SNDT Women's University, Mumbai

Master of Science
(Home Science - Early Childhood Education)

as per NEP-2020

Syllabus

(2023-24)

M.Sc. Home Science - Early Childhood Education

Year I

SN	Courses	Type of Course	Credits	Marks	Int	Ext
	Semester I					
114211	Advanced Life Span Development (Th)	Major (Core)	4	100	50	50
114212	Theories of Behavior and Development (Th)	Major (Core)	4	100	50	50
114213	Persons with Special Needs (Th)	Major (Core)	4	100	50	50
114214	Advanced Early Childhood Education (Th)	Major (Core)	2	50	50	0
114221	Advanced Early Childhood Education (Pr)	Major (Elective)	4	100	50	50
134211	Research Methodology (Th)	Minor Stream (RM)	4	100	50	50
			22	**550**	**300**	**250**
	Semester II					
214211	Recent Trends in Curriculum Planning (Th)	Major (Core)	4	100	50	50
214212	Entrepreneurship in Early Childhood Education (Th)	Major (Core)	4	100	50	50
214213	Curriculum Designing for Young Children (Th)	Major (Core)	4	100	50	50
214214	Preschool organization and Management of programs (Th)	Major (Core)	2	50	0	50
224211	Maternal and Child Nutrition studies (Th)	Major (Elective)	4	100	50	50
244241	Internship (Professional Development and Personal Effectiveness)	OJT	4	100	50	50
			22	**550**	**250**	**300**

Exit option (44 credit):
Post Graduate Diploma in Early Childhood Education

Year II

SN	Courses	Type of Course	Credits	Marks	Int	Ext
	Semester III					
314211	Research and Statistical Applications (Th)	Major (Core)	4	100	50	50
314212	Human Resource Development (Th)	Major (Core)	4	100	50	50
314213	Counselling and Intervention during Foundation Years (Th)	Major (Core)	4	100	50	50
314214	Science of parenting (Th)	Major (Core)	2	50	0	50
324211	Instructional Technology (Pr)	Major (Elective)	4	100	50	50
354231	Research Project	RP	4	100	50	50
			22	**550**	**250**	**300**
	Semester IV					
414211	Research Applications in Early Childhood Education	Major Core	4	100	50	50
414232	Internship	Major (Core)	4	100	50	50
414213	Product Development	Major (Core)	4	100	50	50
424211	Observation and Assessment of Children	Major (Elective)	4	100	50	50
454231	Dissertation	RP	6	150	100	50
			22	**550**	**300**	**250**

3.1 Major (Core)

Course Title	Research and Statistical Application
Course Credits	4 (Theory)
Course Outcome	On completion of the course, the student will be able to 1. Employ appropriate statistical test and interpretation results and discuss. 2. Discriminate between parametric and non-parametric tests 3. Apply statistical tests for data analysis for both large and small samples 4. Demonstrate knowledge and skills to compute and incorporate most suitable statistics. 5. Demonstrate competence in statistical designs and interpretations. 6. Summarize data and present it using tables and graphs
Module 1(Credit 1): Statistics: Meaning and uses	
Learning Outcomes	At the end of the module, the students will be able to: 1. Calculate different statistical tests 2. Calculate and use parametric tests (Parametric and Non parametric) 3. Data Presentation

Content Outline	Unit 1: Statistics: Meaning and uses
	
	    Definition, conceptual understanding of statistical measures, popular concepts and uses of statistics.
	
	Unit 2: Normal Distribution and its Properties
	
	    a) Normal distribution
	
	    b) Binomial distribution
	
	    c) Probability, use of normal probability tables, area under normal distribution curve
	
	    d) Parametric and non-parametric tests
	
	Unit 3: Data Organization and Management
	
	    a) Tabulation and Organization of data- frequency
	
	    b) Distributions, cumulative frequency distribution, contingency tables
	
	    c) Graphical presentation of data- histogram, frequency
	
	    d) Polygon, ogive, stem and leaf plot, box and whiskers Plot,
	
	    e) Graphs for nominal and ordinal data- pie diagram,

	f) Bar graphs of different types, graphs for relation between two variables, line diagram.
	g) Use of illustrations
	h) Cautions in visual display of data
	i) Use of Statistical programs, MS Excess, SPSS

Module 2 (Credit 1): Data Analysis

Learning Outcomes	At the end of the module, the students will be able to: 1. Differentiate quantitative analysis, descriptive statistic and inferential analysis 2. Calculate measures of central tendencies, measures of variability 3. Interpret big and small data by using different tests
Content Outline	Unit 1: Quantitative analysis, descriptive statistics, inferential statistics: Uses and limitations, Summation sign and its properties Unit 2: Proportions, percentages, ratios Unit 3: Measures of central tendency-mean, median, mode- arithmetic mean and its uses, mid – range, geometric mean, weighted mean Unit 4: Measures of variability- range, variance, standard deviation, standard error, coefficient of variation, Kurtosis, skewness Grouped data-frequency distribution, histogram, frequency polygons, percentiles, quartiles, tertiles, ogive curves. Unit 5: Big and Small Sample tests and interpretation - Z-test for single proportions and difference between proportions - Large sample test for single mean and difference between means - Small sample tests- 't'-test, paired 't'-test, 'F' Test

Module 3 (Credit 1): Association, Predictions and other methods

Learning Outcomes	At the end of the module, the students will be able to: 1. Calculate and interpret correlation values 2. Calculate regression values and interpret 3. Apply ANOVA to study mean values in state significance level 4. Set design for studying different variables
Content Outline	Unit 1: Association, Predictions and other methods 1) Correlation: product moment, partial correlation, special correlations. (Chi square test and its interpretation) 2) Linear regression 3) Multiple regressions, logistic regression 4) Nonparametric correlations: Kendall's tau; Spearman's rho; measures for nominal data, chi square, binomial test, proportions test. Unit 2: Analysis of Variance and its interpretation

