Syllabi (Suggestive)
Secondary Stage

Integrated Special and Inclusive Teacher Education Programme (ISITEP)

Rehabilitation Council of India

New Delhi

Integrated Special and Inclusive Teacher Education Programme (ISITEP)

Secondary Stage

Curricular Structure

SL NO	Curricular Components	Courses		Credits per Semester								Credits per Course	Total Credits
				S1	S2	S3	S4	S5	S6	S7	S8		
1.	Student Induction Programme	1.0 Two weeks: Equitable Practice & Inclusive Education											
2.	Foundations of General, Special & Inclusive Education	2.1	Evolution of Indian Education & Disability Discourse	4	-	-	-	-	-	-	-	4	30
		2.2	Human Development, Deviations & Educational Psychology	-	-	4	-	-	-	-	-	4	
		2.3	Introduction to Disabilities	-	-	-	4	-	-	-	-	4	
		2.4	Learning, Teaching, Assessment & Evaluation	-	-	-	-	-	2	-	-	2	
		2.5	Equitable and Inclusive Education	-	-	-	-	-	2	-	-	2	
		2.6	Philosophical & Sociological Perspectives of Special & Inclusive Education	-	-	-	-	-	-	2	-	2	
		2.7	Curriculum Development, Adaptation and Evaluation (Secondary Stage Specific)	-	-	-	-	-	-	2	-	2	
		2.8	Perspectives on School Leadership & Management	-	-	-	-	-	-	-	4	4	
		2.9	Acts, Policies and Provisions for Persons with Disabilities	-	-	-	-	-	-	-	2	2	
	Elective Courses	2.10	Elective Courses (Choose any one from first two i.e. a and b and any one from the remaining as per the disability specialisation)									4	
		a	Reading and Reflective Practices	-	-	-	-	-	-	-	2		
		b	Disability, SEDGs, and Gender	-	-	-	-	-	-	-			
		c	Visual Supports for Learners with Autism (ASD)	-	-	-	-	-	-	-	2		
		d	Historical and Contemporary Issues in Education of Deaf in India (HI)	-	-	-	-	-	-	-			
		e	Listening and Spoken Language Therapy (HI)	-	-	-	-	-	-	-			
		f	Working with Learners with Intellectual Disability having High Support Needs (ID)	-	-	-	-	-	-	-			
		g	Management and Supporting Learners with Severe and Multiple Disabilities (MD)	-	-	-	-	-	-	-			
		h	Integrating Skills and Activity Participation (MD)	-	-	-	-	-	-	-			
		i	Research Based Practices and Therapeutic Interventions for Supporting Learners with Specific Learning Disabilities (SLD)	-	-	-	-	-	-	-			
		j	Education of Learners with Visual Impairment from Past to Present (VI)	-	-	-	-	-	-	-			
3.	Disciplinary / Inter-disciplinary courses	One/two discipline(s) from any of the school curricular areas.		8	12	12	12	12	8	-	-	64	64
		3.1	Language										
		3.2	Physical Sciences (Physics, Chemistry, etc.)										
		3.3	Biological Sciences (Zoology, Botany, etc.)										
		3.4	Mathematics										
		3.5	Social Sciences & Humanities (Economics, History, Geography, Psychology, Political Science etc.)										

		3.6	Business Studies, Accountancy, etc.										
		3.7	Arts (Visual and Performing)										
		3.8	Physical Education and Yoga										
		3.9	Vocational Education										
		3.10	Computer Sciences										
		3.11	Any other school subjects										
4.	**Stage & Disability Specific Content-cum Pedagogy***	**Stage & Disability Specific Content cum-Pedagogy Courses (One stage & one disability specialisation to be opted) (ASD/HI/ID/MD/SLD/VI)**		-	-	4	4	4	4	-	-	**16**	**16**
5.	**Ability Enhancement & Value-added courses**	**Ability Enhancement & Value-added courses**											
		5.1	**Language-I (Schedule 8 Language)**	4	-	-	-	-	-	-	-	**4**	**28**
		5.2 a & b	**Language-II (a-ISL or b-English-Any Other languages other than opted Language I)**		4							**4**	
		5.3	**Inclusive Art Education**	2	-	-	-	-	-		-	**2**	
		5.4	**Exploring Disability Intercepts in Indian Knowledge Systems and Ethos**	2		-	-	-	-	-	-	**2**	
		5.5	**Teacher and Society**	-	2	-	-	-	-	-	-	**2**	
		5.6	**ICT and Assistive Technology in Special & Inclusive Education**	-	-	-	-	2	-	-	-	**2**	
		5.7	**Educational Research and Statistics**	-	-	-	-	-	2	-	-	**2**	
		5.8	**Adapted Sports, Nutrition, Yoga, and Understanding Self**	-	-	-	-	-	-	2		**2**	
		5.9 a	**Positive Behaviour Supports**	-	2	-	-	-	-	-	-	**2**	
		5.9 b	**Guidance & Counselling**	-	-	-	-	-	-	2	-	**2**	
		5.9 c	**Life Skills Across Life Span**	-	-	-	-	-	-	-	2	**2**	
		5.10	**Citizenship, Sustainability and Environmental Education**	-	-	-	-	-	-	-	2	**2**	
6.	**School Experience & Internship***	**Stage Specific Special/Inclusive (ASD/HI/ID/MD/SLD/VI)**											
		6.4.1	**Disability Specific Including Internship**	-	-	-	-	2	-	-	-	**2**	**20**
		6.4.2		-	-	-	-	-	2	-	-	**2**	
		6.4.3		-	-	-	-	-	-	2	-	**2**	
		6.4.4		-	-	-	-	-	-	10	-	**10**	
		6.4.5		-	-	-	-	-	-	-	2	**2**	
		6.4.6		-	-	-	-	-	-	-	2	**2**	
7.	**Community Engagement & Services**	**7.0 Inclusive Community Engagement and CBR**		-	-	-	-	-	--	-	2	**2**	**2**
				20	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**160**	**160**

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1.0	**Two-Weeks Student Induction Programme**	
2.0	**Foundations of Education & Special Education**	
2.1	Evolution of Indian Education & Disability Discourse	
2.2	Human Development, Deviations & Educational Psychology	
2.3	Introduction to Disabilities	
2.4	Learning, Teaching, Assessment & Evaluation	
2.5	Equitable and Inclusive Education	
2.6	Philosophical & Sociological Perspectives of Special & Inclusive Education	
2.7	Curriculum Development, Adaptation and Evaluation (Secondary Stage)	
2.8	Perspective on School Leadership & Management	
2.9	Acts, Policies and Provisions for Persons with Disabilities	
2.10	Elective Courses (Choose any one from first two i.e. a and b and any one from the remaining as per the disability specialisation)	
a	Reading and Reflective Practices	
b	Disability, SEDGs, and Gender	
c	Visual Supports for Learners with Autism (ASD)	
d	Historical and Contemporary Issues in Education of Deaf in India (HI)	
e	Listening and Spoken Language Therapy (HI)	
f	Working with Learners with Intellectual Disability having High Support Needs (ID)	
g	Management and Supporting Learners with Severe and Multiple Disabilities (MD)	
h	Integrating Skills and Activity Participation (MD)	
i	Research Based Practices and Therapeutic Interventions for Supporting Learners with Specific Learning Disabilities (SLD)	
j	Education of Learners with Visual Impairment from Past to Present (VI)	
3.0	**Disciplinary/ Inter-disciplinary Courses** (to be developed by the University concerned in line with regular 4-year Undergraduate Programme - FYUP)	
4.0	**Secondary Stage and Disability Specialization Specific Courses (ASD/HI/ID/MD/SLD/VI)**	
4.4.1	Disability Specialisation I	
4.4.2	Disability Specialisation II	
4.4.3	Disability Specialisation III	
4.4.4	Content cum Pedagogy of Agriculture	
4.4.5	Content cum Pedagogy of Art (Visual & Performing)	
4.4.6	Content cum Pedagogy of Commerce, Accountancy and Business Studies	
4.4.7	Content cum Pedagogy of Computer	
4.4.8	Content cum Pedagogy of Home Science	
4.4.9	Content cum Pedagogy of Language Hindi	
4.4.10	Content cum Pedagogy of Language English	
4.4.11	Content cum Pedagogy of Mathematics	
4.4.12	Content cum Pedagogy of Physical Education and Yoga	
4.4.13	Content cum Pedagogy of Science (Biological)	
4.4.14	Content cum Pedagogy of Science (Physical)	
4.4.15	Content cum Pedagogy of Social Science	
4.4.16	Content cum Pedagogy of Vocational Education	
5.0	**Ability Enhancement & Value-Added Courses**	

5.1	Language-I (Schedule 8 Language)	
5.2 a & b	Language-II (a-ISL or b-English-Any Other languages other than opted Language I)	
5.3	Inclusive Art Education	
5.4	Exploring Disability Intercepts in Indian Knowledge Systems and Ethos	
5.5	Teacher and Society	
5.6	ICT and Assistive Technology in Special & Inclusive Education	
5.7	Educational Research and Statistics	
5.8	Adapted Sports, Nutrition, Yoga, and Understanding Self	
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7.0	**Inclusive Community Engagement and CBR**	
7.1	Inclusive Community Engagement and CBR	

Full form of Abbreviations/Acronym

AAC	Augmentative and Alternative Communication
ABA	Applied Behaviour Analysis
ADHD	Attention Deficit Hyperactivity Disorder
ADL	Activities for Daily Living
ASD	Autism Spectrum Disorders
ASHA	Accredited Social Health Activist.
AR	Augmented Reality
AT	Assistive Technology
AVT	Auditory Verbal Therapy
CAI	Computer-Assisted Instructions
CBR	Community-Based Rehabilitation
CBM	Cognitive Behaviour Management
CBSE	Central Board of Secondary Education
CCE	Continuous and Comprehensive Evaluation
CDEIC	Cross Disability Early Intervention Centre
CDEI & SR	Cross Disability Early Intervention & School Readiness.
CPD	Continual Professional Development
CRE	Continuing Rehabilitation Education
CRT	Criterion Referenced Tests
CwD	Children with disabilities
CwSN	Children with Special Needs
DPSP	Directive Principles of State Policy
DSM	Diagnostic and Statistical Manual
ECC	Expanded Core Curriculum
ECSE	Early Childhood Special Education
FLN	Foundational Literacy and Numeracy
FYUP	Four-Year Undergraduate Programme
HI	Hearing Impairment
ICF	International Classification of Functioning
ICSE	Indian Certificate of Secondary Education
ICT	Information and Communication Technology
ID	Intellectual disability
IEDC	Integrated Education of Disabled Children
IEDSS	Integrated Education of the Disabled (children) at Secondary Stage
IEP	Individualised Educational Programme
IFSP	Individualised Family Support Plan
ISAA	Indian Scale for Assessment of Autism
ISL	Indian Sign Language
JJ	Juvenile Justice
MD	Multiple disabilities
MDG	Millenium Development Goal
MOOC	Massive Online Open Courses
NCF	National Curricular Framework
NCTE	National Council for Teacher Education
NEP	National Education Policy
NGO	Non-Governmental Organisation

NIOS	National Institute of Open Schooling
NPE	National Policy on Education
NRT	Norm-Referenced Testing
NT Act	National Trust Act
O&M	Orientation and Mobility
PBIS	Positive Behavioural Intervention and Support
PHC	Primary Health Centre
POA	Programme of Action
POCSO	Protection of Children from Sexual Offences
PRA	Participatory Rural Appraisal
PTA	Pure Tone Audiometry
PwD	Person with disability
PWDV	Protection of Women from Domestic Violence
RBSK	Rashtriya Bal Swasthya Karyakram
RCI	Rehabilitation Council of India
RMSA	Rashtriya Madhyamika Siksha Abhiyan
RPwD	Rights of Persons with Disabilities
RTE	Right to Education
SDG	Sustainable Development goal
SEDG	Socio-Economically Disadvantaged Groups
SEL	Socio- Emotional Learning
SIPDA	Scheme for Implementing of Persons with Disabilities
SLD	Specific Learning Disabilities
SSA	Sarva Siksha Abhiyan
TLM	Teaching Learning Material
UDHR	Universal Declaration of Human Rights
UDID	Unique Disability Identity cards
UDL	Universal Design for Learning
UEE	Universalization of Elementary Education
UGC	University Grants Commission
UNCRPD	United Nations convention on rights pf Persons with Disabilities
VI	Visual Impairment
VR	Virtual Reality

Secondary Stage (ASD/HI/ID/MD/SLD/VI)

The National Education Policy (NEP) 2020 represents a transformational shift in teacher training, focusing on a multidisciplinary, practical, and technology-integrated approach. By aligning teacher education with the diverse and dynamic needs of the 21st Century, the NEP proposes to polish and accelerate a generation of educators who are prepared to inspire, innovate, and shape the future of education.

Secondary education is the stage of formal education that follows the middle stage and comes before higher education. In India, secondary education is typically for students from grades 9,10,11 and12. The secondary curriculum is learner-centred with school being a place where students would acquire various skills; building self-concept, sense of enterprise, aesthetic sensibilities and sportsmanship. Therefore, for the purpose of fostering core competencies in learners, the curriculum in secondary level encompasses major learning areas, from scholastic and co-scholastic points of view. It comprises four years of multidisciplinary study, building on the subject-oriented pedagogical and curricular style of the Middle Stage, but with greater depth, greater critical thinking, greater attention to life aspirations, and greater flexibility and student choice of subjects.

In Grades 9 and 10, students would engage with eight curricular areas to ensure breadth of study, building on the learning achieved in the Middle Stage. The curriculum includes the study of three languages, Arts Education, Physical Education, Vocational Education, Social Sciences & Humanities, Interdisciplinary Areas, Mathematics and Computational Thinking, and Sciences. More subject choices are available to students in Grades 11 & 12. Choice-based courses which would enable depth of learning across a range of human knowledge are offered in Grades 11 & 12. To address the requirement of breadth of study, students are required to choose subjects from amongst at least two out of the three groups of curricular areas such as: i) the Group comprising Arts Education, Physical Education and Vocational Education; b) the Group Comprising Social Sciences & Humanities, and Interdisciplinary Areas; and c) Mathematics and Sciences. The requirements to choose subjects from at least two groups help meet the requirement of breadth of study by students in Grades 11 & 12.

The NEP addresses several aspects of teacher education in secondary stages, that are relevant for persons with disabilities. These include various specialization courses to teach children with disabilities and modules on teaching children with disabilities within existing programs. Moreover, teachers will be provided greater autonomy in selecting pedagogical tools relevant to their classroom contexts and will no longer be required to perform non-teaching tasks. Teachers will be trained to recognize and identify disabilities. The Curriculum strives to:

- provide ample scope for the physical, intellectual and social development of students.
- enlist general and specific teaching and assessment objectives.
- uphold Constitutional values.
- nurture life skills by prescribing curricular and co-curricular activities.
- integrate innovations in pedagogy, knowledge and application.
- promote inclusive education.
- integrate environmental education in various disciplines.
- equally emphasize Co-scholastic areas of Art Education and Health and Physical Education.

The Approaches to the Secondary Stage are focused on

- The learner-centric
- Experiential Learning
- Discipline
- Constitutional and universal values

- Increased flexibility and choice of subjects to study
- Concerted curricular and pedagogical initiatives
- Multidisciplinary
- Meaningful and joyful learning experiences to go beyond textbooks
- No student left out from participation in activities
- Create a conducive environment for the development of competencies

Teaching Learning Environment and Accessibility:

Students pursuing secondary stage education come under the crucial adolescent age group and they need to be approached delicately. Adolescence should be viewed more broadly, taking into account not just the purely physical components of growth but also the psychological, social, emotional and moral domains. Therefore, secondary school teachers must address the various needs of adolescents with disabilities. It is important to remember that students with disabilities need a space or environment that is safe and stimulating. It should allow them to move freely and access resources or materials, the classroom, playground, lab, libraries and restrooms. Therefore, all resources should be well-thought-out and made barrier-free to help students with disabilities feel included. Along with these, schools must ensure the safety, health & hygiene concerns of all girl students including girls with disabilities. Similar to traditional schooling, student's creativity and critical thinking are fostered through free play activities, art, dramatization, constructive play, and creating games with rules, while structured activities are aimed towards specific and planned learning objectives. A stimulating, developmentally appropriate learning environment for this age group includes classrooms with activity corners, open-ended play and learning materials, project work, and interesting learning activities. As the school students in secondary stage are adolescents, a teacher should lead by a balance among indoor & outdoor activities, involving independent, small group and big group activities.

Role of the Teacher:

After receiving training, the teachers ought to be allowed to design their own lessons, activities, and experiences in order to meet the secondary stage's overall learning goals. For successful inclusion, the regular class teacher and the special educator must collaborate to provide seamless inclusion and fulfilling learning opportunities for children with disabilities. National Curriculum Framework for School Education (NCFSE), 2023 stresses that teachers must be the torchbearers of all educational improvement. Thus, teachers must be enabled and motivated in every way possible. NCFSE further submits that teachers must have autonomy to respond to the reality of the classroom in the best possible manner. NCFSE (2023) suggests that pedagogy at the secondary stage should expect more independent learning from the students. More opportunities for self-study and group work should be encouraged. Classroom interactions should also be diverse — didactic, Socratic, and inquiry-based methods are all appropriate for this Stage. Students should be given opportunities to engage with higher-order capacities of analysis and synthesis through meaningful yet challenging assessments.

Specialisation Areas:

All the Pedagogic courses at the Secondary stage are aimed at developing knowledge and comprehension among students with disabilities with specialisation in one of the specific disability areas namely Autism Spectrum Disorder, Hearing Impairment, Intellectual Disabilities, Multiple Disabilities, Specific Learning Disabilities and Visual Impairment. The learners will also be acquainted with the modes of inquiry and epistemological frameworks of their chosen subjects so that they can use teaching strategies that are responsive to diverse settings as well as to the needs of students with different disabilities.

The course content includes in theory and practicals, adequate exposure and experience to the prospective special educators opting to specialise in teaching at the secondary level. They may opt for anyone of the six disabilities listed above. They will be prepared to teach at secondary level in inclusive schools, to collaborate and team-teach with the regular teachers, teach in resource rooms, teach in special schools and also in home based learning environments. The techniques of universal design for learning (UDL) to teach in inclusive class rooms, individualised educational planning wherever required and justified flexibility in planning curricular content, teaching process and selection of ICT, teaching learning material and evaluation will be the focus of the special teachers' training. This is to ensure that the student with disability receives the education that is appropriate to him/her and not compromising on the quality of education. The special educator will also be a professional leader in creating awareness about the abilities of the persons with disabilities among the public so that they are accepted in higher education institutions/job market as they complete the secondary level education successfully.

Enlightened Indian Perspectives

India since ancient years has been an inclusive society where persons with disabilities were never institutionalized and they lived with their families. The teachers in Gurukulas in ancient years, taught their students based on their abilities and interests and most learning was by doing and therefore, activity-based. The teaching process that we adopt today to teach students with disabilities is along similar lines, where we identify the abilities and needs of the person and teach them to learn by doing. The Indian vision of education has been broad and deep, including the idea that education must foster both inner and external development. Learning about the external world should align with learning about one's inner reality and self. This is also an eminently practical perspective – 'developing good health and socio-emotional skills and developing the ability to think and make good and rational choices and decisions in the world, must occur in an integrated and holistic manner.' Learning is not merely gathering information but is the development of self, of our relationships with others, being able to discriminate between different forms of knowledge, and being able to fruitfully apply what is learned for the benefit of the individual and society. For students with disabilities, it is important to help them communicate effectively and learn skills to lead independent living with dignity in a socially acceptable manner. The foregoing Bhartiya Darshan (Indian Vision) of education is fully and in letter and spirit applicable in the case of all students with disabilities regardless of their nature of disability. They are an integral part of Bhartiya Samaj (Indian Society). It is, therefore, imperative that the learning needs of these students in all areas of development are kept in mind while planning and implementing any educational program including programs for preparing teachers.

Teachers are the frontline providers of quality education and considered to be the most vital single factor in the system of education. A teacher is just like the backbone of the society and acts as an architect of the nation's development. Teachers, thus form the very heart of the education process and represent an indispensable vehicle towards a progressive, just, educated, and prosperous society. The Rights of Persons with Disabilities Act (2016) also envisages that all students with disabilities must be provided opportunities to receive education in an appropriate learning environment where all facilities are available to meet his/her additional/special learning needs. Keeping this in mind the following program of preparing teachers for the secondary stage has been designed.

1.0 STUDENT INDUCTION PROGRAMME

Student Induction Programme

Code: 1.1 **Credits: Nil** **Semester: 1**

About the Induction Programme

Disability has always been a part of human existence. We have seen rapid development in the field of disability rehabilitation in the past three decades, with a major paradigm shift from charity to a rights-based society. The Acts and policies provide entitlements and equal opportunities to persons with disabilities, thus enabling them to be contributing members of society. People with disabilities have been through a very difficult journey from sure death and abandonment in the Greek and Roman times, to a guarantee of all human rights and fundamental freedoms in modern times. (Article 10 of the UNCRPD). Though India has always been an inclusive society, there are instances of marginalization of persons with disabilities. Independent India has come a long way in terms of inclusion of persons with disabilities in all areas such as rights, education, employment, and inclusion in society like any other citizen of the country.

