

**MAHARSHI DAYANAND SARASWATI UNIVERSITY
AJMER**



SYLLABUS

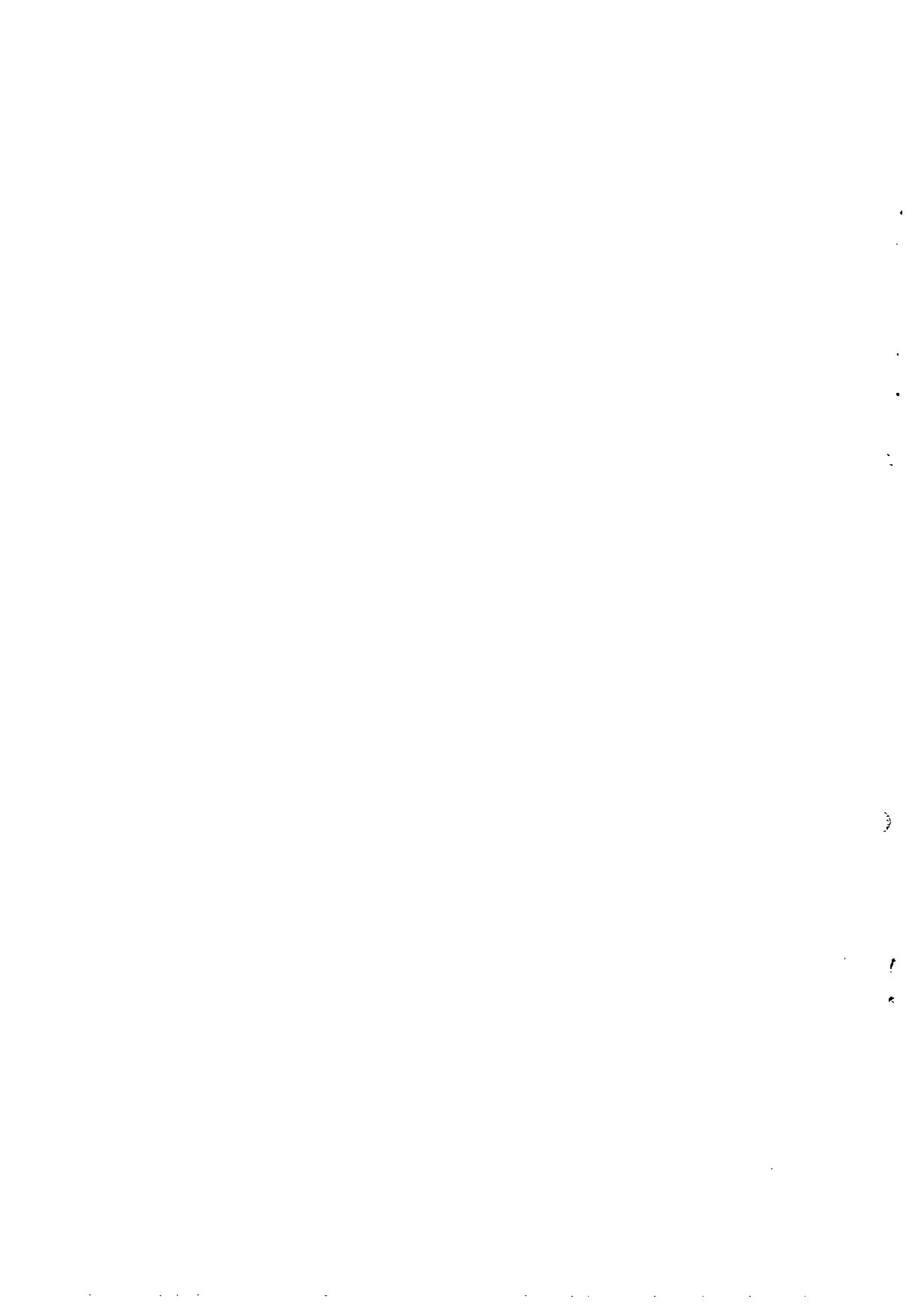
FACULTY OF EDUCATION

**Bachelor of Education
B.Ed. Sp.Ed. (V.I.)**

B.Ed. Special Education (Visual Impairment)

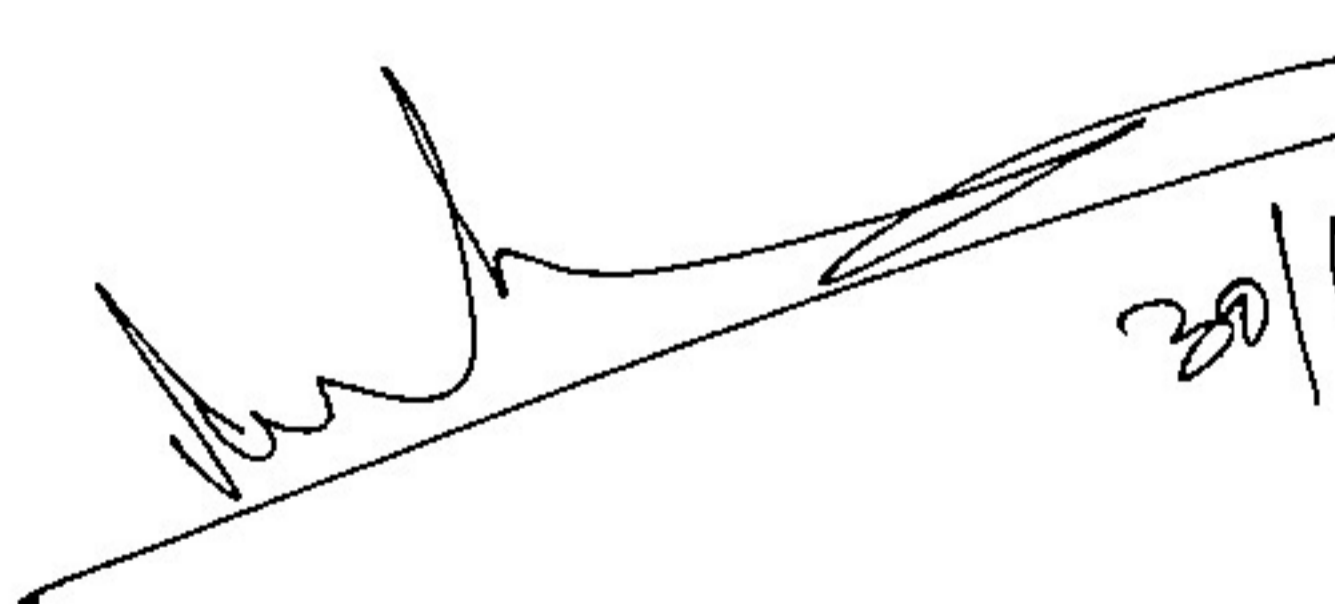
(Semester Scheme)

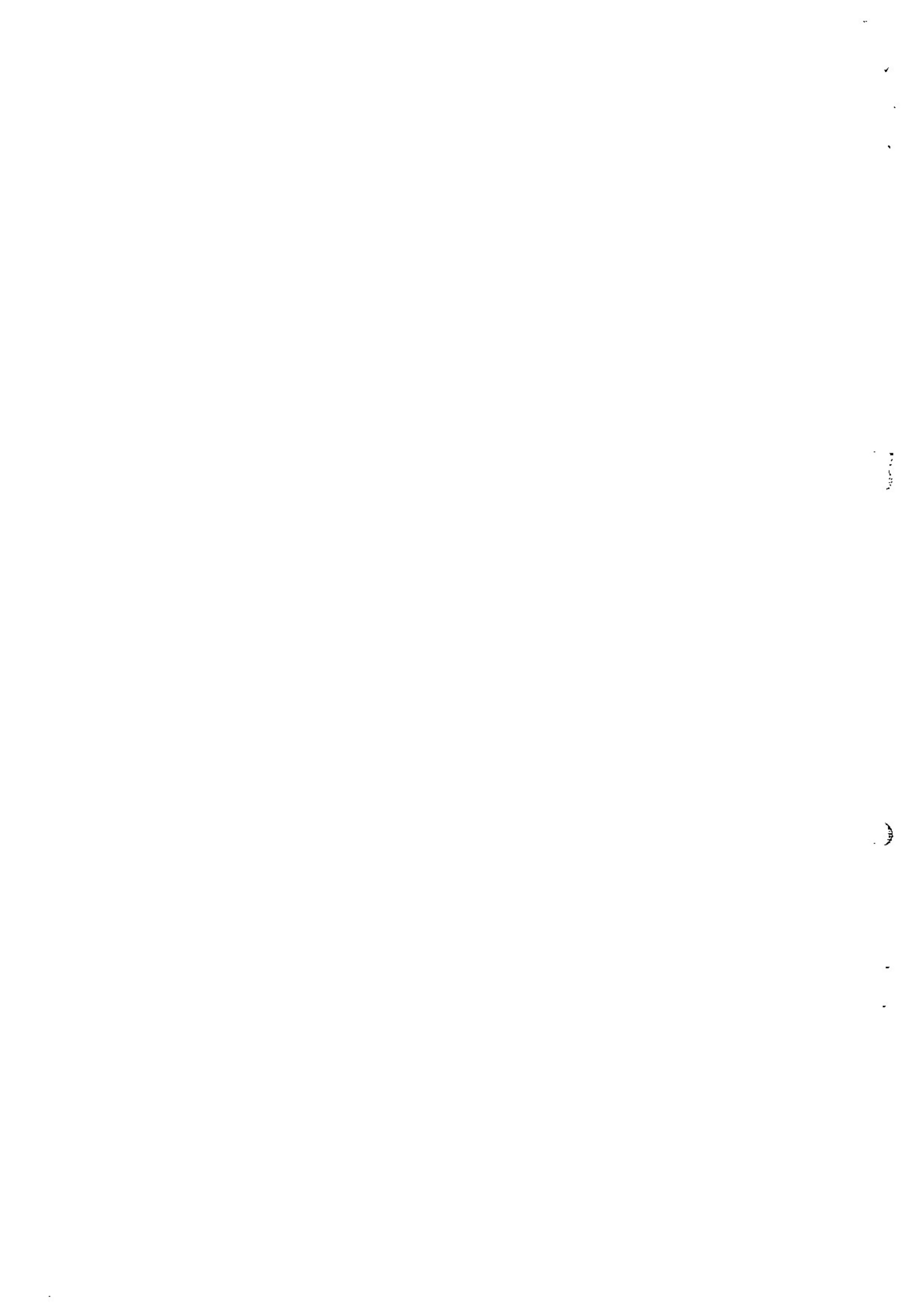
(w.e.f. 2023-24)



CURRICULUM FRAMEWORK

Bachelor of Education – Special Education
B.Ed Spl. Ed (vi)
(1st Year)

 20/6/2023



B.ED. SPL. EDU. (VI) 1ST YEAR					
S.NO.	COURSE CODE	PAPER NAME	INTERNAL MARKS	EXTERNAL MARKS	TOTAL
1	A-1	HUMAN GROWTH & DEVELOPMENT	20	80	100
2	A-2	CONTEMPORARY INDIA AND EDUCATION	20	80	100
3	A-3	LEARNING, TEACHING AND ASSESSMENT	20	80	100
4	A-4 (P-1 st)	PEDAGOGY OF TEACHING SCIENCES OR PEDAGOGY OF TEACHING MATHEMATICS OR PEDAGOGY OF TEACHING SOCIAL SCIENCE	20	80	100
5	A-4 (P-2 nd)				
6	A-4 (P-3 rd)				
7	A-5 (P-4 th)	PEDAGOGY OF TEACHING HINDI OR PEDAGOGY OF TEACHING ENGLISH	20	80	100
8	A-5 (P-5 th)				
9	B-6	INCLUSIVE EDUCATION	10	40	50
10	B-7	INTRODUCTION TO SENSORY DISABILITIES	10	40	50
11	B-8	INTRODUCTION TO NEURO DEVELOPMENTAL DISABILITIES	10	40	50
12	B-9	INTRODUCTION TO LOCOMOTOR AND MULTIPLE DISABILITIES	10	40	50
13	C-12	IDENTIFICATION OF CHILDREN WITH VISUAL IMPAIRMENT AND ASSESSMENT OF NEEDS	20	80	100
14	C-13	CURRICULUM, ADAPTATION AND STRATEGIES FOR TEACHING EXPANDED CURRICULUM	20	80	100
PRACTICAL					
15	E-1	CROSS DISABILITY & INCLUSION	25	25	50
16	E-2	DISABILITY SPECIALISATION	25	25	50
GRAND TOTAL			230	770	1000

HUMAN GROWTH & DEVELOPMENT

Course Code: A 1

Credit: 04

Contact Hours: 60

Marks: 100

Introduction

This course exposes student-teachers to the study of child and human development in order to gain a better understanding about variations and the influence of socio-cultural-political realities on development. A critical understanding of theoretical perspectives of development would aid in their application in teaching learning process. Through close observation of children in their natural environments the teacher trainee would be able to situate their theoretical knowledge within realistic frames. This course would also be able to equip them to reflect and critique the normative notions of childhood and adolescence.