	1) One-factor analysis of variance
	2) Two-factor analysis of variance
	Unit 3: Design of Experiments
	    1) Completely randomized design
	    2) Randomized block design
	    3) Latin square design
	    4) Factorial design

Module 4 (Credit 1): Inferential Statistics	
Learning Outcomes	At the end of the module, the students will be able to: 1. Compare inferential statistics 2. Determine confidence level 3. Analyze within and among groups differences 4. Analyze multi variations in results
Content Outline	Two group differences: t test- independent and dependent samples. Bootstrapping 1. Correlation r – value 2. Chi- square, frequency count 3. Multi-group differences: one-way ANOVA: independent and dependent samples. Two-way ANOVA: independent samples 4. ANCOVA and Repeated Measure ANOVA 5. Wilcoxon sign-rank test; median test; U test; Kruskal-Wallis test 6. MANOVA and discriminant function analysis

Assignments and Activities towards Comprehensive Continuous Evaluation (CCE)

Module 1: Applications of Measures of central tendencies / Application of Measures of variability

Module 2: Develop designs to study groups comparison

Module 3: Differentiate between different tests

Module 4: Methods of Effective data presentation / Challenges of data presentations

References:

1. Bell, J. (1997): Doing Your Research Project: A Guide for First-time Researchers in Education and Social Science, Viva Books, New Delhi

2. Bell, J. (1997): How to Complete Your Research Project Successfully: A Guide for First-time Researchers, UBSPD, New Delhi.

3. Bulmer, M.C. (1984): Sociological Research Methods: An Introduction, Macmillan, Hong Kong.

4. Goon, A. & Gupta, M. & Dasgupta, B. (2001) "Fundamentals of Statistics", Vol.I & II, The World Press, Calcutta,

5. Gupta, S. (2001) "Research Methodology and Statistical Techniques", Deep and Deep, New Delhi,

6. Kothari, C.R. (2000): Research Methodology: Methods and Techniques, Wishwa Prakashan, New Delhi.

7. Kumar, A. (2002): Research Methodology in Social Sciences, Sarup and Sons, New Delhi.

8. McBurney, D.H. (2001): Research Methodology, Thomson-Wadsworth, Australia.

9. Sharma, K.V.S. (2001) "Statistics made Simple: Do it yourself on PC", Prentice-Hall, New Delhi.

3.2 Major (Core)

Course Title	Human Resource Development
Course Credits	2+2 (Theory & Practical)
Course Outcome	At the end of the course students shall be able to: 1 Identify relevance of process of human resource development. 2 Recognize the common grounds of HRD and Human Development 3. Apply the strategies of Human Resource Development. 4. Integrate HRD in various sectors 5. Understand the additional issues in HRD.
Module 1 (Credit 1): Concept of HRD & Scope	
Learning Outcomes	After learning the module the students will be able to : 1.Understand the concept of HRD 2.Design human resource policies and programs 3.Conduct training programs for managers
Content Outline	**Unit 1: Introduction to HRD** -Concept, scope, significance, goals, functions and techniques of HRD **Unit 2**: **HRD Mechanism-** Managerial process & skills, functions and traits of manager, Human resource planning- process of HR planning, Benefits of HR planning, problems and issues related to HR planning. **Unit 3: Understanding HD and HRD-** Concept of Human development and HRD, relevance of HD & HRD in current context of professional world
Module 2 (Credit 1): HRD Stratagems and Policies	
Learning Outcomes	After learning the module, the students will be able to: 1.Design training programs for Employees regarding communication, leadership skills 2. Draw job description and job designs 3. Design advertising for recruitment 4. Plan an induction program for new employees 5. Design mentoring format and plan topics 6. Plan appraisal formats

Content Outline	**Unit 1: Motivational aspects of HRD**: Objectives, techniques, Maslow Theory and motivation, Herzberg's findings.
	Unit 2: Groups and Teams: Team development and functioning, group dynamics; leadership, communication, group norms, team roles, conflict resolutions.
	Unit 3: Recruitment, selection and induction: Job design, drawing up job description Job analysis; advertising, short listing, interviews, the induction process, competency modeling, Job enrichment
	Unit 4: Task analysis: Performance appraisal and performance management, personal competence, Employee empowerment, Employee career growth and remuneration
	Unit 5: Coaching and Mentoring: Meaning and objectives of mentoring, types of mentoring, roles and responsibilities of mentor.

Module 3 (Credit 1): HRD in different sectors

Learning Outcomes	After learning the module, the students will be able to: 1. Design and develop programs and sessions for professionals from different sectors
Content Outline	**Unit 1:** HRD in Education sector **Unit 2:** HRD in Service industry **Unit 3:** HRD in health sector

Module 4 (Credit 1): HRD in current scenario and Globalization

Learning Outcomes	After learning the module, the students will be able to: 1. Develop flow charts for organizational management 2. Maintain quality management in centers 2. Handling grievances in organization 3. Plan training workshops on various skills 4. Develop ethics in self and employees
Content Outline	**Unit 1: Quality Management** Organizational development, QWL (quality of work life), Total quality management. **Unit 2: Human Relations and HRD:** Human relations training-soft skills, life skills, leadership skills Conflict management, Handling grievances in organization, maintaining discipline **Unit 3: Values and ethics in HRD:** Organizational values, managerial values and ethics, developing Ethics in employees in field of HD/ECE.

