

SCHEME OF EXAMINATION

&

SYLLABI

OF

MASTER'S OF OCCUPATIONAL THERAPY
(First Year and Second Year)

IN MUSCULOSKELETAL DISORDERS

Affiliated to

Guru Gobind Singh Indraprastha University
KASHMERI GATE, DELHI.

W.E.F. ACADEMIC SESSION 2007-2008

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY, DELHI.

MASTER OF OCCUPATIONAL THERAPY (MOT)

MUSCULOSKELETAL DISORDERS

FIRST YEAR

COURSE CODE	COURSE NAME	CREDITS
MOT (O) 101	Research Methodology and Biostatistics	5
MOT (O) 102	Application of Occupational Therapy in Rehabilitation	10
MOT (O) 103	Role of Occupational Therapy in Physical Dysfunctions	10
MOT (O) 104	Role of Occupational Therapy in Mental Health	10

PRACTICALS

MOT (O) 151	Assessment & Management	15
MOT (O) 152	O.T Clinics / Symposium / Presentation**	5

TOTAL CREDITS : 55

***NUES stands for Non – University Examination Subject.*

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY, DELHI.

MASTER OF OCCUPATIONAL THERAPY (MOT)

MUSCULOSKELETAL DISORDERS

SECOND YEAR

COURSE CODE	COURSE NAME	CREDITS
MOT (O) 201	Pedagogy in Occupational Therapy Education	6
MOT (O) 202	Administration, Management & Ethical Issues	6
MOT (O) 203	Occupational Therapy in Musculoskeletal Disorders - I	8
MOT (O) 204	Occupational Therapy in Musculoskeletal Disorders - II	8

PRACTICALS

MOT (O) 251	Assessment & Management	12
MOT (O) 252	O.T Clinics / Symposium / Presentation**	3
MOT (O) 253	Dissertation	12

TOTAL CREDITS : 55

***NUES stands for Non – University Examination Subject.*

- Additional contact hours constitute a part of clinical training and practicals.
- The total number of credits essential for award of degree are 100.

FIRST YEAR

RESEARCH METHODOLOGY AND STATISTICS

Course Code MOT (O) 101

CREDITS – 5

Course Objective: To enhance the ability of the Occupational Therapist to conduct scientific studies thereby addressing the concerns of a commitment to inquiry, knowledge development and responsible (knowledge based) clinical practice and to construct valid and reliable assessment tools capable of yielding data of scientific value.

Following are the topics to be included:

SECTION I

RESEARCH METHODOLOGY

1. Research in Occupational Therapy

Introduction to Research Methodology

Research – Definition, Concept, Purpose, Approaches

Role of Computers in Research

2. Research Fundamental

Define Measurement

Measurement Framework

Scale of Measurement

Pilot Study

Types of Variables

Reliability & Validity

Drawing Tables, Graphs, Master Chart etc.

3. Writing a Research Proposal, Critiquing a Research Article

Defining a Problem

Review of Literature

Formulating a question, Operational Definition

Inclusion & Exclusion Criteria

Forming groups

Data collection & Analysis

Results, Interpretation, conclusion, discussion

Informed Consent

Limitations

4. Research Design

Principle of Designing

Design, instrumentation & analysis for qualitative research

Design, instrumentation & analysis for quantitative research

Design, instrumentation & analysis for quasi-experimental research

Design models utilized in Occupational Therapy

5. Research Ethics

SECTION II

BIOSTATISTICS

1. Biostatistics

Introduction

Definition

Types

Application in Occupational Therapy

2. Data

Definition

Types

Presentation

Collection methods

3. Measures of central value

Arithmetic mean, median, mode, relationship between them

Partitioned values-Quartiles, Deciles, Percentiles

Graphical determination

4. Measures of Dispersion

Range

Mean Deviation

Standard Deviation

5. Normal Distribution Curve

6. Co-relation analysis

Bivariate distribution:

Scatter Diagram

Co-efficient of correlation

Calculation & interpretation of co-relational co-efficient

T-test, Z-test, P-value

7. Regression analysis

Lines of regression

Calculation of Regression co-efficient

8. Sampling

Methods of Sampling

Sampling distribution

Standard error

Type I & II error

9. Probability (In Brief)

10. Hypothesis Testing

Null Hypothesis

Alternative hypothesis

Acceptance & rejection of null Hypothesis

Level of significance

11. Parametric & Non – Parametric tests

APPLICATION OF OCCUPATIONAL THERAPY IN REHABILITATION

Course Code MOT (O) 102

CREDITS – 10

Section 1:

APPLICATION OF OCCUPATIONAL THERAPY THEORY

Course Objectives: To enhance the abilities of the Occupational Therapist to choose the appropriate evaluations and treatment procedures based on the philosophy of occupational therapy.