Objectives

After studying this course the student- teachers will be able to

- ☐ *Explain the process of development with special focus on infancy, childhood and adolescence.*
- ☐ *Critically analyze developmental variations among children.*
- ☐ *Comprehend adolescence as a period of transition and threshold of adulthood.*
- ☐ *Analyze different factors influencing child development.*

Unit 1: Approaches to Human Development

- 1.1 Human development as a discipline from infancy to adulthood
- 1.2 Concepts and Principles of development
- 1.3 Developing Human- Stages (Prenatal development, Infancy, Childhood, Adolescence, Adulthood)
- 1.4 Nature vs Nurture
- 1.5 Domains (Physical, Sensory- perceptual, Cognitive, Socio-emotional, Language & communication, Social relationship)

Unit 2: Theoretical Approaches to Development

- 2.1 Cognitive & Social- cognitive theories (Piaget, Vygotsky, Bruner, Bandura)
- 2.2 Psychosocial Theory (Erikson)
- 2.3 Psychoanalytic Theory (Freud)
- 2.4 Ecological Theory (Bronfrenbrenner)
- 2.5 Holistic Theory of Development (Steiner)

Unit 3: The Early Years (Birth to Eight Years)

- 3.1 Prenatal development: Conception, stages and influences on prenatal development
- 3.2 Birth and Neonatal development: Screening the newborn - APGAR Score, Reflexes and responses, neuro-perceptual development

- 3.3 Milestones and variations in Development
- 3.4 Environmental factors influencing early childhood development
- 3.5 Role of play in enhancing development

Unit 4: Early Adolescence (From nine years to eighteen years)

- 4.1 Emerging capabilities across domains of physical and social emotional
- 4.2 Emerging capabilities across domains related to cognition - metacognition, creativity, ethics
- 4.3 Issues related to puberty
- 4.4 Gender and development
- 4.5 Influence of the environment (social, cultural, political) on the growing child

Unit 5: Transitions into Adulthood

- 5.1 Psychological well-being
- 5.2 Formation of identity and self-concept
- 5.3 Emerging roles and responsibilities
- 5.4 Life Skills and independent living
- 5.5 Career Choices

Engagement with the field as part of course as indicated below

Hands on Experience

- ▢ Observe children in various settings and identify milestones achieved.
- ▢ Seminar on human development
- ▢ Writing Journal for reflection and case study

Suggested Readings

- ▢ Berk, L. E. (2000). Human Development. Tata Mc.Graw Hill Company, New York.
- ▢ Brisbane, E. H. (2004). The developing child. Mc.Graw Hill, USA.
- ▢ Cobb, N. J. (2001). The child infants, children and adolescents. Mayfield Publishing Company, California.
- ▢ Hurlock, E. B. (2005). Child growth and development. Tata Mc.Graw Hill Publishing Company, New York.
- ▢ Hurlock, E. B. (2006). Developmental Psychology- A life span approach. Tata Mc.Graw Hill Publishing Company, New Delhi.
- ▢ Meece, J. S., & Eccles J. L (Eds) (2010). Handbook of Research on Schools, Schooling and Human Development. New York: Routledge
- ▢ Mittal, S. (2006). Child development- Experimental Psychology. Isha Books, Delhi.
- ▢ Nisha, M. (2006). Introduction to child development, Isha Books, Delhi.
- ▢ Papalia, D. E., & Olds, S. W. (2005). Human development. Tata Mc.Graw Hill Publishing Company, New York.

CONTEMPORARY INDIA AND EDUCATION

Course Code: A2

Credit: 04

Contact Hours: 60

Marks: 100

Introduction

This course will enable student-teachers to explore education from philosophical and sociological perspective and hands on experience of engaging with diverse communities, children and schools. It also traces the educational developments in the historical context leading to contemporary India. The course also includes various commissions and policies and issues and trends in the field of education, special education and inclusive education.

Objectives

After completing this course the student-teachers will be able to

- Explain the history, nature and process and Philosophy of education.
- Analyse the role of educational system in the context of Modern Ethos.
- Understand the concept of diversity.
- Develop an understanding of the trends, issues, and challenges faced by the contemporary Indian Education in global context.

Unit 1: Philosophical Foundations of Education

- 1.1 Education: Concept, definition and scope
- 1.2 Agencies of Education: School, family, community and media
- 1.3 Philosophies of Education: idealism, naturalism, pragmatism, existentialism, humanism, constructivism and connectionism
- 1.4 Classical Indian Perspective (Buddhism, Jainism, Vedanta Darshan, Sankya Darshan)
- 1.5 Indian Philosophers (Aurobindo, Gandhi, Tagore, Krishna Murthy)

Unit 2: Understanding Diversity

- 2.1 Concept of Diversity
- 2.2 Types of Diversity: Gender, linguistic, cultural, socio-economic and disability
- 2.3 Diversity in learning and play
- 2.4 Addressing diverse learning needs
- 2.5 Diversity: Global Perspective

Unit 3: Contemporary Issues and Concerns

- 3.1 Universalisation of School Education, Right to Education and Universal Access
- 3.2 Issues of a) Universal enrolment b) Universal retention c) Universal learning
- 3.3 Issues of quality and equity. Physical, economic, social, cultural and linguistic, particularly w.r.t girl child, weaker sections and disabled

3.4 Equal Educational Opportunity: (i) Meaning of equality and constitutional provisions
(ii) Prevailing nature and forms of inequality, including dominant and minority groups and related issues

3.5 Inequality in Schooling: Public-private schools, rural-urban schools, single teacher schools and other forms of inequalities such as regular and distance education system

Unit 4: Education Commissions and Policy (School Education)

4.1 Constitutional provisions on education that reflect National Ideals: Equality, liberty, secularism, and social justice

4.2 National Commissions and Policies: Education Commission (1964), NPE and POA (1986, 1992), National Policy for Persons with Disabilities (2006)

4.3 National Acts: RCI Act, 1992, PWD Act, 1995, NT Act, 1999, RTE Act (2009 & 2012).

4.4 Programmes and Schemes: IEDC (1974, 1983), SSA (2000, 2011), RMSA, 2009, IEDSS, 2009

4.5 International Conventions and Policies: Salamanca Declaration and Framework, 1994; UNCRPD, 2006; MDG, 2015; INCHEON strategies

Unit 5: Issues and Trends in Education

5.1 Challenges of education from preschool to senior secondary

5.2 Inclusive education as a rights based model

5.3 Complementarity of inclusive and special schools

5.4 Language issues in education

5.5 Community participation and community based education

Some Suggested Activities on contemporary issues

- Comparative study of different settings
- Conflicts and social movements in India: Women, Dalit, Tribal and Disabled
- ☐ Educational debates and movements
- ☐ First generation learners
- ☐ Children with disabilities
- Inclusive education
- RTE act in the context of disadvantaged
- ☐ Linguistic and religious diversity
- ☐ Human rights, minority rights
- ☐ Educational status of various groups
- Special and inclusive schools
- Analysis of contemporary debates

Essential Readings

- ☐ Guha, R. (2007). India after Gandhi: The History of the World's Largest Democracy. Macmillan, Delhi.

LEARNING, TEACHING AND ASSESSMENT

Course Code: A 3

Credits: 04

Contact Hours: 60

Marks: 100

Introduction

This Course will initiate student-teachers to understand learning theories and as these translate into teaching and learning actions. Assessment of learning as a continuous process is also focused. The course also needs to focus on the PwD as Learner and their special education needs that teacher needs to address in diverse education settings.

Objectives

After completing this course the student-teachers will be able to

- *Comprehend the theories of learning and intelligence and their applications for teaching children*
- *Analyse the learning process, nature and theory of motivation*
- *Describe the stages of teaching and learning and the role of teacher*
- *Situate self in the teaching learning process*
- *Analyze the scope and role of assessment in teaching learning process in order to introduce dynamic assessment scheme for educational set up towards enhanced learning.*

Unit 1: Human Learning and Intelligence

- 1.1 Human learning: Meaning, definition and concept formation
- 1.2 Learning theories:
 - Behaviourism: Pavlov, Thorndike, Skinner
 - Cognitivism: Piaget, Bruner
 - Social Constructivism: Vygotsky, Bandura
- 1.3 Intelligence:
 - Concept and definition
 - Theories: Two-factor, Multifactor, Triarchic Theory (Robert Steinberg)
- 1.4 Creativity: Concept, Definition and Characteristics
- 1.5 Implications for Classroom Teaching and Learning

Unit 2: Learning Process and Motivation

- 2.1 Sensation: Definition and Sensory Process
- 2.2 Attention: Definition and Affecting Factors
- 2.3 Perception: Definition and Types
- 2.4 Memory, Thinking, and Problem Solving
- 2.5 Motivation: Nature, Definition and Maslow's Theory

Unit 3: Teaching Learning Process

- 3.1 Maxims of Teaching
- 3.2 Stages of Teaching: Plan, Implement, Evaluate, Reflect
- 3.3 Stages of Learning: Acquisition, Maintenance, Generalization
- 3.4 Learning Environment: Psychological and Physical
- 3.5 Leadership Role of Teacher in Classroom, School and Community

Unit 4: Overview of Assessment and School System

- 4.1 Assessment: Conventional meaning and constructivist perspective
- 4.2 'Assessment of Learning' and 'Assessment for Learning': Meaning and difference
- 4.3 Comparing and contrasting assessment, evaluation, measurement, test and examination
- 4.4 Formative and summative evaluation, Curriculum Based Measurement
- 4.5 Revisiting key concepts in school evaluation: filtering learners, marks, credit, grading, choice, alternate certifications, transparency, internal-external proportion, improvement option

Unit 5: Assessment: Strategies and Practices

- 5.1 Strategies: (Oral, written, portfolio, observation, project, presentation, group discussion, open book test, surprise test, untimed test, team test, records of learning landmark, cloze set/open set and other innovative measures) Meaning and procedure
- 5.2 Typology and levels of assessment items: Multiple choice, open ended and close ended; direct, indirect, inferential level
- 5.3 Analysis, reporting, interpretation, documentation, feedback and pedagogic decisions
- 5.4 Assessment of diverse learners: Exemptions, concessions, adaptations and accommodations;
- 5.5 School examinations: Critical review of current examination practices and their assumptions about learning and development; Efforts for exam reforms: Comprehensive and Continuous Evaluation (CCE), NCF (2005) and RTE (2009)

Engagement with the field as part of course as indicated below:

- I. Report submission: observation of children belonging to any three stages of development and describing applications of development in teaching-learning contexts
- II. Preparation of Self study report on individual differences among learners
- III. Prepare a leaflet for parents on better emotional management of children
- IV. Compilation of 5 CBM tools from web search in any one school subject
- V. Team presentation of case study on assessment outcome used for pedagogic decisions VI. Report on community participation in school assessment or study recent ASAR report to understand school independent assessment

Transaction and Evaluation

This concepts and theoretical precepts included in this course should be explained with reference to children with and without disabilities. The effort of transaction should be to enhance the understanding of

how learning occurs and what are the suitable means of its assessment. Evaluation may be done by asking student-teachers to children with and without disabilities and present a report of the same

Essential Readings

- Amin, N. (2002) Assessment of Cognitive Development of Elementary School Children: A Psychometric Approach. Jain Book Agency, New Delhi.
- Chauhan, S.S. (2013). Advanced Educational Psychology. Jain Book Agency, Delhi.
- King-Sears, E.M. (1994). Curriculum Based Assessment in Special Education. Singular Publishing Group, San Diego, CA.
- Panch, R. (2013). Educational Psychology: Teaching and Learning Perspective. McGraw Hill Education (India) Private Limited, New Delhi.
- Paul, P. (2009). Language and Deafness. Singular publication.
- Salvia, John, Ysseldyke, James, E. And Bolt, Sara. (2007). Assessment in Special and Inclusive Education. Houghton Mifflin Company, Boston.
- Whitcomb, S., & Merrell, K.W. (2012). Behavioral, Social, and Emotional Assessment of Children and Adolescents, Routledge, New York.
- Woolfolk, A., Misra, G., & Jha, A.K. (2012). Fundamentals of Educational Psychology, (11th edn). Pearson Publication, New Delhi.

Suggested Readings

- Geisinger, K.F. (2013). APA Handbook of Testing and Assessment in Psychology. American Psychological Association, USA.
- Guskey, T. R., & Bailey, J (2000). Grading and Reporting. Thousand Oaks. Corwin King, CA.
- Howell, K. W., & Nolet, V. (2000). Curriculum-Based Evaluation: Teaching and decision making. Wadsworth, Ontario.
- McMillan, J. H. (2001). Classroom Assessment: Principles and Practice for Effective Instruction. Allyn and Bacon, London.
- Nevo, D. (1995). School based Evaluation. Pergamon Publishing, Oxford.
- Salvia, J., & Ysseldyke, J.E. (1998). Assessment. (7th ed) Houghton Mifflin, Boston

PEDAGOGY OF TEACHING SCIENCE

Course Code: A 4 (Part I)

Credits: 04

Contact Hours: 60

Marks: 100

Introduction

The course will help the student-teachers to generate their student's interest for learning science and develop a scientific attitude. It is designed to equip the student-teachers to teach science using innovative methods, techniques and teaching learning material to students with & without disabilities.