Assignments/Activities towards Comprehensive Continuous Evaluation (CCE):

Module 1:
1. Identify any three or five issues/problems at professional place and list down the
2. managerial qualities to handle those issue.
3. Compare various techniques of HRD and relate them with your organizational
4. environment.
5. Plan a workshop /event /program where HD skills and HRD skills complement each
6. other.
7. Design human resource policies and programs

Module 2:
1. Identify the situations at work place and apply the Maslow or X&Y theory
2. Job Advertising and job description for center
3. Design advertising for recruitment
4. Plan an induction program for new employees
5. Design mentoring format and plan topics
6. Design an appraisal form for different categories of employees

Module 3:
1. Plan team building activities for ECE professionals
2. Plan training workshops on soft skills for different service set ups.
3. Case study of any organization to study career growth and planning

Module 4:
1. Evaluate quality services and quality management in different organizations.
2. Identify conflict management skills and present report
3. Role plays on conflict resolution
4. Formulate soft skill workshops
5. Develop monthly planner for quality control and enhancement
6. Compare and contrast leadership skills of successful entrepreneurs
7. Construct flow chart for HRD and management.

References:

1. Armstrong, M (1999): "The Art of HRD: Human Resource Management", Crest Publishing House, New Delhi

2. Armstrong, M (2000): Strategic Human Resource Management: A Guide to Action", Kogan Page, London

3. Arya, P P and Tandon, B B (1998): "Human Resource Development". Deep and Deep Publication: New Delhi

4. Bhambra. ,A (1999): Nature of Human Resource Management, Common wealth Publishers, Nee Delhi

5. Chopra, R.K. (2001): Management of Human Resource, Kitab Mahal, Allahabad

6. Subba Rao, P. (2002): Personnel and Human Resource Management, Himalay Publishing House.

3.3 Major (Core)

Course Title	Counselling and Intervention for Foundation Years
Course Credits	4 (Theory)
Course Outcome	On completion of the course, the student will be able to: 1. Identify relevant areas counselling and intervention during Foundation years. 2. Create effective environment intervention strategies for early in life 3. Demonstrate the ability and skill to identify manage developmental issues during foundation years 4. Apply counselling approaches in resolving issues of early years 5. Address various behavioral problems

Module 1 (Credit 1): Principles of counselling and Interventions	
Learning Outcomes	At the end of the module, the students will be able to: 1. Identify the different areas, need counselling and intervention for foundation years 2. Realize preventive measures are more important for foundation years 3. Introduce family intervention to resolve
Content Outline	Unit 1: Scope and need of counselling and intervention for foundation years Unit 2: Development, Development concerns & counselling Unit 3: Developmental challenges, Prevention model for foundation years Unit 4: Preventive counselling, Remedial counselling & Family therapy

Module 2 (Credit 1): Counselling for Childhood	
Learning Outcomes	At the end of the module, the students will be able to: 1. Identify areas child and family counselling 2. Identify causes and symptoms of behavioral problems 3. Recognize risk factors for development during adolescence 4. Apply counseling process. 5. Use behavioral modification techniques
Content Outline	Unit 1: Areas of child counselling and role of family, intervention for developmental hazards of early development Unit 2: Counsellor qualification and qualities to work effectively with children Unit 3: Process of counselling and intervention, preconditions and setting limits for in child counselling Unit 4: Counselling skills, attitude and ethics in child counselling Unit 5: Causes, Symptoms & Management of Behavioral problems (Nail biting, Thumb sucking, Sleep talking, Sleep walking, Bed wetting, Deviant disorders)

	Unit 6: Behavior modifications and specific intervention
Module 3 (Credit 1): Developmental Interventions during Adulthood	
Learning Outcomes	At the end of the module, the students will be able to: 1. Identify developmental tasks, challenges of childhood 2. Specify role of family and School for development during foundation years 3. Deal with early deprivation and negative influence of mass media
Content Outline	Unit 1: Early Childhood: Developmental tasks, Challenges and intervention Unit.2: Middle Childhood: Developmental tasks, Challenges and intervention Unit 3: Late Childhood: Developmental tasks, Challenges and intervention Unit 4: Role of family, school adjustment Unit 5: Intervention to manage- Early deprivation, influence of mass media
Module 4 (Credit 1): Counselling approaches and interventions	
Learning Outcomes	At the end of the module, the students will be able to: 1. Apply person centric approach in counselling 2. Use behavior modification technique 3. Relate eclectic approach to deal with problem of children 4. Use effectively paly and art therapy for children
Content Outline	Unit 1: Person Centric approach Unit 2: Behavioral perspective- an intervention- based principles of Classical conditioning and Principles of operant conditioning Unit 3: Psychodynamic approach Unit 4: Eclectic approach in counselling Unit 5. Play and art therapy Unit 6. Solution focused

Assignments/Activities towards Comprehensive Continuous Evaluation (CCE):

Module 1: Conduct workshops on developmental task, challenges and intervention for different for foundation years- peer or group assignment

Module 2: Develop module for family involvement in child development / Conduct case study on integral development during foundation years.

Module 3: Pamphlets on parental involvement / Develop tips risk and protective factors during foundation years

Module 4: Awareness program on biological and physical concerns of childhood

References:
1. Cindy, L., Juntunen, Donald, R., and Etkinson, R (2002) Counselling Across Life Span (Prevention and Treatment) Ed. Sage 2002

2. Madhukar, I. (2000) "Guidance and Counseling", Authors Press.

3. Satya, B.N. (2002) "Guidance and Counseling", Abhishek Publication, Chandigarh.

4. R., Jo Bbner-Landy, Gilli, S., Brace,C. (2002). Counselling in Schools. New Delhi: Sage Publications Ltd 2.

5. Lewis, J.A., Dana, R.Q., Blevins, G.A. (2011). Substance Abuse Counselling (4th ed.). Belmont, C.A: Brooks/Cole, Cengage Learning. 4. Velleman, R. (2011). Counselling for Alcohol Problems (3rd ed.). New Delhi: Sage Publications.

