### DEPARTMENT OF PSYCHOLOGY UNIVERSITY OF KERALA



### M.Phil.PROGRAMME IN LEARNING DISABILITIES (Syllabus) (Under Credit and Semester Systemw.e.f. 2017 Admission)

#### **PROGRAMME OBJECTIVES:**

The field of Learning Disabilities is more an applied discipline. Hence the course will emphasize hands-on experience and practical training. The theory coursesare designed to give an in-depth understanding of the various concepts, issues, and theoretical formulations relating to various aspects in the field. The practical course and case studies are intended to develop practical skill in the identification and remediation of various kinds of learning disabilities and related problems in children. An outline of the course with course titles and credits is given below.

#### **Structure of the Programme**

Semester	Course Code	Name of the Course	Number
No.			of credits
Ι	PSY(LD)-711	Research Methodology	4
	PSY(LD)-712	Learning Disabilities	4
	PSY(LD)-713	Dyslexia, Reading and Brain	4
	PSY(LD)-714	Assessment and Remediation Skills	2
		(Practical)	
	PSY(LD)-715	Case studies	2
II	PSY(LD)-721	Dissertation	20
Total Credits			36

### SEMESTER : I COURSE CODE : PSY(LD)-711 COURSE TITLE : RESEARCH METHODOLOGY CREDITS : 4

### AIM

- To equip the student for effective use of scientific method in Psychological research
- To ensure that the student has a working knowledge of basic concepts in qualitative and quantitative methods, research designs, sampling, data processing, and report writing.

### **OBJECTIVES**

A quick review of basic concepts in scientific methodology are first introduced followed by more detailed exploration of different qualitative and quantitative methods, data processing techniques and report writing. The syllabus is intended to enable the students carry out their research work with methodological rigor and meet the standards expected of a good scientific research. They are also given necessary training in producing a scientific report following the APA style and format.

## **MODULE I: APPLICATION OF SCIENTIFIC METHOD IN PSYCHOLOGY**

Assumptions and characteristics of science; The Scientific Method; Ethical considerations in research; Steps in carrying out scientific research- The research problem, Hypotheses, The method; Sampling- Estimation of sample size, Different sampling techniques-Probability sampling methods, Non-probability sampling methods

## **MODULE II: QUALITATIVE RESEARCH METHODS**

Nature of qualitative data; Different kinds of qualitative research- Action research, Case study research, Ethnography, Grounded theory, Phenomenology, Historical research; Techniques to collect qualitative data- Interview, Observation, Focus group discussion; Techniques to analyze qualitative data- Hermeneutics, Semiotics, Narrative and metaphor

## **MODULE III: QUANTITATIVE RESEARCH METHODS**

Nature of quantitative data; The concept of variance- Partitioning of variance, controlling error variance through research designs, Experimental research methods; Between group designs- Two group designs, ANOVA designs, Factorial designs, Within group designs, Small N designs; Advantages and disadvantages of small N designs- Different kinds of small N designs; Quasi-Experimental research methods, Non-experimental designs- Observational research, Archival research, Case study research, Survey research

## **MODULE IV: DATA PROCESSING**

Tabulation and coding, Statistical analysis of the data, Estimating differences among the groups- t-tests, Anova and post hoc tests, Manova, Discriminant analysis, non-parametric methods; Estimating relationships among variables- Pearson r, Rank correlation, Multiple correlations, Factor Analyses, Path Analysis, Structural Equation Modelling; Use of statistical packages- SPSS

# **MODULE V: REPORT WRITING**

Components of a research report; The APA specifications for report writing.

### REFERENCES

- Edwards A. E. (1968). Experimental design in Psychological Research, New York: Holt, Rinehart.
- Kothari, C. R. (1986). Research Methodology: Methods and Techniques, New Delhi: Wiley Eastern Ltd.
- McBurney, D.H. (2003). Research Methods (5<sup>th</sup> Ed.). Bangalore: Thomson Wadsworth.
- Robinson, P.W.(1981). Fundamentals of Experimental Psychology, N.J.: Prentice Hall.
- Singh, A.K. (2006). Tests, Measurements, and Research Methods in Behavioural Sciences. Patna: BharatiBhavan Publishers and Distributors.
- Young, Pauline V. (1975). Scientific Social Surveys and Research, 4<sup>th</sup> Ed. N.J.: Prentice-Hall.

### SEMESTER : I COURSE CODE : PSY(LD)-712 COURSE TITLE : LEARNING DISABILITIES CREDITS : 4

### AIM

- To provide the student with a comprehensive understanding of Learning disability and related concepts
- To sensitize the students regarding the various issues in the identification, assessment, management of children with learning disability

### **OBJECTIVES**

The students are initiated to the various theoretical approaches and conceptual advances in the field of learning disability and are given training in the identification, assessment, management of children with different types of learning disability. Effective inclusive practices and class room adaptations are also addressed in the syllabus to help students devise better planning and management strategies.