The recent NEP 2020 ***is committed to providing equity in education*** and states that education is fundamental for achieving full human potential, developing an equitable and just society, and promoting national development. It highlights the fact that providing universal access to quality education is the key to India's continued ascent, and leadership on the global stage in terms of economic growth, social justice and equality, scientific advancement, national integration, and cultural preservation. This aligns with the global education development agenda reflected in Goal 4 (SDG4) of the 2030 Agenda for Sustainable Development, adopted by India in 2015 that seeks to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" by 2030.

To achieve these, the RPwD Act (2016) has many provisions some of which direct the appropriate Government and the local authorities to undertake the following measures:

(a) Conduct a survey of school-going children every five years to identify children with disabilities, ascertaining their special needs and the extent to which these are being met:

(b) Establish adequate number of teacher training institutions;

(c) Train and employ teachers, including teachers with a disability who are qualified in sign language and Braille, and also teachers who are trained in teaching children with intellectual disability;

(d) Train professionals and staff to support inclusive education at all levels of school education;

This is also highlighted in the recent 'Disability and Development Report (2024) of the UN Department of Economic and Social Affairs as it suggests improved accessibility in schools and learning environments for which to develop teacher capacities.

All these mandates and policies point to quality teacher education as the key to the successful empowerment of persons with disability to function as members of society with dignity. The said courses in ISITEP are designed to fulfill these aspirations. The two-week induction program through a series of experiential activities will take you through a short introduction to disabilities as a human diversity and draw your attention to their specific needs so that their learning can be enhanced.

Congratulations to you for having chosen to become a special educator!

Suggested Schedule of the Induction Prgramme

Day	Topic	Activities	Learning outcomes
1	Recognizing & appreciating Diversity	Simulated exercises on disabilities	Learners will be able to identify human differences & appreciate the richness they bring to the fabric of life
2	Types of Disabilities & use of assistive devices for intervention	Film watching & reflections Simulated activities	Learners will be able to know the differences between the 21 disabilities & how different assistive devices can increase their independence
3	Barriers & facilitators in participation of PwDs in society (family, school, & community) & use of ICT	Watching & making short videos, role-play, debates, street play, etc.	Learners will understand the challenges that people with disabilities face daily, in multiple settings
4	Human Rights approach to disability & inclusion, UDHR, and the UN's role. Accessibility & other issues of participation on an equal basis	Puppet shows, chart making, poster making, cartoon strips, etc.	Learners will appreciate that people with disabilities have the same rights & fundamental freedoms as all other human beings, plus a right to accessibility
5	Communication systems/ modes of persons with disabilities (Braille, Sign language, AAC, etc.)	Debate, seminars	Learners will gain expertise in the biggest challenge facing persons with different disabilities, communication.
6	Practice braille, sign language & other modes of communication	Demonstrations & practice. Create opportunities for discussions using sign language and AAC	Learners will gain expertise, increasingly, on how to communicate directly with people with disabilities.
7	Practice braille, sign language & other modes of communication	Demonstrations & practice Give individual assignments for writing in Braille.	Learners will gain expertise in the biggest challenge facing persons with disabilities, communication
8	Visits to early intervention centers, special schools, Integrated & Inclusive schools, therapy centers	Interaction with PwDs, special teachers, classroom teachers, discussions with peers & different stakeholders.	Learners will get first-hand experience of the real barriers on the ground that persons with disabilities face in multiple settings like home, school, and community life. Equally, they will learn the challenges faced by teachers, and peer groups in social, educational & everyday settings
9	Visits to skill training centers, NGOs, Families of the disabled, and other facilities for persons with disabilities	Observations, report writing, journal making, Reflection notebook, etc.	Same as above
10	Presentations on the field visits	Presentations & Seminars, Small group assignments on roles of stakeholders in Inclusive Education	Learners will be able to present their understanding of the situation on the ground, & the gaps thereof

Suggested Readings

https://disability.trinayani.org

https://drive.google.com/drive/folders/1WD0-SsH9JjXeDmNmiFz4ocjJzWisEml7?usp=sharing

2.0 FOUNDATION OF GENERAL, SPECIAL & INCLUSIVE EDUCATION

Evolution of Indian Education & Disability Discourse

Course code: 2.1 **Credits: 4** **Semester- 1**

About the Course:

This course will enable learners to understand the evolution of Indian education starting from the Vedic period till today's contemporary world of modern Indian education. The course allows the students to move on to the journey of Indian education wherein they witness the specific changes in the concept and contexts of education with the changing times. The course also traces developments and shifts in the disability discourse. The course aims to orient students regarding constitutional values and provisions for Children with Special needs including Specific commissions, policies, programs, acts, and Curriculum Frameworks at national and international levels. It will also help students to understand the role of major Judicial landmarks in Education and Special Education. Swadeshi and Nationalist attempts of Educational Reforms will be discussed in the context of the need fulfillment of CWSNs. An insight regarding challenges in the education of CWSNs from the foundational stage to secondary education will be sought with possible solutions.

Learning outcomes:

After completion of this course, the student teacher will be able to:

- Explain the historical account of the evolution of Indian Education with disability discourse.
- Trace the changes in the educational system with changing times in the context of CWSNs.
- Discuss the concept of "Education" in Independent India in light of constitutional values and provisions.
- Develop an understanding of the different acts, policies, programs, curriculum frameworks for School Education and major judgements in the context of special education
- Critically analyze the Indigenous and contemporary interventions in education and future roads ahead.

Course content

Unit 1: Ancient Indian Education (An Overview)

1.3 Vedic Education System- Evolution, Aims, Teaching and Learning
1.3 Post-Vedic Period of Education – a period of change in terms of Power and Authority
1.3 Origin of Buddhist and Jain System of Education
1.3 Educational Institutions: Nalanda, Taxila, Vikramshila, Vallabhi, Nadia and their Management
1.3 Discourse on Disability in Terms of Evolution, Transition and Change

Unit 2: Gupta Period to Colonial Period

1.3 Education in the Gupta and post-Gupta periods with reference to socio-political aspects

1.3 Invasion of Islam and Educational Values

1.3 Destruction of Indigenous System of Education and Origin of Missionary Education Adam's Reports, Anglicist- Classicist controversy, Disability in Charter Act 1833, Macaulay Minute (1835), Missionary Institutions for Disability Education,

1.3 Westernization of Indian Education: Woods Dispatch (1854), Hunter Commission (1882)

1.3 Education of Children with Disabilities: Central Advisory Board of Education (CABE 1923) on children with hearing impairment (sign language), Sargent Report (1944),

Unit 3: Education in Independent India

1.3 Constitutional Values: Reflecting on ideas of Equality, Liberty, Fraternity, Social Justice and Diversity

1.3 Understanding Diversity: Concept and Types of Diversity (Gender, Social-cultural, Geographical, socio-economic and disability), Diversity in disabilities- Types (21), Girl child with a disability, twice exceptionality; Disability as a concept (WHO-2001,1980) & Social and Political Construct

1.3 Constitutional Provisions in Education and Children with Special Needs: Fundamental Rights, DPSP & Duties, Legislative powers (Citizenship, Right to Education, Education for the Socio-Economically Disadvantaged Groups (SEDGs))

1.3 Overview of National Commissions on Education: University Education Commission (1948-49), Secondary Education Commission (1952-53), Education Commission (1964-66)

1.3 Brief Description of Policies in Education: National Policy on Education (NPE 1968), National Policy on Education (NPE 1986 and POA 1992), Acharya Rama murti Committee (1990) National Education Policy (NEP, 2020)

Unit 4: Education of Children with Disabilities

1.3 National Acts: RCI Act (1992), NT Act (1999), RTE Act (2009&2012), Rights of Persons with Disabilities (2016)

1.3 Programmes and Schemes: Grant-in-aid Scheme, UEE, SSA (2000,2011), Samagra Shiksha Abhiyan, RMSA (2009), IEDC (1974,1983), IEDSS, 2009 (Inclusive Education of the Disabled at the Secondary Stage)

1.3 Role of National Curriculum Frameworks on School Education in Disability Education: (NCF, 2005), National Curriculum Framework for School Education (NCFSE, 2023), National Curriculum Framework for Foundational stage (2022), CDEI & SR (2022)

1.3 Role of International Conventions and Policies in relation to disability Education

1.3 Major Judicial Judgements on Education and Special Education

Unit 5: **Indigenous And Contemporary Interventions in Education (BHARTIYA SHIKSHA)**

1.3 Swadeshi and Nationalist Attempts of Educational Reforms (Sri Aurobindo, Swami Vivekananda, Rabindranath Tagore, Mahatma Gandhi, Savitribai and Jyotiba Phule, Pt. Madan Mohan Malviya, Dr. B. R. Ambedkar, J. Krishan murti, Gijubai Badeka)

1.3 Exploring the Swadeshi Attempts in the Education of Children with Special Needs (Aims of Education (Education of Life & Living Skills), infrastructural Setting,

Characteristics of Guru & Shishya & their Relationship, Ratio, Peer Learning, Curricular classification, Transactional Methodology- Oral, Discussion, Debate, Experiential etc., Evaluation of Learning- Performance-based etc.)

1.3 Philosophy &Trends in Delivery of Educational Service to Children with Special Needs: Welfare to Human Rights Approach

1.3 Inclusive education as a right-based model, complementarily of inclusive and special schools

1.3 Challenges of education across different levels from foundational to secondary and higher Education

Suggested Coursework/Practicum:

- Facilitate Group Discussions on Indian Constitutional Values and other aspects through activities.
- Analysis and interpretation of educational statistics.
- Visit Places of Educational Significance and Develop a Project Report.
- In-depth study and critical analysis through Books, Journals, and original documents.
- Submission of assignments on any of the above areas with a research point of view.
- Getting involved with marginalized communities or CWSNs in community and family through surveys, group talks, and short projects.
- Getting practical experience by working with different communities, CWSNs, and schools.
- Studying real-life examples and doing the case study.

Suggestive mode of transaction:

- Learners will engage through interactive and planned lectures.
- Use of Multimedia Approach and ICT in Education. E.g., smart Boards, PowerPoint presentations, Documentaries, etc.
- Group discussions, small group talks, panel discussions, and themed seminars may be conducted.
- Field engagements, such as visits to educational settings can also be undertaken which provides real-world application and experiential learning opportunities to the students.
- Co-operative and team teaching may be adopted additionally.

Suggestive assessment:

- The Assessment will be based on the tests and assignments.
- Group discussions, presentations, research projects, peer evaluations, simulations, and role plays can also be done for the same.

Suggested Readings References

The Constitution of India. Retrieved from accessed on dated 09/06/2024 https://lddashboard.legislative.gov.in/sites/default/files/COI...pdf

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Krishnamurthy, J. (n.d.). Education and the Significance of Life. Krishnamurti Foundation India.
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National Curriculum Framework for School Education (NCFSE), 2023. National Council of Educational Research and Training. New Delhi: NCERT.
Puri, M. (2012). Great Indian thinkers on education. APH Publishing.
Right of Children to Free and Compulsory Education Act, (2009). Ministry of Education. Government of India.
Rashtriya Madhyamik Shiksha Abhiyan (RMSA). (2009). Ministry of Human Resource Development.
Rights of Persons with Disabilities Act, (2016). Department of Empowerment of Persons with Disabilities, Ministry of Social Justice and Empowerment. Government of India.
Rehabilitation Council of India. (1992). Rehabilitation Council of India Act, 1992. New Delhi: Government of India.
Sarva Shiksha Abhiyan (SSA). (2000, 2001). Ministry of Human Resource Development.
Samagra Shiksha Abhiyan. (2009). Ministry of Human Resource Development.
Tagore, R. (1951/2000). What is real education? Rabindranath Tagore philosophy of education and painting (pp. 43-50). National Book Trust.

Human Development, Deviations & Educational Psychology

Course code: 2.2 **Credits: 4** **Semester: 3**

About the Course

This course is designed to enable learners to become familiar with the dynamic aspects of human growth and development over the life span. Learners will gain a deeper understanding of transitions between major life phases and a broad knowledge of development within each life stage. Human development is a complex process that involves biological, psychological, and social changes across the lifespan. *Deviations* from typical development can occur at any stage and can manifest in various forms, including developmental disorders, behavioural issues, and social challenges. Through close observation of children in their natural environments, the learners would be able to situate their theoretical knowledge within realistic frames. Educational psychology will provide an overview of the fundamental concepts and principles of educational psychology in Indian as well as Global context. It explores the cognitive, emotional, and social processes involved in learning across diverse educational settings. Accordingly, the five units of this course will examine theories of learning, development, motivation, and assessment, as well as their applications in the classroom.

Learning outcomes

After completion of this course, the student teacher will be able to:

- Explain the process of development with a special focus on infancy, childhood, and adolescence.
- Describe the significance of various aspects of development including social-emotional, cognitive, moral, etc. from birth to adulthood.
- Summarize the theoretical approaches to human development in the context of Theories of Learning and the development of self
- Critically analyse developmental variations among children With Special Needs.
- Comprehend adolescence as a period of transition and threshold of adulthood.

Course content

Unit1: Understanding Human Development with different perspectives

1.1 Child development: Meaning, Biological, Philosophical, concept of Jiva, mana (Antahkaran), Atman in Indian Psychology, Significance of study

1.2 Approaches: Biological, Human Development Approach in Modern Concept, Psychological

1.3 Developing Human: Stages of development (Prenatal development, Peri-natal, Postnatal Infancy, Childhood, Adolescence, Adulthood)

1.4 Concept of Nature, Nurture, and Epigenesis on various domains of development (physical, sensory-perceptual, cognitive, socio-emotional, language & communication, social relationship)

1.5 Developmental deviations in growth and development: Genetic, pre-natal, birth complications, environmental and psychosocial factors

Unit 2: Theoretical Perspective on Human Development and its application in the classroom

2.1 Psychodynamic Theories: Sigmund Freud's Psychoanalytic Theory and Erikson's Psychosocial Theory

2.2 Behaviorist Theories (S-R): Ivan Pavlov's Classical Conditioning and B. Frederick Skinner's Operant Conditioning theories, Human Behavior in the Indian context
2.3 Humanistic and Social Theory, Theories of Motivation – (Maslow, Deci & Ryan), Human Psychological needs-*Purusharth Vivechan*, Lev Vygotsky's Sociocultural Theory
2.4 Jean Piaget's Cognitive Theory, Process of Knowing in Indian Context
2.5 Ecological theory: Bronfenbrenner's Ecological Systems Theory

Unit 3: Prenatal and Early Years of life (Zero -Eight years) and Educational Implications

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 (e.g., the role of family, play, etc.)
3.5 Concept and Theory of Pancha-Koshiya Vikas in Human Development

Unit 4: Knowing Early Adolescence to Adolescence stage (9 years - 16 years) and educational intervention

4.1 Emerging Identity across the physical body and disabilities, Issues related to puberty, Developing habits, Diseases, and disabilities
4.2 Social-emotional Domains of Development and Disability Narratives
4.3 Emerging capabilities across domains related to cognition and metacognition, Cognitive Dissonance, and denial, Antargyan as a cognitive activity,
4.4 Developing Gender (Basic Identity, Stability, Conformity, Gender Role, and Stereotype) and education
4.5 Influence of the environment (social, cultural, political, technology and education) on the growing child

Unit 5: Transition into Adulthood and Psychological well being

5.1 Psychological well-being: Patanjali Yog sutra, Yogic Meditation, Buddhistic Meditation, Western methods
5.2 Formation of self-concept and personality, Theories of Self (Carl Rogers), Concept of Trigunatit Vayaktitva
5.3 Adulthood in Indian and Western Concepts and Disability Issues
5.4 Emerging roles and responsibilities: Life Skills and career choices
5.5 Challenges of CWDs in their transition to adulthood

Suggested Coursework/Practicum

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

- Observe children in early childhood education programmes. Assess a child's strengths and needs across all developmental and behavioural dimensions in the early childhood years and record them.
- Critically evaluate the intervention programme related to health, nutrition, and education of young children.
- Discuss the theoretical approaches to human development in a seminar/workshop in the classroom.
- Explore primary sources of knowledge such as Taittairya Upanishad, Manduk Upnishad, Garbho-upnishad, etc.

- Practice of Patanjali's Ashtangyog through Breathing Practice, body postures, and meditation techniques.
- Write a Journal for reflection and case studies on CWSNs.

Suggested modes of transaction

Discussions, Reflections, Case Studies, Seminars, Projects etc.

Suggested modes of assessment

Continuous formative assessment, open book exam, report writing, journal writing

Suggested Readings

Banavathy, V., & Choudry, A. (2015). Indian psychology: Understanding the basics. International Journal of Yoga - Philosophy, Psychology and Parapsychology, 3(1), 9. https://doi.org/10.4103/2347-5633.161028

Berk, L. E. (2000). Human Development. Tata McGraw Hill Company, New York.

Berk, L.C. (2008). Child Development, New Delhi: Prentice Hall of India (Pvt.) Ltd.

Bhan S. (2014) Understanding Learners. A Handbook for Teachers. Prasad Publications, New Delhi, ISBN 978-93-84764-01-2

Brisbane, E. H. (2004). The developing child. McGraw Hill, USA.

Cobb, N. J. (2001). The Child: infants, children, and adolescents. Mayfield Publishing Company, California.

Hurlock, E. B. (1980). Developmental Psychology: A Life-Span Approach. Prentice Hall, New Delhi.

Hattie, J. (2013). Visible Learning for Teachers. Corwin.

Hurlock, E. B. (2005). Child growth and development. Tata McGraw Hill Publishing Company, New York.

Hurlock, E. B. (2006). Developmental Psychology- A life span approach. Tata McGraw Hill Publishing Company, New Delhi.

Malik, P. (n.d.). garbh-geeta. Scribd. https://www.scribd.com/document/670451556/garbh-geeta

Mangal, S.K. (2012). Educational Psychology. Phi Learning, 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 McGraw Hill Publishing Company, New York.

Rao, K. R., & Paranjpe, A. C. (2016). Psychology in the Indian tradition. In Springer eBooks. https://doi.org/10.1007/978-81-322-2440-2

Santrock, J. W. (2006). Child Development., Tata McGraw Hill Publishing Company, New York.

Santrock, J. W. (2007). Adolescence. Tata McGraw Hill Publishing Company, New Delhi.

Satapathy, Biswajit. (2018). Pancha Kosha Theory of Personality. The International Journal of Indian Psychology. 6. 10.25215/0602.105.
Slavin, R. E. (2018). Educational Psychology. 12th Ed, Pearson Education, United Kingdom.

Introduction to Disabilities

Course code: 2.3 **Credits: 4** **Semester: 4**

About the Course

This course is designed to provide an understanding of disabilities to the student teachers. The course covers foundational concepts and explores the various models of disability. It introduces key frameworks like the ICF, and DSM-5, and specifically provides an understanding of the RPwD Act (2016), which outlines the various legally recognized disabilities and the provisions for persons with those disabilities. The course also examines the characteristics and needs of various disabilities. Emphasizing inclusion, it addresses government responsibilities, certification processes, and legal protections, aiming to foster a supportive environment for individuals with disabilities. The course also intends to develop sensitivity towards persons with disabilities which is essential while working and teaching children with disabilities.

Learning outcomes

After completion of this course, the student teacher will be able to:

- Explain the various terms associated with disabilities.
- Classify various disabilities according to different frameworks.
- Describe the vital provisions for empowering persons with disabilities.
- Give details of the prevalence, characteristics, and needs of various disabilities.
- Discuss the sensitivity to be kept in mind while working with persons with disabilities.

Course content

Unit 1: Basics of Disability

1.1 Diversity: Concept and Types; Difficulty, Delay & Disability in Learners
1.2 Models of Disability: Medical, Social, and Rights-based
1.3 Disabilities specified in the Rights of Persons with Disabilities (RPwD) Act, 2016
1.4 International Classification of Functioning (ICF) framework of WHO, DSM-5
1.5 Developing Sensitivity towards Persons with Disabilities

Unit 2: Significant provisions for empowerment of learners with disabilities in RPwD Act (2016)

2.1 Rights and entitlements of persons with various disabilities
2.2 Provisions for benchmark disabilities & high support needs
2.3 Concept of equality and equity, social justice, and reasonable accommodation
2.4 Accessibility & barrier-free environment for different disabilities
2.5 Effective participation and inclusion of various disabilities

Unit 3: Characteristics, incidence, prevalence, types, and needs of persons with physical disabilities

3.1 Locomotor Disabilities: Muscular Dystrophy & Cerebral Palsy.
3.2 Locomotor Disabilities: Leprosy-cured person, acid attack victims, and dwarfism.
3.3 Sensory disabilities: Blindness and Low vision
3.4 Sensory disabilities: Deaf, hard of hearing
3.5 Speech and language disabilities

Unit 4: Characteristics, incidence, prevalence, types, and needs of persons with disabilities

4.1 Intellectual disability
4.2 Autism Spectrum Disorder
4.3 Specific Learning Disability
4.4 Multiple disabilities including deafblindness
4.5 Other disabilities included in the RPwD (2016) Act

Unit 5: Considerations for promoting inclusion

5.1 Duties and Responsibilities of Central and State Governments
5.2 Certification of specified disabilities
5.3 Offences against persons with disabilities and provision of penalties
5.4 Understand the intersectionality of disability
5.5 Addressing myths about disabilities

Suggested Coursework/Practicum

- Making awareness posters about myths and the reality of disability.
- Awareness programs on celebrating days allocated for specific disabilities.
- Gathering state-wise data about the incidence of disability.
- Visit at least 3 special schools for children with various disabilities and submit a report thereof.