3.4 Major (Core)

Course Title	Science of Parenting (Th)
Course Credits	2 (Th)
Course Outcomes	After going through the course, learners will be able to
	CO. 1 Promote a healthy development of children through sharing scientific evidence
	CO.2 Integrate science-based tools and strategies to deal with some of the most common parenting challenges
	CO.3 Use skills to prevent and manage negative behaviors and effectively discipline and coach children toward better behaviors
	CO.4 Formulate strategies to develop skills for parenting

Module 1 (Credit 1) PARENTING STYLES	
Learning Outcomes	After learning the module, learners will be able to: 1. Understand the concept of parenting 2. Develop insight into 7 C's of parenting 3. Differentiate between parenting styles 4. Assess parenting styles and its effect on the growing child 5. Reflect on parenting stress, causes and dealing with it 6. List down skills required in good parenting
Content Outline	Unit 1: Concept of Parenting Unit 2: Positive parenting and why is it powerful? Unit 2: Ways to provide positive parenting Unit 2: 7 C's of parenting Unit 3: Parenting styles and its effect on the growing child Unit 4: Parenting stress, causes and dealing with it Unit 5: Skills required in good parenting
Module 2 (Credit 1) Developing parent-child relationship	
Learning Outcomes	After learning the module, learners will be able to: 1. Understand the role of a parent as coach 2. Identify the role of father in parenting 3. Caring for children with special needs 4. Deal with behavioral problems and promoting good behaviors 5. Use discipline to stop negative behaviors 6. Determine the effect of praise on kids 7. Reflect on the steps for effective parent

Content Outline	Unit 1: Role of a parent as coach Unit 2: Role of father in parenting Unit 3: Behavioral problems and dealing with it Unit 4: Types of discipline Unit 5: Steps for effective parent

Assignments/Activities towards Comprehensive Continuous Evaluation (CCE):

Module 1: Presentations/ Article reviews on Parenting styles

Module 2: Creating a model for awareness guidelines for community related to positive parenting/Creating a booklet on various topics related to parenting/ Role play on behavioral problems.

References:

1. Amato, P. R., & Fowler, F. (2002). Parenting practices, child adjustment, and family diversity. Journal of Marriage and Family, 64(3), 703-716.
2. Chen, Y., Kubzansky, L. D., & VanderWeele, T. J. (2019). Parental warmth and flourishing in mid-life. Social Science & Medicine, 220, 65-72.
3. Eyberg, S. M., & Funderburk, B. W. (2011). Parent-child interaction therapy: Treatment manual. Unpublished manuscript, University of Florida at Gainesville.
4. McNeil, C., & Hembree-Kigin, T. L. (2011). Parent-child interaction therapy (2nd ed.). New York: Springer Science & Business Media.
5. Yogman, M., Garner, A., Hutchinson, J., Hirsh-Pasek, K., & Golinkoff, R. M. (2018). The power of play: A paediatric role in enhancing development in young children. Paediatrics, 142(3), 1-17.

3.5 Major (Elective)

Course Title	Instructional Technology
Course Credits	4 (Pr)
Course Outcomes	After going through the course, learners will be able to 1. Create digital stories and games as teaching aid. 2. Prepare Instructional Model for Training Programs. 3. Develop models for interacting with children more meaningfully. 4. Integrate knowledge of technology to communicate with parents and other stakeholders. 5. Use technological tools to effectively stimulate the children's development. 6. Demonstrate skills to use ICT tools to create brochures, posters, leaflets, flyers for preschool programs.
Module 1 (Credit 1) Instructional Design	
Learning Outcomes	After learning the module, learners will be able to 1. Know the emergence of Instructional technology 2. Use instructional models 3. Use mobiles devices and various soft wares and application
Content Outline	Unit 1: Instructional Systems Design: The meaning & historical evolution of the Idea • Influence of Cognitive load theory by Sweller on Instructional Design • Influence of Gagne's Theory of instruction on instructional design Unit 2: Instructional Models • ADDIE model of instruction • Systems Approach to instruction Dick & Carey's model • Motivational Design ARCS model of John Keller Unit 3: Electronic Technology and instructional design • Personal Computing Devices and instructional design • Internet and its influence on instructional design
Module 2 (Credit 1): Instructional for young children in Early Literacy & Numeracy	
Learning Outcomes	At the end of the module, the students will be able to: 1. Create content on given topics and deliver content by using different technology tools 2. Convert content into local language 3. Create PPT's, Videos
Content Outline	Unit 1: A) Foundations of language & literacy pedagogy; Principles of language instructions; Language and Literacy historical perspective B) Early Literacy: what does it mean from cognitive perspective? • The difference in the nature of spoken and written

language
- Acquiring literacy: a qualitative change in thought process

Based on the work done by Margaret Donaldson

C) Early Literacy: As it emerges as a part of developmental process
- The emergent literacy approach (phonological awareness, print awareness, emergent reading & writing)
- Planning & executing instructions for an emergent reader & writer

Based on the work done by Marie Clay

Unit 2:

Literacy Instruction in Indian Languages
- Nature of Indian scripts and its implications on Early Literacy instruction

Based on the work done by Dr. Maxine Bernstein
- Overview of Early Literacy approaches in India
- Issues in Early literacy in Indian Context

Unit 3:

Early Literacy: The cultural aspects of Early literacy
- Designing culturally appropriate content and literacy instruction for children
- Evolving a relevant literacy framework to plan and execute the effective instruction in the preschool.