## **MODULE I: INTRODUCTION**

Historical background of LD; Meaning & Definitions; Theoretical Approaches (Biological, Cognitive, Psycho-social, Educational); Prevalence & Causes; Characteristics of children with LD; Classification and sub-types; Cognitive deficits in LD: Spatial-temporal processing, STM/Working memory, metacognition; Nonverbal LD; Current status and Research Issues.

### **MODULE II: LANGUAGE AND LD**

Properties and Components of language; Language development models (Behaviourist, Psycholinguistic and Sociolinguistic); Neurolinguistics; Clinical Linguistics; Bidialectism, bilingualism & multilingualism; LD and English as Second Language; LD and Language in Minority children; LD and other learning difficulty problems in Indian context.

## MODULE III: DYSGRAPHIA AND DYSCALCULIA

Problems of hand writing; Spelling & written expression; Evaluation of dysgraphia; Neuropsychology of dysgraphia; Development of Number concept and mathematical skills; Nature, incidence, and common features of Mathematical Disability (MD); MD and RD; Diagnosis and assessment; Remedial strategies.

### **MODULE IV: ASSESSMENT AND MANAGEMENT**

Approaches and methods of identification and diagnosis of LD; Assessment tools available; Neuropsychological assessments; Hemispheric activation arousal in LD; ERP & Brain Imaging in LD.

Behavioural and emotional problems in LD- ADD and ADHD: Characteristics, causes & management; Self-Esteem and other related personality correlates of LD; Social Skills and LD.

Teachers perspective, parents perspective, management of LD outside Classroom, Role of Special education, Assistive technology and other support by teachers and parents; Individualized Educational Program (IEP), Principles of remediation and remedial strategies;Common tests and tools that aid intervention, Work with children – play therapy , Family therapy – Parent management training, challenges in parenting LD children, Basics of psychoeducation

# **MODULE V: INTEGRATED EDUCATION**

Why & How? Role of LD specialist as resource room person in schools; importance of liaison with teachers, other special educators, etc., external referral agencies, Report writing skills – compiling/integrating test results and submitting a report to referral agencies/school authorities, bilingual/multilingual special education; Benefits of early intervention- nurturing early language skills at home and school.

### REFERENCES

- Alan. A. Beaton (2004). Dyslexia, Reading and the Brain. Sussex: Psychology Press.
- Bernice Y.L. Wong (1996). The ABCs of Learning Disabilities. N.Y.: Academic Press.
- Charles Hulme and R. Malatesha Joshi (1998). Reading and Spelling: Developmnet and Disorders. London: Lawrence Erlbaum Associates.
- Das J P (1998). Dyslexia & Reading Difficulties.Mumbai:The Maharashtra Dyslexia Association
- Gowramma (2005). Development of Remedial Instruction Programme for Children with Dyscalculia in Primary School. Mysore: Chetana Book House.
- Nickola W. Nelson (1998). Childhood Language Disorders in Context: Infancy through Adolescence. London: Allyn and Bacon.
- PrathibhaKaranth (2003). Cross-Linguistic Study of Acquired Reading Disorders: Implicatins for Reading Models, Disorders, Acquisition, and Teaching. N.Y.: Kluwer Academic Publishers.
- PrathibhaKaranth and Joe Rozario (2003).Learning Disabilities in India. New Delhi: Sage Publications.
- Purushottama G. patel (2004), Reading Acquisition in India: Models of Learning and Dyslexia. New Delhi: Sage Publications

### SEMESTER : I COURSE CODE : PSY(LD)-713 COURSE TITLE : DYSLEXIA, READING AND BRAIN CREDITS : 4

### AIM

• To enable students appreciate theneurobiological bases of Learning Disabilities and develop an interest in brain-behaviour research

#### **OBJECTIVES**

The students are given basic information regarding mechanisms involved in reading and processing of symbolic content of language. The neural pathways involved and various theoretical formulations regarding the structural basis of language and deficits in reading are also delivered through different modules included in the course.

### **MODULE I: READING**

Orality and literacy; Components of reading (decoding, comprehension, speed, and fluency); Reading acquisition models; Skilled reading: Dual Route model, Connectionistic models, DRC.

### MODULE II: PHONOLOGICAL AWARENESS AND ORTHOGRAPHY

Concept and assessment of Phonological awareness; Phonological awareness and reading; Orthography and reading; Orthographic depth hypothesis and Grain-Size theory; Concept of Akshara and reading in Indian context.

### **MODULE III: DYSLEXIA**

Concept and definition of Dyslexia; Phonological deficit hypothesis and phonological recoding in dyslexia; Naming deficits, articulation problems, developmental language delay (SLI) and dyslexia; RAN; Diagnosis and Assessment of dyslexia; Types of dyslexia.