Objectives

After completing the course the student-teachers will be able to

- *Explain the role of science in day to day life and its relevance to modern society.*
- *Describe the aims and objectives of teaching science at school level.*
- *Demonstrate and apply skills to select and use different methods of teaching the content of sciences.*
- *Demonstrate competencies of planning for teaching sciences, organizing laboratory facilities and equipment designing pupil centered teaching learning experiences.*
- *Demonstrate skills to design and use various evaluation tools to measure learner achievement in sciences.*

Unit 1: Nature and Significance of Science

- 1.1 Nature, Scope, Importance and Value of Science
- 1.2 Science As An Integrated Area of Study
- 1.3 Science and Modern Indian Society: Relationship of Science and Society
- 1.4 Impact of Science with Special Reference to Issues related with Environment, Industrialization and Disarmament
- 1.5 Role of Science for Sustainable Development

Unit 2: Planning for Instruction

- 2.1 Aims and Objectives of Teaching Science in Elementary and Secondary School
- 2.2 Bloom's Taxonomy of Educational Objectives and Writing Objectives in Behavioural Terms
- 2.3 Lesson Planning – Importance and Basic Steps. Planning Lesson for an Explanation, Demonstration, and Numerical Problem in Teaching of Sciences
- 2.4 Unit Planning – Format of A Unit Plan
- 2.5 Pedagogical Analysis. Meaning and Need. Guidelines for Conducting Pedagogical Analysis

Unit 3: Approaches and Methods of Teaching Sciences

- 3.1 Process Approach, Direct Experience Approach, Inductive-Deductive Approach
- 3.2 Lecture, Demonstration, Discussion, Problem-solving, Concept-mapping, Programmed Instruction, Team Teaching, Seminar, Computer Assisted Learning (CAL)
- 3.3 Project Method and Heuristic Method
- 3.4 Creating Different Situations of Learning Engagement: Group Learning, Individual Learning, Small Group, Cooperative (Peer-tutoring, Jigsaw, etc.), Situated/Contextual Learning with reference to Children with Disabilities
- 3.5 Constructivist Approach and its Use in Teaching Science

Unit 4: Learning Resources with reference to Children with Disabilities for Teaching Science

- 4.1 Teaching Learning Aids – Need, Importance, Selection, Use and Classification of Aids Based on Type of Experience, Audio Visual Aids, Multimedia, Charts, and Models (Tactile and Visual)
- 4.2 Importance of Co-Curricular Activities-Science Club, Science Exhibition, Science Text Books-Characteristics and Significance with reference to Children with Disabilities
- 4.3 The Science Laboratory-Planning Organization of Lab, Storage, Record Keeping and Safety of Scientific Equipments with reference to Children with Disabilities
- 4.4 Aquarium, Vivarium – Role in Teaching with Setting & Maintaining
- 4.5 Museum, Botanical And Zoological Garden: Role In Teaching

Unit 5: Evaluation

- 5.1 Evaluation- Concept, Nature and Need
- 5.2 Norm Referenced & Criterion Referenced Evaluation, Comprehensive and Continuous Evaluation: Concept and Significance, Scholastic and Co-Scholastic Assessment
- 5.3 Tools and Techniques for Formative and Summative Assessments
- 5.4 Preparation of Diagnostic Test and Achievement Test
- 5.5 Adaptations of Evaluation Procedure With Reference To Children With Disabilities

Practical/ Field Engagement/Project Work

Any one of the following

- I. Pedagogical analysis of a unit from Science content.
- II. Preparation of a multimedia presentation on a topic from Science content keeping students with disabilities in view.
- III. Developing an Action Research Plan on a problem related to teaching and learning of Sciences to students with disabilities to students with disabilities.
- IV. Construction of a diagnostic test for unit along with a remedial plan.

- V. Comparative analysis of prescribed syllabus and textbooks of different Boards
Curricular innovations in respective subject areas
- VI. Curricular adaptations for teaching Sciences to students with disabilities

Essential Readings

- Brown, R. (1978). Science instruction of visually Impaired Youth. New York: AFB.
- Buxton, A. C. (2010). Teaching Science in Elementary and Middle School. New Delhi: Sage Publications.
- Bybee, R. (2010b). The teaching of science: 21st-century perspectives. Arlington, VA: NSTA Press, USA.
- Fensham, P.J. (1994). The content of Science: A constructive Approach to its Teaching and Learning. Washington, D.C: The Falmer Press.
- Gupta, V. K. (1995). Teaching and Learning of Science and Technology. New Delhi: Vikas Publishing House Pvt. Ltd.
- Henneman, K. A. (1975). Teaching of Visually Handicapped, Ohio: Charles E. Merrill Publishing Company.
- Joshi, S. R. (2005). Teaching of Science. New Delhi: A.P.H Publishing Corporation.
- Kelley, P., & Gale, G (1998). Towards Excellence: Effective education for students with vision impairments, Sydney: North Rocks Press.
- Lawson, E. A. (2010). Teaching Inquiry Science in Middle School, New Delhi: Sage Publications.
- Layton, D. (1989). Innovations in Science and Technology Education, New Delhi: Sterling Publishers.
- Mani, M. N. G. (1992). Techniques of teaching blind children, New Delhi: Sterling Publishers.
- Mukhopadhyay, S., Jangira, N. K., Mani, M.N.G., & Raychowdhary, N. (1987). Sourcebook for training teachers of visually impaired, New Delhi: NCERT.
- Murray, L. J. (1988). Basic Skills – Science, Boston: John Murrey.
- NCERT (1982). Teaching Science in secondary schools, New Delhi: NCERT.
- NIVH (1992). Handbook for the teachers for the visually handicapped, Dehradun
- Scholl, G.T. (1986). Foundations of education for blind and visually handicapped children and youth, New York: American Foundation for the blind.
- Sharma, R.C. (2005). Modern Science teaching, Delhi: Dhanpat Rai & Sons.
- Siddiqui, H. M. (2007). Teaching science, New Delhi: Balaji offset.
- Siddiqui, N.N., & Siddiqui, M.N. (1994). Teaching of science today & tomorrow, Delhi: Doaba House.
- Stern, A., & Sund, B. (1983). Teaching science through discovery. Ohio: Charles E. Merrill Publishing Company.

PEDAGOGY OF TEACHING MATHEMATICS

Course Code: A 4 (Part II)

Credits: 04

Contact Hours: 60

Marks: 100

Introduction

The course will help the student-teachers to generate their student's interest for learning maths and develop dispositions towards the subject. It is designed to equip the learners to teach maths using innovative methods, techniques and teaching learning material for children with & without disabilities.

Objectives

After completing the course the student-teachers will be able to

- *Explain the nature of Mathematics and its historical development with contribution of Mathematicians.*
- *Describe the aims and objectives of teaching Mathematics at school level.*
- *Demonstrate and apply skills to select and use different methods of teaching Mathematics.*
- *Demonstrate competencies of planning for teaching Mathematics, organizing laboratory facilities and equipment designing pupil centered teaching learning experiences.*
- *Demonstrate skills to design and use various evaluation tools to measure learner achievement in Mathematics.*

Unit 1: Nature of Mathematics

- 1.1 Meaning, Nature, Importance and Value of Mathematics
- 1.2 Axioms, Postulates, Assumptions and Hypothesis in Mathematics
- 1.3 Historical Development of Notations and Number Systems
- 1.4 Contribution of Mathematicians (Ramanujam, Aryabhata, Bhaskaracharya, Euclid, Pythagoras)
- 1.5 Perspectives on Psychology of Teaching and Learning of Mathematics- Constructivism, Enactivism, Vygotskyian Perspectives, and Zone of Proximal Development

Unit 2: Objectives and Instructional Planning in Mathematics

- 2.1 Aims and Objectives of Teaching Mathematics in Elementary and Secondary Schools
- 2.2 Bloom's Taxonomy of Educational Objectives and Writing Objectives in Behavioural Terms
- 2.3 Lesson Planning Importance and Basic Steps. Planning Lesson of Arithmetic, Algebra and Geometry
- 2.4 Unit Planning – Format of A Unit Plan

2.5 Pedagogical Analysis: Meaning and Need and Procedure for Conducting Pedagogical Analysis. Classification of Content, Objective, Evaluation, etc

Unit 3: Strategies for Learning and Teaching Mathematics

- 3.1 Concept Formation and Concept Attainment: Concept Attainment Model for Learning and Teaching of Concepts
- 3.2 Learning By Exposition: Advanced Organizer Model
- 3.3 Methods of Teaching- Lecture, Discussion, Demonstration, Inductive-Deductive, Analytic-Synthetic, Problem-Solving, And Project
- 3.4 Techniques of Teaching Mathematics: Oral Work, Written Work, Drill-Work, Brain-Storming and Computer Assisted Instruction (CAI)
- 3.5 Creating Different Situations of Learning Engagement: Group Learning, Individual Learning, Small-Group, Cooperative (Peer-Tutoring, Jigsaw, etc.), and Situational/ Contextual Learning

Unit 4: Teaching-Learning Resources in Mathematics for Students with Disabilities

- 4.1 Mathematics Laboratory- Concept, Need, and Equipment for Setting Up a Mathematics Laboratory
- 4.2 Utilization of Learning Resources in Mathematics: Charts and Pictures, Weighing and Measuring Instruments, Drawing Instruments, Models, Concrete Materials, Surveying Instruments With Reference To Children With Disabilities
- 4.3 Bulletin Boards and Mathematics Club
- 4.4 Abacus, Cussionaire Rods, Fractional Discs, Napier Strips
- 4.5 Calculators, Computers, Smart Boards, Multimedia Presentations, and Special Aids and Appliances For Children With Disabilities

Unit 5: Assessment and Evaluation for Mathematics Learning

- 5.1 Assessment and Evaluation- Concept, Importance and Purpose
- 5.2 Error Analysis, Diagnostic Tests, Identification of Hard Spots and Remedial Measures
- 5.3 Tools and Techniques for Formative and Summative Assessments of Learner Achievement in Mathematics, Comprehensive and Continuous Evaluation in Mathematics
- 5.4 Preparation of Diagnostic and Achievement Test
- 5.5 Adaptations in Evaluation Procedure for Students With Disabilities

Practical/ Field Engagement/ Project Work

Any one of the following

- I Pedagogical analysis of a unit of content from secondary school Mathematics Syllabus
- II. Preparation of a multimedia presentation on a topic with special reference to students with disabilities
- III. Construction of a question paper based on current CBSE format/concerned State Board of education, preparing its Scoring key, and marking scheme

- IV. Analyzing errors committed by school children in Mathematics and preparing a remedial plan
- V. Developing an Action Research proposal for a problem related to teaching and learning of Mathematics with reference to students with disabilities

Transactions

Lecture cum demonstration, Workshops and Seminars

Essential Readings

- Carey, I.M. (1988). *Measuring and Evaluating School Learning*. Allyn and Bacon, Boston.
- Chambers, P. (2010). *Teaching Mathematics*. Sage Publication, New Delhi.
- Chapman, L.R. (1970). *The Process of Learning Mathematics*. Pergamon Press, New York.
- David, A.H., Maggie, M.K., & Louann, H.L. (2007). *Teaching Mathematics Meaningfully: Solutions for Reaching Struggling Learners*, Canada: Amazon Books.
- David, W. (1988). *How Children Think and Learn*. Blackwell Publishers Ltd., New York.
- Gupta, H. N., & Shankaran, V. (1984). *Content-Cum-Methodology of Teaching Mathematics*. NCERT, New Delhi.
- James, A. (2005). *Teaching of Mathematics*. Neelkamal Publication. New Delhi.
- Kumar, S. (2009). *Teaching of Mathematics*. Anmol Publications, New Delhi.
- Mangal, S.K. (1993). *Teaching of Mathematics*. Arya Book Depot, New Delhi.
- Mani, M. N. G. (1992). *Techniques of Teaching Blind Children*. Sterling Publishers, New Delhi.
- Mukhopadhyaya, S., Jangira, N. K., Mani, M.N. G., & Raychaudhary, N. (1988). *Sourcebook for Training Teachers of Visually Handicapped*. NCERT, New Delhi.
- Nemeth, A. (1973). *Nemeth Code for Mathematics and Scientific Notation*. American Printing House, Lovisville.
- Siddhu, K.S. (1990). *Teaching of Mathematics*. Sterling Publishers. New Delhi.

Suggested Readings

- Keeley, P. K., & Cheryl, T. R. (2011). *Mathematics Formative Assessment*. Sage Publications. London.
- National Curriculum Framework. (2005). NCERT, New Delhi
- National Curriculum Framework for Teacher Education. (2009). NCTE, New Delhi.
- Teaching of Mathematics (ES-342). Blocks 1-4. (2000). IGNOU, New Delhi
- Text Books of Mathematics for Class-VI to X. (2006). NCERT, New Delhi.

PEDAGOGY OF TEACHING SOCIAL SCIENCE

Course Code: A 4 (Part III)

Credits: 04

Contact Hours: 60

Marks: 100

Introduction

This course explores the scope of social science. It develops competencies in designing lesson plans and evaluations tools. It addresses the knowledge and understanding of the methodologies, approaches to teach social sciences at secondary level and also modify and adapt content-area curricula, materials and techniques for students with disabilities. The course also focuses on various skills and competencies that teachers need to develop.