Based on the Work done by Sylvia Ashton Warner &Victoria Purcell-Gates

Unit 4:

Numeracy instruction for young children
- Early Numeracy: The position of National Curriculum Framework 2005 & the Focus Group Paper on the Math Education
- Early Numeracy: Some Important aspects of instruction
- Designing Curricular objectives & conceptually oriented instruction for Numeracy for young children

Module 3 (Credit 1): Electronic Technology & Instruction	
Learning Outcomes	At the end of the module, the students will be able to: 1. Develop online platforms for collaborative learning 2. Create animation tools 3. Develop Teacher Education Module for teachers teaching in Early grade
Content Outline	Unit 1: Young Learners & Electronic Technology: what the research has to offer Unit 2: Preschool Teacher Education & Electronic Technology Unit 3: Using ICT for designing Instruction Part :1 Introduction to • Image processing, presentation tools • Video and sound processing tools • Animation tools Unit 4: Developing Teacher Education Module for teachers teaching in Early grade
Module 4 (Credit 1): Action Research in collaboration with field practitioners	
Learning Outcomes	At the end of the module, the students will be able to: 1. Develop platform to learn and collaborate online 2. Develop communication tool (broachers, leaflets, certificates, ID cards, Invitation letters etc) 3. Communicate with creative report writing

Content Outline	Unit 1:
	- Students would take up action research in collaboration with organizations like preschools, early grades of primary school, Teacher's education institutes for preschool & primary Teachers, NGOs practicing innovative instructional practices - Students are supposed to Plan, Design, & implement the Instructions on any relevant topics during their field attachment - Alternatively, they may study document and analyze important & significant Instructional practice in their respective organization Unit 2: Report writing & Presentation of the report of Field extension activities.

Assignments/Activities towards Comprehensive Continuous Evaluation (CCE):

Module 1: Creating modules for instruction
Module 2: Designing culturally appropriate content and literacy instruction for children
Module 3: Developing Teacher Education Module for teachers teaching in Early grade
Module 4: Develop broachers, leaflets, certificates, ID cards, Invitation letters

References:
1. Barnett, H. (2003). Technology professional development: Successful strategies for teacher change. Syracuse, NY: Syracuse University. (ERIC Document Reproduction Service No. ED 477 616).
2. Coppola, J., & Thomas, B. (2000). A model for e-classrooms design beyond chalk and talk. Technological Horizons in Education Journal, 27(6), 31-37.
3. Howard P. Parette, Jr., Ed.D., Craig Blum (2013): Instructional Technology in Early Childhood, Brookes Publishing. ISBN: 72452978-1-59857-245-2
4. Hutinger, P. (1987). Computer-based learning for young children. In J. L. Roopnarine & J. E. Johnson (Eds.), Approaches to early childhood education (pp. 213-234). Columbus, OH: Charles E. Merrill.
5. Hutinger, P., & Johanson, J. (2000). Implementing and maintaining an effective early childhood comprehensive technology system. Topics in Early Childhood Special Education, 20(3), 159-173.

3.6 Research Project

Course Title	Research Project
Course Credits	4 (Pr)
Course Outcome	By the end of this Course students should be able to: 1. Demonstrate an ability to plan a research project 2. Demonstrate an ability to comply with ethical, safety, and documentation processes appropriate to their project 3. Demonstrate expert knowledge in the subject of their research project, such as detailed literature review 4. Demonstrate expert knowledge in the research methods appropriate to generating reliable data for their research questions 5. Demonstrate an ability to assemble their findings into a substantial piece of writing. 6. Demonstrate an ability to reflect on the strengths and weaknesses of their research and methodology, 7. Provide constructive advice on how they might improve their efforts in future work
Module 1 (Credit 1): Formulation of problem	
Learning Outcomes	At the end of the module, the students will be able to: 4. Identify a preliminary project topic 5. Decide a project title 6. Write a research proposal
Content Outline	Unit 1: Project topic -identify research area relevant to subject, recognize research gaps in the chosen area, decide a final research topic and title, write a research proposal.
Module 2 (Credit 1): Review of Literature	
Learning Outcomes	At the end of the module, the students will be able to: 1. Recognize the aim of review of literature 2. Identifying secondary sources review 3. Develop ability to review article and research papers 4. Understand the relevance of right literature 5. Develop ability to select researches related to their research area
Content Outline	Unit 1: Types of sources: Books, peer-reviewed scholarly or scientific journals from reputable publishers, Master's dissertation, Doctoral thesis, any other project Unit 2: Elements of literature review: an introduction or background information section; the body of the review containing the discussion of sources; a conclusion and/or recommendations section to end the paper.
Module 3 (Credit 1): Designing Research proposal / Model validation	

Learning Outcomes	At the end of the module, the students will be able to: 1. Understand the basic of designing research proposal 2. Identify the sources for literature review 3. Formulate aims and objectives 4. Develop research design
Content Outline	Unit 1: Introduction-need for study, abstract, Review of literature, Aims and objectives, Research design and method, Ethical considerations, Budget, Appendices, Citations. Unit 2: Guidelines to write Research proposal

Module 4 (Credit 1): Planning tools & techniques for data collection

Learning Outcomes	At the end of the module, the students will be able to: 1. Construct a research tool relevant for research topic 2. Assess the validity and reliability of the tool 3. Develop understanding about techniques of data collection
Content Outline	Unit 1: Introduction, objectives of tools in Research, Characteristics of a Good Research Tool, Validity, Reliability, Usability, Time frame for data collection Unit 2: Types of Tools and their Use, Questionnaire, Rating Scale, Likert scale, Attitude Scale, Unit 3: Preparation of research tool, google forms /links

Assignments/Activities towards Comprehensive Continuous Evaluation (CCE):

Module 1: Read research articles in area of research interest and presentation/ Article and book review and Presentation

Module 2: Designing a research proposal, Constructing hypothesis, Research design

Module 3: Constructing tools and techniques for data collection.

Module 4: Presentation of research proposal

References:

1. Bell, J. (1997) "Doing Your Research Project: A Guide for First-time Researchers in Education and Social Science", Viva Books, New Delhi.

2. Bell, J. (1997): How to Complete Your Research Project Successfully: A Guide for First-time Researchers, UBSPD, New Delhi.