1. Development of Occupational Therapy knowledge
2. Organization and use of knowledge
3. Emerging Paradigm
4. Model Base
5. Bridging the gap between theory and practice
6. Therapeutic roles and functions
7. Clinical Reasoning, Assessment and Diagnosis, Planning and Intervention
8. O.T Process Model
9. Service Program
10. Critical Analysis of the various approaches used

Section 2:

ASSISTIVE TECHNOLOGY

Course Objectives: To enhance the capabilities of the occupational therapist in maximizing the client's / patient's function in occupational performance areas by using appropriate technology.

1. Introduction and definitions of technology
2. Competencies required by occupational therapist
3. Matching Technology to Human needs
4. Role of Assistive Technology in Rehabilitation

5. Technological Applications:
 - ◆ Seating System
 - ◆ Self-care aids
 - ◆ Educational and Vocational aids
 - ◆ Interface switches and mounting aids
 - ◆ Recreational aids
 - ◆ Visual aids
 - ◆ Communication aids
 - ◆ Aids for the tactilely impaired
 - ◆ Pointing and Writing aids
 - ◆ Manipulatory and Mobility aids
 - ◆ Upper, lower extremity and spinal orthoses and upper and lower prostheses
(emphasizing application of CAD/CAM technology)
 - ◆ Environmental Controlled units
6. Service Delivery models
7. Societal & Professional issues regarding technology service delivery
8. Mandate to Occupational Therapy Profession and Professionals
9. Concept of Telemedicine / Rehabilitation and Information Technology
10. Current practice and recent advances (including material technology)
11. Future of technology and O.T.

Section 3:

ENVIRONMENTAL ADAPTATIONS

Course Objectives: To enhance the capabilities of the Occupational Therapist in optimizing the client's / patient's performance of a desired task in the environmental context.

1. Introduction
2. Regulations concerning accessibility to physical environment
3. Elimination of environmental barriers
4. Determination of personal role choice
5. Designs for maximizing performance within the environment
6. Working conditions

ROLE OF OCCUPATIONAL THERAPY IN PHYSICAL DYSFUNCTIONS

Course Code MOT (O) 103

CREDITS – 10

Course Objectives: To enhance the Occupational Therapist's capability to evaluate it's effectiveness following program planning, development, implementation and organization in various environment of practice.

Section 1:

- a) Common neurological, neurosurgical conditions (including structural disorders of nervous system, infectious disorders, degenerative disorders)
- b) Adults with developmental disabilities (alternative living situations, occupational performance considerations)
- c) Aging & elderly population (general aspects, pathophysiology of human aging, assessment & management of the elderly with disability, aging with a disability rehabilitation & care, educational & legal aspects.
- d) Cancer
- e) H.I.V. & A.I.D.S
- f) Leprosy

Section 2:

- a) Common Orthopaedic conditions (including fractures and dislocations)
- b) Arthritic Conditions
- c) Sports Health (Impact of regular training on human biological system assessment of physical and functional capacities, Environmental consideration, process and implementation of training, special considerations in training, prevention & management of sports injuries, safety & hygiene in sports psychology, organization and administration considerations, scope of OT in Sports, Current and Future trends).
- d) Trauma Care
- e) Thermal Injuries
- f) Amputations
- g) Cardio-Respiratory Conditions
- h) Women's Health (identifying areas of concern with regards to O.T profession adolescence, Child-bearing years, mature woman, the elderly woman)

ROLE OF OCCUPATIONAL THERAPY IN MENTAL HEALTH

Course Code MOT (O) 104

CREDITS – 10

Course Objectives: To enhance the Occupational Therapist's capability to evaluate the OT program effectiveness following planning, development, implementation and Organization in various environment of practice.