Objectives

After completing the course the student-teachers will be able to

- ≡ *Explain the concept, nature and scope of social science.*
- ≡ *Develop competencies for designing unit and lesson plans, as well as tools of evaluation for social science teaching.*
- ≡ *Develop skills in preparation and use of support materials for effective social science teaching.*
- ≡ *Develop the ability to organize co-curricular activities and community resources for promoting social science learning.*

Unit I: Nature of Social Sciences

- 1.1 Concept, scope and nature of social science
- 1.2 Difference between social sciences and social studies
- 1.3 Aims and objectives of teaching social science at school level
- 1.4 Significance of social science as a core subject
- 1.5 Role of social science teacher for an egalitarian society

Unit II: Curriculum and Instructional Planning

- 2.1 Organization of social science curriculum at school level
- 2.2 Instructional Planning: Concept, need and importance
- 2.3 Unit plan and Lesson plan: need and importance
- 2.4 Procedure of Unit and Lesson Planning
- 2.5 Adaptation of unit and lesson plans for children with disabilities

Unit III: Approaches to teaching of Social Science

- 3.1 Curricular approaches: a) Coordination, b) Correlational, c) Concentric, d) Spiral, e) Integrated, f) Regressive
- 3.2 Methods of teaching social science: Lecture, discussion, socialized recitation, source and project method

- 3.2.1. Devices and techniques of teaching social studies – Narration, description, illustration, questioning, assignment, field trip, story telling, Role play, Group and self study, programmed learning, inductive thinking, Concept mapping, expository teaching and problem solving
- 3.3 Accommodations required in approaches for teaching children with disabilities
- 3.4 Instructional material for teaching of social science: Time-lines & Genealogical charts, Maps & Globes, Use of different types of Boards(Smart boards, Chalk Board, Flannel Board), Tape-records, Radio, Television, Films & Filmstrips, Overhead Projector, Social science games and Power Point Presentation
- 3.5 Adaptations of material for teaching children with disabilities

Unit IV: Evaluation of Learning in Social Science

- 4.1 Purpose of evaluation in social science
- 4.2 Techniques of evaluating learner achievement in social Science: Written and Oral tests, Observation Tools, Work Samples, Portfolio
- 4.3 Assessment: tools and techniques of Continuous and Comprehensive Evaluation (CCE) for curricular and co-curricular subjects
- 4.4 Construction of teacher made test
- 4.5 Diagnostic testing and enrichment techniques for children with disabilities

Unit V: Social Science Teacher as a Reflective Practitioner

- 5.1 Being a reflective practitioner- use of action research
- 5.2 Developing an Action Research Plan for solving a problem in teaching-learning of Social science
- 5.3 Case study- Need and Importance for a School Teacher
- 5.4 Development of a Professional Portfolio/ Teaching Journal
- 5.5 Competencies for teaching Social science to children with disabilities

Transaction

The student-teachers should be encouraged to read chapters and articles. There may be quizzes, seminars, field trips, lectures, demonstrations, school visits and observations to teach this course.

Course Work/ Practical/ Field Engagement

- ☐ Prepare a unit of social science content for a given child with disabilities
 - ☐ Develop an Action Research Plan on a problem related to teaching and learning in Social Science
- Adapt teaching learning materials for a child with disabilities
 Develop questions and achievement tests in social science
 Organize activities like quiz, mock-parliament, field trips, exhibitions and any other co-curricular activities in schools

PEDAGOGY OF TEACHING HINDI

COURSE CODE : A5 (Part IV)
Conduct Hours : 60 Hr.(60 ?k.Vs)

Credits: 04
Marks : 100

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PEDAGOGY OF TEACHING ENGLISH

Course Code: A5 (Part V)

Credits: 04

Contact Hours: 60

Marks: 100

Introduction

This course will enable the student-teachers to gain a strong knowledge base in nature of English language & literature, instructional planning and evaluation. It will help in applying theory to practice to design your own materials and plan lessons in preparation for teaching real classes. The course offers you the opportunity to explore in-depth aspects of English and to find out about the approaches and current practices of language teaching in relation to Indian and international contexts. The course also equips you with analytical and investigative skills and provides a foundation in issues related to English language teaching, second language pedagogy and language acquisition.

Objectives

After completing the course the student-teachers will be able to

- Explain the principles of language teaching, and evolution and trends in English literature.
- Prepare an instructional plan in English.
Adapt various approaches and methods to teach English language.
- Use various techniques to evaluate the achievement of the learner in English.

Unit I: Nature of English Language & Literature

- 1.1 Principles of Language Teaching
- 1.2 Language Proficiency: Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP)
- 1.3 English Language in the school context: An Evolutionary Perspective
- 1.4 Current Trends in Modern English Literature in Indian context
- 1.5 Teaching as second language in Indian context.

Unit II: Instructional Planning

- 2.1 Aims and objectives of Teaching English at different stages of schooling
- 2.2 Instructional Planning: Need and Importance
- 2.3 Unit and lesson plan: Need and Importance
- 2.4 Procedure of Unit and Lesson Planning
- 2.5 Planning and adapting units and lessons for children with disabilities

Unit III: Approaches and Methods of Teaching English

- 3.1 Difference between an approach and a method

- 3.2 Task based approach, co-operative learning, language across curriculum, communicative language teaching, Bilingual, Eclectic and Constructive approach
- 3.3 Method Teaching of Prose, Poetry, Drama, Grammar and Vocabulary- i) Translation method. ii) Structural – Situational method. iii) Direct method
- 3.4 Development of four basic language skills: Listening, Speaking, Reading, and Writing
- 3.5 Accommodation in approaches and techniques in teaching children with disabilities

Unit IV: Instructional Materials

- 4.1 Importance of instructional material and their effective use
- 4.2 The use of the instructional aids for effective teaching of English: Smart boards, Chalk Board, Flannel Board, Pictures/ Picture-cut-outs, Charts, Tape-records, Radio, Television, Films & Filmstrips, Overhead Projector, Language Laboratory, Language games, reading cards, Worksheets, Handouts, and Power Point Presentation
- 4.3 Construction of a teacher made test for English proficiency
- 4.4 Teaching portfolio
- 4.5 Adaptations of teaching material for children with disabilities

Unit V: Evaluation

- 5.1 Evaluation - Concept and Need
- 5.2 Testing Language skills and Language elements (Vocabulary, Grammar and Phonology)
- 5.3 Adaptation of Evaluation Tools for Children with Disabilities
- 5.4 Individualized assessment for Children with Disabilities
- 5.5 Error analysis, Diagnostic tests and Enrichment measures

Transaction

This course should be taught through a series of workshops, seminars and presentations. Lectures, demonstrations and discussions for theory based topics. Students should be encouraged to use instructional material in their practice of teaching lessons. Adaptations in pedagogy, material and evaluation should be taught through workshops and specific case studies

Course Work/ Practical/ Field Engagement

- Design teaching programme based on error analysis
- Develop an Action Research Plan for measuring the effectiveness of a given teaching approach in English
- Develop work sheet (interactive including language games)
- Prepare worksheets to enrich vocabulary among secondary students with disabilities
- Develop lesson plans for the teaching of prose and poetry
- Critically analyze any one poem or essay of a well known poet or writer

INCLUSIVE EDUCATION

Course Code: B 6

Credits: 02

Contact Hours: 30

Marks: 50

Introduction

The course is designed to develop an understanding about inclusive education and addressing diversity in the mainstream classroom. It is also formulated in a way that the learners will know the pedagogical practices and recognises ways in which different stakeholders can collaborate for the success of inclusive education.

Objectives

After completing the course the student-teachers will be able to

- Explain the construct of inclusive education & the progression from segregation towards valuing & appreciating diversity in inclusive education.
- Explicate the national & key international policies & frameworks facilitating inclusive education.
- Enumerate the skills in adapting instructional strategies for teaching in mainstream classrooms.
- Describe the inclusive pedagogical practices & its relation to good teaching.
- Expound strategies for collaborative working and stakeholders support in implementing inclusive education.

Unit 1: Introduction to Inclusive Education

5 Hours

- 1.1 Marginalisation vs. Inclusion: Meaning & Definitions
- 1.2 Changing Practices in Education of Children with Disabilities: Segregation, Integration & Inclusion
- 1.3 Diversity in Classrooms: Learning Styles, Linguistic & Socio-Cultural Multiplicity
- 1.4 Principles of Inclusive Education: Access, Equity, Relevance, Participation & Empowerment
- 1.5 Barriers to Inclusive Education: Attitudinal, Physical & Instructional

Unit 2: Policies & Frameworks Facilitating Inclusive Education

5 Hours

- 2.1 International Declarations: Universal Declaration of Human Rights (1948), World Declaration for Education for All (1990)
- 2.2 International Conventions: Convention against Discrimination (1960), Convention on Rights of a Child (1989), United Nations Convention of Rights of Persons with Disabilities (UNCRPD) (2006)
- 2.3 International Frameworks: Salamanca Framework (1994), Biwako Millennium Framework of Action (2002)
- 2.4 National Commissions & Policies: Kothari Commission (1964), National Education Policy (1968), National Policy on Education (1986), Revised National Policy of

Education (1992), National Curricular Framework (2005), National Policy For Persons With Disabilities (2006)

2.5 National Acts & Programs: IEDC (1974), RCI Act (1992), PWD Act (1995), National Trust Act (1999), SSA (2000), RTE (2006), RMSA (2009), IEDSS (2013)

Unit 3: Adaptations Accommodations and Modifications **7 Hours**

- 3.1 Meaning, Difference, Need & Steps
- 3.2 Specifics for Children with Sensory Disabilities
- 3.3 Specifics for Children with Neuro-Developmental Disabilities
- 3.4 Specifics for Children with Loco Motor & Multiple Disabilities
- 3.5 Engaging Gifted Children

Unit 4: Inclusive Academic Instructions **8 Hours**

- 4.1 Universal Design for Learning: Multiple Means of Access, Expression, Engagement & Assessment
- 4.2 Co-Teaching Methods: One Teach One Assist, Station-Teaching, Parallel Teaching, Alternate Teaching & Team Teaching
- 4.3 Differentiated Instructions: Content, Process & Product
- 4.4 Peer Mediated Instructions: Class Wide Peer Tutoring, Peer Assisted Learning Strategies
- 4.5 ICT for Instructions

Unit 5: Supports and Collaborations for Inclusive Education **5 Hours**

- 5.1 Stakeholders of Inclusive Education & Their Responsibilities
- 5.2 Advocacy & Leadership for Inclusion in Education
- 5.3 Family Support & Involvement for Inclusion
- 5.4 Community Involvement for Inclusion
- 5.5 Resource Mobilisation for Inclusive Education

Practical & Field Engagement

- I. Visit Special Schools of any two Disabilities & an Inclusive school & write observation report highlighting pedagogy
- II. Prepare a Checklist for Accessibility in Mainstream Schools for Children with Disabilities
- III. Design a Poster on Inclusive Education
- IV. Prepare a Lesson Plan on any one School subject of your choice using any one Inclusive Academic Instructional Strategy

Transactions

Group discussions following videos and visits. Debate for Inclusion vs. Segregation & Self study for legislations and frameworks

INTRODUCTION TO SENSORY DISABILITIES

Course Code: B 7

Credits: 02

Contact Hours: 30

Marks: 50

Introduction

The course is designed to provide a basic understanding to the student-teachers about the nature and needs of different types of sensory disabilities. It will also equip them in undertaking screening, planning and instructing students with sensory disabilities.

Objectives

After completing this course, the student-teachers will be able to

Name the different types of sensory impairments and its prevalence and describe the process of hearing & implications of various types of hearing loss.

Explain the issues & ways to address challenges in educating students with hearing loss.

Describe nature, characteristics & assessment of students with low vision & visual impairment.

Suggest educational placement and curricular strategies for students with low vision & visual impairment.

Explicate the impact of deaf-blindness & practices for functional development.

Unit 1: Hearing Impairment: Nature & Classification

5 Hours

- 1.1 Types of sensory impairments: Single (Hearing Impairment & Visual Impairment) & Dual sensory impairment (Deaf-blindness)
- 1.2 Importance of hearing
- 1.3 Process of hearing & its impediment leading to different types of hearing loss
- 1.4 Definition of hearing loss, demographics & associated terminologies: deaf/ Deaf/ deafness/ hearing impaired/ disability/ handicapped
- 1.5 Challenges arising due to congenital and acquired hearing loss

Unit 2: Impact of Hearing Loss

5 Hours

- 2.1 Characteristics of learners with hearing loss and impact of different degrees of hearing impairment on communication
- 2.2 Language & communication issues attributable to hearing loss and need for early Intervention
- 2.3 Communication options, preferences & facilitators of individuals with hearing loss
- 2.4 Issues & measures in literacy development and scholastic achievement of students with hearing loss
- 2.5 Restoring techniques using human (interpreter) & technological support (hearing devices)

Unit 3: Visual Impairment- Nature and Assessment

5 Hours

- 3.1. Process of Seeing and Common Eye Disorders in India
- 3.2. Blindness and Low Vision--Definition and Classification
- 3.2. Demographic Information--NSSO and Census 2011
- 3.4. Importance of Early Identification and Intervention
- 3.5. Functional Assessment Procedures

Unit 4: Educational Implications of Visual Impairment

5 Hours

- 4.1. Effects of Blindness- Primary and Secondary
- 4.2. Selective Educational Placement
- 4.3. Teaching Principles
- 4.4. Expanded Core Curriculum- Concept and Areas
- 4.5. Commonly Used Low Cost and Advanced Assistive Devices

Unit 5: Deaf-blindness

10 Hours

- 5.1 Definition, causes, classification, prevalence and characteristics of deaf-blindness
- 5.2 Effects and implications of deaf-blindness on activities of daily living & education
- 5.3 Screening, assessment, identification & interventional strategies of deaf-blindness
- 5.4 Fostering early communication development: Methods, assistive devices and practices including AAC
- 5.5 Addressing orientation, mobility & educational needs of students with deaf-blindness

Course Work/ Practical/ Field Engagement

- Develop a checklist for screening of children for hearing impairment
- Develop a checklist for screening of children for low vision
- Develop a checklist for screening of children for blindness
- Develop a checklist for screening of children for deaf blindness
- Journal based on observations of teaching children with sensory disabilities

Transactions

Visits, Observations, Videos and Interactions with Students with Disabilities

Essential Readings

- Bradford, L. J. & Hardy, W.G. (1979). Hearing and Hearing Impairment. New York: Grune and Stratton.
- Davis, H. & Silverman, S. R. (1970). Hearing and Deafness - Part I. Holt, London: Rinehart & Winston.
- Holbrook, C.M. & Koenig, A. J. (Eds.) (2000). Foundations of Education, Vol I. History and Theory of Teaching Children and Youths with Visual Impairments. (2nd ed): New York: AFB Press

INTRODUCTION TO NEURO DEVELOPMENTAL DISABILITIES

Course Code: B 8

Credits: 02

Contact Hours: 30

Marks: 50

Introduction

The course integrates relevant subject matter in the areas of Learning Disability, intellectual Disability and Autism Spectrum Disorder. This course will prepare preservice teachers to work with students with Neuro Developmental disabilities in inclusive and specialized settings. It fosters the acquisition of the broad-based knowledge and skills needed to provide effective educational programs for students with learning and behavior characteristics. The course emphasizes implications for educational and vocational programming, curriculum, and instruction.