## MODULE IV: AUDITORY AND VISUAL ASPECTS OF DYSLEXIA

Speech perception and dyslexia; Temporal deficit hypothesis of dyslexia; Visuo-perceptual aspects of dyslexia: Eye movements, Orthoptic and binocular factors, Retinal factors.

## **MODULE V: NEUROBIOLOGY OF DYSLEXIA**

Genetics of dyslexia; Cerebral laterality; Geschwind-Behan-Galaburda (GBG) hypothesis; Planumtemporale; Cerebellar deficit hypothesis; Magnocellular deficit hypothesis.

### REFERENCES

- Alan. A. Beaton (2004). Dyslexia, Reading and the Brain. Sussex: Psychology Press.
- Bernice Y.L. Wong (1996). The ABCs of Learning Disabilities. N.Y.: Academic Press.
- Charles Hulme and R. Malatesha Joshi (1998). Reading and Spelling: Developmnet and Disorders. London: Lawrence Erlbaum Associates.
- Das J P (1998). Dyslexia & Reading Difficulties.Mumbai:The Maharashtra Dyslexia Association
- Gowramma (2005). Development of Remedial Instruction Programme for Children with Dyscalculia in Primary School. Mysore: Chetana Book House.
- Nickola W. Nelson (1998). Childhood Language Disorders in Context: Infancy through Adolescence. London: Allyn and Bacon.
- PrathibhaKaranth (2003). Cross-Linguistic Study of Acquired Reading Disorders: Implicatins for Reading Models, Disorders, Acquisition, and Teaching. N.Y.: Kluwer Academic Publishers.
- PrathibhaKaranth and Joe Rozario (2003).Learning Disabilities in India. New Delhi: Sage Publications.
- Purushottama G. patel (2004), Reading Acquisition in India: Models of Learning and Dyslexia. New Delhi: Sage Publications

#### SEMESTER : I COURSE CODE : PSY(LD)-714 COURSE TITLE : ASSESSMENT AND REMEDIATION SKILLS (PRACTICALS) CREDITS : 2

#### AIM

- To assess the parameters of the client's problems, choose an effective intervention, and measure the outcome of the intervention
- To assist in developing neuro-psychologically informed special education decisions

#### **OBJECTIVES**

A prioritized assembly of all the important psychological batteries in the field of learning disability that must be at one's fingertips in order to begin the complicated process of individual psychological diagnosis is provided in the syllabus. An understanding of the essentials of administration, scoring, and interpretation of the various neuro-psychological batteries will enhance the clinical inference of students and aid them in planning effective remediation strategies.

The students will be given supervised training on the various tests used in the assessment and in the remediation methods of different types of Learning disabilities. These consist of

- 1. IQ Assessment (WAIS / WISC/ BKT/ SPM /MALINS /VSMS)
- 2. Cognitive Assessment System (CAS)
- 3. COGENT battery
- 4. PREP Battery
- 5. GLAD and NIMHANS Battery for LD
- 6. The Illinois Test of Psycholinguistic Abilities
- 7. Achievement tests

In addition to the exposure given to the students in the department, they shall be sent to special centers/institutes of LD and schools with resource room for screening and assessment of LD on a regular basis. During their visits to such centers/schools, students are required to maintain a record of activities they did, which should be submitted for evaluation at the end of the semester.

### SEMESTER : I COURSE CODE : PSY(LD)-715 COURSE TITLE : CASE STUDIES CREDITS : 2

### AIM

• To provide training in the identification and remediation of learning disability and related problems in children

#### **OBJECTIVES**

At the end of the semester students need to submit in-depth reports on a minimum of four LD cases that should include detailed assessment and remediation. From the case-study description, as well as the psychometric information provided, students are required to provide the following information:

- (a) Discussion of cognitive and language strengths and weaknesses
- (b) Discussion of the relationship between cognitive and language abilities and academic performance
- (c) Identify appropriate types of academic and/or social interventions
- (d) Identify appropriate testing and instructional materials
- (e) Identify specific assistive technologies and/or media appropriate for the case

### SEMESTER : II COURSE CODE : PSY(LD)-721 COURSE TITLE : DISSERTATION CREDITS : 20

#### AIM

• Toequip the students with necessary skills to undertake research projects in the area of learning disability and related problems in children.

#### **OBJECTIVES**

The dissertation work undertaken by astudent is expected to familiarize him/her with the major research issues in the field under study. By undertaking an independent research work, the students get practical experience in conceptualizing a research problem in Psychology, execute the work following systematic scientific method, and prepare a research report strictly following the accepted guidelines for research publication. It is expected that the work will provide the students with a thorough grounding in research methodology which will enable them to undertake independent research projects in any area they choose. It is also expected that the student may pursue further research in the area of interest identified by them during the course of their dissertation work.