Suggested Mode of Transaction

Lectures, readings, group discussions and debates

Suggested modes of assessment

Individual and group projects, Class tests, Written assignments, Group discussions

Suggested Readings

Books

Batshaw, M. L., Roizen, N. J., & Lotrecchiano, G. R. (2012). Children with disabilities. Paul H Brooks Publishing.

Chavan, B. S, Ahmed, W., Gupta, R.K. (2022). Comprehensive textbook on disability. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd.

Chauhan, N. K. (2023). Introduction to disabilities. Book Enclave.

Dogbe, D. S. Q., Yeboah, K. A. (2020). Introduction to special education and disability studies. Lambert Academic Publishing.

Farrell, A. F. (2015). Educating special students: An introduction to provision for learners with disabilities and disorders. Sage Publications.

Hodkinson, A. (2019). Key issues in special educational needs, disability, and inclusion. SAGE Publication Ltd.
Khatri, N. (2023). Introduction to disability. Walnut Publication.
Martin, J. E., & Martin, R. (2016). An introduction to special education: Making a difference. Pearson.
Mishra, P., Reddy, K. S., & Sridevi, K. (2021). Introduction to disabilities. Neelkamal Publications (P) Ltd (Hyderabad).
Ramaswamy, B. (2012). Introduction to disability basic concepts and issues. Kanishka Publication.
Raj, F. (2024), Unbreakable Spirit: Navigating Life with MS (Multiple Sclerosis). Bengaluru: The Write Order Publications
Shakespeare, T. (2018). Disability the basis. Routledge.
Smith, J., & Sewell, A. (2020). Introduction to special educational needs, disability, and inclusion: a student's guide. SAGE Publication Ltd.
Wearmouth, J. (2023). Special educational needs and disability. Routledge.
Westwood, P. (2013). What teachers need to know about students with disabilities. Acer Press.
Singh, D. (2020). Handbook of Rights of Persons with Disabilities Act 2016: A Brief Description of 21 Disabilities. Kanishka Publications, Delhi

Web links

https://depwd.gov.in/acts
http://www.ccdisabilities.nic.in/resources/disability-india
https://niua.in/intranet/sites/default/files/2458.pdf
https://cdnbbsr.s3waas.gov.in/s3e58aea67b01fa747687f038dfde066f6/uploads/2023/11/20231129 2033291428.pdf
https://www.nhfdc.nic.in/upload/nhfdc/Persons_Disabilities_31mar21.pdf
https://rehabcouncil.nic.in/sites/default/files/In-service-training-Module/1_English_Introductory_Training_Module.pdf
https://www.nationaldisabilityinstitute.org/wp-content/uploads/2018/11/supplemental-guide-sensitivity.pdf
https://rehabcouncil.nic.in/sites/default/files/In-service-training-Module/2_English_Education_Module.pdf
https://rehabcouncil.nic.in/sites/default/files/In-service-training-Module/3_English_Grassroots_Level_Functionaries.pdf
https://rehabcouncil.nic.in/sites/default/files/In-service-training-Module/4_English_Health_and_Allied_Training_Module.pdf
https://rehabcouncil.nic.in/sites/default/files/In-service-training-Module/5_English_Senior_and_Mid_Level_Functionaries.pdf

Learning, Teaching, Assessment and Evaluation

Course Code: 2.4 **Credits: 2** **Semester: 6**

About the Course

This course will help learners understand learning theories and how these theories translate into teaching and learning actions. Assessment and evaluation as a continuous process is focused on identifying and monitoring the student's progress or difficulties. The course addresses the learning needs of students with disabilities and the support that the teacher needs to address them in diverse educational settings including special and inclusive environments**.**

Learning Outcomes

After completion of this course, the student teacher will be able to:

- Discuss 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 the teacher.
- Demonstrate understanding of the teaching-learning process including a focus on students with diverse learning needs/ disabilities.
- Analyse the scope and role of assessment and evaluation in the teaching-learning process with a special focus on students with diverse learning needs/disabilities.

Course content

Unit 1: Human Learning and Intelligence

1.1 Sensation: Definition and Sensory Process
1.2 Attention: Definition and affecting factors; Perception: Definition and types
1.3 Memory: Definition, types, and affecting Factors; Thinking: Definition and types; and Problem-Solving: Definition and process
1.4 Motivation: Nature, Definition, and Maslow's Theory
1.5 Educational Implications for Classroom Teaching and learning in special and inclusive classroom settings

Unit 2: Learning Process and Motivation

2.1 Human learning: meaning, definition, and concept formation
2.2 Learning theories: Behaviorism (e.g., Pavlov, Thorndike, Skinner); Cognitivism: (e.g., Piaget, Bruner); Social Constructivism: (e.g., Vygotsky, Bandura)
2.3 Intelligence: Concept and definition. Theories of Intelligence: (Two-factor, Multifactor, Triarchic Theory, Multiple Intelligence)
2.4 Creativity: Concept, Definition and Characteristics
2.5 Implications for classroom teaching and learning in special and inclusive classroom settings

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: Concept and types (Psychological, Social, Emotional, and Physical); Creating a positive learning environment
3.5 Leadership Role of the Teacher in Special and Inclusive Classrooms, Schools, and Community

Unit 4: Overview of Assessment and Evaluation

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, with references to students with disabilities/diverse learning needs
4.5 Key concepts in evaluation: e.g. Marks, credit, grading, transparency, internal-external proportion, improvement examination options

Unit 5: Assessment and Evaluation Practices

5.1 Strategies: e.g., 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: e.g., Multiple choice, open-ended and close-ended; direct, indirect, inferential level
5.3 Analysis, reporting, interpretation, documentation, feedback, and pedagogic decisions
5.4 School examinations: Critical review of current examination practices and their assumptions about learning and development; Efforts for exam reforms: Comprehensive and Continuous Evaluation (CCE), National Curriculum Framework (NCF), Right to Education Act (RTE, 2009), National Policy on Education (NEP, 2020), Rights of Persons with Disabilities Act (RPwD Act, 2016)
5.5 Assessment of learners with diverse learning needs: Adaptations and accommodations; Examination provisions (CBSE, ICSE, NIOS, State Boards)

Suggested Coursework/Practicum

- Observe children in a class in special, regular, and inclusive schools respectively, and describe similarities and differences in teaching-learning contexts and submit a report.
- Prepare a Self-study report on individual differences among learners.
- Compile three curriculum-based assessment tools in any one subject area by doing a web search, write a report**.**

Suggested modes of transaction

The 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 in different settings and what can be the suitable means of its assessment. Evaluation may be done by asking the learners to interact with children with and without disabilities in any learning environment and present a report of the same.

Suggested modes of assessment

- Individual and group projects, class tests, discussion on given topics with credits given to the students for their efforts and participation.
- Periodic tests and assignments.

Suggested Readings

Books

Amin, N. (2002). Assessment of Cognitive Development of Elementary School Children: A Psychometric Approach. New Delhi: Jain Book Agency.

Chauhan, S.S. (2013). Advanced Educational Psychology. New Delhi: Jain Book Agency,

King-Sears, E.M. (1994). Curriculum Based Assessment in Special Education. San Diego: Singular Publishing Group.

Panch, R. (2013). Educational Psychology: Teaching and Learning Perspective. New Delhi: McGraw Hill Education (India) Private Limited.

Salvia, J., Ysseldyke, J, E. and Bolt, S. (2007). Assessment in Special and Inclusive Education. Boston: Houghton Mifflin Company.

Whitcomb, S., & Merrell, K.W. (2012). Behavioral, Social, and Emotional Assessment of Children and Adolescents, New York: Routledge.

Woolfolk, A., Misra, G., & Jha, A.K. (2012). Fundamentals of Educational Psychology, (11th ed). New Delhi: Pearson Publication.

Journals

- The International Journal on Assessment and Evaluation
- The International Journal of Special Education
- Educational Assessment, Evaluation and Accountability
- Assessment in Special Education Series

Online links

- https://sites.google.com/site/webresourcesforlearning/home
- https://www.cambridgeenglish.org/teaching-english/professional-development/cambridge-english-teaching-framework/teaching-learning-and-assessment/
- http://teachinglearningresources.pbworks.com/w/page/19919565/Learning%20Theories
- https://www.ncbi.nlm.nih.gov/books/NBK562189/

Equitable and Inclusive Education

Course Code: 2.5 Credits: 2. Semester: 6

About the Course

The course is designed to develop an understanding of equitable and 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 recognise ways in which different stakeholders can collaborate for the success of inclusive education.

Learning Outcomes

After completing the course, the student teacher will be able to:

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

Course content

Unit 1: Introduction to Inclusive Education & Policy Perspectives

1.1 Disability & Diversity, Diversity in classrooms (Learning Styles, Linguistic & Socio-Cultural Multiplicity, Socially and Economically Disadvantaged Groups (SEDGs)
1.2 Philosophy of Inclusion: Meaning & definition of inclusion and inclusive education, Understanding barriers to inclusive education: Physical, Educational and Attitudinal
1.3 Changing/ Evolving Practices in the education of children with disabilities: Segregation, Integration & Inclusion
1.4 National Commissions & Policies Promoting Inclusive Education
1.5 International declarations & conventions promoting inclusive education

Unit 2: Adaptations, Reasonable Accommodations & Planning

2.1 Curriculum accommodation and modification: Concept, need, and principles
2.2 Disability-specific adaptation: requirements & approaches
2.3 Importance of communication & language for Inclusive Classroom
2.4 Participation in non-academic curricular activities: Need, planning, and adaptations
2.5 Assessments strategies for facilitating learning in an inclusive classroom and alternative evaluations

Unit 3: Inclusive Academic Instructions

3.1 Universal Design & addressing diversity: Meaning, key principles
3.2 Universal Design for Learning (UDL): Understanding principles and application to classrooms

3.3 Inclusive classroom environment
3.4 Differential instructions, response to intervention, and peer-mediated instructions (Peer Tutoring, Peer Assisted Learning)
3.5 Engaging Gifted Children: Cooperative Teaching Models

Unit 4: Supports and Collaborations for Inclusive Education

4.1 Planning for classroom engagement for all (Lesson planning for different subjects)
4.2 Advocacy & leadership for inclusion in education (Stakeholders of inclusive education & their responsibilities)
4.3 Resource rooms and the role of special educators (collaboration between classroom teacher and special educator)
4.4 Integration of ICT for Inclusion
4.5 Family Support & Community Involvement for Inclusion

Unit 5: Positive Behaviour Supports

5.1 Understanding behaviours: Topography, communicative and non-communicative functions, internal and external factors
5.2 Neuro-divergent affirming strategies to promote positive behaviour support (e.g. using interest, structure, visual strategies, self-stimulatory behaviours, providing choices and control)
5.3 Understanding the role of using motivation and teaching emotional regulation (ABA and CBM)
5.4 Creating safe and encouraging learning spaces, and predictable environments
5.5 Differentiating and managing shutdowns, meltdowns, and tantrums

Suggested Coursework/Practicum

- Visit Special Schools catering to at least two different disabilities and at least two inclusive schools and write observation reports highlighting pedagogy.
- Prepare a checklist for accessibility in mainstream schools for children with disabilities.
- Design a poster on inclusive education considering policy concerns.
- Prepare a lesson plan on any one school subject of your choice using any one inclusive academic instructional strategy.

Suggested mode of transaction

Group discussions following videos on UDL. A debate on Inclusion vs. Segregation. Hands on experience on adaptations. Plan for an advocacy program

Suggested modes of assessment

Peer assessment. Reflective practices.

Suggested Readings

Bartlett, L. D., & Weinstein, G. R. (2003). Successful Inclusion for Educational Leaders. New Jersey: Prentice Hall.
Choate, J. S. (1991). Successful Mainstreaming. Allyn and Bacon.
Choate, J. S. (1997). Successful Inclusive Teaching. Allyn and Bacon.

Daniels, H. (1999). Inclusive Education. London: Kogan.
Deiner, P. L. (1993). Resource for Teaching Children with Diverse Abilities, Florida: Harcourt Brace and Company.
Dessent, T. (1987). Making Ordinary School Special. Jessica Kingsley Pub.
Gargiulo, R.M. Special Education in Contemporary Society: An Introduction to Exceptionality. Belmont: Wadsworth.
Gartner, A., & Lipsky, D.D. (1997). Inclusion and School Reform Transferring America's Classrooms. Baltimore: P. H. Brookes Publishers.
Giuliani, G.A. & Pierangelo, R. (2007). Understanding, Developing and Writing IEPs. Corwin press: Sage Publishers.
Gore, M.C. (2004). Successful Inclusion Strategies for Secondary and Middle School Teachers, Crowin Press, Sage Publications.
Hegarthy, S. & Alur, M. (2002). Education of Children with Special Needs: from Segregation to Inclusion, Corwin Press, Sage Publishers.
Karant, P., & Rozario, J. ((2003). Learning Disabilities in India. Sage Publications.
Karten, T. J. (2007). More Inclusion Strategies that Work. Corwin Press, Sage Publications.
King-Sears, M. (1994). Curriculum-Based Assessment in Special Education. California: Singular Publications.
Lewis, R. B., & Doorlag, D. (1995). Teaching Special Students in the Mainstream. 4th Ed. New Jersey: Pearson.
McCormick, S. (1999). Instructing Students who Have Literacy Problems. 3rd Ed. New Jersey, Pearson.
Mishra, M., & Pettala, R. (Eds.). (2023). Education of Socio-Economic Disadvantaged Groups: From Marginalisation to Inclusion (1st ed.). Routledge India. https://doi.org/10.4324/9781003370222
Rayner, S. (2007). Managing Special and Inclusive Education, Sage Publications.
Ryandak, D. L. & Alper, S. (1996). Curriculum Content for Students with Moderate and Severe Disabilities in Inclusive Setting. Boston, Allyn and Bacon.
Sedlak, R. A., & Schloss, P. C. (1986). Instructional Methods for Students with Learning and Behaviour Problems. Allyn and Bacon.
Sharma A., & Singh, N. (2021). Trends in Inclusive Education.ISBN:978-93-93873-00-2, Renova International Publication
Stow L. & Selfe, L. (1989). Understanding Children with Special Needs. London: Unwin Hyman.
Turnbull, A., Turnbull, R., Turnbull, M., & Shank, D.L. (1995). Exceptional Lives: Special Education in Today's Schools. 2nd Ed. New Jersey: Prentice-Hall Inc.
Vlachou D. A. (1997). Struggles for Inclusive Education: An Ethnographic Study. Philadelphia: Open University Press.
Westwood, P. (2006). Commonsense Methods for Children with Special Educational Needs - Strategies for the Regular Classroom. 4th Edition, London Routledge Falmer: Taylor & Francis Group.

Philosophical and Sociological Perspectives of Special and Inclusive Education

Course code: 2.6 **Credits: 2** **Semester: 7**

About the Course

This course will enable student-teachers to explore education from philosophical and sociological perspectives and provide hands-on experience in engaging with diverse communities, children, and schools. It also describes the various educational agencies that propagate education in our society. It throws light on the contributions of philosophers in education and inclusive education and tries to connect the sociological and philosophical foundation in the field of special and inclusive education.

Learning outcomes

After completion of this course, the student teacher will be able to:

- Explain the philosophical and sociological foundation of special and inclusive education.
- Describe the role of various agencies in the educational system in the context of special and inclusive education.
- Understand the concept of diversity.
- Develop an understanding of the trends, issues, and challenges faced by contemporary Indian Education in the global context.
- Appreciate the values and social changes regarding the education of persons with disabilities.

Course content

Unit 1: **Philosophical Foundations of Education**

1.1. Concept and Nature of Education: Concept of Education (Meaning and definition), Aims of Education (Individual, Social, and Democratic), Scope of education, Conceptual distinction between Education and Schooling, Learning, Training, Teaching, Instruction
1.2. Agencies of Education: School, family, community, and media as agencies of education
1.3. Schools of Philosophy: Western Philosophy (Naturalism, Idealism, Pragmatism, Existentialism) and Constructivism as Schools of Philosophy
1.4. Classical Indian Philosophies: Vedanta Darshan, Sankhya Darshan, Buddhism and Jainism
1.5. Contribution of Indian Philosophers: e.g., Sri Aurobindo, Mahatma Gandhi, Rabindranath Tagore, J. Krishna Murthy, Sonam Wangchuk

Unit 2: Philosophical Foundations of Special and Inclusive Education

2.1. Concept and nature of special and inclusive education- right to access education and receive appropriate support to achieve their full potential, regardless of their background or abilities
2.2. Concept of individual differences, individualization, and special education

2.3. Development of inclusive education- segregation, mainstreaming, integration, and inclusion
2.4. Equal opportunities and participation: accessibility and universal design
2.5. Contribution of pioneers in the field e.g., Itard, Seguin, Louis Braille, Valentin Hauy, Hellen Keller, A.G. Bell, Maria Montessori

Unit 3: Sociological Foundations of Education

3.1. Education in the social context: Relationship of Sociology with Education
3.2. Education and social change: meaning and nature
3.3. Education as social sub-system: education and the home, community with special reference to Indian Society
3.4. Education and social stratification, social equity, equality, and educational opportunities
3.5. Education of socially and economically disadvantaged sections of society

Unit 4: Social Context of Special and Inclusive Education

4.1. Understanding diversity, marginalization, and deprivation- meaning and nature
4.2. Approaches to diversity: developmental, social, economic, linguistic, cultural, geo-political and ecological
4.3. Diversity in the classroom
4.4. Concept of social exclusion and inclusion: types of exclusions, factors contributing to exclusion
4.5. Strategies to promote inclusion

Unit 5: Values and Social Change Towards Education of Persons with Disabilities

5.1. Vedic and ancient practices in India for the education of persons with disabilities, Continuum of Special education
5.2. Growth of educational opportunities for persons with a disability during the 20th and 21st centuries - tracing values and social change
5.3. Shifting from medical and charity models to a rights-based approach - nothing for us without us
5.4. Influence of philosophical and Sociological perspectives on Pedagogical Aims of Special and Inclusive Education
5.5. Influence of philosophical and sociological perspectives on organizational systems and practices of special and inclusive education

Suggested Coursework/Practicum

- Comparative discussions on philosophical and sociological foundations related to special and inclusive education.
- Analysis and interpretation of special and inclusive education.
- Attitude change towards special and inclusive education in the context of philosophical and sociological foundations.
- In-depth study and critical analysis through books, journals, and original documents.

- Submission of assignments on Vedic and ancient practices in India for the education of persons with disabilities, continuum of special education
- Enumerate the approaches to diversity: developmental, social, economic, linguistic, cultural, geo-political and ecological
- Getting involved with marginalized communities or CWSNs in community and family through surveys, group talks, and short projects.
- Getting practical experience by working with different communities, CWSNs, and schools.
- Compare among Agencies: School, family, community, and media as agencies of Special and Inclusive education

Suggested modes of transaction

Lectures, Discussions, PowerPoint Presentation & Field visits.

Suggested modes of assessment

- **Test:** Average of two class tests.
- **Assignment:** Any of the following topics:
- Philosophical foundations of special education, Conflicts, and social movements in India: Women, Dalit, Tribal and Disabled, Sociological foundations of inclusive education, Children with diversities, Inclusive education, Agencies of education, Contributions of various persons such as Hellen Keller, Valentine Hauy, Itard, etc., educational status of various groups, Special and inclusive schools

Suggested readings

Books

Aggarwal. J. C. (1992). Development and Planning of Modern Education: New Delhi Vikas Publishing House Pvt. Ltd.

Ain, L. C. (2010). Civil Disobedience, Book Review Literary Trust: New Delhi. Select chapters.

Anand, S. P. (1993). The Teacher & Education in Emerging Indian Society, New Delhi: NCERT.

Bhat. B. D. (1996). Educational Documents in India, New Delhi: Arya Book Depot.

Bhatia, K. & Bhatia, B. (1997). The Philosophical and Sociological Foundations, New Delhi Doaba House.

Biswas. A. (1992). Education in India, Arya Book Depot. New Delhi

Biswas. A., & Aggarwal, J.C. (1992). Education in India, Arya Book Depot New Delhi.

Chakravarty, S. (1987). Development Planning: The Indian Experience, Oxford University press: New Delhi.