Objectives

After completing the course the student-teachers will be able to

- *Discuss the characteristics and types of learning disability.*
- *Describe the tools, areas of assessment and apply intervention strategies to enhance learning.*
- *Explain the characteristics and types of Intellectual disability.*
- *Describe the tools, areas of assessment and prepare and apply intervention strategies for independent living.*
- *Explain the characteristics and types of Autism Spectrum Disorder.*
- *Describe the tools, areas of assessment and apply intervention strategies.*

Unit 1: Learning Disability: Nature, Needs and Intervention

- 1.1 Definition, Types and Characteristics
- 1.2 Tools and Areas of Assessment
- 1.3 Strategies for reading, Writing and Maths
- 1.4 Curricular Adaptation, IEP, Further Education.
- 1.5 Transition Education, Life Long Education

Unit 2: Intellectual Disability: Nature, Needs and Intervention

- 2.1 Definition, Types and Characteristics
- 2.2 Tools and Areas of Assessment
- 2.3 Strategies for Functional Academics and Social Skills
- 2.4 Assistive Devices, Adaptations, Individualized Education Plan, Person Centered Plan, Life Skill Education
- 2.5 Vocational Training and Independent Living

Unit 3: Autism Spectrum Disorder: Nature, Needs and Intervention

- 3.1 Definition, Types and Characteristics
- 3.2 Tools and Areas of Assessment
- 3.3 Instructional Approaches
- 3.4 Teaching Methods
- 3.5 Vocational Training and Career Opportunities

Transaction

This course should be taught through lectures, discussion, demonstrations, presentations and workshops. They should be given hands on training in assessments of specific needs of children, interpretation of test reports and develop strategies for classroom intervention

Course Work/ Practical/ Field Engagement

- Develop an Assessment Tool for a child with learning disability in the given area
- Prepare a transition plan from school to college for an I.D Child
- Prepare a life skill curriculum
- Prepare a screening tool for children with Autism Spectrum Disorder
- Prepare teacher made test for functional assessment of a given child with ID/ Autism
- Plan an educational program on the basis of an assessment report of a child with ID/Autism

Essential Readings

- Accardo, P.J., Magnusen, C., & Capute, A.J. (2000). Autism: Clinical and Research Issues. York Press, Baltimore.
- American Psychiatric Association. (2000). Diagnostic and Statistical Manual of Mental Disorders (4th ed. TR). Washington DC.
- Bala, M.J. (2004). Methods of Teaching Exceptional Children. Discovery, New Delhi.
- Browning, R. E. (2004). Teaching Students with Behaviour and Severe Emotional Problems. <http://www.k12.wa.us/specialed/families/pubdocs/bestpractices.pdf>

Suggested Readings

- Higgins, J. (2003) Practical Ideas that Really Work for Students with Dyslexia and Other Reading Disorders. PRO-ED, Austin.
- Moyes, R.A. (2010). Building Sensory Friendly Classrooms to Support Children with Challenging Behaviors: Implementing Data Driven Strategies. Sensory World, Texas.
- Pierangelo, R., & Giuliani G A. (2003). Transition services in Special Education. Allyn & Bacon, London
- Reddy G.L., & Rama, R. (2000). Education of Children with Special Needs. Discovery Pub, New Delhi.

INTRODUCTION TO LOCOMOTOR AND MULTIPLE DISABILITIES

Course Code: B 9

Credits: 02

Contact Hours: 30

Marks: 50

Introduction

The course aims to develop understanding about planning effective educational programme and functional activities for students with locomotor and multiple disabilities. This course intends to develop required skills in teacher trainee to identify the children with locomotor and multiple disabilities and also plan an effective programme education as well as for creating awareness on these conditions. Teacher is also expected to plan an effective therapeutic and programme and also refer for medical intervention whenever if necessary.

Objectives

After completing the course the student-teachers will be able to

- 1. Identify the persons with Locomotor disabilities such as Cerebral Palsy, Amputees, Polio, Leprosy cured, Muscular dystrophies, Neural and spinal defects and Multiple disabilities.
- 2. Plan an effective programme for creating awareness about the persons with Locomotor disabilities and Multiple disabilities.
- 3. Plan an effective therapeutic and programme for the persons with Locomotor disabilities and Multiple disabilities and to refer for medical intervention if necessary.
- 4. Plan an effective educational programme and functional activities for the persons with Locomotor disabilities and Multiple disabilities.

Unit 1: Cerebral Palsy (CP)

- 1.1. CP: Nature, Types and Its Associated Conditions
- 1.2. Assessment of Functional Difficulties of CP including Abnormalities of Joints and Movements (Gaits)
- 1.3. Provision of Therapeutic Intervention and Referral of Children with CP
- 1.4. Implications of Functional Limitations of Children with CP in Education and Creating Prosthetic Environment in School and Home: Seating Arrangements, Positioning and Handling Techniques at Home and School
- 1.5. Facilitating Teaching-Learning of Children with CP in School, IEP, Developing TLM; Assistive Technology to Facilitate Learning and Functional Activities

Unit 2: Amputees, Polio, Spinal Cord Injuries Spina-bifida and Muscular Dystrophy

- 2.1. Definition, Meaning and Classification
- 2.2. Assessment of Functional Difficulties
- 2.3. Provision of Therapeutic Intervention and Referral

- 2.4. Implications of Functional Limitations for Education and Creating Prosthetic Environment in School and Home: Seating Arrangements, Positioning and Handling Techniques at Home and School
- 2.5. Facilitating Teaching-Learning: IEP, Developing TLM; Assistive technology

Unit 3: Multiple Disabilities and Other Disabling Conditions

- 3.1 Multiple Disabilities. Meaning and Classifications
- 3.2 Various Combinations of Multiple Disabilities and Associated Conditions Such as Epilepsy, Motor and Sensory Conditions
- 3.3 Other Disabling Conditions such as Leprosy Cured Students, Tuberos Sclerosis and Multiple Sclerosis
- 3.4 Implications of Functional Limitations for Education and Creating Prosthetic Environment in School and Home: Seating Arrangements, Positioning and Handling Techniques at Home and School
- 3.5 Facilitating Teaching-Learning: IEP, Developing TLM; Assistive technology

Course Work/ Practical/ Field Engagement (any one of the following)

- ☐ Undertake a case study after identifying a child with cerebral palsy or a child with Multiple Disabilities. Assess the child's difficulties in activities of daily living and academic activities and develop an intervention plan.
- ☐ Undertake a survey on 50 children with different disabilities and find out how many children are affected with cerebral palsy and multiple disabilities. Find out the causes of their disabling conditions and what difficulties these children are facing in attending their schools.

Essential Readings

- ☐ Miller, F. and Bachrach, S.J. (2012). Cerebral Palsy: A Complete Guide for Caregiving. A Johns Hopkins Press Health Book.
- ☐ Sarva Siksha Abhiyan. Module on Cerebral Palsy. http://ssa.nic.in/inclusive-education/training-module-for-resource-teachers-for-disable-children/Module%205%20Cerebral%20Palsy.pdf/at_download/file
- ☐ Sarva Siksha Abhiyan . Module on Multiple Disabilities. http://ssa.nic.in/inclusive-education/training-module-for-resource-teachers-for-disable-children/Module%203%20Multiple%20Disability.pdf/at_download/file

IDENTIFICATION OF CHILDREN WITH VISUAL IMPAIRMENT AND ASSESSMENT OF NEEDS

Course Code: C 12

Credits: 04

Contact Hours: 60

Marks: 100

Introduction

We cannot treat a visually impaired child as 'a pair of young eyes'. We need to understand the whole child, including his feelings and needs. Having understood the psychological and sociological implications of visual impairment, the learners should be more empathetic to the needs of the visually impaired and address them appropriately in diverse educational settings. There are many eye conditions each with different educational and social implications. The infant must 'see to learn' and therefore a visually impaired infant must 'learn to see'. The course will enable the trainees to be able to identify children who are at risk for visual impairment. The trainees will be able to develop the skills of doing functional vision assessment and enhance the residual vision. The course also focuses on needs and assessment of children with multiple disability and visual impairment.

Objectives

After completing the course student-teachers will be able to

- 1. Describe the structure of eye and common eye defects.
- 2. Explain the etiology of visual impairment.
- 3. Analyse the implications of visual impairment and identify their needs.
- 4. Develop skills to identify and assess children with visual impairment.
- 5. Describe the needs and develop skills to assess children with visual impairment and multiple disabilities (VMD).

Unit 1: Anatomy and Physiology of Human Eye

- 1.1 Structure and Function of human eye
- 1.2 Normal vision development and process of seeing
- 1.3 Principles of refraction and refractive errors
- 1.4 Concept and definitions of blindness and low vision
- 1.5 Concept of visual acuity, visual field, depth perception and contrast sensitivity

Unit 2: Types of Visual Impairment and Common Eye Disorders

- 2.1 Loss of Visual acuity
- 2.2 Loss of Visual field
- 2.3 Colour vision defect and loss of contrast sensitivity
- 2.4 Refractive errors, Vitamin-A deficiency, Cataract, Glaucoma, Corneal ulcer, trachoma, Albinism, Retinal detachment, Retinitis pigmentosa, Retinopathy of prematurity, Cortical Visual Impairment, Optic Atrophy, Nystagmus, Amblyopia, and Macular degeneration

2.5 Educational implications of different Eye disorders

Unit 3: Implications of Visual Impairment and Needs of Visually Impaired

- 3.1 Psychosocial implications of visual impairment
- 3.2 Factors affecting implications of visual impairment: Age of onset, degree of vision, type of vision loss, prognosis, and socio economic status of the family
- 3.3 Effect of visual impairment on growth and development: Physical, Motor, Language, Socio-emotional, and Cognitive development
- 3.4 Educational needs of the visually impaired and need for expanded core curriculum
- 3.5 Implications of low vision and needs of children with low vision

Unit 4: Identification and Assessment of Visual Impairment

- 4.1 Interpretation of clinical assessment of vision
- 4.2 Functional assessment of vision: Concept, need and methods
- 4.3 Tools of functional assessment of vision and skills: Functional skills inventory for the blind (FSIB), Low Vision Assessment by Jill Keeffe, Lea tests, and Portfolio assessment
- 4.4 Tools for psychological assessment of the visually impaired: Vithoba Paknikar Performance Test, A short Scale IQ measure for the visually impaired based on WISC-R, Adapted EPQ, Adapted Blind Learning Aptitude Test, Concept development for blind children, Reading Preference Test, Cornell Medical Index for Visually Handicapped Children
- 4.5 Report writing

Unit 5: Assessment of Learning Needs of Children with VIMD

- 5.1 Concept and definition of VIMD
- 5.2 Etiology of VIMD
- 5.3 Impact of VIMD on learning and development
- 5.4 Screening, identification, and assessment of Visually Impaired children with associated disabilities
- 5.5 Multidisciplinary assessment of Visually Impaired children with Associated Disabilities

Course Work/ Practical/ Field Engagement

- Present a seminar on implications of visual impairment on the personality of the visually impaired
- Prepare material on early indicators of visual impairment and prevention of visual impairment
- Carry out functional assessment of skills of a blind, a low vision, and a VIMD child and submit a report of their assessment

Essential Readings

- Barraga, N. C. (1980). Sequences of Visual Development. University of Texas. Austin

CURRICULUM, ADAPTATION AND STRATEGIES FOR TEACHING EXPANDED CURRICULUM

Course Code: C 13

Credits: 04

Contact Hours: 60

Marks: 100

Introduction

Curriculum is the heart of any educational system. As is the curriculum, so is the educative process. This course will provide basic understanding of the concept of curriculum approaches to curriculum development. The course content shows a strong commitment to the notion that children with visual impairment should have access to the regular core curriculum for which they need to learn an expanded core curriculum unique to visual impairment. Apart from that certain curricular adaptations and modifications are required to be done to enable the students to access visually oriented concepts. Adapted physical education and creative arts also form a part of this course of study.