3. Gupta, S. (2001) "Research Methodology and Statistical Techniques", Deep and Deep, New Delhi.

4. Holloway, I. (1997): Basic Concepts of Qualitative Research, Blackwell Science, London.

5. Kumar, A. (2002): Research Methodology in Social Sciences, Sarup and Sons, New Delhi.

Semester IV

4.1 Major (Core)

Course Title	Research Applications in Early Childhood Education
Course Credits	4 (Pr)
Course Outcome	On completion of the course, the student will be able to 1. Display competencies of scientific writing. 2. Manifest skills of presentation and writing scientific documentation. 3. Display skills to effectively communicate result finding. 4. Critically appreciate articles and books 5. Gain knowledge and techniques needed to effectively convey ideas, conduct research, and produce high-quality research work

Module 1 (Credit 1): Competencies of scientific writing	
Learning Outcomes	At the end of the module, the students will be able to: 1. Identify the structural parts of an academic paper 2. State the purpose of research clearly 3. Communicate research with clarity and focus
Content Outline	Unit 1: Structural parts of an academic paper Unit 2: Basic skills of scientific writing

Module 2 (Credit 1): Constructing evidence-based arguments	
Learning Outcomes	At the end of the module, the students will be able to: 1. Manifest skills of presentation and writing scientific documentation.
Content Outline	Unit 1; Recognizing, articulating, and applying an understanding of different perspectives (including their own) Unit 2: Applying critical, comparative, and creative thinking and problem solving Unit 3: Forming opinions based on exploration and evidence

Module 3 (Credit 1): Display skills to effectively communicate result finding	
Learning Outcomes	At the end of the module, the students will be able to: 1. Communicate results with clarity and focus 2. Highlight the relevance of research 3. Choose an appropriate language
Content Outline	Unit 1: Communicating results with clarity and focus Unit 2: Highlighting the relevance of research Unit 3: Choosing an appropriate language to communicate results

Module 4 (Credit 1): Writing a scientific paper	

Learning Outcomes	At the end of the module, the students will be able to: 1: Create scientific articles /paper 2: Apply specific aspects of the research to scientific articles /papers 3: Understand guidelines and formatting requirements for a scientific paper
Content Outline	Unit 1: Steps to organizing manuscript Unit 2: Applying specific aspects of the research to scientific articles /papers Unit 3: Guidelines and formatting requirements for a scientific paper

Assignments and Activities towards Comprehensive Continuous Evaluation (CCE):

Module 1: List down structural parts of an academic paper

Module 2: Applying critical, comparative, and creative thinking and problem solving

Module 3: Discuss results with clarity and focus

Module 4: Writing a scientific article

References:

1. Bell, J. (1997): Doing Your Research Project: A Guide for First-time Researchers in Education and Social Science, Viva Books, New Delhi
2. Bell, J. (1997): How to Complete Your Research Project Successfully: A Guide for First-time Researchers, UBSPD, New Delhi.
3. Kothari, C.R. (2000): Research Methodology: Methods and Techniques, Vishwa Prakashan, New Delhi.
4. Kumar, A. (2002): Research Methodology in Social Sciences, Sarup and Sons, New Delhi.
5. McBurney, D.H. (2001): Research Methodology, Thomson-Wadsworth, Australia.
6. Pande, G.C. (1999): Research Methodology in Social Sciences, Anmol Publication, New Delhi.

4.2 Major (Core)

Course Title	Internship
Course Credits	Credits 4 (Practical)
Course Outcomes	After going through the course, learners will be able to
	1) Work as professionals in the field of ECE as Teacher Educators, Curriculum Designers, Supervisors, Managers and contribute in Policy making. 2) Contribute in a variety of educational settings for children in private, public, NGO's sectors 3) Promote skills for community participation and development for optimization of human potential 4) Frame and implement developmentally appropriate curriculum 5) Work with sensitivity, ethically, and professionally with families and children with diverse needs through integrating various methodology

Module 1 (Credit 1): 1. Creating teaching-learning transactions with children	
Learning Outcomes	After learning the module, learners will be able to: 1. Create teaching-learning transactions with children 2. Develop Skills in an ECD setting to gain professional competence 3. Demonstrate the values, work ethics, attitudes and skills expected of an ECD professional
Content Outline	1. Observing teaching-learning activities being conducted in classes 2. Preparing appropriate teaching-learning material 3. Conducting teaching-learning activities under supervision 4. Exploring teacher's attitudes and perspectives regarding children's learning

Module 2 (Credit 1): Participation in the Administrative aspects of the Institution	
Learning Outcomes	After learning the module, learners will be able to: 1. Physical infrastructure 2. Planning of activities 3. Resource Management
Content Outline	Observe and assess the following: Unit 1: Physical infrastructure, facilities and resources available in the center Unit 2; Planning of activities, transaction of activities and the use of TLM Unit 3: Scheduling of Activities, Resource Management

Module 3 (Credit 1): Placement in different organizations for children	
Learning Outcomes	After learning the module, learners will be able to: 1. Gain purposeful learning experience through placement in different organizations for children, under supervisory guidance. 2. Enhance their knowledge, skills and attitudes. 3. Plan and execute activities and recreational programs for children
Content Outline	Unit 1: Placement in different centers Unit 2: Plan and execute the need-based programs individually

Module 4 (Credit 1):	Writing a proposal for funding
Learning Outcomes	After learning the module, learners will be able to: 1. Collate information and present. 2. Write a proposal to open a center.
Content Outline	Unit 1: Steps in collating information Unit 2: Proposal writing for funding

Assignments/Activities towards Comprehensive Continuous Evaluation (CCE):

Module 1: Observation report of the centre placed
Module 2: Detailed activity taken report
Module 3: Writing a report of the centre in which the student is placed
Module 4: Submission of Research proposal

Reference:

1. Tribhuwan. R. D and Shevkari. S. R. (2000). How to Write Funding Project, Discovery Publishing Pvt. Ltd; First Edition, ISBN: 978-8171415595

2. Coley. S. M and Scheinberg. C. A and Yulia. A. (2021). Proposal Writing Effective Grantsmanship for Funding, SAGE Publications, Inc, Sixth Edition. ISBN: 9781544371535.