Chandra, B. (1997). Nationalism and Colonialism, Orient Longman: Hyderabad.

Choudhary. K.C., & Sachdeva, L. (1995). Total literacy by 2000: New Delhi: IAE Association.

Deaton A., & Dreze, J. (2008-2009). Poverty and Inequality in India in Raj Kapila and Uma Kapila (Ed.) in Indian Economy since Independence. Oxford University Press: New Delhi.

Deshpande, S. (2004). Contemporary India: A Sociological View. Penguin: New Delhi.

Dubey, S. C (2001). Indian Society, National Book Trust: New Delhi.

Famous Speeches of Gandhi ji: Speech on the Eve of The Last Fast, January 12, 1948.

Jain, L.C. (2010). Civil Disobedience, Book Review Literary Trust, New Delhi.

Jagannath. M. (1993). Indian Education in the Emerging Society, New Delhi Sterling publishers Pvt. Ltd.
Jangira, N.K. (2012). NCERT Mother of Inclusive Education. Address on Golden Jubilee of NCERT at RIE, Ajmer on 01 Sept. 2012.
Kashyap, S. C. (2009). The Constitution of India, National Book Trust: New Delhi.
Sapra. C. L., & Aggarwal, A. (1987): Education in India some critical Issues. New Delhi: National Book Organization.
Saraswathi, T. S. (1999). Culture, Socialization and Human Development, New Delhi: Sage Publications.
Sen, A., & Dreze, J. (1997). India: Economic Development and Social Opportunity, Oxford India: Delhi.
Speeches of Gandhi ji: Speech on the Eve of The Last Fast, January 12, 1948. Government of India.
Steven, B. (1998). School and Society, New Delhi: Sage Publications.
Suresh, D. (1998). Curriculum and Child Development, Agra: Bhargava.
Taneja. V.R. (1998). Educational Thoughts and Practice, Delhi University Publications.
Vaidyanathan, A. (1995). The Indian Economy: Crisis, Response and Prospects.
Tracts of the Times. Orient Longman Publications: New Delhi.
Weber. O.C. (1990). Basic Philosophies of Education, New York Holt, Rinehart and Winston.
शुक्ल, एस. सी. और कुमार, के. (सं) (२००८) शिक्षा का समाज शास्त्रीय सन्दर्भ. (अनु.) एम .सी .डोनिया. ग्रन्थ शिल्पी : नई दिल्ली .
कुमार ,के ,.१९९८ .शैक्षिक ज्ञान और वर्चस्व .ग्रन्थ शिल्पी :नई दिल्ली .
कुमार ,के .2007 ,.मेरा देश तुम्हारा देश– भारत और पाकिस्तान के स्कूली इतिहास में स्वतंत्रता संघर्ष .राजकमल प्रकाशन :नई दिल्ली .
तेत्सुको ,के ,.२०११ .तोत्तो चान) .अनु (.पू .या .कुशवाहा .नेशनल बुक ट्रस्ट ,नई दिल्ली .
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होल्ट ,जे ,.२००२ .बच्चे असफल कैसे होते हैं) ?अनु (.पू .या .कुशवाहा .एकलव्य प्रकाशन : भोपाल

Online links

a) http://unesdoc.unesco.org/images/0023/002322/232205e.pdf
b) http://www.gandhi-manibhavan.org/gandhicomesalive/speech8.htm
c) http://www.mkgandhi.org/speeches/speechMain.htm

Curriculum Development, Adaptation and Evaluation (Secondary Stage)

Course code: 2.7 (Secondary) **Credits: 2** **Semester: 7**

About the Course

This paper delves into the intricacies of curriculum designing and implementation for secondary school students with disabilities, examining various approaches and strategies essential for fostering inclusive learning environments. At the heart of this discussion lays the concept of curriculum adaptation, which plays a pivotal role in ensuring that educational content is accessible and meaningful to all students, regardless of their abilities. Explore how educators can tailor curriculum freamworks to accommodate the diverse learning style and requirement of students with special needs. As well, scrutinize the importance of pedagogical practices and skills in delivering effective instruction within inclusive classrooms, emphasizing the significance of differentiation and individualized support. Moreover, the evaluation of inclusive curriculum initiatives is essential for gauging their efficacy and identifying areas for improvement. By assessing the impact of inclusive education on students' academic perfomance, social intergration, and overall well-being, educators can refine their practices and foster continours improvement in the realm of inclusive education at secondary school level.

Learning outcomes

After completion of this course, the student teacher will be able to:

- Understand and apply curricular design and development for teaching the students at Secondary Stage and learn curricular areas, structure and phases at secondary stage.
- Apply curricular approaches, learning environment, TLM and effective pedagogy for students at Secondary Stage.
- Evaluate pedagogical practices and teaching skills for students at Secondary Stage.
- Perform curricular adaptation and use assistive technology for students with disabilities.
- Acquire knowledge on curriculum assessment and implement Universal Design for Learning for curricular planning and evaluation.

Course content

Unit 1: Curriculum Designing

5.6 Meaning, Definition, Concept and Principles of curriculum designing and development
5.7 Curricular Areas at Secondary Stage
5.8 Curricular structure and phases at Secondary Stage: Group 1, Group 2, Group 3 and Group 4
5.9 Implications of Curriculum at Secondary Stage
5.10 Curriculum development across school subjects (Language, Mathematics, Science, Social Science, Arts, Interdisciplinary, Physical and Vocational Education)

Unit 2: Curricular Approaches at Secondary School Level

2.1 Curricular Approaches to learning standards, Content, Pedagogy and Assessment
2.2 Learning environment and Teaching Learning Materials at Secondary Stage

2.3 Effective pedagogy at Secondary Stage – Experiential Learning, Learning by inquiry, Project based learning, Workshops, Internships, Apprenticeships, Laboratory Experiemtns, didactic Approach, Demonstration, group conversation, Discussion, etc Time allocation for the Secondary Stage

2.4 Integration of knowledge of India in curriculum designing, Need and importance of course on Indian Knowledge Systems

2.5 Approaches in developing values and dispositions at Secondary Stage

Unit 3: Pedagogical Practices and Skills

3.1 Ensuring supportive school culture & practices – Guidance and counselling at Secondary Stage

3.2 Teacher Empowerment — Emerging innovative pedagogical practices and skills

3.3 ICT Solutions for Secondary Education

3.4 Curricular goals and competencies across school subjects at Secondary Level

3.5 Concept of Inclusion, principles and inclusive practices for students with disabilities and students with special talents

Unit 4: Curriculum Adaptation for Children with Special Needs

4.1 Curricular adaptations for teaching children with sensory impairment at Secondary Stage

4.2 Curricular adaptations for teaching children with intellectual and developmental disabilities - Autism, Cerebral Palsy, Specific Learning Disabilities and Multiple disabilities at Secondary Stage

4.3 Curricular adaptations for teaching children with locomotor disability at Secondary Stage

4.4 Curricular adaptations for children with other disabilities in RPwD e.g Blood disorders, chronic neurological disorders that may have educational implications at Secondary Stage

4.5 Assistive and Adaptive Technology in curriculum adaptation across disabilities

Unit 5: Curriculum Evaluation

5.1 Concept, Meaning, Definition of Curriculum Evaluation, Assessment – Concept and Meaning

5.2 Need for Curricular Assessment - Types and Approaches in Curriuclum Assessment at Secondary

5.3 Implication of curriculum assessment and emerging trends in curriculum evaluation in special education – Ability Based Assessment, Adaptive Assessment System, Need Based Assessment

5.4 Curricular Assessment across School Subjects (Language, Mathematics, Science, Social Science, Arts, Interdisciplinary, Physical and Vocational Education) at Secondary School Stage

5.5 Need of Universal Design for Learning for curricular design and evaluation at Secondary Stage

Suggested Coursework/Practicum

- Internships
- Apprenticeships
- Laboratory Experiemtns
- Demonstration and group conversation
- Project(s) (Group/Small Group/Individual)
- Workshops and Training Sessions

Suggested modes of transaction

Differentiated instruction, lecture-based instruction, technology-based learning, group learning, individual learning, inquiry-based learning, kinesthetic learning, game-based learning, and expeditionary learning

Suggested assessment

- Periodic assignments and tests
- Group projects
- Assessment of class presentations
- Assessment of submitted projects

Suggested readings

Books

- Barlex, D. (2012). Curriculum development. In Technology Education for Teachers (pp. 197-230). Brill.
- Carroll, J. M., & Muller, C. (2018). Curricular differentiation and its impact on different status groups including immigrants and students with disabilities. Handbook of the Sociology of Education in the 21st Century, 251-273.
- Goodson, I. F. (2013). School subjects and curriculum change. Routledge.
- Halder, T., Adaikalam, R., Sujathamalini, J., & Gunasekaran, K. Inclusive Development of Children with Disabilities.
- Handelzalts, A. (2019). Collaborative curriculum development in teacher design teams (pp. 159-173). Springer International Publishing.
- Jones, C. J. (2010). Curriculum development for students with mild disabilities: Academic and social skills for RTI planning and inclusion IEPs. Charles C Thomas Publisher.
- Loedding, N. B. (2015). Effect of common core curriculum standards on high school students with disabilities (Doctoral dissertation, Walden University).
- Macalister, J., & Nation, I. P. (2019). Language curriculum design. Routledge.
- Marsh, C. (1990). Reconceptualizing School-Based Curriculum Development. Falmer Press, 1900 Frost Road, Suite 101, Bristol, PA 19007.
- Moore, A. (2012). Teaching and learning: Pedagogy, curriculum and culture. Routledge.
- Polloway, E. A., Patton, J. R., Serna, L., & Bailey, J. W. (2001). Strategies for teaching learners with special needs. Merrill/Prentice Hall.

- Quick, S. K. (1978). Secondary impacts of the curriculum reform movement: A longitudinal study of the incorporation of innovations of the curriculum reform movement into commercially developed curriculum programs. Stanford University.
- Saleem, M. T., & Rizwan, S. Curriculum Planning and Development. B. Ed. (4 Years), 23.
- Skilbeck, M. (1990). School based curriculum development. Sage.
- Slattery, P. (2012). Curriculum development in the postmodern era: Teaching and learning in an age of accountability. Routledge.
- Thijs, A., & Van Den Akker, J. (2009). Curriculum in development. Netherlands Institute for Curriculum Development (SLO).
- VanTassel-Baska, J., & Baska, A. (2021). Curriculum planning and instructional design for gifted learners. Routledge.
- Yadav, S. K. (2011). National study on ten year school curriculum implementation. New Delhi: NCERT.

Online links

- https://www.egyankosh.ac.in/bitstream/123456789/80490/1/Unit-3.pdf
- https://files.eric.ed.gov/fulltext/ED139060.pdf
- https://cbseacademic.nic.in/web_material/CurriculumMain21/Main-Secondary/Intitial_pages_sec_2020-21.pdf
- file:///C:/Users/SPL%20EDN/Downloads/JPSP+-+2022+-+12.pdf
- https://ncert.nic.in/pdf/notice/learning_outcomes.pdf
- https://www.unom.ac.in/asc/Pdf/CURRICULUM%20DESIGN%20AND%20DEVELOPMENT-1.pdf
- https://www.education.gov.in/sites/upload_files/mhrd/files/document-reports/Confluence.pdf
- https://www.wbnsou.ac.in/online_services/SLM/BED/C-13_MR.pdf

Perspectives on School Leadership and Management

Course Code: 2.8 **Credits: 4** **Semester: 8**

About the Course

With evolving educational policies, particularly in the context of NEP 2020, school leadership and management are crucial for enhancing outcomes for students of diverse abilities. Effective leadership influences teacher capacity, and school climate, and fosters positive change through digital transformation and strategic initiatives. This course promotes a comprehensive understanding of educational contexts, future growth opportunities, and collaboration with school leaders. It emphasizes creating safe, inclusive spaces where all learners can thrive, engaging with parents, listening to learners and teachers, and ensuring accessibility (Indian Sign Language, Braille, and other supportive systems).

Learning outcomes

After completion of this course, the student teacher will be able to:

- Describe the role and importance of school leadership in inclusive education.
- Understand diversity in education and the challenges in school leadership.
- Develop frameworks for managing change among students, teachers, support staff, families, and the community.
- Implement school-level changes in curriculum, supportive skills, professional development, and resource allocation.
- Explain different school leadership dimensions.

Course content

Unit 1: Education Management - Nature, Scope, and Objectives

1.1 Systematic planning, organizing, directing, and regulating educational resources
1.2 Scope of administrative, academic, human resource, facility, and financial management
1.3 Community and stakeholder engagement to promote equity and inclusion
1.4 Role and Inclusion of PwDs in leadership and decision-making positions
1.5 Intersectionality: social, economic, gender, disability, special needs, migrant population, geographical location, and accessibility issues

Unit 2: School Leadership in Diverse Learning Contexts

2.1 Facilitative Leadership to create a more inclusive learning environment
2.2 Promoting school belonging among diverse learners through student leadership roles and community engagement
2.3 Developing a collaborative culture among staff
2.4 Promoting lifelong learning through professional development and mentoring
2.5 School leaders as change-makers: Using data and feedback to drive school-wide change and transformation

Unit 3: Educational Leadership and Management

3.1 Using data for decision-making to enhance learning and development
3.2 Overview of leadership theories: transformational, distributed, servant, and instructional leadership
3.3 Leadership styles and their influence on school culture
3.4 Equity-centred leadership practices
3.5 Case studies of best practices in school leadership with diverse learners

Unit 4: Role Modelling and Wellbeing in Leadership

4.1 Role of school leaders as role models
4.2 Promoting wellbeing among staff and students
4.3 Strategies for self-care and resilience in leadership
4.4 Fostering a positive school culture through role modelling
4.5 Supporting mental health and wellness initiatives

Unit 5: Social-Emotional Skills for School Leaders

5.1 Importance of social-emotional skills in leadership
5.2 Building Emotional Intelligence
5.3 Strategies for emotional regulation and stress management
5.4 Developing empathy and active listening skills
5.5 Conflict resolution and negotiation skills

Suggested Coursework/Practicum

- Visit educational setups to interview school leaders.
- Analyse examples of transformative changes promoting inclusive school culture.
- Develop a school improvement plan essay or debate.

Suggested modes of transaction

Experiential workshops, Activities, Case study analysis, Interactions with PwD leaders working as school leaders, symposiums, focus group discussions.

Suggested modes of assessment

- Individual and group projects, class tests, and discussion on given topics with credits given to the students for their efforts and participation.
- Periodic tests and assignments.
- Evaluate a pamphlet/poster/booklet prepared by the student-teacher to promote collaborative culture among staff.
- Rate one case study submitted by the student-teacher on PwD leader in the field.

Suggested readings

Books

Bateman, D. F., & Bateman, C. F. (2014). *A Principal's Guide to Special Education* (3rd Edition). Council For Exceptional Children.

Causton, J., & Theoharis, G. (2014). The Principal's Handbook for Leading Inclusive Schools. Brookes Publishing Company.

Mythili, N. (2024). School Leadership in India. Routledge India.

Fullan, M. (2014). The Principal: Three Keys to Maximizing Impact. Jossey-Bass.

Leithwood, K., & Jantzi, D. (2006). Transformational School Leadership for Large-Scale Reform: Effects on Students, Teachers, and their Classroom Practices. Springer.

Journals

Bailey, J., & Weiner, R. (2022). Interpreting social-emotional learning: How school leaders make sense of SEL skills for themselves and others. *School Leadership Review, 16*(2), 4.

Bakshi, S. (2022). Pathways to School Leadership: A study on school leadership practices in special schools of Kerala.

Gómez-Leal, R., Holzer, A. A., Bradley, C., Fernández-Berrocal, P., & Patti, J. (2022). The relationship between emotional intelligence and leadership in school leaders: A systematic review. *Cambridge Journal of Education, 52*(1), 1-21.

Gopal, S. (2024). Educational Leadership and Professional Learning in Teacher Education: An Indian Perspective. *Educational Administration: Theory and Practice, 30*(4), 1871–1877. https://doi.org/10.53555/kuey.v30i4.1774

Gupta, M. Does A Dynamic School Leader Develop Dynamic Teachers? Management Functions in Covid-19 Era, 57.

Sharma, D. (2022). National leadership mentor program for school teachers: Scaffolding beginner teacher towards leading school.

Sibi, K. K., & Miranda, J. J. (2022). 21st Century Principal Leadership in Higher Education: Challenges and Preparedness. International Journal of Education and Management Studies, 12(1), 52-57.

Online Links

Understanding Singaporean Educational Leadership

Shaala Siddhi: National Programme on School Standards and Evaluation (https://shaalasiddhi.niepa.ac.in/ppt/AllDomain_PPT_English/Domain-5.pdf)

School Leadership for Special Education (https://www.tn.gov/content/dam/tn/education/special-education/School_Leadership_for_SpEd_2022.pdf)

Life Skills Curriculum (https://dreamadream.org/life-skills-curriculum/)

UNESCO

Acts, Policies and Provisions for Persons with Disabilities

Course code: 2.9 **Credits: 2** **Semester: 8**

About the Course

The course aims to develop a comprehensive knowledge of various acts and policies related to education in general and the education of persons with disabilities in particular. The course will discuss the acts and policies with reference to both national and international contexts. The learners are expected to develop critical and reflective thinking on the acts and policies and establish the linkage with existing provisions and schemes towards protecting the rights of persons with disabilities as well as empowering them with equitable and quality education.

Learning outcomes

After completion of this course, the student teacher will be able to:

- Explain the acts and policies that shaped Indian education during the 20th and 21st centuries.
- Describe various international mandates and conventions that have significant implications in strengthening special and inclusive education.
- Discuss the National Acts, Policies, and relevant schemes in favour of persons with disabilities.
- Critically analyse the existing acts and policies that promote the education of persons with disabilities.
- Reflect on the existing provisions and schemes that promote equitable and quality education.

Course content

Unit 1: Constitutional Provisions, National Commissions & Policies on Education in India

1.1. Ideas of Equality, Liberty, Secularism, and Social Justice
1.2. Constitutional provisions on the right to education, women's education, education for the weaker sections and minorities
1.3. University Education Commission (1948-49), Secondary Education Commission (1952-53), Education Commission (1964-66)
1.4. National Policy on Education (NPE 1968), National Policy of Education (NPE 1986 and POA 1992), National Education Policy (NEP, 2020)
1.5. National Curriculum Framework (NCF, 2005), National Curriculum Framework for Teacher Education (NCFTE, 2009), National Curriculum Framework for School Education (NCFSE, 2023)

Unit 2: International Conventions and Policies for Persons with Disabilities

2.1. Salamanca Statement (1994) and Dakar Framework for Action (2000)
2.2. UNCRPD, 2006 (United Nations Convention on Rights of Persons with Disabilities)
2.3. MDG, 2015 (The Millennium Development Goals Report); Sustainable Development Goals
2.4. INCHEON strategies (United Nations effort, Incheon 2030)
2.5. Biwako Millennium Framework

Unit 3: National Acts & Policies for Persons with Disabilities

3.1. Landmarks in development of education of children with disabilities: Concept of disability in Sergent Report, Disability in Charter Act 1823, Central Advisory Board of Education (CABE 1923) on children with hearing impairment (sign language)
3.2. RCI Act, 1992, PwD (Persons with Disability) Act, 1995
3.3. NT (National Trust) Act, 1999
3.4. RTE Act (2009 and amended 2012)
3.5. The Right of Persons with Disability Act 2016

Unit 4: Provisions, Programmes and Schemes

4.1. Protection of Rights and Redressal of Grievenances through office of Chief Commissioner of Disability and State Commissioner of Disability under RPD Act 2016
4.2. National and State Commission for Protection of Child's Right w.r.t. RTE Act
4.3. Promotion of Inclusive Education- IEDC (1974, 1983) (Integrated Education for the Disabled Children), Samagra Shiksha Abhiyan [SSA (2000, 2011) (Sarva Shiksha Abhiyan), RMSA, 2009 (Rashtriya Madhyamik Shiksha Abhiyan)], IEDSS, 2009 (Inclusive Education of the Disabled at the Secondary Stage)
4.4. UGC Guidelines on Accessibility, Equal Opportunity Cell in Universities and Colleges
4.5. Provisions under SIPDA

Unit 5: Analysis of Acts, Policies and Provisions promoting Right to Education and Universal Access

5.1. Indian perspective on Disability (Divyang Jan)
5.2. Issues of Universal enrolment, Universal retention, and Universal learning; Equalizing educational opportunities, Physical, economic, social, cultural, language issues in education (addressing multilingual practices of the children)
5.3. Inequality in schooling: public-private schools, rural-urban schools, single teacher schools
5.4. Other forms of inequalities such as regular and distance education systems
5.5. Challenges in implementation and gaps in acts, policies and provisions

Suggested Coursework/Practicum

- Group activity: presentation of important acts and policies followed by discussion in the classroom.
- As a groupwork ask students to prepare a wall magazine highlighting acts, policies and provisions separately.
- Undertake a survey on any stakeholder (parents, teachers or school managers) regarding their opinion on various available schemes and facilities.