Objectives

After completing the course student-teachers will be able to

- ☐ *Define curriculum, its types and explain its importance.*
- ☐ *Demonstrate techniques of teaching functional academic skills.*
- ☐ *Explain importance and components of independent living skills.*
- ☐ *Explain curricular adaptations with reasonable accommodations.*
- ☐ *Illustrate how physical education and creative arts activities can be adapted for the children with visual impairment.*

Unit 1: Concept and Types of Curriculum

- 1.1 Concept, Meaning and Need for Curriculum
- 1.2 Curricular Approaches in Special Education – Developmental, Functional, Eclectic and Universal design for learning Approach
- 1.3 Types of Curriculum – need based, knowledge based, activity based, skill based and hidden curriculum
- 1.4 Curriculum Planning, Implementation and Evaluation; Role of Special teachers of the Visually Impaired
- 1.5 Core Curriculum and Expanded Core Curriculum- Meaning, Need and Components

Unit 2: Teaching Functional Academics Skills

- 2.1 Learning media assessment
- 2.2 Braille reading readiness
- 2.3 Techniques of teaching Braille
- 2.4 Techniques of Teaching print to children with low vision
- 2.5 Braille aids and devices, optical devices for print reading and writing

Unit 3: Teaching of Independent Living Skills

- 3.1 Independent living skills – Meaning, Importance, Components
- 3.2 Orientation and Mobility – need and importance, techniques of teaching mobility, sighted guide and pre-cane, cane techniques and mobility aids
- 3.3 Daily living skills – assessment of needs and techniques of teaching age appropriate daily living skills
- 3.4 Sensory efficiency – importance and procedures for training auditory, tactile, olfactory, gustatory, kinaesthetic senses and residual vision
- 3.5 Techniques of teaching social interaction skills, leisure and recreation skills and self-determination

Unit 4: Curricular Adaptation

- 4.1 Curricular adaptation – Need, Importance and Process
- 4.2 Reasonable accommodation – Need and Planning
- 4.3 Planning of lessons for teaching Expanded Core Curriculum – Individualized Education Program writing
- 4.4 Pedagogical Strategies – Cooperative learning, Peer tutoring, reflective teaching, multisensory teaching
- 4.5 Preparation of Teaching Learning Material for ECC – Reading Readiness kit, Flash Cards, Sensory Kits, and Mobility Maps

Unit 5: Curricular Activities

- 5.1 Curricular activities – Meaning and Need for Adaptation.
- 5.2 Adaptation of Physical education activities and Yoga
- 5.3 Adaptation of Games and Sports – both Indoor and Outdoor
- 5.4 Creative Arts for the children with visual impairment
- 5.5 Agencies/Organisations promoting – Sports, Culture and Recreation activities for the Visually Impaired in India – Indian Blind Sports Association, Chess Federation of India, Paralympic Committee of India, Abilympics, World Blind Cricket

Course Work/ Practical/ Field Engagement

1. Prepare reading readiness material for pre-school children with visual impairment
2. Preparation and presentation of a kit to develop sensory efficiency
3. Select one chapter from a primary level text book of your choice and adapt it for learners with visual impairment
4. Adapt one diagram and one map from secondary classes into non-visual format

Essential Readings

- Lowenfeld, B. (1971). Our blind children: Growing and learning with them. Charles C. Thomas, Springfield.
- Aggarwal, J.C. (2005). Curriculum development. Shipra Publication, New Delhi.

PRACTICUM : VI

E 1: Cross disability & inclusion

Hours: 10

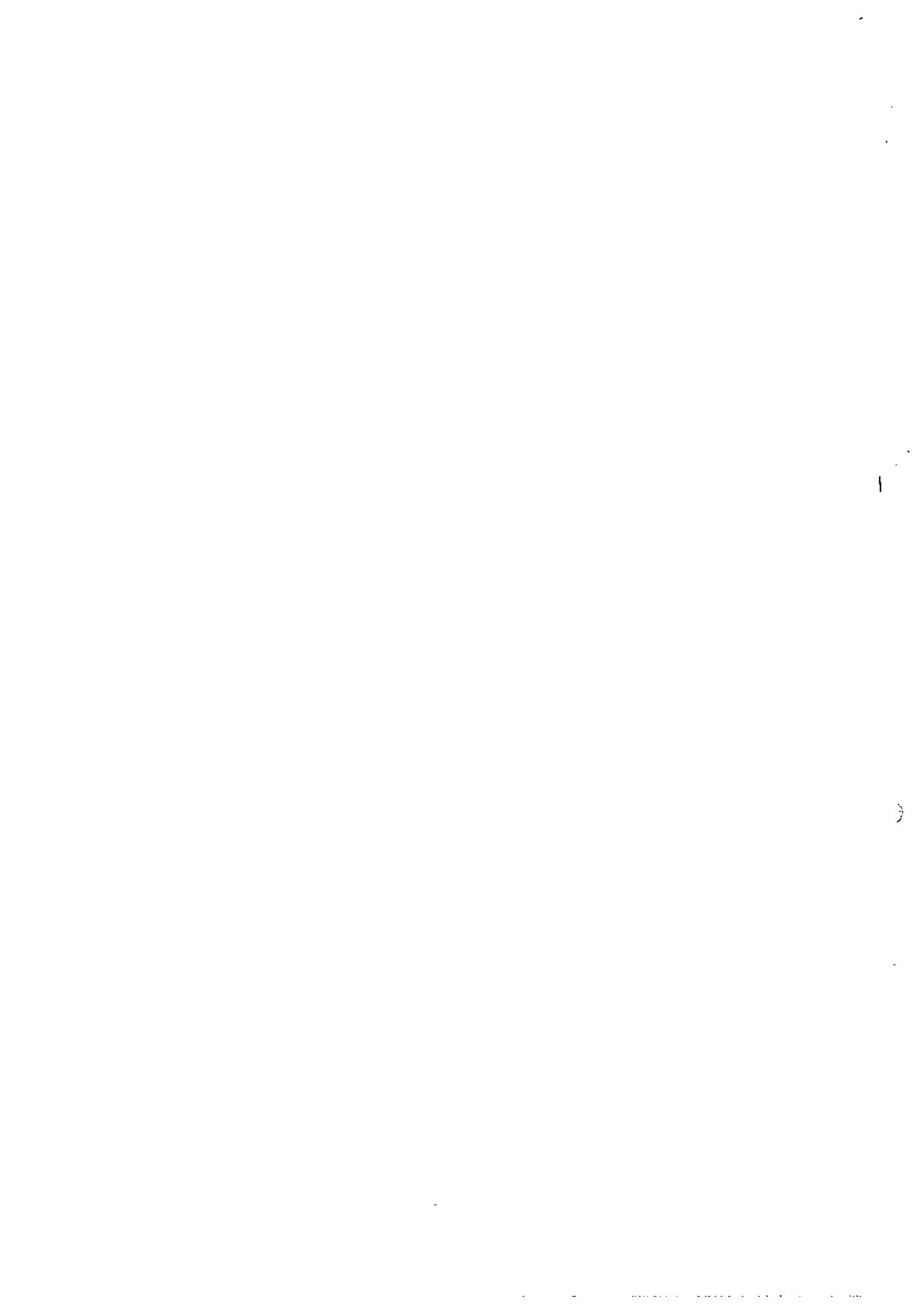
Credits: 02

Marks: 50

Sl. No.	Tasks for the Student-teachers	Disability Focus	Educational Settings	Specific Activities	Hrs. (60)	Marks	Submissions
1	1. Classroom observation	1.VI	1.Special School	1.Learners will observe students in different educational settings, curriculum transaction, classroom interaction in curricular and co-curricular areas and submit a report	10	25	
		2.Other than VI	2.Minimum three special schools		10		
		3.Any disability	3. Inclusive schools		10		
	2. Learning of Braille	VI and Deaf-blind	College	2.Introduction to Bharati/ Hindi or Regional Braille	30	25	

E 2: Disability Specialisation**Hours: 60****Credits: 02****Marks: 50**

Sl. No.	Tasks for the Student-teachers	Educational Settings	Disability Focus	Specific Activities	Hrs.	Marks	Submissions
1.1	Learning of Braille	College	VI	1. Bharati Hindi or Regional Braille	30 Hours	25	
				2. Braille Mathematical sign for: Numeric indicator, basic operations, simple fraction and brackets	15 Hours	25	
1.2	Learning the use of Assistive Devices	College	VI	Taylor Frame: Basic Operation using arithmetic and algebraic types	15 Hours		



CURRICULUM FRAMEWORK

Bachelor of Education – Special Education

B.Ed Spl. Ed (vi)

(2nd Year)



B.Ed. Spl Edu. (VI) 2nd Year

S.No.	Course Code	Paper Name	Internal Marks	External Marks	Total
1	B-10 (A)	GUIDANCE & COUNSELLING	10	40	50
2	B-11 (A)	ORIENTATION AND MOBILITY	10	40	50
3	C-14	INTERVENTION AND TEACHING STRATEGIES	20	80	100
4	C-15	TECHNOLOGY AND EDUCATION OF THE VISUALLY IMPAIRED	20	80	100
5	C-16	PSYCHO SOCIAL AND FAMILY ISSUES	10	40	50
6	D-17	READING AND REFLECTING ON TEXTS	10	40	50
7	D-18	PERFORMING AND VISUAL ARTS	10	40	50
8	D-19	BASIC RESEARCH AND STATISTICS	10	40	50
PRACTICAL.					
10	E-2	DISABILITY SPECIALISATION	50	50	100
11	F-1	MAIN DISABILITY SPECIAL SCHOOL	50	50	100
12	E-1	CROSS DISABILITY & INCLUSION	50	50	100
13	F-2	OTHER DISABILITY SPECIAL SCHOOL	50	50	100
14	F-3	INCLUSIVE SCHOOL	50	50	100
Total			350	650	1000

GUIDANCE & COUNSELLING

Course Code: B 10(A)

Credits: 02

Contact Hours: 30

Marks: 50

Objectives

After completing this course the student-teachers will be able to

- Apply the skills of guidance and counselling in classroom situations.
- Describe the process of development of self-image and self-esteem.
- Appreciate the types and issues of counselling and guidance in inclusive settings.

Unit 1: Introduction to Guidance and Counselling

- 1.1 Guidance and Counselling: Definition and Aims
- 1.2 Areas of Guidance and Counselling
- 1.3 Core Conditions in Counselling
- 1.4 Skills and Competencies of a Counsellor
- 1.5 Role of Teacher in Guiding and Counselling Students with Special Needs

Unit 2: Enhancing Self Image and Self Esteem

- 2.1 Concept of Self as Human
- 2.2 Understanding of Feelings and Changes
- 2.3 Growth to Autonomy
- 2.4 Personality Development
- 2.5 Role of Teacher in Developing Self-Esteem in Children

Unit 3: Guidance and Counselling in Inclusive Education

- 3.1 Current Status with reference to Indian School
- 3.2 Types of Counselling: Child-Centred, Supportive, Family
- 3.3 Guidance in Formal and Informal Situations: Within and Outside Classroom, Vocational Guidance
- 3.4 Group Guidance: Group Leadership Styles and Group Processes
- 3.5 Challenges in Group Guidance

Practicum/ Field engagement

- I. Counselling and report writing on a selected case
- II. Simulation of a parent counselling session
- III. Report of critical observation of a given counselling session

Transaction

The transaction for this course should be done with a perspective to enhance in the student-teachers the ability to become a "People-helper". They should be able to appreciate the role of a guide and counsellor in the school setting.

ORIENTATION AND MOBILITY

Course Code: B 11(A)

Credit: 02

Contact Hours: 30

Marks: 50

Introduction

Movement with independence in the environment has been stated to be one of the major challenges of vision loss. In order to facilitate their meaningful empowerment, therefore, it is necessary to provide students with visual impairment skills and techniques which enable them to cope with these challenges. Developments, especially during and after World War II, have led to the emergence of a large variety of such strategies, skills and technologies, which are covered under the discipline titled Orientation and Mobility.

So, the present course carrying the same title introduces the learners to various crucial aspects of this vital subject. It is hoped that through the study of the course, the student-teachers would be in a better position to understand the implications of vision loss with reference to independent movement. It would also enable them to get insights into basic skills and components essential for meaningful orientation and easy and graceful movement for the visually impaired.

Objectives

After completing the course the student-teachers will be able to

- Describe the nature and scope of O&M as also the O&M related responsibilities of the special teacher.*
- Acquire basic knowledge of human guide techniques.*
- Describe pre-cane and cane travel skills and devices.*
- Get acquainted with the importance and skills of training in independent living for the visually impaired.*

Unit 1: Introduction to Orientation and Mobility

- 1.1 Orientation and Mobility -- Definition, Importance and Scope
- 1.2 Basic Terminologies Associated with O&M: Trailing, Landmarks, Clues, Cues, Shoreline, Squaring Off, Clockwise Direction, Sound Masking, Sound Shadow
- 1.3 Roles of Other Senses in O&M Training
- 1.4 Special Responsibilities of Special Teacher/Educator with reference to O&M Training
- 1.5 Blindfold -- Rationale and Uses for the Teacher

Unit 2: Human/ Sighted Guide Technique

- 2.1 Grip
- 2.2 Stance
- 2.3 Hand Position

2.4 Speed Control

2.5 Negotiating: Narrow Spaces, Seating Arrangements, Staircases, Muddy paths

Unit 3: Pre-Cane Skills

3.1 Upper and Lower Body protection

3.2 Room Familiarization

3.3 Using Oral Description for Orientation

3.4 Search Patterns

3.5 Building Map Reading Skills

Unit 4: Cane Travel Techniques and Devices

4.1 Canes -- Types, Parts, Six Considerations

4.2 Cane Travel Techniques: Touch Technique, Touch and Drag Technique, Diagonal Cane Technique

4.3 Use of Public Transport

4.4 Asking for Help: When and How

4.5 Electronic Devices, Tactile and Auditory Maps -- Description and Uses

Unit 5: Training In Independent Living Skills

5.1 Self Care, Gait and Posture

5.2 Personal Grooming

5.3 Eating Skills and Etiquette

5.4 Identification of Coins and Currency Notes

5.5 Basics of Signature Writing

Course Work/Practical/ Field Engagement

Undertake any two of the following

- a. Act as a sighted guide in different situations/settings.
- b. Prepare a list of canes and other devices available with various sources along with prices.
- c. Undergo an experience of moving under a blindfold for a few minutes and describe it (about 200 words).
- d. Make a short PowerPoint/ oral presentation for about 5 minutes on the importance of O&M for the visually impaired.
- e. Draw up a list of important clues/cues/landmarks which the visually impaired student can use in the school.