4.3 Major (Core)

Course Title	Product Development
Course Credits	4 (Pr)
Course Outcome	On the submission of the final product, the students will be able to: 1. Develop insight into various tools and techniques used as intervention for enhancing behavioral change including learning at all age groups 2. Build intervention to manage issues of community groups such as LGBTQ+ and special groups also. 3. Design the intervention by following stages logically 4. Develop entrepreneurial skills
Module 1 (Credit 1): Relevance and Conceptualization of product	
Learning Outcomes	At the end of the module, the students will be able to: 7. Identify problem area of intervention 8. Verify most appropriate technique to address concern 9. Decide the nature of product such as, intervention, module, games, activity books, problem specific guidelines etc. 10. Create unique intervention
Content Outline	Unit 1: Concept of Product Unit 2. Novelty in creating product Unit 3. Criteria for selecting Group/ population for product development Unit 4. Importance of creativity in product development
Module 2 (Credit 1): Setting objectives and guidelines and process of use of product	
Learning Outcomes	At the end of the module, the students will be able to: 1. Determine the uses of product 2. Finalize the guidelines to use the product
Content Outline	Unit 1: Uses of Products Unit 2. Guidelines and instructions Unit 3. Step by step process
Module 3 (Credit 1): Development process and Material finalization	
Learning Outcomes	At the end of the module, the students will be able to: 1. List the material required to build product 2. Formulate series of material preparation in order to fix entire product 3. Decide the use of durable and environment friendly material 4. Decide cost effective and long-lasting product
Content Outline	Unit 1: Material – durable and cost effective Unit 2. Logical order of preparing sub parts of product Unit 3. Damage and repair of product
Module 4 (Credit 1): Final quality product, duplication, patenting and marketing	

Learning Outcomes	At the end of the module, the students will be able to:
	1. Determine good quality product
	2. Decide duplication of product
	3. Justify cost for the product
	4. Convince prize and marketing
	5. Derive patenting procedure
Content Outline	Unit 1: Quality product
	Unit 2. Duplication value of product
	Unit 3. Material and development cost
	Unit 4. Orientation about patenting

Assignments/Activities towards Comprehensive Continuous Evaluation (CCE):

Module 1.
1. Develop the rationale of product development
2. List and study different products such as, models, guidelines, games, puzzles, activity books, floor games etc.

Module 2.
1. Decide guidelines for and procedure of use of the product before finalization

Module 3.
1. Explore durable material make price list
2. Conduct workshop on pollution control and environment protection

Module 4
1. Organize session on patenting of the product

Reference:

1. Bstieler,L. Noble, C.H. (2003). The PDMA Handbook of Innovation and New Product Development. United States: Wiley. ISBN: 9781119890225.

2. Cooper, R. G., Edgett, S. J. (2009). Lean, Rapid and Profitable New Product Development. Booksurge Publishing. ISBN: 9781439224601.

3. Jone, T (1997). New Product Development: An Introduction to a Multifunctional Process, Elsevier Science & Technology Books, ISBN: 9780750624275.

4. McGrath, M. E. (1996). Setting the PACE in Product Development: A Guide to Product And Cycle-time Excellence. Taylor & Francis. ISBN: 9780750697897.

5. Srivastava, R.K. (2007). Product Management and New Product Development. Excel Books, ISBN: 9788174464781.

4.4 Major (Elective)

Course Title	Observation and Assessment of Children
Course Credits	Credits 4 (2Th + 2 Practical)
Course Outcomes	After going through the course, learners will be able to
	i) Understand the nature, process and significance of social research with children. ii) Plan Formative and Summative assessment for children iii) Design tools such Observation schedules, Rating Scales, Event Sampling, Check lists etc. iv) Design Rubrics to assess Development, Plan Portfolios v) Understand critical considerations in research with children

Module I: Introduction to Assessment

Learning Outcomes	After learning the module, learners will be able to: 1. Comprehend concepts, functions, types of assessment 2. Interpret the characteristics of effective assessment 3. Plan methods for evaluating children, program
Content Outline	**Unit I**: Concept and Definitions • Functions of Assessment- Screening, Diagnosis, Placement, Program Planning, Evaluation **Unit II**: Planning the Assessment Process • Formative Assessment • Summative Assessment • Characteristics of effective child Assessment • Tools & Techniques of Assessment • Methods for Evaluating Young Children • Observation- Purpose, Types of observations, • Tools for Observation- Schedules, Time Sampling, Event sampling, Technology Anecdotal records, Case study, Types of Rating Scales, Questionnaires, Interview Schedules • Types of records **Unit III** Identification of the child • Developmental Screening • Diagnosis • Individualized Planning of Programs and Interventions • Performance Monitoring through Observations, Classroom Portfolios, anecdotal Records

Module 2: Program Evaluation

Learning Outcomes	After learning the module, learners will be able to- 1) Understand different components of Program Evaluation 2) Create a plan for program assessment
Content Outline	**Unit 1**: Philosophy **Unit 2**: Objectives **Unit 3**: Methodology **Unit 4:** Curriculum **Unit 5**: Schedules

Module 3	Observing Development of Young Children
Learning Outcomes	After learning the module, learners will be able to- 1) Categorize different aspect of evaluating children 2) Design Observational Instruments to use in Early childhood settings 3) Evaluate the critical considerations in research with children
Content Outline	Unit 1: Domains of Assessment • Cognitive Assessment • Sensory Activity • Perceptual Motor Abilities • Language and Communication abilities • Socio-emotional Development • Social Interactions with adults and peers • Creativity
Module 4	Assessment of Infrastructure
Learning Outcomes	1) Select methods to observe and assess the Physical environment 2) Evaluate the tools for different aspects of the Preschool Setting 3) Analyze the current trends and challenges in Assessing Young Children
Content Outline	Unit 1: Environment Assessment • Dimensions of Environment • Open Physical Space • Closed Physical Space • Physical Facilities • Organization and Supervision of Space • Equipment • Materials • Social aspects • Contingency experiences • Guidelines for Assessing Environments • Tools used to assess different aspects of environment • Trends and challenges in developmental assessment of young children

