**B.Ed. Special Education (V.I.)**

**Title of the Course: Intervention and Teaching Strategies (C-14)**

**(Semester: III)**

**Credits: 4**

**MM: 100 (External: 70 Internal: 30)**

**Contact Week 15**

**Introduction of the Course**

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.

**Learning Outcomes**

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 (12 hours)**

1. Difference among Methods, Approaches and Strategies
2. Intervention - Concept, Scope and Importance
3. Intervention for lately blinded students - Role of Special teachers/educators
4. Mediated teaching-learning - Concept, Need and Procedure
5. Enriched teaching for Concept development: Converting visual concepts into  
   accessible experiences

**Unit 2: Mathematics (12 hours)**

1. Coping with Mathematics phobias
2. Conceptualization of Mathematical ideas - Processes and Challenges for Children  
   with Visual Impairment
3. Preparation and Use of tactile materials
4. Mental arithmetic abilities - Concept, Importance and Application
5. Evaluation procedures with special reference to the Needs of Children with Visual  
   Impairment

**Unit 3: Science (12 hours)**

1. Providing first-hand experience in the class and the school environment
2. Inclusive/collaborative learning for laboratory work
3. Science Teaching Learning Materials and Equipment: i) Preparation and use of TLM,  
   ii) Locating and procuring Science equipment
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 (12 hours)**

1. Techniques of preparation and presentation of adapted Tactile maps, Diagrams, and  
   Globe
2. Procuring, adapting and use of different types of models
3. Organizing field trips
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 (12 hours)**

1. Visual Stimulation: Concept and Procedure
2. Selection of an appropriate medium of reading and writing
3. Techniques and procedures for developing reading and writing skills
4. Orientation and Mobility for low vision children
5. Classroom management - Seating arrangement, adjustable furniture, illumination,  
   non-reflecting surfaces and colour contrast

**Practicum/ field engagement/Suggested Projects / Assignments (Any Two)**

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| * 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.
* Dubey, S. K. (2018). Education of Low Vision Students, Kanishka Publishers and Distributors, New Delhi.
* Fernandez, G., Koening. C., Mani. M.N.G., & Tensi. S. (1999). See with the Blind.  
  Books for Change, Banglalore.
* Jackson, J. (2007). Low Vision Manual. Edingurgh: Butterworth Heinemann/  
  Elsevier, Edingurgh.
* Jose, R. (1983). Understanding Low Vision. American Foundation For The Blind.  
  New York.
* Kauffman, J.M., & Hallahan, D.P. (1981). Handbook of Special Education. Prentice  
  Hall, New Delhi.
* Lowenfeld, B. (1973). The Visually Handicapped Child in School. John Day  
  Company, New York.
* Lydon, W. T., & McGraw, M. L. (1973). Concept Development for Visually  
  Handicapped Children. AFB, New York.
* Mangal. S. K. (2007). Educating exceptional children-an introduction to special  
  education. PHI learning Pvt. New Delhi.
* Mangal, S. K. (2011) Educating Exceptional Children: An Introduction to Special  
  Education. PHI Learning Pvt. Ltd., New Delhi.
* Mani. M. N. G. (1997). Amazing Abacus. S.R.K. Vidyalaya Colony, Coimbatore.
* Mani, M. N. G. (1992). Techniques of Teaching Blind Children. Sterling Publishers  
  Pvt. Ltd. New Delhi.
* Macnaughton, J. (2005). Low Vision Assessment. Butterworth Heinemann/ Elsevier,  
  Edingurgh.
* Mason, H., & McCall, S. (2003). Visual Impairment - Access to Education for  
  Children and Young people. London: David Fulton Publishers.
* Mukhopadhyay, S., Mani, M.N.G., Roy Choudary, M., & Jangira, N.K. (1988).  
  Source Book for Training Teachers of Visually Impaired. New Delhi: NCERT.
* Macnaughton, J. (2005). Low Vision Assessment. Butterworth Heinemann /Elsevier,  
  Edingurgh.
* Niemann, S., & Jacob, N. (2009). Helping Children who are Blind. The Hesperian  
  Foundation, California.
* Punani, B., & Rawal, N.(2000). Handbook for Visually Impaired. Blind Peoples'  
  Association, Ahmedabad.
* Scholl, G.T. (1986). Foundations of the education for blind and visually handicapped  
  children and youth: Theory and Practice. AFB Press, New York.
* Vijayan, P.., & Gnaumi, V. (2010). Education of children with low vision. Kanishka  
  Publication, New Delhi.

**Additional Readings**

* Agrawal, S. (2004). Teaching Mathematics to Blind Students through Programmed  
  Learning Strategies. Abhijeet Publication, Delhi.
* Hodapp, R. M. (1998). Developmental Disabilities: Intellectual, Sensory and Motor  
  Impairment. Cambridge University Press, New York.
* Kelley, P., & Gale, G. (1998). Towards Excellence: Effective Education for Students  
  with Vision Impairments .North Rocks Press, Sydney.
* Mangold, S. S. (1981). A teachers' Guide to the Special Education needs of Blind and  
  Visually handicapped Children. New York: AFB
* Pandey, V. P. (2004). Teaching of mathematics. Sumit Publiication, New Delhi.
* Status of Disability in India. (2012). Rehabilitation Council of India, New Delhi.

**Teaching Learning Process**

The course will be taught through interactive pedagogic methods such as classroom discussion, debates, film discussions, critical media analysis, collaborative learning tasks which enhance reading comprehension of core writings in the area and innovative projects. Reflective expression and learning will be encouraged. This concepts and theoretical precepts included in this course should be explained with reference to children with and without disabilities.

**Keywords: Intervention,strategy,Approach,Methodology,Pre-math skills**