Essential Readings

- ☐ Blasch, B. B., Weiner, W. R., & Welsh, R. I. (1997). Foundations of Orientation and Mobility (2nd ed.). AFB Press, New York.
- ☐ Cutter, Joseph (2006). Independent Movement and Travel in Blind Children. IAP, North Carolina.

INTERVENTION AND TEACHING STRATEGIES

Course Code: C 14

Credits: 04

Contact Hours: 60

Marks: 100

Introduction

This course builds on the pedagogy courses presented under A4 and A5 of the present B.Ed. curriculum. It prepares the student-teachers to transact lessons in various school-subjects for children with visual impairment. For this purpose, the required intervention and teaching techniques and skills are highlighted.

The student-teachers, it is hoped, will find the course highly stimulating, as it will enable them to help blind and low vision students to cope effectively with the challenges of curriculum transaction, at par with their sighted peers.

Objectives

After completing the course student-teachers will be able to

- Explain various theoretical perspectives related to intervention & teaching strategies.
 - Demonstrate techniques of teaching Mathematics to visually impaired children.
 - Acquire necessary competencies and skills for teaching science and assessment of the learners with special reference to children with visual impairment.
 - Acquire and apply necessary skills for adapting TLM in social science and assessment of the learners with special reference to children with visual impairment.
- Describe the process of assessment visual efficiency and classroom management for children with low vision.*

Unit 1: Theoretical Perspectives

- 1.1 Difference among Methods, Approaches and Strategies
- 1.2 Intervention – Concept, Scope and Importance
- 1.3 Intervention for lately blinded students – Role of Special teachers/educators
- 1.4 Mediated teaching-learning – Concept, Need and Procedure
- 1.5 Enriched teaching for Concept development: Converting visual concepts into accessible experiences

Unit 2: Mathematics

- 2.1 Coping with Mathematics phobias
- 2.2 Conceptualization of Mathematical ideas – Processes and Challenges for Children with Visual Impairment
- 2.3 Preparation and Use of tactile materials
- 2.4 Mental arithmetic abilities – Concept, Importance and Application
- 2.5 Evaluation procedures with special reference to the Needs of Children with Visual Impairment

Unit 3: Science

- 3.1 Providing first-hand experience in the class and the school environment
- 3.2 Inclusive/collaborative learning for laboratory work
- 3.3 Science Teaching Learning Materials and Equipment: i) Preparation and use of TLM, ii) Locating and procuring Science equipment
- 3.4 Problem solving and Learning by doing approach for Visually Impaired students
- 3.5 Evaluation procedure with particular reference to Practicals and Adaptations in Examination questions

Unit 4: Social Science

- 4.1 Techniques of preparation and presentation of adapted Tactile maps, Diagrams, and Globe
- 4.2 Procuring, adapting and use of different types of models
- 4.3 Organizing field trips
- 4.4 Teaching Skills: Dramatization, Narration, Explanation, Story-telling, and Role play
- 4.5 Evaluation of concepts and skills in social science with particular reference to Geography

Unit 5: Teaching of Children with Low Vision

- 5.1 Visual Stimulation: Concept and Procedure
- 5.2 Selection of an appropriate medium of reading and writing
- 5.3 Techniques and procedures for developing reading and writing skills
- 5.4 Orientation and Mobility for low vision children
- 5.5 Classroom management – Seating arrangement, adjustable furniture, illumination, non-reflecting surfaces and colour contrast

Course Work / Practical / Field Engagement

- ☐ Prepare and use two teaching learning materials for teaching Maths/ Science/ Social Science.
- ☐ Prepare a short concept paper (about 500 words) on developing a science laboratory for the visually impaired students.
Functionally assess the vision of a low vision child and plan a teaching programme.

Essential readings

- ☐ Bourgeault, S. E. (1969). The Method of Teaching the Blind : The Language Arts. American Foundation for the Overseas Blind ,Kuala Lumpur.
- ☐ Chapman, E. K. (1978). Visually Handicapped Children and Young People. Routledge, London.
- Fernandez, G., Koenig. C., Mani. M.N.G., & Tensi. S. (1999). See with the Blind. Books for Change, Bangalore.

TECHNOLOGY AND EDUCATION OF THE VISUALLY IMPAIRED

Course Code: C 15

Credits: 04

Contact Hours: 60

Marks: 100

Introduction

Technology in the form of adaptive and assistive devices, plays a crucial role in the education of the visually impaired. This course brings into sharp focus the need and importance of such technologies both for the practicing teachers and the visually impaired learners. While highlighting the significance of addressing the users point of view/feedback and involving mainstream professionals in developing required technologies, the course also dwells upon on how best students with visual impairment get access to the printed text/material.

The course also acquaints the student-teachers with various devices for making the teaching-learning process for important school subjects meaningful, exciting and rewarding for all concerned. The educational needs of children with low vision and related technological perspectives are addressed, too, along with critical contributions of computer-aided learning and interventions.

In short, the course focuses on making transaction of curriculum for blind and low vision students, a really enjoyable and worthwhile experience. It needs to be studied in conjunction with course Code C14 of the curriculum.

Objectives

After completing the course student-teachers will be able to

- ☐ *Relate the concept and nature of educational technology and ICT to the education of children with visual impairment.*
- ☐ *Acquire knowledge of the concept and nature of adaptive technology and explain underlying principles and techniques.*
- ☐ *Get familiar with technologies for print-access for children with visual impairment. Describe and use different technologies for teaching low vision children as also various school subjects.*
- ☐ *Demonstrate understanding of computer-based teaching-learning processes.*

Unit 1: Introducing Educational and Information Communication Technology

- 1.1 Educational Technology-Concept, Importance, and Scope
- 1.2 Difference between Educational Technology and Technology in Education
- 1.3 Special Significance and Goals of Technology for the Education of children with Visual Impairment
- 1.4 Information and Communication Technology (ICT) - Concept and Special Significance for teaching-learning of the visually impaired
- 1.5 ICT and the UN Convention on the Rights of Persons with Disabilities.

Unit 2: Adaptive Technologies

- 2.1 Concept and Purposes
- 2.2 Basic Considerations--Access, Affordability, and Availability
- 2.3 Addressing User's Perspectives in Developing Adaptive Technologies
- 2.4 Roles of IT's and the Scientific Community:
- 2.5 Universal/Inclusive Design - Concept, Advantages, and Limitations.

Unit 3: Access to Print for the Visually Impaired

- 3.1 Screen Readers with Special Reference to Indian Languages; Magnifying Software, and Open Source Software.
- 3.2 Braille Notetakers and Stand-alone Reading Machines
- 3.3 Braille Translation Software with Particular reference to Indian Languages and Braille Embossers
- 3.4 On-Line Libraries and Bookshare
- 3.5 Daisy Books, Recordings, and Smart Phones.

Unit 4: Assistive Technologies for the Visually Impaired with Reference to School Subjects and Low Vision

- 4.1 Mathematics: Taylor Frame, Abacus, Geo Board, Algebra and Maths Types, Measuring Tapes, Scales, and Soft-wares for teaching Maths.
- 4.2 Science: Thermometers, Colour Probes, Scientific and Maths Talking Calculators, Light Probes, and Weighing scales and Soft-wares for teaching Science.
- 4.3 Social Science: Tactile/Embossed Maps, Charts, Diagrams, Models of Different Types, Auditory Maps, Talking compass, and GPS
- 4.4 Low vision devices: Optical, Non-Optical and Projective
- 4.5 Thermoform and Swell Paper technology and Softwares for developing tactile diagrams

Unit 5: Computer-Aided Learning

- 5.1 Social Media
- 5.2 Creation of Blogs
- 5.3 Tele-Conferencing
- 5.4 Distance Learning and ICT
- 5.5 e-Classroom: Concept and Adaptations for Children with Visual Impairment

Course Work / Practical / Field Engagement

Any three of the following

- Prepare a list of devices for Mathematics and Science available for the visually impaired in one special school and one inclusive school
 - Write a short list of hints and suggestions you will offer to the scientific community for motivating them to develop adaptive technologies for the visually impaired
 - Make a short report (in about 500 words) on the advantages and limitations as well as sources of availability in respect of any print-access technology indicated in Unit
-

3 above.

Make a case study of a student with low vision at the secondary stage, indicating clearly his educational needs and how you can address them

- Prepare a report on the possibilities and prospects available for the visually impaired students through the use of computers
- Prepare a short note (in about 400 words) on various aspects of a classroom and how it could be made accessible to the visually impaired

Essential Readings

- Biwas, P. C. (2004). Education of children with Visual Impairment: in inclusive education. Abhijeet Publication, New Delhi.
- Bourgeault, S. E. (1969). The Method of Teaching the Blind: The Language Arts. American Foundation for the Overseas Blind, Kuala Lumpur.
- Chaudhary, M. (2006). Low Vision Aids. Japee Brothers, New Delhi.
- Lowenfeld, B. (1973). The Visually Handicapped Child in School. John Day Company, New York.
- Mani, M.N.G. (1997). Amazing Abacus. S.R.K. Vidyalaya Colony, Coimbatore.
- Mukhopadhyay, S., Mani, M.N.G., Roy Choudary, M., & Jangira, N.K. (1988). Source Book for Training Teachers of Visually Impaired. NCERT, New Delhi.
- Proceedings: Asian Conference on Adaptive technologies for the Visually Impaired (2009). Asian Blind Union, New Delhi.
- Punani, B., & Rawal, N. (2000). Handbook for Visually Impaired. Blind Peoples' Association, Ahmedabad.
- Scheiman, M., Scheiman, M., & Whittaker, S. (2006). Low Vision Rehabilitation: a practical guide for occupational therapists. Therefore Slack Incorp, New Jersey.
- Scholl, G. T. (1986). Foundations of the education for blind and visually handicapped children and youth: Theory and Practice. AFB Press, New York.
- Singh, J. P. (2003). Technology for the Blind: Concept and Context. Kanishka Publication, New Delhi.
- Vijayan, P., & Gnaumi, V. (2010). Education of Children with low Vision. Kanishka Publication, New Delhi.

Suggested Readings

- Fatima, R. (2010). Teaching aids in mathematics; a handbook for elementary teachers. Kanishka Publication, New Delhi.
- Hersh, M.A., & Johnson, M. (2008). Assistive Technology for Visually Impaired and Blind People. Springer, London.
- Sadao, K. C., & Robinson, N. B. (2010). Assistive Technology for young children: creating inclusive learning environments. Paul H Brooks, Baltimore.

PSYCHIO SOCIAL AND FAMILY ISSUES

Course Code: C 16

Credits: 02

Contact Hours: 30

Marks: 50

Introduction

Children with Visual Impairment belong to families. It is important to explore family backgrounds and their influence on how visually impaired are perceived and how children perceive themselves, and how they behave in consequence. The learners need to develop an insight into the plethora of emotions the family goes through at the birth of a special child, the challenges they face throughout the life of the visually impaired, and the roles and responsibilities of the family and the community.

Objectives

After completing the course student-teachers will be able to

- Describe the effect of birth of a child with visual impairment on the family.
- Analyze the role of family and parental concerns related to their child with visual impairment from birth to adulthood.
- Explain the role of parent community partnership in the rehabilitation of a person with visual impairment.
- Develop different skills to empower families in meeting the challenges of having a child with visual impairment.

Unit 1: Family of a Child with Visual Impairment

- 1.1 Birth of a child with visual impairment and its effect on parents and family dynamics
- 1.2 Parenting styles: Overprotective, Authoritative, Authoritarian and Neglecting
- 1.3 Stereotypic attitudes related to visual impairment and attitude modification
- 1.4 Role of family in Early stimulation, Concept development and Early intervention
- 1.5 Role of siblings and extended family

Unit 2: Parental Issues and Concerns

- 2.1 Choosing an educational setting
- 2.2 Gender and disability
- 2.3 Transition to adulthood: sexuality, marriage, and employment
- 2.4 Parent support groups
- 2.5 Attitude of professionals in involving parents in IEP and IFSP

Unit 3: Rehabilitation of Children with Visual Impairment

- 3.1 Concept of habilitation and rehabilitation
 - 3.2 Community Based Rehabilitation (CBR) and Community Participatory Rehabilitation (CPR)
 - 3.3 Legal provisions, concessions and advocacy
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3.4 Vocational rehabilitation: need and challenges

3.5 Issues and challenges in rural settings

Unit 4: Meeting the Challenges of Children with Visual Impairment

4.1 Enhancing prosocial behaviour

4.2 Stress and coping strategies

4.3 Recreation and leisure time management

4.4 Challenges of adventitious visual impairment

4.5 Soft skills and social skills training

Course Work/ Practical/ Field Engagement (Any Two)

- Interview family members of three children with visual impairment (congenital/ adventitious and blind, low vision and VIMD) and analyze their reactions and attitude towards the child
- Prepare and present a list of activities how parents, siblings, and grandparents can be engaged with the child with visual impairment
- Prepare charts/ conduct street plays/ make oral presentations to remove myths related to visual impairment
- Visit schools for the visually impaired and make presentations before the parents on Government concessions and auxiliary services available

Essential Readings

- Bhandari, R., & Narayan, J. (2009). Creating learning opportunities: a step by step guide to teaching students with vision impairment and additional disabilities, including deafblindness. Voice and vision, India.
- Hansen, J. C., Rossberg, R.H., & Cramer, S.H. (1994). Counselling Theory and Process. Allyn and Bacon, Boston.
- Lowenfeld, B. (1969). Blind children learn to read. Springfield: Charles C. Thomas.
- Lowenfeld, B. (1973). Visually Handicapped Child in School. American Foundation for the Blind, New York.
- Lowenfeld, B. (1975). The Changing Status of the Blind from Separation to Integration. Charles C. Thomas, California.
- Mani, M. N. G. (1992). Techniques of Teaching Blind Children. Sterling publishers Pvt. Ltd., New Delhi.
- Narayan, J., & Riggio, M. (2005). Creating play environment for children. Hilton/ Perkins. Watertown.
- Shah, A. (2008). Basics in guidance and Counselling. Global Vision Publishing House, New Delhi.
- Smith, D. D., & Luckasson, R. (1995). Introduction to Special Education – Teaching in an age of Challenge (2Ed). Allyn & Bacon, USA.