Assignments/Activities towards Comprehensive Continuous Evaluation (CCE):

Module I

1. Preparing Observation Schedules for 1 child
2. 1 Rating Scale on a particular trait
3. Event Sampling and Time Sampling for a behavior problem

Module II

1. Planning Checklists for Program/ Infrastructure Assessment
2. Using the instruments to assess Infrastructure, Program and Children

Module III

1. Creating Sample Checklists to assess development in various domains (at least 2 domains)
2. Designing a Comprehensive Report Card for Foundational years

Module IV

1. Identifying Tools for different aspects of the Preschool Setting
2. Creating a checklist/Rating Scale for assessing Classroom setting

References:

1. Anandalakshmy, S., Chaudhary, N., & Sharma, N. (2008). Researching Families and Children. New Delhi: Sage Publications.
2. Bennett,V., Wood,L.and Rogers,S.(1997):"teaching through play" Open university press,Philadepia.
3. Bryman, A. (2009). Social Research Methods. Oxford: Oxford University Press • Christensen, P. & James, A. (2008). Research with children: Perspectives and Practices. London: Routledge.
4. National Scientific Council on the Developing Child (2009): A working paper by Harvard University
5. Nicholson, S. & Shipstead, S. (1998) Looking through the glass: Observations in the Early Childhood Classroom, 2nd Edition. Merill, Prentice Hall, New Jersey.

4.5 Research Project

Course Title	Dissertation
Course Credits	6
Course Outcomes	After going through the course, learners will be able to
	1. Create an outline of a research proposal
	2. Modify knowledge in developing rationale of the study
	3. Design research methodology
	4. Demonstrate skills for writing results and discussion.
	5. Develop appropriate scientific writing styles
	6. Design and conduct a research project
Module 1 (Credit 1) Research Topic Selection and Designing	
Learning Outcomes	After learning the module, learners will be able to:
	1. Justify the significance of their research
	2. Correlate theories, concepts and methods relevant to their research projects
	3. Develop a research design to enable them to answer their central research question
Content Outline	1. Selecting a research topic
	2. Developing a research design
Module 2 (Credit 1) Constructing Research Questions and **Setting Parameters for Research**	
Learning Outcomes	After learning the module, learners will be able to:
	1. Design academic literature relevant to their research project
	2. Develop research questions
	3. Create tools needed for research
	4. Critically evaluate feedback from peers and academic supervisors, exercise reflection and self-criticism
	5. Modify tools for research
Content Outline	1. Importance of academic literature relevant to the research project
	2. Constructing research questions
	3. Developing tools for research
	4. Validating the tool for research
	5. Setting the time schedule for research

Module 3 (Credit 1) Planning for Data Collection	

Learning Outcomes	After learning the module, learners will be able to:
	
	    1. Identify areas for collecting data
	    Reframe the findings of their research effectively and fluently

Content Outline	1. Collecting data from the field

Module 4 (Credit 1) Data Analysis	

Learning Outcomes	After learning the module, learners will be able to:
	
	    1. Design appropriate tests
	    Analyze data

Content Outline	1. Use appropriate tests 2. Analyzing the Data

Module 5 (Credit 1) Drafting, Editing, Proof Reading	

Learning Outcomes	After learning the module, learners will be able to:
	
	    1. Plan the Dissertation
	
	    2. Rewrite the Dissertation
	
	    3. Develop skills to proof read the dissertation

Content Outline	1. Ways to draft the dissertation 2. Ways to edit the dissertation 3. Skills to proof reading the dissertation

Module 6 (Credit 1) Finalizing the Dissertation	

Learning Outcomes	After learning the module, learners will be able to:
	
	    1. Check Plagiarism
	
	    2. Complete and submit dissertation

Content Outline	1. Tools to check plagiarism 2. Completing dissertation & submitting

Assignments/Activities towards Comprehensive Continuous Evaluation (CCE):

Module 1:
    1. Assignment on developing a research design

Module 2:
    1. Discussion on constructing research questions

Module 3:
    1. Assignment on developing tools for research

Module 4:
    1. Presentation on data analyzed

Module 5:
    1. Creating the rough draft of Dissertation

Module 6:
    1.Submitting the Dissertation

References:

1. Bell, J. (1997) "Doing Your Research Project: A Guide for First-time Researchers in Education and Social Science", Viva Books, New Delhi.

2. Bell, J. (1997): How to Complete Your Research Project Successfully: A Guide for First-time Researchers, UBSPD, New Delhi.

3. Festinger, L. and Katz, D. (ed.) (1977): Research Methods in the Behavioral Sciences, Amerind Publishing, New Delhi.

4. Gupta, S. (2001) "Research Methodology and Statistical Techniques", Deep and Deep, New Delhi.

5. Holloway, I. (1997): Basic Concepts of Qualitative Research, Blackwell Science, London.

6. Kumar, A. (2002): Research Methodology in Social Sciences, Swarup and Sons, New Delhi.

Dissertation Assessment Template:

	INTERNAL ASSESSMENT (25)			**TOTAL Marks Obtained**
		Proposal (15)		
		Understanding of concept & Execution (10)		
	TOTAL Marks		**out of 25**	
	INTERNAL ASSESSMENT (25)	**(A) General**		
		Punctuality, Sincerity, Perseverance, Commitment, Attitude		
		TOTAL	**Out of 15**	
		(B) Skills		
		Use of Resources, Literature, Use of Technology, Communication, Any other		
		TOTAL	**Out of 10**	
	TOTAL Marks (by the internal supervisor) out of 50			
			INTERNAL EXAMINER	EXTERNAL EXAMINER
JOINT ASSESSMENT (100)		Dissertation (50)		
		Viva Voce (50)		
		TOTAL		
		TOTAL (Average of the two)		
OVERALL TOTAL (OUT OF 150)				