Suggested modes of transaction

Group work, Lecture cum presentation, Self-reading, assignments and field works.

Suggested modes of assessment

Assessment of students' engagement in group work, assignments, quizzes, class tests and term end examinations.

Suggested readings

Convention on the Rights of the Child Adopted and opened for signature, ratification and accession by General Assembly resolution 44/25 of 20 November 1989 entry into force 2 September 1990, in accordance with article 49.
https://www.ohchr.org/sites/default/files/Documents/ProfessionalInterest/crc.pdf

DEPwD (2016). The Rights of Persons with Disabilities Act, Ministry of Social Justice and Empowerment, Govt. of India, New Delhi.
https://www.iitg.ac.in/eo/sites/default/files/RPwDAct2016.pdf

DoSEL (2020). National Education Policy-2020, Department of School Education and Literacy, Ministry of Human Resource Development (Ministry of Education), New Delhi.

DoSEL (2023). National Curriculum Framework for School Education 2023. Department of School Education and Literacy, Ministry of Education), New Delhi. https://www.education.gov.in/sites/upload_files/mhrd/files/ncf_2023.pdf

DoSEL (2023). National Guidelines and Implementation Framework on Equitable and Inclusive Education, Department of School Education and Literacy, Ministry of Education, New Delhi.

DoSEL (2009). The Right of Children to Free and Compulsory Education Act, 2009. Ministry of Human Resource Development (now Ministry of Education), New Delhi. https://www.indiacode.nic.in/bitstream/123456789/13682/1/rte_act_2009.pdf

Hegarthy, S. & Alur, M. (2002). Education of Children with Special Needs: From Segregation to Inclusion, Corwin Press, Sage Publishers.

MHRD (1968). National Policy on Education, 1968. Ministry of Human Resource Development (now Ministry of Education), New Delhi. https://www.education.gov.in/sites/upload_files/mhrd/files/document-reports/NPE-1968.pdf

MHRD (1986). National Policy on Education 1986. Ministry of Human Resource Development (Ministry of Education), New Delhi. https://ncert.nic.in/pdf/nep/npe86.pdf

MSJE (2006). National Policy for Persons with Disabilities 2006. Ministry of Social Justice and Empowerment, Government of India, New Delhi.

NCERT (2006). Position Paper- National Focus Group on Education of Children with Special Needs. NCERT, New Delhi.
http://14.139.60.153/bitstream/123456789/232/1/NCERT-national%20focus%20group-special_ed_final1.pdf

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UGC (2022). Accessibility Guidelines and Standards for Higher Education Institutions and Universities.
https://www.ugc.gov.in/KeyInitiative?ID=MNJdt2jZ+aRpA/DRRKQwyg==

UNESCO (2004). Education for All: The Quality Imperative. EFA Global Monitoring Report. Paris SEL for School (https://mgiep.unesco.org/course-sel-for-schools

Reading and Reflective Practices

Course code: 2.10(a) **Credits: 2** **Semester: 8**

About the Course

One of the core areas that schools focus on is age-appropriate and fluent literacy skills among the students. Hence, aspirant graduates who intend to make a career in special education must also be good readers and writers. This course is skill-based and activity-oriented and is designed to allow the learners to enhance their reading and writing skills from a professional perspective and apply them suitably for students with disabilities.

Learning outcomes

After completing the course, the learners will be able to:

- Discuss the role and importance of literacy in education.
- Describe the difference between reading and reading comprehension and the skills required.
- Narrate the different types of texts.
- Discuss writing as a process and a product.
- Detail out the procedure for independent writing.

Course content

Unit 1: Reflections on Literacy

1.1 Role of literacy in education, career, and social life
1.2 Literacy and Self-esteem
1.3 Literacy and First Language
1.4 Learning a second language and educational bilingualism
1.5 Braille Literacy

Unit 2: Reflections on Reading and Comprehension

2.1 Reading – reading aloud, silent reading
2.2 Reading comprehension- learning to read and reading to learn (Chall's stages of reading)
2.3 Developing reading and reading comprehension from foundational to higher level; activities and strategies
2.4 Self-regulation and Meta-cognitive awareness for reading
2.5 Reading and reading comprehension amongst children with disabilities

Unit 3: Responding to Texts

3.1 Indicators of text comprehension: retelling, paraphrasing, summarizing, answering, predicting, commenting, and discussing
3.2 Type of texts narrative, descriptive, directive, and argumentative
3.3 Responding to text - reports, policy documents, news, editorials, academic articles, advertisements, resumes, storybooks, and novels
3.4 Web search, digital and e-books

3.5 Reading preferences, reading for pleasure

Unit 4: Writing as a Process and Product

4.1 Writing as a process: language, grammar, vocabulary, spelling
4.2 Content, intent, audience, and organization
4.3 Process of writing - handwriting, neatness, alignment, and spacing
4.4 Self-editing and peer editing using COPS (capitalisation, organisation, punctuation and spellings)
4.5 Evaluating Students' Writing: Conceptualisation, appropriateness, complexity, organization and literary richness and originality and creativity

Unit 5: Independent Writing

5.1 Writing: Picture description, expansion of ideas, essays, stories, poems, original writing
5.2 Professional writing: e.g. applications, agenda, minutes, note taking and others
5.3 Converting written information into graphical representation
5.4 Filling up Surveys, Forms, Feedback Responses, Checklists
5.5 Professional writing in special education and ethics

Suggested Coursework/Practicum

- 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.

Suggested modes of transaction

Lectures, journal clubs, seminars, debates and discussions for enhancing reading and writing skills.

Suggested modes of assessment

Evaluation of assignments on reading and writing, reading groups and writing groups and their presentations.

Suggested Readings

Books

Baniel, A. (2012). Kids beyond limits. Perigee Trade, New York.
McCormick, S. (1999). Instructing students who have literacy problems. Merrill, New Jersey.

Ezell, H., & Justice, L. (2005). Programmatic Research on Early Literacy: Several Key Findings. IES 3rd Annual Research Conference: American Speech Language & Hearing Association.

Gallangher. K. (2004). Deeper Reading: Comprehending Challenging Texts. Stenhouse Publishers.

Heller, R. (1998). Communicate clearly. DK Publishing, New York.

Luetke-Stahlman, B., & Nielsen, D. (2003). Early Literacy of Kindergartners High Beam.

May, F. B. (1998). Reading as communication. Merrill, New Jersey.

May, F. B. (2001). Unravelling the seven myths of reading. Allyn and Bacon, Boston.

McGregor, T. (2007). Comprehension Connections: Bridges to Strategic Reading. Heinemann Educational Books.

Miller. D. (2002). Reading with Meaning: Teaching Comprehension in the Primary Grades. Stenhouse Publishers, New York.

Pandit, B., Suryawanshi, D. K., & Prakash, M. (2007). Communicative language teaching in English. Nityanutan Prakashan, Pune.

Paul, P. V. (2009). Language and Deafness. Jones and Bartlett, Boston.

Soundarapandian, M. (2000). Literacy campaign in India. Discovery Publishing House, New Delhi.

Tovani, C., & Keene. E. O. (2000). I Read It, but I Don't Get It: Comprehension

Strategies for Adolescent Readers. Stenhouse Publishers.

Online links

http://www.asercentre.org

https://www.landmarkoutreach.org/wp-content/uploads/Challs-Stages-of-Reading-Development.pdf

https://www.learner.org/wp-content/uploads/2019/06/RWD.DLU1_.ChallsStages.pdf

Disability, SEDGs, and Gender

Course Code: 2.10(b) **Credits: 2** **Semester: 8**

About the course

This course will prepare learners to develop an understanding of the intersectionality of disability with Gender and other Socio-Economically disadvantaged Groups (SEDGs). The purpose is to inculcate human oneness and value and respect persons with disabilities regardless of their socio-cultural identities, gender, geographical conditions, and socio-economic backgrounds. This course is also aimed at creating awareness among the learners about the legal provisions for the empowerment of persons with disabilities belonging to different socio-economically disadvantaged groups (SEDGs). The expected long-term benefit is to develop knowledge, skills, and attitudes among learners about the sensitivity and vital points of consideration while planning and executing learning activities for students with disabilities belonging to diverse SEDGs.

Learning outcomes

After completion of this course, the student-teachers will be able to:

- Develop an understanding of a human rights-based approach in the context of disability, human values, and co-existence of disability among socio-economically disadvantaged groups.
- Explain the socio-demographic perspectives of gender and disabilities, the compounding impact of gender and disability, legal safeguards for girls and transgender, and gendered experiences of students with disabilities.
- Describe the socio-cultural and educational issues and concerns of students with disabilities belonging to Socio-cultural groups (ST, SC, OBC, and Minorities), educational programmes, and the role of a teacher.
- Illustrate the challenges in the education of students residing in difficult and aversive geographical terrains, educational initiative, and the role of a teacher.
- Enlist the challenges faced by children with disabilities in difficult circumstances, analyse the disadvantageous impact on the CwDs, and plan out the educational intervention programmes for them.

Course content

Unit 1: Human Rights, Human Values and Disability

1.1. Human Rights-based approach: Concept, history, and advantages
1.2. Principles of human rights-based approach- Equality and non-discrimination, universality & inalienability, participation and inclusion, interdependence and interrelatedness, accountability, and rule of law
1.3. Instruments of human rights system: Legal frameworks, policies & programs, resources and supports, public awareness-information, education, and communication (IEC), establishments, networking, and collaborations with different societal spheres
1.4. Human values and disability: Social existence of disability, human diversity and rights, empowerment, enforceability, indivisibility, participation, legal and social protection, safety and security, and advocacy
1.5. Socio-Economically Disadvantaged Groups (SEDGs) and human empowerment: SEDGs - social and legal identities, their socio-economic conditions, empowerment

provisions for their health care, education, employment, legal protection, and justice, accessible public spaces and services, social, inclusion and community participation.

Unit 2: Gender Identity and Disability

2.1. Gender and socialization practices: Difference between gender and sex, stigma and discrimination, gender roles and responsibilities, socialization of boys, girls, and transgender in family and society.

2.2. Disability and socialization practices: gendered disability, stigma and discrimination, violence, individuals with a disability and their roles and responsibilities, socialization of boys, girls, and transgender with disability in family and society.

2.3. Legal safeguards for girls and transgender with and without disability- Constitutional provisions, Protection of Women from Domestic Violence (PWDV) Act 2005, POCSO-2012, Juvenile Justice (JJ) Act 2015, RTE (Amendment) Act 2012 and, RPwD Act 2016, Transgender Persons (Protection of Rights) Act, 2019, The Criminal Law (Amendment) Act, 2013 & 2018

2.4. Gendered experience of students with disability- Residential and non-residential schools, classrooms and beyond, curriculum, learning activities, textbooks, assessment, equity and social role valorisation, implications for teaching and learning in different learning centers.

2.5. Educational initiatives and teachers' role: Policy, schemes and programs, gender inclusion fund, measures for empowerment of girls, women, and transgender with a disability on enhancing the quality of their socio-economic conditions, education, health (including sexual, reproductive, and mental health), employment, lifestyle.

Unit 3: Disability and Socio-cultural Groups

3.1. Socio-Cultural Groups-Constitutional and social identities, educational and social rights, policy and programs for scheduled tribes, scheduled castes, other backward classes, and linguistic and religious minority groups.

3.2. Socio-educational issues and concerns- marginalization, discrimination and social exclusion, harassment, poverty, social mores & customs, language, inaccessibility to quality schools.

3.3. Gendered disability among socio-cultural groups- multiple and compound impacts of disability and disadvantage, lack of resources and supports, and underrepresentation in schools.

3.4. Educational initiatives: Identification of untapped talents among SEDGs, inclusion fund, upgradation and strengthening of schooling system, academic activities under tribal sub-plan and scheduled caste sub plan, relaxations and reservation schemes, scholarships, and other incentive schemes.

3.5. Teachers' role in promoting equality and inclusion- respect and acceptance of socio-cultural conditions, contextualization of curriculum, multilingual pedagogical approach, skills of multi-grade teaching, identification of socio-cultural milieu and other resources, use of socio-cultural capital of learners in teaching and learning.

Unit 4: Disability and Geographical Conditions

4.1. Geography and disparity in education - inter and intra states disparity, poverty, specific issues of coastal areas, hilly areas, desert, natural disasters prone areas, developmental projects area, international boundaries area.

4.2. Geographical conditions and disability- issues related to different geographical terrains, access to education, access to rehabilitation services, infrastructural conditions, language and culture, availability and accessibility of resources, services, information, communication, and transport.

4.3. Educational initiatives in difficult terrains: Government schemes and programs, intervention in aspirational districts, PM- New15 point programs, Special Education Zones, Special Education Zones, residential schooling, alternative forms of schooling, scholarships, and other incentive schemes.

4.4. Local governance and collaboration: understanding the local governance, resource identification and resource mobilization, and collaboration with local organizations and community.

4.5. Teachers' role in promoting equality and inclusion- understanding the geographical conditions and learning needs of children, adjustment of learning spaces, adaptation, and accommodation in the scheduling of learning activities and timings, adaptation in curriculum, teaching-learning, assessment, and harnessing technology.

Unit 5: Disability, Socio-economic and Other Disadvantaged Conditions

5.1. Disability and poverty: Occurrence of disability, discrimination, and vulnerability, other interacting factors like family interaction, child rearing, nutrition, social and physical well-being, and employment.

5.2. Disability in migrant communities, refugees, construction workers- CwDs in migrating families, ambiguous sense of belongingness, lack of housing and inaccessible living arrangements, experiences of simultaneous discrimination, health, and social relations, and sense of helplessness.

5.3. Children with disability in chronic distress and at-risk conditions- CwDs of chronically ill parent(s), sex workers, single parents, prisoners, CwDs in juvenile/observation homes, CwDs engaged in substance abuse, CwDs living in vulnerable situations, orphans with disabilities, child beggars, destitute CwDs, victims with disabilities of or CwDs of victims of trafficking, victims with disabilities of disasters, social conflicts, war, and other human actions.

5.4. Educational initiatives: Policy, schemes and programs, short-term mitigating interventions and long-term sustainable interventions, educational opportunities in mobile schools, schools on wheels/tents, porta-cabin schools, learning in shelter homes, services of counsellors, social workers, and volunteers as in NEP 2020.

5.5. Teachers' role in promoting equality and inclusion: learning opportunities in difficult situations, curricula alignment, designing of portable learning aids, package programming and digital education, developing information and community support mechanisms, working with families in distress, identifying and use of strengths within at-risk community, resourcefulness, and service provision in crisis, inter and intra linkages in community and bridging the gap between the school and community.

Suggested Coursework/Practicum

- Design activity-log to establish a Gender Justice Club or Disability Support Circle in the school.
- Study the case of a woman with a disability and submit a detailed report.
- Explore the internet and document case studies of transgender with disability.
- Review selected paper/s authored by women with disability or read an autobiography of women with disability.
- Conduct a gender analysis of a selected Disability Act/Policy.
- Interact with children and families of socio-cultural groups, identify the challenges of education, and prepare a plan of action.
- Visit observation homes/shelter homes/homes of construction workers, and migrant families in your locality, interact with CwDs and families at risk, and prepare a package programme for her/his holistic development.

Suggested modes of transaction

This course has been designed to provide the student-teachers with a sociocultural perspective on disability. It aims to promote awareness about the space for disability equity and rehabilitation within the human rights system. As such the transaction of the course topics should be done through focus group discussions, and issue-based classroom interactions in addition to lectures and seminars. Field visits, cross-sectional surveys, case studies, assignments, and projects should be added to strengthen the transactional process and learning.

Suggested modes of assessment

Student-teachers will be observed on the field trips, evaluation of students-teachers, report of surveys, and analysis of the policy report. It has to be through formative and summative evaluation as per the university norms.

Suggested Readings

Books

DGS (2021). Inclusion of Transgender Children in School Education: Concerns and Roadmap. Department of Gender Studies, National Council of Educational Research and Training, New Delhi.

DoSEL (2020). National Education Policy-2020. Department of School Education and Literacy. Ministry of Human Resource Development (Now Ministry of Education), New Delhi.

Gobinda C. Pal (2010). Dalits with Disabilities: The Neglected Dimension of Social Exclusion. Working Paper Series Indian Institute of Dalit Studies New Delhi

Habib, L. A. (1997). Gender and Disability: Women's Experiences in the Middle East. Oxfam, UK.

Hans, A. (2015). Disability, Gender and the Trajectories of Power. Sage Publications Pvt. Ltd. New Delhi.

Keshwal, H. S. (2019). Independent Living and Sustainable Development of PWIDS. NIEPID (Divyangjan): Regional Centre Kolkata, Kanishka Publishers, New Delhi.

Meekosha, H. (2004). Gender and Disability. Sage Encyclopedia of Disability. New Delhi

Mittal, A.K. (2008) ED. Handbook for women with visual impairment. AICB, New Delhi.

NCERT (2006). Position Paper-National Focus Group on Gender Issues in Education. National

Council of Educational Research and Training, New Delhi.
NCERT (2013). Training Material for Teacher Educators on Gender Equality and Empowerment. National Council of Educational Research and Training, New Delhi.
NCERT (2017). Minority Education - Policies, Programmes and Schemes-Frequently Asked Questions. National Council of Educational Research and Training, New Delhi.
NCERT (2017). Modules for Enhancement of Quality Education-Issues, Challenges and Concerns of Scheduled Castes (A Training Package). National Council of Educational Research and Training, New Delhi.
NCERT (2020). Inclusion in Education - A Manual for School Management Committee. National Council of Educational Research and Training, New Delhi.
NCERT (2021). Educational Rights of Children with Special Needs-Frequently Asked Questions. National Council of Educational Research and Training, New Delhi.
NCTE (2004). Discrimination Based on Sex, Caste, Religion and Disability: Addressing through Educational Interventions. NCTE, New Delhi
O'Brien, J., & Forde, C. (2008). Tackling Gender Inequality, Raising Pupil Achievement. Dunedin Academic Press, Edinburgh.
Pal, G.C. (2010). Dalits with Disabilities: The Neglected Dimension of Social Exclusion. Working Paper Series, Indian Institute of Dalit Studies, New Delhi.
Ridgeway, C. L. (2011). Framed by Gender: How Gender Inequality Persists in the Modern World. Oxford University Press, New York.
Samuels, E. (2014). Fantasies of Identification: Disability, Gender, Race. NYU Press, New York.
SCSTRTI. Study on Cost Disability in TSP Areas of Chhattisgarh, Jharkhand and Odisha, Scheduled Caste and Scheduled Tribe Research and Training Institution, Govt. of Odisha.
Smith, B. G., & Hutchison, B. (2013). Gendering Disability. Rutger University Press, New Jersey.
Treas, J., & Drobnic, S. (2010). Dividing the Domestic: Men, Women, and Household Work in Cross-National Perspective. Stanford University Press, Stanford.

Journals

Ghosh, M. (2015). Disability and women: A Note on the Tribal Aboriginals in Darjeeling Hills. International Journal of Scientific Research, 4(4), doi:10.36106/ijsr
Purkayastha, D. (2010). Economic Growth, Intra-Household Resource Allocation and Gender Inequality. Atlantic Economic Journal, 38(4), 465-466.

Online links

Alber, B.& Hurst, R. (2004). Disability and a human rights approach to development. Disability Knowledge and Research. (available at www.disabilitykar.net)
The Criminal Law (Amendment) ACT, 2018 Available at https://www.mha.gov.in/sites/default/files/CSdivTheCriminalLawAct_14082018_0.pdf
The Criminal Law Amendment Act 2013, available at The_Criminal_Law_Amendment_Act_2013_0.pdf
The Juvenile Justice (Care and Protection of Children) Act, 2015, available at https://www.indiacode.nic.in/bitstream/123456789/8864/1/201602.juvenile2015pdf.pdf
The Protection of Children from Sexual Offences Act, 2012, available at

https://lddashboard.legislative.gov.in/sites/default/files/The_Protection_of_Children_from_Sexual_Offences_Act_2012.pdf
The Protection of Women from Domestic Violence Act, 2005, available at https://lddashboard.legislative.gov.in/sites/default/files/A2005-43.pdf
The Right of Children to Free and Compulsory Education Amendment Act 2012, available at https://www.ldexplained.org/wp-content/uploads/2022/01/Right-of-Children-to-Free-and-Compulsory-Education-Amendment-Act-2012-English-Copiable_Searchable.pdf
The Rights of Persons with Disabilities Act, 2016, available at https://www.iitg.ac.in/eo/sites/default/files/RPwDAct2016.pdf
The Transgender Persons (Protection of Rights) Act 2019 https://thc.nic.in/Central_Governmental_Acts/Transgender_Persons_(Protection_of_Rights)_Act,_2019.pdf

Visual Supports for Learners with Autism

Course Code: 2.10.c (ASD) Credits: 2 Semester: 8

About the Course:
Autistic individuals – both speaking and non-speaking - benefit from support to access and fully participate in daily life. Based in research, use of structure and visual supports is an evidence-based and neurodiversity affirming practice that facilitates learning, builds autonomy and promotes independence across the lifespan. Easy to individualise, appropriate use of visual supports benefit autistic and non-autistic students alike and empowers educators to facilitate teaching in 1:1, small groups and in classrooms. Instrumental in creating predictability, providing information, facilitating choice making etc., appropriate use of visual supports has a lifelong impact on learning and the mental health of autistic individuals. Providing visual supports helps autistic individuals learn, enjoy and join in academics, curricular activities and everyday life at home, in educational, work settings and public spaces. It also facilitates access and active engagement of autistic individuals and their families in social and community events and activities.