READING AND REFLECTING ON TEXTS

Course code: D 17

Credits: 02

Contact Hours: 30

Marks: 50

Introduction

One of the core areas that schools focus upon is age appropriate and fluent literacy skills. Hence, aspirant graduates who intend to make career in education must be good readers and good writers (in literally sense). Due to several reasons a student teacher like you may not have adequate skills, interest and motivation for reading and writing. Here is a skill based and activity oriented course designed to give you an opportunity to look at reading writing seriously, relearn it as a professional activity, apply it for students with special needs and enjoy it like never before.

Objectives

After completing the course student-teachers will be able to

- 1. *Reflect upon current level of literacy skills of the self.*
- 2. *Show interest and begin working upon basic skills required to be active readers in control of own comprehension*
- 3. *Show interest and begin working upon basic skills required to be independent writers understanding adequate intent, audience and organization of the content.*
- 4. *Prepare self to facilitate good reading writing in students across the ages.*
- 5. *Find reading writing as learning and recreational tools rather than a course task.*

Unit 1: Reflections on Literacy

- 1.1 Literacy and Current University Graduates: Status and Concerns
- 1.2 Role of Literacy in Education, Career and Social Life
- 1.3 Literacy, Thinking and Self Esteem
- 1.4 Literacy of Second Language (English): Need and Strategies
- 1.5 Basic Braille Literacy

Unit 2: Reflections on Reading Comprehension

- 2.1 Practicing Responses to Text: Personal, Creative and Critical
- 2.2 Meta Cognitive Awareness of Reading Processes and Strategies Applied for Meaning Making
- 2.3 Developing Good Reading Skills and Habits in Primary Level Students. Activities and Strategies
- 2.4 Basic Understanding of Reading Comprehension of Children with Disabilities

Unit 3: Skill Development in Responding to Text

- 3.1 Indicators of Text Comprehension: Retelling, Summarizing, Answering, Predicting, Commenting and Discussing

- 3.2 Practicing Responding to Text (Using The Indicators) for Recreational Reading Material (Narrations) and School Textbooks (Description)
- 3.3 Practicing Responding to Text (Using The Indicators) for Reports, Policy Documents and News (Expositions) and Editorial, Academic Articles, Advertisement Copy, Resume (Argumentation)
- 3.4 Practicing Web Search, Rapid Reading and Comprehensive Reading

Unit 4: Reflecting Upon Writing as a Process and Product

- 4.1 Understanding writing as a Process: Content (Intent, Audience and Organization)
- 4.2 Understanding writing as a Process: Language (Grammar, Vocabulary, Spelling)
- 4.3 Understanding writing as a Process: Surface Mechanics (Handwriting, Neatness, Alignment and Spacing)
- 4.4 Practicing Self Editing and Peer Editing of Sample Texts
- 4.5 Practicing Evaluating Students Writing Using Parameters: Productivity, Correctness, Complexity, Text Organization and Literary Richness

Unit 5: Practicing Independent Writing

- 5.4 practicing Writing: Picture Description: Expansion of Ideas/ Essays/ Stories
- 5.5 Practicing Daily Leaving Writing: Applications: Agenda - Minutes/ Note Taking
- 5.6 Practicing Converting Written Information into Graphical Representation
- 5.7 Practicing Filling up Surveys, Forms, Feedback Responses, Checklists
- 5.8 Reflections on the Course: From Theory to Practice to Initiating Process to Improve Self

Course Work/ Practical/ Field Engagement

- Have a peer editing of independently written essays and discuss your reflections upon this experience
- Prepare a feedback form for parents and for teachers focussing on differences in the two forms due to different intent and audience
- Develop a short journal of graphical representation of 3 newspaper articles on school education using the options given in 2.4
- Visit a book store for young children, go through the available reading material including exercise books, puzzles, etc. and make a list of useful material for developing early literacy skills

Essential Readings

- Anderson, R., Hiebert, E., Scott, J., & Wilkinson, I. (1985). *Becoming a Nation of Readers: The report of the commission on reading*. National Institute of Education and the Center for the Study of Reading, Washington, DC.
- Annual Status of Education Report. (2014). ASER Centre, New Delhi (<http://www.asercentre.org>).

PERFORMING AND VISUAL ARTS

Course code: D 18

Credits: 02

Contact Hours: 30

Marks: 50

Introduction

India has an excellent historical backdrop as well as contemporary talents in the field of art. However, it is debatable whether the same has been translated into our school system effectively. Do most of our students get exposure to a variety of activities involving knowing, exploring and appreciating art? Most probably they do not. It is time that we take a fresh look at what art education is and what role it plays in school education. More than anything, art education is also expected to enhance learning. And do teachers know how to go about it to achieve it? Here is an opportunity to facilitate the art within you which in turn will reflect art in within students.

For a student-teacher with disability appropriate learning alternatives are to be given by the college. For example, a candidate with blindness must get alternative learning opportunities and evaluative tasks for visual art or a candidate with deafness for music art – if and when needed.

Objectives

After completing the course student-teachers will be able to

- Exhibit Basic understanding in art appreciation, art expression and art education.*
- Plan and implement facilitating strategies for students with and without special needs.*
- Discuss the adaptive strategies of artistic expression.*
- Discuss how art can enhance learning.*

Unit 1: Introduction to art Education

- 1.1 Art and art education: Meaning, scope and difference
- 1.2 Artistic expression: Meaning and strategies to facilitate
- 1.3 Art therapy: Concept and application to students with and without disabilities
- 1.4 Linking Art Education with Multiple Intelligences
- 1.5 Understanding emerging expression of art by students

Unit 2: Performing Arts: Dance and Music

- 2.1 Range of art activities related to dance and music
- 2.2 Experiencing, responding and appreciating dance and music
- 2.3 Exposure to selective basic skills required for dance and music
- 2.4 Dance and Music: Facilitating interest among students: planning and implementing activities
- 2.5 Enhancing learning through dance and music for children with and without special needs: Strategies and Adaptations

Unit 3: Performing Arts: Drama

- 3.1 Range of art activities in drama
- 3.2 Experiencing, responding and appreciating drama
- 3.3 Exposure to selective basic skills required for drama
- 3.4 Drama. Facilitating interest among students: planning and implementing activities
- 3.5 Enhancing learning through drama for children with and without special needs: strategies and adaptations

Unit 4: Visual Arts

- 4.1 Range of art activities in visual arts
- 4.2 Experiencing, responding and appreciating visual art
- 4.3 Exposure to selective basic skills in visual art
- 4.4 Art education. Facilitating interest among students: planning and implementing activities
- 4.5 Enhancing learning through visual art for children with and without special needs: strategies and adaptations

Unit 5: Media and Electronic Arts

- 5.1 Range of art activities in media and electronic art forms
- 5.2 Experiencing, responding and appreciating media and electronic arts
- 5.3 Exposure to selective basic skills in media and electronic arts
- 5.4 Media and electronic arts. Facilitating interest among students: planning and implementing activities
- 5.5 Enhancing learning through media and electronic art for children with and without special needs: strategies and adaptations

Course Work/ Practical/ Field Engagement

- 'hot seating' activity for historical / contemporary personalities wherein students play the role of that personality to advocate his/her opinions/decisions/thought processes (for example, Akbar, Hitler, Galileo, Bhagat Singh etc)
 - Portfolio submission of the basic skills exposed in any one of the art forms of choice
 - Write a self-reflective essay on how this course on art will make you a better teacher
 - Learn and briefly explain how music notations are made. Submit a brief report OR learn and explain the concept of composition in visual art. Submit a brief report. OR make and submit a sample advertisement for a product OR Learn Mudras of a classical dance forms and hold a session for the students on that. Submit photo report of the same OR Carry out web search on Indian sculpture and submit a brief compilation
- Observe an art period in a special school and briefly write your reflections on it

BASIC RESEARCH AND STATISTICS

Course code: D 19

Credits: 02

Contact Hours: 30

Marks: 50

Objectives

After completing the course student-teachers will be able to

- Describe the concept and relevance of research in education and special education.
- Develop an understanding of the research process and acquire competencies for conducting a research.
- Apply suitable measures for data organization and analysis.

Unit 1: Introduction to Research

- 1.1 Scientific Method
- 1.2 Research: Concept and Definition
- 1.3 Application of Scientific Method In Research
- 1.4 Purpose of Research
- 1.5 Research in Education and Special Education

Unit 2: Types and Process of Research

- 2.1 Types of Research
 - Basic/Fundamental
 - Applied
 - Action
- 2.2 Process of Research
 - Selection of Problem
 - Formulation of Hypothesis
 - Collection of Data
 - Analysis of Data & Conclusion
- 2.3 Tools of Research: Tests, Questionnaire, Checklist and Rating Scale
- 2.4 Action Research in Teaching Learning Environment
- 2.5 Professional Competencies for Research

Unit 3: Measurement and Analysis of Data

- 3.1 Scale for measurement: Nominal, Ordinal, Interval and Ratio
- 3.2 Organization of data: Array, Grouped distribution
- 3.3 Measures of central tendency and Dispersion: Mean, Median and Mode, Standard deviation and Quartile deviation
- 3.4 Correlation: Product Moment and Rank Order Correlation
- 3.5 Graphic representation of data

Practicum/ Field Engagement

- Develop a teacher made test for a given subject matter
- Develop a questionnaire checklist
- Develop an outline for conducting action research

Essential Readings

- Best, J. W., & Kahn, J. V. (1996). Research in Education Prentice-Hall of India, New Delhi.
- Dooley, D. (1997). Social Research Methods. Prentice-Hall of India, New Delhi.
- Grewal, P.S. (1990). Methods of Statistical Analysis. Sterling Publishers, New Delhi.
- Gupta, S. (2003). Research Methodology and Statistical Techniques. Deep & Deep Publishing, New Delhi.
- Koul, L. (1996). Methodology of Educational Research. Vikas Publishing House, New Delhi.
- Potti, L.R. (2004). Research Methodology. Yamuna Publications, Thiruvananthapuram.

Suggested Readings

- Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences. Academic Press, New York.
- Greene, S., & Hogan, D. (2005). Researching children's experience. Sage Publication, London.

Semester - III

E 2: Disability Specialisation

Hours: 120

Credits: 04

Marks: 100

Sl. No.	Tasks for the Student-teachers	Educational Settings	Disability Focus	Specific Activities	Hrs.	Marks	Submissions
1.1	Reading and writing of standard English braille	College	VI	1. Reading and writing English Braille text. Transcription from print to Braille and vice versa(Grade II)	60 Hours	50	
				2. Braille Mathematics Code: Radicals, fraction (Mixed, complex and hyper complex), sign and symbols of comparison, Shape signs, Greek letters, indices, set, symbols, trigonometric functions	30 Hours	25	
				3. Abacus and Geometric kit	30 Hours	25	

F1: Main Disability Special School

Hours: 120

Credits: 04

Marks: 100

Sl. No.	Tasks for the Student-teachers	Disability Focus	Educational Setup	No. of Lessons
1	Classroom teaching	VI	Special Schools for VI	Min. 90 school periods

Semester - IV

E 1: Cross disability & inclusion

Hours: 120

Credits: 04

Marks: 100

Sl. No.	Tasks for the Student-teachers	Educational Settings	Disability Focus	Specific Activities	Hrs.	Marks	Submissions
1.1	Classroom Observation For school subjects at different levels	1. Special schools other than VI	1. Other than VI	Observation For school subjects at different levels	15 Hrs	25	
		2. Inclusive schools	2. Any Disability	Observation For school subjects at different levels	15 Hrs		
1.2	Orientation and Mobility Training	College Campus and outside campus	VI	a) Sighted Guide Technique b) Pre Cane skills c) Cane technique d) Direction finding technique	60 Hrs	50	
1.3	Teaching lessons on O&M and ADL	Special and inclusive school	VI and VIMD	Individualized Teaching lessons on orientation and mobility and activities of daily living	30 Hrs	25	

F 2: Other Disability Special School

Hours: 120

Credits: 04

Marks: 100

Sl. No.	Tasks for the Student-teachers	Disability Focus	Educational Setup	Hrs.	Marks
1	1. Classroom teaching, development of T.M, document study, maintenance of record 2. Classroom teaching, development of T.M document study, maintenance of record	Other than Visual Impairment	Special Schools for other disabilities	60 Hrs	50
		VIMD	Special schools or programmes for Multiple disabilities	60 Hrs	50

F 3: Inclusive School

Hours: 120

Credits: 04

Marks: 100

Sl. No.	Tasks for the Student-teachers	Disability Focus	Educational Setup	Hrs.	Marks
1	Classroom teaching with special focus on functional academic skills e.g. Braille, special equipments, preparation of Tl M to facilitate inclusion and creating awareness about the needs of children with disabilities	Visually Impaired, seeing children and teachers	Inclusive schools	120 Hrs	100