- a) Disorders diagnosed in infancy, childhood or adolescence
- b) Delirium, Dementia, Amnestic and other cognitive disorders
- c) Mental disorders due to a general medical condition
- d) Substance related disorders
- e) Schizophrenia and other Psychotic disorders
- f) Mood disorders
- g) Anxiety disorders
- h) Somatoform disorders
- i) Eating disorders
- j) Adjustment disorders
- k) Personality disorders
- l) Frames of References
- m) Practice Models used in Mental Health
- n) Group Therapy: Types and Goals
- o) Role of Motivation in Mental Health
- p) Stress and Pain Management

ASSESSMENT & MANAGEMENT (PRACTICAL)

Course Code MOT (O) 151

CREDITS – 15

Course Objectives: On completion of the study of this subject the student should be able to:

- ◆ Perform a through Occupational Therapy assessment using appropriate evaluative tools.
- ◆ Plan an individualized goals using goal attainment scales for Orthopaedic conditions covered in the first year.
- ◆ To determine the effectiveness of planning, implementation & termination of appropriate intervention strategies in treatment
- ◆ Apply Effective Occupational Therapy treatment techniques, compare & contrast the efficacy of different treatment approaches.
- ◆ Communicate the status to the patient with other rehabilitation team members & patient's attendants.

Following are the topics to be included but not limited to -

Practical Training in the Occupational Therapy assessment & treatment for conditions covered in the first year.

Practical Examination -

- ◆ Practical examination will be divided into two parts:
 - 1) Two Long Case
 - 2) One Short Case

PEDAGOGY OF OCCUPATIONAL THERAPY EDUCATION

Course Code MOT (O) 201

CREDITS – 6

Course Objectives: On completion of the study of this subject the student should be able to

- ◆ Understand the Dynamics of teaching & learning
- ◆ Plan effective teaching sessions in Physiotherapy

Following are the topics to be included but not limited to:

1. Education

Introduction

Educational Philosophy – Idealism Naturalism, Pragmatism

Aims of Education

Functions of Education

Formal, Informal and non-formal education

Agencies of Education

Current issues and Trends in Higher Education

Issue of quality in higher education

Autonomy and Accountability

Privatization of Education

2. Concept of Teaching and Learning

Meaning and scope of educational psychology

Meaning and relationship between teaching and learning

Learning Theories

Dynamics of behavior

Individual differences

3. Curriculum

Meaning and concept

Basis of curriculum formulation

Framing objectives for curriculum

Process of curriculum development and factors involved

Evaluation of curriculum

4. Method and techniques of teaching

Lecture

Demonstration

Discussion

Seminar

Assignment

Project

Case Study

5. Planning for teaching

Bloom's taxonomy of instructional objectives

Writing instructional objectives in behavioral terms

Unit Planning

Lesson Planning

6. Teaching aids

Types of teaching aids

Principles of selection, preparation and use of audio-visual aids

7. Measurement and Evaluations

Nature of educational measurement: meaning, process, types of tests

Construction of an achievement test and its analysis

Standardized test

Introduction of some standardized tools, important test of intelligence, aptitude and personality

Continuous and comprehensive evaluation

8. Guidance and counseling

Meaning & concepts of guidance and counseling

Principles of guidance and counseling

9. Awareness Programme

Awareness and guidance to the common people about health and disease.

Course Objectives: On completion of the study of this subject the student should be able to

- ◆ Understand the basic issues of Management & Administration
- ◆ Practice as an informed professional on Legal & Ethical Issues

SECTION 1

Service Delivery and Management

Course Objectives: To enhance the ability of the Occupational Therapist to implement the principle of Management and Administration in the context of increasing interaction between the Health-Care facility and the community.

1. **Health Care Delivery System (including in health prevention and promotion)**
2. **Values and Motivation**
 - ◆ Core Values and attitudes of Occupational Therapy practice
 - ◆ Standard of Practice
 - ◆ Personal Values
 - ◆ Changing the focus from valuation to obligation
 - ◆ Dealing with Moral Issues
 - ◆ Professional Guidance
 - ◆ Conflicting values and Motivation
 - ◆ Organizational, Personal & Professional Guidance (Organizational Self-View, Fundamental Documents)
3. **Organizing and Engaging people in work setting**
 - ◆ Achieving Organizational vision through people
 - ◆ Concept of Productivity
 - ◆ Leadership
 - ◆ Organizational Leadership: Roles, Responsibilities & Competencies
 - ◆ Theories about managing people, Managing styles
 - ◆ Work teams
- ◆ Organizational Performance Improvement (Quality and Service Improvement)
4. **Dealing with Differences (Values, Diversity concerns)**

5. Organizational Structure and control for business success characteristics of business

Structures (Legal structure, Tax status, Operating Structure)

- Organizational structure (Organizational chart, hierarchy in Organizations, Organizational Patters), Product Strategy Decisions
- Policies and Procedures
- Re-organization
- Human Resource Development in relation to operating structure