Learning Outcomes: After completion of this course, the student teacher will be able to:

- Understand human development from a neurodiversity affirming lens
- Recognise the need and importance of visual supports
- Understand the principles of visual support and its integration with other approaches
- Implement strategies in skill building to foster independence
- Apply and use in different settings and across developmental ages

Course Content
Unit1: Diversity in Human Development

1.1 Neurodiversity: introduction and principles
1.2 Stages and domains of development (neuro-developmental, motor, sensory, play, social, emotional, communication, language, cognitive and learning)
1.3 Neurodiversity paradigm to understand variations in milestones, delays and disabilities
1.4 Impact of invisible disabilities on identification and access for autistic individuals and their families
1.5 Need and role of environmental modifications with respect to inclusion

Unit 2: Introduction to visual supports

2.1 Structured Teaching: introduction, principles needs and importance across the lifespan
2.2 Understanding and implementing social strategies and approaches (e.g., social stories, comic strips etc.)
2.3 Understanding visual structure, materials and strategies
2.4 Implementing physical structure, visual schedules and work systems
2.5 Developing TLMs for group and individualised teaching

Unit 3: Implementing Visual Supports Across Different Setting

3.1 Implementation in home-based settings (e.g., daily schedules, household chores)

3.2 Implementation in inclusive and special needs schools (e.g., classroom, playground, cultural events, lunch and free periods etc.)
3.3 Adaptations for vocational and work spaces and independent living
3.4 Enabling participation in public spaces and community events (e.g., going to restaurants, movies, shopping, using public transport, vacations or family events, access to dental care, blood tests etc.)
3.5 Incorporating flexibility in daily schedules and facilitating transitions (e.g., within activities, across settings, change of seasons, educational/work settings, residence etc., and over developmental ages such as adolescence, after school)

Unit 4: Integrating visual supports to foster independence

4.1 Teaching to promote communication, interactive learning and engagement across ages and settings using visual supports, AACs and ICT
4.2 Visual supports, social approaches and AACs to teach context based, unspoken rules and expectations (the hidden curriculum)
4.3 Teaching essential skills (e.g., self-care, academic, curricular activities, play, leisure and recreation, vocational and work skills etc.)
4.4 Building higher order skills (e.g., choice-making, decision-making, critical thinking, problem-solving)
4.5 Understanding and implementing developmentally appropriate reasonable accommodations

Unit 5: Using Visuals to Teach Self-Awareness

5.1 Understanding diagnosis
5.2 Generating body awareness
5.3 Understanding physical and mental health
5.4 Self-awareness about needs and strengths (e.g., sensory, communication, sexuality, emotional and sensory regulation etc.)
5.5 Self-determination, agency and advocacy (e.g., sharing the diagnosis, making choices, understanding rights etc.)

Suggested Coursework/Practicum:

- Attend talks and webinars conducted by autistic self-advocates and their family members to understand their perspectives about autism.
- Develop presentations about autism, differences and neurodiversity to create positive awareness and appreciation amongst educators, other professionals and in general community.
- Develop presentations to identify the challenges that autistic students are likely to face in pursuing higher education. Devise a plan to make relevant modifications to make your teaching institute an autism-friendly environment for students with autism.
- Develop TLMs to teach 5 different concepts of self-awareness to students with autism.

Suggestive Mode of Transaction:

Learners are encouraged to critically review all materials

- Observations
- Demonstrations
- Hands-on experiences
- Field visits

- Audio-video and multimedia resources
- Lectures and discussions
- Presentations and projects
- Workshops and seminars
- Online resources
- Self-study

Suggestive Assessment:
- Coursework practicum
- Written assignments and essays
- Individual and group projects
- Classroom presentations
- Sessional and Terminal semester examinations (as per UGC norms)

Suggestive Reading Materials:

Books

Anderson, S. R., Jablonski, A. L., Thomeer, M. L., & Knapp, V. M. (2007). Self-help Skills for People with Autism: A Systematic Teaching Approach. United States: Woodbine House.

Barua M. & Daley T. (2008). Autism Spectrum Disorders. New Delhi: Aahan Publications. http://www.autism-india.org/docs/Advocacy_Attachments_Autistic%20Spectrum%20Disorder%20A%20Guide%20for%20Paediatricians.pdf

Bondy, A., Frost, L. (2012). A Picture's Worth: PECS and Other Visual Communication Strategies in Autism. Bethesda, MD: Woodbine House.

Dutta, S. K., & De, M (Eds) (2019). Understanding Autism: Through the Lens of Parents and Professionals. The Asiatic Society.

Fields-Meyer, T. (2011). Following Ezra: What One Father Learned About Gumby, Otters, Autism, and Love From His Extraordinary Son. United States: Penguin Publishing Group.

Grandin, T., & Panek, R. (2013). The autistic brain: thinking across the spectrum. Boston: Houghton Mifflin Harcourt.

Gray, C. (2016). The New Social Story Book, Revised and Expanded 15th Anniversary Edition. United States: Future Horizons.

Jordon, R. Roberts, J.M., & Hume, K. (Eds) (2019). The SAGE Handbook of Autism and Education. United Kingdom: SAGE Publications.

Kranowitz, C. S. (2016). The Out-Of-Sync Child Grows Up. Coping with Sensory Processing Disorder in the Adolescent and Young Adult Years. Tarcher Perige

Mesibov, G. Thomas, J.B., Chapman, S. M. , Schopler, E. (2007). TEACCH Transition Assessment Profile-Second Edition (TTAP-2). Austin, TX: Pro-Ed.

Mesibov, G. B., Shea, V., Schopler, E. (2010). The TEACCH Approach To Autism Spectrum Disorders. N.Y. Springer.

Myles, B.S., Trautman, M.L., Schelvan, R.L. (2004). The Hidden Curriculum: Practical Solutions for Understanding Unstated Rules in Social Situations. USA:AAPI,

Ozonoff, S. (2018). Assessment of Autism Spectrum Disorder, Second Edition. United Kingdom: Guilford Publications.

Paul, C & Jyothi, P. Eds (2022). Talking Fingers. New Delhi: Orange Books Publications (Available in Hindi and English languages)

Sarva Shiksha Abhiyan (2013). Module on Training of Resource Teachers for Autism Spectrum Disorders. SSA. http://14.139.60.153/bitstream/123456789/1585/1/Training%20Module%20on%20Autism%20Spectrum%20Disorders.pdf

Shore, S. M. (2006). Understanding autism for dummies. Hoboken (NJ): Wiley.

Zager, D., & Wehmeyer, M. L. (2019). Teaching Adolescents and Young Adults with Autism Spectrum Disorder: Curriculum Planning and Strategies. London: Routledge

Journals

- Autism Community Network: https://www.autismnetworks.org/autism.html
- Autism Spectrum Disorders: https://www.opastpublishers.com/journal/autism-spectrum-disorders-open-access
- Journal of Autism and Developmental Disorders https://link.springer.com/journal/10803
- Research in Autism Spectrum Disorders: https://www.sciencedirect.com/journal/research-in-autism-spectrum-disorders
- Autism in Adulthood: https://home.liebertpub.com/publications/autism-in-adulthood/646

Online links

- https://www.ignouhelp.in/ignou-bed-study-material/
- http://autism-india.org
- https://www.donnawilliams.net/
- http://www.buildsomethingpositive.com/wenn/
- http://www.aspie.com/
- https://thegirlwiththecurlyhair.co.uk
- https://autisticnotweird.com
- https://Feelslikeautism.com
- https://kbrudraakshkb.wixsite.com/autism-advocacy
- https://barryprizant.com/
- https://out-of-sync-child.com/
- https://neuroclastic.com
- https://wrongplanet.net/
- https://thinkingautismguide.com/
- https://teacch.com/resources/
- http://www.autism-india.org/docs/Advocacy_Attachments_Autistic%20Spectrum%20Disorder%20A%20Guide%20for%20Paediatricians.pdf
- https://blog.stageslearning.com/blog/10-tips-for-teaching-young-children-with-autism-spectrum-disorder
- https://files.eric.ed.gov/fulltext/ED358637.pdf
- https://files.eric.ed.gov/fulltext/ED491496.pdf
- https://wac.colostate.edu/resources/teaching/guides/ld/
- https://www.researchgate.net/publication/315515592_Curriculum_Approaches_and_Theories
- https://www.researchgate.net/publication/325088451_Curriculum_Design_and_Development
- https://www.unom.ac.in/asc/Pdf/CURRICULUM%20DESIGN%20AND%20DEVELOPMENT-1.pdf

- https://open.umn.edu/opentextbooks/textbooks/comprehensive-individualized-curriculum-and-instructional-design-curriculum-and-instruction-for-students-with-developmental-disabilities-autism-spectrum-disorders

Historical and Contemporary Issues in Deaf Education in India

Course Code: 2.10 d (HI) **Credits: 2** **Semester: 8**

About the Course:

This course delves into the historical and contemporary issues in deaf education in India, examining the significant impact of global events like the Milan Conference (1880) and their ongoing effects. It highlights the history of deaf education in India, explores what inclusion means from the deaf perspective, and proposes strategies for a more inclusive educational framework.

Learning Outcomes:
After completion of this course, the student teacher will be able to:

- Analyse the historical context and development of deaf education in India.
- Evaluate current issues and challenges faced by the deaf community in Indian educational settings.
- Propose inclusive educational strategies that respect and integrate sign language and cultural diversity.
- Design accessible curriculum and instructional methods for deaf learners.
- Advocate for policy changes and societal attitudes that promote equity and inclusion in deaf education.
- Demonstrate professional ethics and cultural competency when working with deaf students.

Course Content

Unit 1: Historical Perspectives on Deaf Education in India

1.6 Early history of deaf education in India. First Deaf School, Teacher Training Institutes in India, Deaf Schools by Deaf Educators.
1.7 Impact and implications of the Milan Conference, 1880 on Indian deaf education
1.8 Development of schools and institutions for the deaf in India
1.9 Socio-cultural attitudes towards deafness in India
1.10 Case studies on the evolution of educational practices in Indian deaf education

Unit 2: Current Issues in Deaf Education in India

Language acquisition and bilingual education approaches in India
1.12 Accessibility to educational resources and technologies in Indian contexts
1.13 Challenges in teacher preparation and professional development in India
1.14 Legal frameworks and policy implications in India
1.15 Intersectionality: Gender, ethnicity, and disability in Indian deaf education

Unit 3: Inclusion from the Deaf Perspective

2.1 Definition and importance of inclusion from the deaf perspective
2.2 Incorporating Indian Sign Language and visual learning methods
2.3 Developing culturally responsive curriculum in India
2.4 Enhancing communication accessibility in mainstream Indian schools
2.5 Addressing social and emotional well-being in deaf learners in India

Unit 4: Advocacy and Policy Reform in India

3.1 Advocacy initiatives by deaf community for Indian Sign Language
3.2 Accessibility provisions in educational systems in India
3.3 Role of State, National and International Deaf organizations
3.4 Case studies of successful advocacy initiatives in India by the deaf community: ISLRTC, RPwD Act 2016
3.5 Future directions in Indian deaf education reform

Unit 5: Professional Ethics

4.1 Core Ethical Principal: Respect for all learners, Non-discrimination and Equity, Confidentiality, and Professional Competence
4.2 Ensuring Accessibility for the DHH learners as per RPwD Act, 2016
4.3 Deconstructing Ableism and Audism
4.4 Reflective practice: Evaluating personal biases and assumptions, Ethical Dilemmas
4.5 Allyship and Collaboration: Building partnerships with the deaf community to foster inclusion

Suggested Coursework/Practicum:

- Conduct a case study on a local deaf education program
- Develop inclusive teaching materials for deaf learners
- Engage in community service with a deaf advocacy group

Suggestive modes of transaction:

- Interactive lectures
- Panel discussions with guest speakers from the deaf community
- Hands-on workshops on sign language and assistive technologies

Suggestive modes of assessment:

- Research papers on historical and contemporary issues
- Presentations
- Group Discussions
- Field Visits and Interviews with Deaf Leaders
- Reflective journals
- Final project proposal and presentation

Suggested Readings:

Ladd, P. (2003). Understanding Deaf Culture in Education.
Vashishtha, M. M. (2022). History of Deaf Education in India
Lane, H. (1984). When the mind hears: A history of the deaf. Random House.
Rehabilitation Council of India. (2000). Status of Disability in India, Volumes.

Online Links:

Milan Conference : https://deafhistory.eu/index.php/component/zoo/item/1880
Reality of Deaf Education in India : https://www.youtube.com/watch?v=Q4_GxsbKVHs

Listening and Spoken Language Therapy (LSLT)

Course code: 2.10 e (HI) **Credits: 2** **Semester: 8**

About the course

This course will enable student-teachers to understand the principles and practices of listening and spoken language therapy and develop skills and competencies for practicing listening and spoken language therapy as a part of intervention services for young DHH children. The course also describes how student-teachers can promote development of listening, spoken language, speech, literacy and education in young DHH children, and develop skills to guide and coach parents of DHH children to help them support their child's listening and communication development. Student-teachers will also learn how to be competent in supporting listening and communication development of DHH children in mainstream and other school settings.

Learning outcomes

After completion of this course, the student teacher will be able to:

- Describe the rationale and principles of LSLT
- Understand the need for assessment in listening and spoken language therapy
- Understand the strategies, techniques and procedures in LSLT
- Learn how to plan and execute LSLT sessions
- Explain the importance of role of parents and home training

Course content

Unit 1: **The philosophy of listening and spoken language therapy**

1.1. Rationale for development of listening and spoken language in DHH children, Definitions of LSLT, History of auditory verbal practice in intervention of DHH children
1.2. Principles and main features of LSLT, Procedures used in LSLT
1.3. Pre-requisites of LSLT, Factors affecting outcomes of LSLT
1.4. Evidence based practice in LSLT, importance of documentation and system for documentation of sessions and reports
1.5. Professional development requirements for listening and spoken language therapists, Scope of practice of a LSL therapist, professional ethics in practice of LSLT

Unit 2: Planning in listening and spoken language therapy

2.1 Planning long-term and short-term goals
2.2 Planning of weekly sessions, execution of weekly plans, recording of diagnostic information during sessions
2.3 Planning of activities for LSLT sessions, age-appropriate activities and materials, developing materials for specific goals
2.4 Strategies used for developing listening, thinking and spoken language, use of appropriate strategies for meeting the goals, Techniques used in LSLT
2.5 Tele-practice in LSLT: Considerations in setting up a tele-practice - system requirements, team, lesson planning, digital resources

Unit 3: Role of parents and family in Listening and Spoken Language Therapy

3.1 Parents as an integral part of the team, Rationale for importance of parents and family

3.2 Understanding the impact of child's hearing impairment on the family, the grieving process and coping strategies used by parents, Supporting and ensuring parent participation in the child's LSLT

3.3 Guiding and coaching parents to support listening/spoken language through the child's daily routine activities and to integrate listening and spoken language in the child's life, developing skills in behaviour management of the child, developing skills in using LSLT techniques, strategies for effective coaching of parents

3.4 Role of parents in the LSLT planning, Sharing goals and diagnostic evaluation with parents every session, transfer of goals from therapy session to home and outside

3.5 Managing parental expectations, helping parents to develop realistic expectations based on the child's profile and other non-clinical factors

Unit 4: Assessment in listening and spoken language therapy

4.1 Purposes of assessment and importance of ongoing assessments in LSLT

4.2 Types of assessment – Informal and formal assessment procedures, standardized assessments, Dynamic assessment, Curriculum-based assessments

4.3 Tools, developmental checklists, standard tests available for assessment

4.4 Procedures for baseline assessment in LSLT, Importance of baseline assessment prior to planning

4.5 Assessments for monitoring of progress and assessing outcomes in various areas such as listening, speech perception, communication, language, speech, cognition, social communication, pragmatics, literacy, play, music perception

Unit 5: Practice of listening and spoken language therapy

5.1 Normal aspects of development of listening, speech, language, and cognition – developmental milestones, Theories of learning and factors affecting learning, Influence of associated factors on child development—culture, community, family and associated impairments

5.2 Auditory learning approaches in children, Neuroplasticity and Auditory brain development, Development of listening skills, Stages of auditory hierarchy, Learning to listen sounds, Functional listening skills,

5.3 Techniques for spoken language development, Modelling, prompting techniques, Responsive teaching, Teaching meaningful and interactive conversations,

5.4 Understanding behaviour and behaviour management in children, Relationship between learning and behaviour, Techniques of behaviour management, Role of play in developing listening and spoken language, Identifying red flags in children with associated problems, Team approach in managing children with behaviour issues and other impairments

5.5 LSLT for school readiness and literacy development – Readiness of parent and child for school, Role of LSLT in facilitating reading development, Reading to babies and young children, Coaching parents to read to their child, Importance of books

Suggested Coursework/Practicum

- Observe and document developmental milestones of normal hearing and DHH children across domains.
- Observe and demonstrate baseline assessment using different checklists and scales on 10 DHH children.

- Prepare lesson plan with short term and long-term goals.
- Practice various LSLT strategies in role-play.
- Practice strategies and activities to develop literacy skills (reading, writing, and math) in children with HI
- Observe outcome assessment using appropriate scales and checklists.
- Prepare home training program for 5 children.
- Counsel parents on various aspects such as importance of auditory stimulation, importance of home training, maintenance of dairy, preparation and use of relevant materials for home therapy, realistic expectations, reinforcement strategies
- Guide and coach the parents in strategies, techniques and procedures in LSLT.
- Demonstrate listening strategies using role play.
- Observe listening spoken and language therapy in children with HI across age groups.
- Develop LSLT materials for different goals.
- Observe role play of parent guidance.
- Observe tele-LSLT sessions.

Suggested modes of transaction

Lectures, Discussion, Role-play, Observations, Group activities, Power point presentation & Field visits.

Suggested modes of assessment

Tests, individual and group assignments, continuous formative assessment, open book exam, report writing, journal writing, submission of lesson plans and activity reports.

Suggested readings

Books

Caraway, T. H. (2011). Auditory Verbal Practice: Teaching spoken language through listening. Plural publishing Inc.

Cole, E., & Flexer, C. (2014). Children with Hearing Loss: Developing Listening and Talking, Birth to Six. (3rd edition). Plural Publishing

Estabrooks, W. (2006). Auditory Verbal Therapy and Practice. A G Bell Association.

Estabrooks, W. (2012). 101 FAQs about Auditory Verbal Practice. A G Bell Foundation.

Estabrooks, S. R. (2021). Language learning in children who are deaf and hard of hearing: Theory to classroom practice. (2nd edition). OUP USA.

Estabrooks, W., Maclver-Lux. & Rhoades E A. (2016). Auditory verbal therapy: For young children with Hearing loss and their families and the practitioners who guide them (1st edition). Plural publishing Inc.

Estabrooks, W., Morrison, H. M., & Maclver-Lux K (2020). Auditory Verbal Therapy – Science, Research and Practice, Plural publication Inc.

Flexer, C. (1999). Facilitating Hearing and Listening in Young Children. Singular Publishing Group, Inc. San Diego

Hulit L. M. (2018). Born to talk: An Introduction to Speech and Language Development (7th edition). Allyn and Bacon.

Ling, D. & Bell, A.G. (1989). Foundations of Spoken Language for Hearing-Impaired Children.

Ling, D. Ling, A. & Bell, A.G. (1978). Aural Habilitation: The Verbal Foundations of Learning in Hearing-Impaired Children.
Luterman, D. (2002). When your Child is Deaf. A Guide for Parents, New York
Madell, J. R. (1998). Behavioral Evaluation of Hearing in Infants and Young Children
Moeller, P. M., Ertmer, J. D., Gammon, S. C. (2016). Promoting language and literacy in children who are deaf or hard of hearing. Vol 20. (1st edition.). Brookes Publishing
Robertson l. (2013). Literacy and deafness. Listening and Spoken language (2nd edition). Plural Publishing.
Robertson, L. (2000). Literacy Learning for Children Who Are Deaf or Hard of Hearing. The Alexander Graham Bell Association, Washington, DC. Thieme Medical Publishers, Inc. New York, N.Y.

Working with Learners with Intellectual Disability having High Support Needs

Course Code: 2.10 f (ID) **Credits: 2** **Semester: 8**

About the course:
A considerable number of Individuals with intellectual disabilities will require support all through their lives in all domains of life including basic essential skills such as mobility, communication and self-help areas. Their needs have to be addressed by the special educators so that they may acquire the skills as much as possible and maintain so as to reduce dependence on others and maintain the learnt skills. Many of them due to their limitations in mobility may not be able to visit the schools/service centers and the support is to be provided in their homes. This course addresses the aspects related to working with persons with high support needs.

