 Exercise physiology
1.2 Energy expenditure
1.3 Application in O.T

Functional work assessment
- 1.1 Standardized work assessments.
1.2 Ergonomics
1.3 Work Measurement.

Investigations
- 1.1 ECG/Chest Xray
- 1.2 Exercise stress testing
- 1.3 Other tests related to O.T

Evaluation - 1.1 Disability evaluation
- 1.2 Ergonomic evaluation
- 1.3 Psychometric testing.

Frames of references - 1.1 Rehabilitative FOR
1.2 Biomechanical FOR
1.3 Occupational behavior FOR

Lecture Hours - 100 hrs 5/wk
Practical Hours - 50 hrs 24/wk
Clinical hours - 400hrs

SUBJECT - ADVANCED O.T IN HAND THERAPY

Examination at the end of the Second Year. Instruction hours: 100 hrs

Course description - This subject involves the application of biomechanical principles, understanding the evolutionary functions of hand and the investigative procedures

Course objectives - Student will be able to demonstrate the advanced treatment techniques involved in the treatment of conditions affecting hand, apply the principle sof biomechanics and do a job analysis and vocational fitness programme.

Unit I - Bio mechanics
Unit II - Evaluation
Unit III - Investigative Procedures
Unit IV - Splinting/adaptive devices
Unit V - O.T Intervention.

Biomechanics -
1.1 Functional anatomy of hand
1.2 Evolutionary functions of hand
1.3 Applied biomechanics

Evaluation -
2.1 Disability
2.2 Functional Evaluation & Job analysis
2.3 Vocational Fitness programme.

Investigative Procedures -
3.1 EMG
3.2 NCV
3.3 Application in O.T

Splinting/adaptive devices -
4.1 Principles of splinting
4.2 Fabrication of splints
4.3 Fabrication of adaptive devices.

O.T Intervention -
5.1 Biomechanical FOR
5.2 Rehabilitative FOR
5.3 Intervention for congenital conditions.

Lecture Hours - 100 hrs 5/wk
Practical Hours - 50- hrs 24/wk
Clinical hours - 400hrs

SUBJECT - O.T EDUCATION

Examination at the end of Second Year — Instruction hours: 50 hrs

Course description - This course emphasis the principles of education, concepts of teaching and learning, principles of methods of teaching and its application in the field of occupational therapy

Course objectives - Students will be able to describe the development of educational aims, describe the principles of curriculum development, instruction, learning and evaluation, counseling and guidance

Unit I - Aims, Philosophy and trends and issues in education including.
Unit II - Concepts of teaching and learning.
Unit III - Curriculum
Unit IV - Principles and methods of teaching
Unit V - Measurement and Evaluation
Unit VI - Guidance and counseling
Unit VII - Faculty development and development of personnel for P.T services.

Aims, Philosophy and trends and issues in education including:

- 1.1 Educational aims
- 1.2 Agencies of education
- 1.3 Formal and informal education
- 1.4 Major philosophies of education (naturalism, idealism, pragmatism, realism) including Gandhi and Tagore.
- 1.5 Modern and contemporary philosophies of education (existentialism, progressivism, reconstructionism, perennialism)
- 1.6. Philosophies of education in India – past, present and future.
- 1,7 Role of educational philosophy
- 1.8 Current issues and trends in education.

Concepts of teaching and learning

- 2.1 Theories of teaching
- 2.2 Relationship between teaching and learning
- 2.3 Psychology of education
- 2.4 Dynamics of behaviour, motivational process, of learning perception, individual differences, intelligence personality.

Curriculum

- 3.1 Curriculum committee
- 3.2 Development of a curriculum for P.T
- 3.3 Types of curriculum
- 3.4 Formation of philosophy, objectives, course objectives.
- 3.5 Placing, course placement, time allotment.

3.6 Selection and organization of learning experience.
3.7 Master rotation plan – individual rotational plan
3.8 Correlation of theory and practice.
3.9 Hospital and community areas for clinical instruction.
3.10 Clinical assignments
3.11 Current trends and curriculum planning.

Principles and methods of teaching

4.1 Strategies of teaching
4.2 Planning of teaching
4.3 Organization, writing lesson plans
4.4 A.V aids
4.5 Teaching methods – socialized teaching methods.

Measurement and Evaluation

5.1 Nature of Measurement of education, meaning, process, personnel, standardized, non standardized tests.
5.2 Steps of constructing a test, measurement of cognitive domain, a a assessment techniques of affective, psychomotor domains, administering scanning and reporting.
5.3 Standardized tools, important tests of intelligence, aptitude, instrument, personality, achivement
5.4 Programme evaluation
5.5 Cumulative evaluation

Guidance and Counselling

Philosophy, Principles and concepts, guidance and counseling services for students and faculty.

Faculty development and development of personnel for OT services.

Lecture Hours - 50 hrs

DISSERTATION

Examination at the end of : 2nd year
Alloted hours: 200

COURSE DESCRIPTION

The Dissertation is a major thesis undertaken by students. It is a Subject in its own right and must be satisfactorily completed in order for the students to graduate. As an alternative to this, the student can present a record of cases.

The Dissertation requires the student: to identify a problem area of relevance to the theory and / or practice of Occupational therapy: to carry out an investigation of one aspect of that problem area: and, to present a clear report on the process and results of the project.

Students are encouraged to identify problems of special interest to them that fall within the interest areas of Occupational therapy services, Students are encouraged to aim towards knowledge on the topic in the specified problem area.

COURSE OBJECTIVES

The objectives of this course are that at the end of the specials study will have:

2. Developed skills in critical thinking, research method (including review of literature, formulation of a problem for study, selection of a research strategy to investigate the problem,) implementation of that strategy), and the formal presentation of information related to the theory and or/ practice of physiotherapy and occupational therapy.
3. Gained an interest in research, writing, and publishing material, which contributes to the ongoing development of professional therapy both as a science and an art.

In addition, the student will be able to fulfill (as measured by written,
Oral & practical internal evaluation) the following objectives of the course.

1. Identify problems of relevance to the theory and/or practice of therapy in rehabilitation.
2. Undertake injury into a specific problem area.
3. Formally document the stages of such a study, including description of the problem, the process of investigation, the findings and their implications for therapy education, practice and research.

EVALUATION

50 marks will be awarded by internal assessment, which will include the guide
50 marks will be awarded by external examiners.