6. Financial Management (Fiscal Management and Cost Accounting)

7. Marketing

- ◆ Market Orientation, Segmentation, Consumer Research
- ◆ Basics of Marketing
- ◆ Marketing Plan
- ◆ Marketing Strategies in health care
- ◆ Promotional Considerations (Communication methods & Media the marketing campaign)

8. Facility Planning

- ◆ Designing values based facility
- ◆ Strategic Planning
- ◆ Design Decisions
- ◆ Planning steps and process
- ◆ Planning for Growth

9. Information Management

- ◆ Management and flow of information in an organization
- ◆ Use of Data
- ◆ Documentation (Personal, Technological, Financial considerations and Realistic expectations)

10. Outcome Management

11. Risk Management

12. Recruitment

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13. Consultancy

14. Entrepreneurship: Ownership and Private Practice

15. Social & Industrial Legislation

16. **Management Junction & Strategy**
17. **Alternate Practice Model**
18. **Developing on Academic discipline**

SECTION II

Legal and Ethical Issues

1. Legal / Legislative issues concerning:
 - Occupational Therapy Profession
 - Persons with Disability
2. Ethical Issues (Principles of AIOTA & WFOT)
 - Code of ethics
 - Future Planning

Course Objectives: On completion of the study of this subject the student should be able to:-

- ◆ Perform thorough Occupational Therapy assessment & list deficiencies
- ◆ Design individualized goals for the patient
- ◆ Rationalize the outcome of the assessment
- ◆ Document systematic, meaningful, accurate written records of the patient
- ◆ To formulate a rationalized treatment plan for the patient
- ◆ Implement physiotherapy treatment
- ◆ Compare & contrast the outcome of various treatment approaches
- ◆ Document the status to the patient as written records

SECTION 1:

1. Context of ortho O.T. Practice
2. Relationship with other services providers
3. General Orthopaedic Health care
4. Diagnostic imaging and other investigations
5. Differential Diagnosis
6. Theoretical basis underlying clinical decisions
7. Principles and techniques of O.T Assessment
 - History
 - Examination and measurement
 - OT Diagnosis
8. Selection and Application of treatment
9. Psychosocial Aspects
10. Service Design and management in various practice settings (includes OT in acute care, critical care and long term management)
11. Assistive technology – pertaining to Orthopaedic disorders

SECTION 2:

Biomechanics and Kinesiology

Following are the topics to be included but not limited to:

- 1) Metabolic and endocrine disorders
- 2) Bone infections
- 3) Congenital deformities
- 4) Developmental conditions
- 5) Diseases of joint
- 6) Tumours of Musculoskeletal system
- 7) Neuromuscular disorders
- 8) Fibrous diseases
- 9) Vascular disorders
- 10) Skeletal injuries
- 11) Tendon injuries
- 12) Soft tissue condition
- 13) Major traumatic condition
- 14) Thermal injuries
- 15) Sports injuries
- 16) Cumulative trauma disorders
- 17) Amputation and prosthetics

OT in Orthopaedic Surgical Conditions

- Orientation and general principles of Orthopaedic surgery
- Various orthopaedic surgical procedures
- OT Management, pre and post surgery of common orthopaedic surgical conditions

Objective: On completion of the study of this subject the student should be able to:

- Perform a thorough Occupational Therapy assessment using appropriate evaluative tools.
- Plan an individualized goals using goal attainment scales for Orthopaedic Conditions covered in the first year.
- To determine the effectiveness of planning, implementation & termination of appropriate intervention strategies in treatment.
- Apply Effective Occupational Therapy treatment techniques, compare & contrast the efficacy of different treatment approaches
- Communicate the status to the patient with other rehabilitation team members & patient's attendants.

Following are the topics to be included but not limited to:-

Practical Training in the Occupational Therapy assessment & treatment for conditions covered in the first year.

Practical Examination:-

Practical examination will be divided into two parts:-

- Two Long Cases
- One Short Case

Student will select a topic in his/her area of interest, in consultation with a supervisor/Guide, qualified for the purpose as recommended by the council/University for and carry out an independent dissertation, which will involve making research proposal, conduct of the work as per the documented methodology, statistical analysis, dissertation writing. The work will build on the knowledge acquired through study of research methodology and Biostatistics. The work will build on the knowledge acquired through study of research methodology and Biostatistics. Each candidate shall submit three type written copies of a dissertation and it should be submitted well in advance before the date of written, oral, clinical and practical examination, Acceptance of the dissertation by the examiners should be a pre-condition to sit in the annual examination.

Evaluation of the dissertation will be done by the examiner (s) appointed by Vice Chancellor of the University.