Learning Outcomes:
After completing of this course student teachers will be able to:

- Describe the characteristics and needs of persons with high support needs.
- Narrate the process of identifying and assessing persons with high support needs
- Explain the teaching strategies and curriculum designing for parsons with high support needs
- Discuss methods and steps in home-based management of persons who need high support
- Narrate the therapeutic supports and assistive devices needed for persons with ID who require high support.

Course Content
Unit 1: Introduction to High Support Needs

1.1. Incidences and Prevalence and current trends in working with Persons with High Support Needs.
1.2. Definition, Nature, Needs of Persons with High Support Needs.
1.3. Provision of High Support Needs as per RPWD Act 2016.
1.4. ICF Classification and implication of it for meeting the High Support Needs.
1.5. Issues and Challenges in management of Persons with High Support Needs.

Unit 2: Screening, Identification and Assessment

2.1. Screening and Identification of Persons with High Support Needs.
2.2. Types of Assessment and Evaluation: NRT, CRT, Therapeutic, Medical, Behavioural, and other relevant assessments.
2.3. Assessment tools: e.g. FACP-PMR and other national and international tools.
2.4. Functional assessment and identification of needs and strength, Assessment of Transition Planning, and services.
2.5. Role of multidisciplinary team in assessment and management of Persons with High Support Needs.

Unit 3 Curriculum and Teaching Strategies for Persons with High Support Needs

3.1. Interpretation of assessment information for curriculum planning.

3.2. Curricular domains: Personal, Social, Communication, Behavioural, and Recreational.
3.3. Teaching strategies, TLM and Assistive devices for Persons with High Support Needs.
3.4. Complementary Augmentative Therapeutic Intervention for Persons with High Support Needs.
3.5. Health, Hygiene, safety and medical care, Addressing common medical issues (prevention of bed sores, contracture, epilepsy, dental care)

Unit 4: Home based management for Persons with High Support Needs

4.1. Identification of family resources, their role, need and concerns.
4.2. Development of IFSP, Behavioural Management Plan.
4.3. Training and support for caregivers of Persons with High Support Needs.
4.4. Record maintenance and documentation.
4.5. Working with professional team and follow up for effective management of persons with high support needs.

Unit 5: Assistive devices and therapeutic supports for Persons with High Support Needs

5.1. Role and importance of therapeutic intervention: Medical and para-medical professionals.
5.2. Role of teacher as a coordinator of the multidisciplinary team in management of Persons with High Support Needs.
5.3. Selection and development of TLM, assistive, supportive and communication devices, availing assistive devices under ADIP scheme.
5.4. Progress monitoring and future management planning.
5.5. Technological support for Therapeutic and assistive devices for Persons with High Support Needs.

Suggested Coursework/Practicum: Any one of the following

- Identify literature on management of high support needs by internet search and other literature with references, compile, write your own review on the collected literature and submit.
- Identify a person with high support need, develop case history record that includes background information, intervention given and all other relevant details and submit.
- Develop a catalogue of the assistive devices for meeting the high support needs with the sources and write your review and submit.

Suggestive modes of transaction:

Lecture discussion, demonstration, visit to homes/centres that support persons who need high support, group discussions. Classroom presentations, observation, engaging in debate and dialogue.

Suggestive modes of assessment:

Submission of the course work /practicum, class tests, other assignments

Suggested Readings:

Books

Abbit, L. (2017). *The conscious caregiver: a mindful approach to caring for your loved one without losing yourself*. Adams Media.

Blacher, J. (Ed.) (1984) *Severely Handicapped Young Children and Other Families*: Research in Review Orlando: Academic Press Inc.
Lyle, D (2021). Understanding profound intellectual and multiple disabilities in Adults.
Myreddi, V, Narayan,J (2004) FACP PMR, Secunderabad: NIMH
Nind, M., Strnadova,I (2020). Belonging for People with Profound Intellectual and Multiple Disabilities. Routledge Publishers
Orlove, F. P., and Sobsey,D (2016). Educating Students with Severe and Multiple Disabilities: A Collaborative Approach, Fifth Edition, New York: Brookes Publishing Rutledge publishers.
Srinivasa Murthy,R. et al (2022) Caregivers Manual of Self Care for emotional Health ENRICH Project. Bangalore: AMC

Weblinks

- https://www.researchgate.net/publication/343569842_Resilience_characteristics_of_families_with_children_with_severe_or_profound_intellectual_disability
- https://www.coursera.org/learn/intellectual-disability-care-education
- https://onlinelibrary.wiley.com/doi/full/10.1046/j.1365-2788.2003.00447.x
- https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-3148.1999.tb00076.x
- https://link.springer.com/article/10.1007/s10803-012-1601-1
- https://www.cbm.org/fileadmin/user_upload/TEDI_manual.pdf

Management and Supporting students with Severe and Multiple Disabilities

Course code: 2.10 g (MD) **Credits: 2** **Semester- 8**

About the coursework:

Students with multiple disabilities often require additional support to access and participate in education, socialize with peers, and develop their skills and abilities. Support needs may vary from extensive to pervasive support required by students with significant physical/cognitive and/sensory disabilities. The physical disabilities affect body function and structures that limit physical activities such as sitting, walking, reaching and activities of daily living that may restrict participation in classroom and school related activities. There are gaps in regard to current situations and preferred future and this course work is one step towards generating worthy outcomes for students with severe and multiple disabilities. There may be some children who have profound cognitive impairment with motor/sensory impairment and they will be identified as students with high support needs. The impact of sensory loss often stretches across key areas of development – social emotional development, communication, approaches to problem solving and concept development. Parental concerns about the future and the lifelong nature of caregiving responsibilities can contribute to anxiety and fatigue. Parents experience emotional, physical, financial exhaustion and stress, difficulty in navigating the systems to access schemes and benefits. Parents often have to deal with healthcare systems, educational institutions, and social/disability welfare services to access necessary support services can be overwhelming and time-consuming. The student teacher needs to recognise the various signs and enable advocacy skills and coping strategies that can help parents better manage their responsibilities while maintaining their own well-being.

Learning Outcomes:

On the completion of this course, the student teacher will be able to:

- Nature and needs of students with severe and multiple disabilities to enhance activity participation.
- Explain the assessment procedures for students with motor and sensory impairment with severe and multiple disabilities.
- Describe various methods, techniques and approaches for planning and management of individuals with intense support needs
- Demonstrate understanding of working with families who have students with severe and multiple disabilities who may need intense support across home and school/organisations
- Select and use appropriate technology and assistive devices in extending support

Course Content
Unit 1: Understanding groups with severe support needs with multiple disability

1.1. Definition, description and the nature of high support needs for students with severe or profound ID with multiple disabilities & its implications with focus on body functions, activity limitation and participation considering mediating factors of environment and person.
1.2. Working with individuals with severe and multiple disabilities - identify strength, issues and challenges with attention to shared framework of assumptions, beliefs and

values of the key stakeholders-distribution and parity of functions and resources of the collaborative team.

1.3. Strategies to promote functional skills, social, peer interaction and self-determination skills applicable across age span -to promote effective learning for students with physical, cognitive and/ sensory impairments and its various combinations.

1.4. Understanding the nature of levels of support (AAIDD) – limited, intermittent, extensive, pervasive across all or some domains. Varying nature of extensive or pervasive support for most with severe and multiple disabilities across all domains and for a few requiring limited or intermittent support for key life/career/financial decisions by means of supported decision making.

1.5. Nature of multi-modal Program/s and Service avenues for students with high or intense support needs.

Unit 2: Assessment for educational planning for students with intense support needs

2.1. Comprehensive strategy for alignment of curriculum, instruction, assessment (including evaluation) in regard to content, product and process decisions.

2.2. Assessment of family resources and family support systems to enable transformational adjustments.

2.3. Nature of assessment for transitional planning and services – community based vocational training, employment, post school adult services including pursuing college.

2.4. Assessment of need for plus curriculum, expanded core curriculum and its alignment with assistive devices across various ages.

2.5. Interpreting alternate assessment results to plan for the support for education and/ rehabilitation.

Unit 3: Management of students with severe and multiple disabilities

3.1. Steps involved in program planning, coordination and evaluation by collaborative team members in management of students with high support needs with multiple disabilities (IQ severe to profound) across age-groups & settings.

3.2. Management strategies for students with intense support needs promoting active participation -Teaching Techniques and approaches, AAC, regulating Sensory Process Disorder, Sensory Motor disorder, enabling Total Communication, Behaviour Management, Orientation & Mobility.

3.3. Specialised support towards pain identification and management based on observing non-verbal cues such as changes in behaviour, facial expressions, body language, or physiological signs like increased heart rate or breathing patterns.

3.4. Nature and methods of Emergency Care Plans and Individualised Health Care Plans – seizure, choking/foreign body airway obstruction, bleeding, falls.

3.5. Multipronged approaches to enable abuse prevention and intervention for children with severe support needs across home and community settings.

Unit 4: Enabling Competencies of the Caregiver

4.1. Knowledge, insight about the condition, acceptance, ability to identify types and kinds of supports needed to enable supported decision making, skills/ability to seek/search for information, advocate for access to benefits, schemes and ability to

network/advocate through and with parent groups including advocating for their own child and for the sector too.

4.2. Understanding the family dynamics and enabling programme planning for individuals with intense support needs across various transitional stages.

4.3. Addressing common medical issues (back-care, prolapsed uterus) of the primary caregiver and health related issues promoting physical, cognitive and emotional well-being of self and family.

4.4. Identify and enable suitable referrals based on the nature of parental fatigue – psychological and mental health well-being and ways to enable self-care of caregivers of students with multiple disabilities.

4.5. Understanding Rights, mobilizing community resources, enabling Parents as Advocates on behalf of their children and engaging with parent networks.

Unit 5: Use of technology in Management of Severe Support Needs

5.1. Concept & Need of Assistive Devices for Persons with intense and/high support needs.

5.2. Define needs and access optimum support for management through integration of technology.

5.3. Assistive technology for communication- use of AAC and other devices; Assistive technology understanding emotions including low-tech emotion and improvement of social and cognitive skills.

5.4. Application of Technology-digital portfolio for learning with use of speech-generating devices, eye-gaze communication systems, and augmentative and alternative communication (AAC) devices.

5.5. Advantages/disadvantages/limitations of Assistive technology; advancements in assistive technology for students with multiple disabilities with high support needs (severe/profound intellectual impairment).

Suggested Coursework/Practicum:

- Develop presentations about needs of persons with severe support needs to create positive awareness and appreciation amongst educators, other professionals and in general community.
- Develop a detailed learning profile for two different students with severe and multiple disabilities while ensuring different genders, ages and settings (special school, inclusive school, home) are represented.
- Develop a detailed report on meaningful intervention and communication with student with multiple disabilities
- Develop personal futures planning for a student with intense support needs or high support needs in consultation with the student and family.
- Develop a Personal Communication Passport for as non-verbal student.
- Develop a plan of action to facilitate mobility, barrier free access -across environments and supports in their everyday settings (e.g., inclusive school classroom, special school classroom, tuition or hobby class, home etc.)
- Develop a non-academic curriculum – ways to develop relationship skills to maintain healthy and rewarding relationships with diverse students and groups within the class
- Develop teaching aids for specific lesson plans or for ADL or writing tool.
- Develop a plan for a student or the caregiver for starting the process of advocating for their needs

Suggestive modes of transaction

Field-based experience, focus group discussion, Stories of life, sharing lived experience by person with disability or family members - siblings, Classroom discussions, Self-study, Field observations, and preparation of study reports. Reading of Vlogs or TED talks viewing where persons with disability share their experiences, Classroom presentations, discussion forums, observation, engaging in dialogue.

Suggestive modes of Assessment:

Written test, classroom presentation, workshop, assignments, practicum, sessional and terminal semester examination.

Suggested Readings:

Abbit, L. (2017). *The conscious caregiver: a mindful approach to caring for your loved one without losing yourself*. Adams Media.

Blacher, J. (Ed.) (1984) *Severely Handicapped Young Children and Other Families*: Research in Review Orlando: Academic Press Inc.

Brent, C. A. (2015). *The Caregiver's Companion*. Harlequin.

Carol Stock Kranowitz. (2011). The out-of-sync child: recognizing and coping with sensory processing disorder. Paw Prints.

Moon, M.S. et.al (1990) *Helping persons with severe mental retardation get and keep employment,* Baltimore, Brookes PublishingCo

Myreddi et al (2007) FACP PMR, Secunderabad:NIMH

Myreddi, V., et al. (2007). *Teaching Students with Profound Mental Retardation - A Guide for Teachers and Parents*, Secunderabad,NIMH.

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Orlove, F.P, Sobsey, D., Gilles, D.L.(2017). Educating Students with Severe and Multiple Disabilities A Collaborative Approach. New York: Paul H Brookes Publishing Co.

Ostlund, D (2015). Students with profound and multiple disabilities in education in Sweden: teaching organisation and modes of student participation. Research and Practice in Intellectual and Developmental Disabilities 2 (2):148-164.

Prizant, B. M. Uniquely Human: Updated and Expanded : A Different Way of Seeing Autism.; Simon & Schuster, Incorporated, 2022.

Perkins Activity and Resource Guide: A Handbook for Teachers and Parents of Students with Visual and Multiple Disabilities. Vol I and Vol II.

Rosenbaum, P. L., & Rosenbloom, L. (2012). Cerebral Palsy. Mac Keith Press.

Sense International India. (2014). Handbook on Deafblindness. Ahmedabad: Sense International India.

Sundari. S,. Bumblebee in the Balcony-Celebrating Life with Cerebral Palsy, Notion Press.

Suggested web readings:

Family and community services (2014).
https://engage.dss.gov.au/wpcontent/uploads/2015/05/ATT-1-Leading-Clinical-Practice-and-Supporting-Individuals- withComp.pdf
https://www.thearc.org/
https://www.yourcpf.org/
Lombardi,P,. Multiple disabilities. (2015). https://granite.pressbooks.pub/understanding-andsupporting-learners-with-disabilities/chapter/multiple-disabilities/

http://www.parentcenterhub.org/multiple/
https://www.aclu.org/sites/default/files/field_document/faq_about_supported_decision_making.pdf
https://www.aclu.org/sites/default/files/field_document/faq_about_supported_decision_making.pdf
https://web.archive.org/web/20110614214114
/http://www.angelswithspecialneeds.org/monthly/severe-and-multiple-disabilities/
http://www.nsnet.org/start/severe.pdf

Integrated Skills and Activity Participation

Course code: 2.10 h (MD) **Credits: 2** **Semester- 8**

About the course:

Integrated Skills and Activity Participation (ISAP) is a collaborative and therapeutic approach that focuses on developing the skills and abilities of students with multiple disabilities, including intellectual, physical, sensory, and communication disabilities. The goal of ISAP is to promote independence, social and educational participation, and personal growth by integrating various skills and activities in a fun, functional and engaging way. The focus for student teachers to look at are ways to promote adaptive skills, social, cognitive and motor skills with appropriate supports for tasks and activities. The students with appropriate adaptive equipment and assistive technology - orthoses, prostheses, mobility and communication equipment will enable the student to participate in all activities both within and outside the classroom including the larger community around him/her. Expanding and integrating skills and activities for students pursuing vocational education will need both hard and soft skills with appropriate training that includes mobility and technology integrated activity participation tools to carry out tasks.

Learning Outcomes:

On the completion of this course, the student teacher will be able to:

- Recognise ways to support posture, positioning and wheeled mobility to promote functional abilities across all settings including mobility.
- Understand the importance of posture control for body awareness, muscle joint function and ergonomics of school environment furniture and work surfaces.
- Examine efficacy of gathering information from various sensory channels including the literacy media the student will use for reading and writing.
- Apply use of AAC to supplement or compensate for impairments in speech-language production and/or comprehension, including spoken and written modes of communication to support students with multiple disabilities.
- Practice strategies to promote sensory efficiency and maintain residual sensory abilities to promote optimal use of senses of the student to access the environment.

Unit 1: Posture, Positioning, Mobility to promote activity participation

1.1 Essential elements and benefits of posture and posture control in students with multiple disabilities with focus on Student, Environment, Task and Tools (SETT).

1.2 State the goals and basic principles of good positioning to promote activity participation and expansion both at home and school activities.

1.3 List out the various equipment used for positioning across ages – Bolsters, Wedges, Pummels, bean bags, chairs with changeable seat and foot rest height.

1.4 Key considerations for use of standing frames- Prone standers, supine standers to promote activity participation, walking aids – Canes, Walkers and crutches.

1.5 State the types wheelchairs and key considerations for safe navigation of users of assisted wheelchair mobility across the environment and transfers from wheelchair.

1.5.1 Varying levels of assistance including techniques of transfer from one surface to another including wheelchair ensure safety for all.

Unit: 2. Orthoses, Prostheses and school environmental considerations for students with physical impairment

2.1 State the benefits of orthoses and Types of orthoses – static, dynamic, postural support and for assisted ADL.
2.2 List the various lower limb orthoses and its benefits to support, align, prevent or correct deformities and improve function of lower limbs.
2.3 State the various types of upper limb orthoses to promote fine motor skills- wrist hand orthoses, thumb spica splint, dynamic finger extension splint, universal cuff, and customised orthoses.
2.4 School function assessment for readiness, for participation, task support and activity performance including focus on transitions within and across stages.
2.5 Appraise modes and strategies of collaboration and communication across and between educational team supporting students with physical, cognitive and sensory disabilities.

Unit 3: Methods and strategies of Learning Media Assessment

3.1 Overview of learning media assessment and essential goals of learning media assessment keeping in mind the nature and extent of sensory impairment.
3.2 Assess the types of media currently used by the student and its effectiveness and accessibility to meet the needs of the student (e.g., braille, large print, audio materials, sign language, captioned videos).
3.3 Identify the most effective media for the student (e.g., braille, large print, audio) and determine the preferred mode of communication (e.g., sign language, oral communication, or a combination).
3.4 Using the Learning Media Assessment to guide educational planning and use of conventional reading and writing instructional program.
3.5 Strategies to evaluate the effectiveness of various print media for students with low vision – regular print, regular print with low vision devices, large print, Braille, or audio materials to supplement one of the other methods for educational instructions.

Unit 4: Implementing Augmentative and Alternative Communication (AAC) for learners to promote communication

4.1 State an overview of the nature and scope of AAC- graphic mode communication (2 D or 3D to symbolise concepts or objects), sign language/sign systems and electronic communication.
4.2 State the key considerations involved in designing AAC (aided or unaided) through a collaborative approach – motor (scanning strategies), sensory and cognitive factors to enhance activity and participation.
4.3 List the various strategies to develop and promote communicative exchanges in early years by using AAC to meet basic functions of communication.
4.4 Organise educational integration of AAC users to promote interactive learning and engagement in the classrooms across ages and subject areas.
4.5 Role of responsive communication partners and intervenors to promote competency, opportunities, driving communication forward, and skill acquisition.

Unit 5: Sensory Efficiency - Training and stimulation of residual Auditory, Visual abilities and enhance optimising Tactile, Olfactory, Gustatory, Kinaesthetic Sense

5.1 Environmental factors that affect the effective usage of residual vision and hearing, ways to adapt the environment at home and school
5.2 Approach, Strategies and ways to facilitate functional usage of Olfactory, Gustatory, Kinaesthetic, vision and hearing
5.3 Setting up of sensory friendly classroom for children with dual sensory loss.
5.4 Aids, technology and accommodations to assist children with dual sensory loss across ages
5.5 Identification, Planning and Management of loss of residual vision and hearing (as an adult) and training caregivers in identifying needs, acceptance and ways to manage progressive conditions of the eye or hearing.

Suggested Coursework/Practicum:

- Develop presentations about needs of persons most important list of aids and equipment a student with low vision needs for learning engagement.
- Develop a detailed learning profile for two different students with MD while ensuring different genders, ages and settings (special school, inclusive school, home) are represented and state the way they are utilising the residual vision to learn and navigate the environment.
- Develop a detailed report on meaningful intervention and communication with children with multiple disabilities using low tech or high tech for storytelling, using experience box.
- Develop personal futures planning for a student with multiple disabilities in consultation with the student and family.
- Develop a Personal Communication Passport for non-verbal student.
- Develop a plan of action in regard to mobility, barrier free access -across environments and supports in their everyday settings (e.g., inclusive school classroom, special school classroom, tuition or hobby class, home etc.)
- Develop an essay based on Communication Pyramid – and ways to engage students who are using AAC or using basic sign communication.
- Develop teaching aids for specific lesson plans or for ADL or writing tool.
- Develop a parent hand out or brochure with **FAQ** for parents who are hesitant to take the AAC option.

Suggestive Mode of Transaction

Field-based experience, focus group discussion, Stories of life, sharing lived experience by person with disability or family members - siblings, Classroom discussions, Self-study, Field observations, and preparation of study reports. Reading of Vlogs or TED talks viewing where persons with disability share their experiences, Classroom presentations, discussion forums, observation, engaging in dialogue.

Suggestive Mode of Assessment:
Written test, classroom presentation, workshop, assignments, practicum, sessional and terminal semester examination.

Suggested Readings

Alant, E. (2017). *Augmentative and Alternative Communication*. Emerald Group Publishing Limited.
Best, S. J., Heller, K. W., & Bigge, J. L. (2005). *Teaching Individuals with Physical Or Multiple Disabilities*. Prentice Hall.
Chinnathurai, R. (2009). *Short Textbook of Prosthetics and Orthotics*. Jaypee Brothers Medical Publishers Pvt. Limited.
Fazzi, D. L., & Barlow, J. M. (2017). *Orientation and Mobility Techniques*. Blind.
Hill, Everette W. (1976) *Orientation and Mobility Techniques: A Guide for the Practitioner*. American Foundation for the Blind.
Jacobs, J. (2018). *Core Words for Classroom & Home*. Blue Lake Publishing.
Jules, S. (2020). *What Will Happen to My Special Needs Child when I Am Gone.*
Koenig, A. J., & Holbrook, M. C. (1995). *Learning Media Assessment of Students with Visual Impairments*. Texas School for the Blind &.
Knott, Natalie Isaak. *Teaching Orientation and Mobility in the Schools: An Instructor's Companion*. (2002). American Foundation for the Blind,.

Online readings

Baltisberger, S., & Cowan, C . (2017). Fun activities for teaching kids to use monocular telescopes on a low budget. Retrieved from https://library.tsbvi.edu/assoc_files/77377021.pdf
Floyd, J. (2017, July 25).
Listening skills. Paths to Literacy. Retrieved from http://www.pathstoliteracy.org/blog/listening-skills
https://www.worksheetfun.com/category/mazes/
https://nwcommons.nwciowa.edu/cgi/viewcontent.cgi?article=1063&context=education_masters

https://inclusive.tki.org.nz/guides/speech-language-and-communication/support-augmentative-and-alternative-communication-aac-users/
https://tewhariki.tahurangi.education.govt.nz/te-k-rerorero---talking-together/5637169352.p
https://www.neurogen.in/assets/frontend/pdf/books/3-Disability-Book-English.pdf

Research Based Practices and Therapeutic Interventions for Supporting Learners with Specific Learning Disabilities

Course code: 2.10 i (SLD) **Credits: 2** **Semester- 8**

About the Course:

This course will equip the student teachers with essential knowledge and skills to support students with specific learning disabilities (SLD) through research-based practices and interventions. The student teachers will gain an understanding of research and evidence-based educational strategies, and some illustrative programmes that have been found to be effective for addressing reading, writing, and mathematical challenges. Along with this, some input on specialized approaches for non-verbal learning disabilities is included. The present course also emphasizes the integration of occupational, speech and language, and art-based therapies within classroom settings, highlighting their importance and practical application. Additionally, the course provides strategies for creating a supportive school environment, including leadership roles, academic interventions, and collaborative support models. This course is tailored to address the understanding of student teachers and future professionals dedicated to enhancing the educational experiences of students with SLD.

Learning Outcomes:
After completion of this course, student teachers will be able to:

- Differentiate between research-based, evidence-based, and non-evidence-based practices, and apply guidelines for selecting effective educational interventions for students with SLD
- Implement evidence-based reading, writing, and mathematics interventions tailored to the needs of students with verbal learning disabilities
- Design and apply strategies to develop visuospatial skills, executive functioning, and social skills in students with non-verbal learning disabilities
- Integrate occupational, speech and language, and art-based therapies into classroom settings effectively to support the holistic development of students with SLD
- Create and implement a comprehensive support system within schools

Course Content

Unit 1: Foundations of Research Based Practices and Interventions

1.1 Research-based practice: Definition, importance, and benefits
1.2 Difference between Research Based Practices, Evidence Based Practices, Non-evidence Based Practices
1.3 Science of Learning: cognitive processes involved in reading, writing and math
1.4 Neuroplasticity and learning: Impact of early intervention and educational interventions
1.5 Guidelines for selecting research-based practices and interventions

Unit 2: Interventions for Verbal Learning Disabilities

2.1 Verbal Learning Disabilities: Meaning
2.2 Science of Reading, Science of Writing, Science of Mathematics

2.3 Reading intervention and Programmes: Orton Gillingham, Wilson Reading system, Sonday System, Jolly Phonics, Sounds in Syllables, Alpha to Omega
2.4 Writing Intervention and Programmes: Orton Gillingham, Jolly Phonics, Word study, Handwriting without Tears
2.5 Mathematics Intervention and Programmes: ST Math, Do the Math, Touch Math, Math U See

-Unit 3: Interventions for Non-Verbal Learning Disability

3.1 Non-Verbal Learning Disability: Meaning
3.2 Difference between NVLD, Autism Spectrum Disorder, Sensory Processing Disorders
3.3 Developing visuo-spatial skills and abstract thinking
3.4 Developing Executive Functioning skills, working memory, and cognitive flexibility
3.5 Developing Social skill: Using CASEL framework, PEERS programme

Unit 4: Therapies to Support Students with SLD in a Classroom

4.1 Need, importance, and scope of therapies for students with SLD
4.2 Occupational Therapy: Meaning, Therapeutic Modalities and activities
4.3 Speech and Language Therapy: Meaning, Interventions, and activities
4.4 Art Based Therapies: Meaning, Scope, Modalities, Activities
4.5 Integration of above therapies in classroom

Unit 5: School and Classroom Supports for SLD

5.1 School Leadership as support: Guidelines to enhance support
5.2 School teachers: Use of academic interventions – Explicit Teaching, Gradual Release of Responsibility Model, Self-Regulated Strategy Development Model, Scaffolding
5.3 School staff as a community support
5.4 School Infrastructure and Technology Support; SETT Framework for appropriate need determination of Assistive Technology Needs
5.5 Stakeholder Collaboration: Nature, Purpose, and Models

Suggestive Practicum:

- Conduct literature review on research and evidence-based practices, and submit a detailed reflection for evaluation
- Analyse case studies, recommend interventions, and submit written analyses evaluated on appropriateness and effectiveness
- Develop, teach, and evaluate lessons on any 3 areas of interventions
- Conduct a survey to understand the status and nature of collaboration in school
- Conduct a mock meeting and role-playing various stakeholders to experience collaborative practices for supporting a student with SLD, and submit a meeting summary
- Create charts for science of learning, science of reading, science of writing, science of maths frameworks
- Develop lesson plans to demonstrate the integration of various therapies in classroom teaching

Suggested mode of Transactions:

Lecture, discussions, demonstrations, hands on training, classroom presentation, workshops, assignments

Suggested Readings:

Alnahdi, G. H. (2015). Assistive technology in special education and the universal design for learning. Turkish Online Journal of Educational Technology, 14(3), 18-23.

American Psychological Association. (2020). Publication manual of the American Psychological Association (7th ed.). Washington, DC: Author.

Arya, N. (2019). Understanding Dyslexia in India: Policy and Practice. Journal of Indian Education, 45(1), 1-18.

Berninger, V. W., & Richards, T. L. (2020). Inter-relationships among behavioral markers, genes, brain, and treatment in dyslexia and dysgraphia. In R. E. Tremblay, M. Boivin, & R. DeV. Peters (Eds.), Encyclopedia on Early Childhood Development. Centre of Excellence for Early Childhood Development.

Brady, S. A. (2011). Efficacy of phonics teaching for reading outcomes: Indications from post-NRP research. In S. A. Brady, D. Braze, & C. A. Fowler (Eds.), Explaining individual differences in reading: Theory and evidence (pp. 69-96). Psychology Press.

Chacko, I., & Kapur, M. (2018). Understanding learning disabilities: Issues, trends and challenges in the Indian context. Disabilities and Impairments, 32(2), 121-135.

Council for Exceptional Children. (2020). High-leverage practices in special education. Council for Exceptional Children.

Graham, S., & Harris, K. R. (2018). Evidence-based practices in writing. In K. R. Harris, S. Graham, T. Urdan (Eds.), APA educational psychology handbook, Vol. 3: Application to learning and teaching (pp. 457-476). American Psychological Association.

Hallahan, D. P., Kauffman, J. M., & Pullen, P. C. (2020). Exceptional learners: An introduction to special education (14th ed.). Pearson.

Karanth, P. (2018). Learning Disabilities in India: Will the Government's Initiatives Lead to a Change? Indian Journal of Clinical Psychology, 45(1), 1-8.

Lerner, J. W., & Johns, B. H. (2015). Learning disabilities and related disabilities: Strategies for success (13th ed.). Cengage Learning.

Mather, N., & Wendling, B. J. (2011). Essentials of dyslexia assessment and intervention. Wiley.

Ministry of Human Resource Development. (2019). Inclusive education of children with disabilities. Government of India. Retrieved from https://mhrd.gov.in/sites/upload_files/mhrd/files/inclusive-education.pdf

National Center for Learning Disabilities. (2019). The state of learning disabilities: Understanding the 1 in 5. National Center for Learning Disabilities.

Poonam, R., & Agarwal, R. (2017). Assistive technology for children with learning disabilities: Indian perspective. Indian Journal of Educational Technology, 39(2), 100-115.

Reddy, L. A., & Newman, E. (2009). School-based mental health interventions for children with ADHD. Clinical Child and Family Psychology Review, 12(3), 219-235.

Sharma, U., & Das, A. K. (2015). Inclusive education in India: Past, present and future. Support for Learning, 30(1), 55-68.

Torgesen, J. K. (2004). Preventing early reading failure and its devastating downward spiral: The evidence for early intervention. American Educator, 28(3), 6-19.

Online Resources

https://files.eric.ed.gov/fulltext/ED498501.pdf

https://my.vanderbilt.edu/spedteacherresources/what-are-evidence-based-practices/
https://scholarworks.uni.edu/cgi/viewcontent.cgi?article=3251&context=grp
https://www.deansforimpact.org/files/assets/thescienceoflearning.pdf
https://www.education.ne.gov/wp-content/uploads/2024/02/INFOGRAPHIC-Evidence-Based-Practices-in-Special-Education-NDE-2024.pdf
https://www.ldatschool.ca/assistive-technology/
https://www.mheducation.com/prek-12/explore/science-of-literacy/science-of-writing.html
https://www.researchgate.net/publication/355201178_Evidence-Based_Practices_for_Special_Education_Teachers_A_Review_of_Current_Literature
https://www.sciencedirect.com/science/article/abs/pii/S0742051X06001053
https://www.thescienceofmath.com/#:~:text=policy%20and%20practice.-,What%20is%20the%20Science%20of%20Math%3F,about%20how%20students%20learn%20math.

Education of Learners with Visual Impairment from Past to Present

Course Code: 2.10 j* (VI) Credits: 2 Semester: 8

* This Course is aimed for developing competencies in cross-disability. It is to be opted by students pursuing ISITEP with disability specialization other than visual impairment.

About the Course

The road map of education of learners with visual impairment from the past to present has undergone a lot of challenges and changes. The historical perspectives of education of children with impairment will give insight to the student trainees to acquire knowledge on the evolving various service delivery options of children with visual impairment. This course provides student trainees the understanding of the structure and functions of the eye, types of refractive errors, common eye disorders, the implications of visual impairment, and the identification and assessment of needs of children with visual impairment. This course will give insight on the importance of Expanded Core Curriculum and various teaching strategies relevant for the children with visual impairment.

Learning Outcomes

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

- Describe the process of seeing and analyze the implications of visual impairment.
- Explain historical perspectives of education of children with visual impairment
- Demonstrate skills of identification and assessment of children with visual impairments.
- Describe the specific interventions and teaching strategies for students with visual impairment.
- Explain the relevance and components of Expanded Core Curriculum for children with visual impairment

Unit 1: Visual Impairment and Implications of Visual Impairment

1.1 Process of seeing, visual acuity, visual field; contrast sensitivity
1.2 Concept and Definitions of Blindness and Low Vision (WHO & RPwD Act, 2016)
1.3 Development of vision in a child (from birth); Common Eye Disorders
1.4 Implications of Visual Impairment: Psycho-social & Educational
1.5 Effect of visual impairment on growth and development: Physical, Motor, Language, Socio-emotional, and Cognitive development

Unit 2: History of Education for Visually Impaired and Development of Tactile Systems of Reading

2.1 History of education of visually impaired: Global Perspectives
2.2 History of education of visually impaired in India: Pre-independence and post-independence period
2.3 History of tactile modes for education for children with visual impairment (Pre-Braille period)
2.4 Development of Braille; Standardization of Bharti Braille
2.5 Evolution of Braille writing devices

Unit 3: Identification and Assessment of Visual Impairment

3.1 Identification of Visual Impairment: Concept & tools
3.2 Clinical assessment of vision
3.3 Functional assessment of vision
3.4 Understanding needs of students with visual impairment
3.5 Understanding Need for Adapted Teaching Methods, Approaches, Strategies & Techniques

Unit 4: Expanded Core Curriculum for Students with Visual Impairment

4.1 Concept of Expanded Core Curriculum (ECC)
4.2 Components of ECC
4.3 Compensatory academic skills: Techniques for Braille Reading and Writing
4.4 Standard English Braille and Bharti Braille (Hindi/Regional Languages)
4.5 Orientation and mobility; Independent living skills

Unit 5: Introduction to Interventions and Adapted Teaching Strategies

5.1 Enriched teaching for concept development: Converting visual concepts into accessible experiences; Mediated teaching-learning
5.2 Functional Academic Skills: Reading, Writing, Arithmetic, Listening, Spatial Awareness and Organizational Skills
5.3 Reasonable accommodation and curricular adaptations with specific concerns of students with visual impairments.
5.4 Assistive technologies for children with visual impairment
5.5 Intervention strategies for Children with low vision and multiple disabilities with visual impairment (MDVI)

Suggested Coursework/Practicum

- Present a seminar on the implications of visual impairment on the personality of the visually impaired.
- Use checklists prepared by national-level organizations (NCERT, NIEPVD or others) for the identification of vision-related problems.
- Prepare material on awareness about causes and prevention of visual impairment.
- Prepare teaching learning material relevant for children with visual impairment.

Suggested Mode of Transaction

Presentation, discussion, workshop, Assignment(s), Group/Individual work, Project(s) , Field Experience, Lecture-cum-Demonstration

Suggested modes of assessment

Individual and group projects, Periodic class tests and assignments, Group discussions, Submission of reflective essays, class tests, credit to be given to the students for their efforts and participation.

Suggested Readings:

Barraga, N. C. (1980). Sequences of Visual Development. University of Texas, Austin.
Bhan, S., & Swarup, S. (2010). Functional Skills Inventory for the Blind. National Association for the Blind. Mumbai.
Bhandari, R., & Narayan J. (2009).Creating learning opportunities: a step-by-step guide to teaching students with vision impairment and additional disabilities, including deafblindness. India: Voice and vision.
Holbrook, M. C., & Koenig, A. J. (2000). Foundations of Education, Vol I: History and Theory of Teaching Children and Youths with Visual Impairments. AFB Press, New York.
Hyvarinen, L., & Jacob N. (2011).What and how does this child see: assessment of visual functioning for development and learning. Vistest Ltd., Finland.
Kumar, P. (2018). Alp Drishti Bachhe (Hindi). Delhi: S R Publishing House
Kundu, C.L. (2000). Status of Disability in India. RCI, New Delhi.
Leat, S.J., Shute R.H., & Westall, C.A. (1999). Assessing children's vision: A handbook. Butterworth-Heinemann, Oxford.
Mani, M.N.G. (1992). Concept development of blind children. SRK Vidyalaya, Coimbatore.
Mani, M.N.G. (2001). Reading Preference Test (REPT) for Children with Low Vision. Coimbatore: International Human Resource Development Centre for the Disabled.
Mukhopadhyay, S., Mani, M.N.G., RoyChoudary, M., & Jangira, N.K. (1988). Source Book for Training Teachers of Visually Impaired. NCERT, New Delhi.
National Institute for the Visually Handicapped (1990). Handbook for Teachers of the Blind. NIVH, Dehradun.
NIEPVD (2020). *Effective Schools for Students with Visual Disabilities (Quality Indicators and Parameters).* NIVH Dehradun. Retrieved online on 22/11/2023 from https://nivh.gov.in/pdfdoc/qualityindicators.pdf
NIEPVD (2022). Expanded Core Curriculum (Hindi) Vistarit Mool Pathchariya. National Institute for the Empowerment of Persons with Visual Disabilities. Available at https://nivh.gov.in/?page_id=7391
NIEPVD (2023). Screening Checklist for Vision Difficulties in Students . National Institute for the Empowerment of Persons with Visual Disabilities. Available at https://nivh.gov.in/?page_id=7391
NIEPVD (2016). Visual Disability: A Resource Book for Teachers. Vo. 1. National Institute for the Empowerment of Persons with Visual Disabilities, Dehradun
NIEPVD (2016). Visual Disability: A Resource Book for Teachers. Vo. 2. National Institute for the Empowerment of Persons with Visual Disabilities, Dehradun
Warren, D.H. (1983). Blindness and Early Childhood Development. AFB Press. New York.
Punani, B., & Rawal, N. (1993). Handbook: Visual Impairment. Ashish Publishing House, New Delhi.

3.0 DISCIPLINARY /INTERDISCIPLINARY COURSES

This consists of 64 credit courses. Courses to be adopted/offered by the University/ Institution concerned in line with regular Year Undergraduate Programme - FYUP within prescribed credits as outlined in the Curriculum Framework

4.0 STAGE & DISABILITY SPECIFIC CONTENT-CUM-PEDAGOGY (16 Credits)

A student needs to complete 16 credits courses in this domain. This domain will lead to have disability specialization area and pedagogy specialization area of the student. Total of 08 Credits courses will be offered in disability-specific area and 08 credits in Pedagogy area as per the followings:

Code	Course Titles	Credits	Semester
4A - Disability Specialization Courses (Total 08 Credits)			
4.4.1	Disability Specific Course I	4	3
4.4.2	Disability Specific Course II	2	4
4.4.3	Disability Specific Course III	2	4
4B - Pedagogical Courses (Total 08 Credits)			
Any 2 to be opted from 4.4.4 to 4.4.16	Pedagogy -1 Course - I	2	5
	Pedagogy - 1 Course – II	2	6
	Pedagogy - 2 Course - I	2	5
	Pedagogy - 2 Course – II	2	6
	Total (4A+4B)	**16**	

Sl.	Course Title
4.4.4	Content cum Pedagogy of Agriculture at Secondary Stage (Course I & II)
4.4.5	Content cum Pedagogy of Arts (Visual & Performing) at Secondary Stage (Course I & II)
4.4.6	Content cum Pedagogy of Commerce, Accountancy & Business Studies at Secondary Stage (Course I & II)
4.4.7	Content cum Pedagogy of Computer Science at Secondary Stage (Course I & II)
4.4.8	Content cum Pedagogy of Home Science at Secondary Stage (Course I & II)
4.4.9	Content cum Pedagogy of Language Hindi at Secondary Stage (Course I & II)
4.4.10	Content cum Pedagogy of Language English at Secondary Stage (Course I & II)
4.4.11	Content cum Pedagogy of Mathematics at Secondary Stage (Course I & II)
4.4.12	Content cum Pedagogy of Physical Education at Secondary Stage (Course I & II)
4.4.13	Content cum Pedagogy of Science (Biological) at Secondary Stage (Course I & II)
4.4.14	Content cum Pedagogy of Science (Physical) at Secondary Stage (Course I & II)
4.4.15	Content cum Pedagogy of Social Science at Secondary Stage (Course I & II)
4.4.16	Content cum Pedagogy of Vocational Education at Secondary Stage (Course I & II)

For each area of disability specialization selected by student, three compulsory courses would be offered under that particular disability specialization area. **A student of secondary level ISITEP Programme needs to select any one Disability Specialization Area as specified below**:

A. **Autism Spectrum Disorders (ASD)**
B. **Hearing Impairment (HI)**
C. **Intellectual Disabilities (ID)**
D. **Multiple Disabilities (MD)**
E. **Specific Learning Disabilities (SLD)**
F. **Visual Impairment (VI)**

A student teacher needs to select two pedagogical course area and accordingly needs to complete two courses in each pedagogical area. Pedagogical Courses of two areas/streams need to be opted by the student teacher in line with the discipline courses they have been opted (as offered by the University/HEI under Domain 3). A student teacher of secondary level ISITEP Programme needs to select any two Pedagogical area/stream from table given above. Each stream of pedagogy courses will consist of two papers respectively of two credits. i.e. 2 Pedagogy Area x 2 Papers in Each = 04 Credits.

In additional to the pedagogical papers, disability wise common pedagogical supports have been presented for reference for the delivery of the subject matter.

Semester-wise Distribution:

Code	Course Titles	Credits
Semester 3		
4.4.1	Disability Specific Course I	4
Semester 4		
4.4.2	Disability Specific Course II	2
4.4.3	Disability Specific Course III	2
Semester 5		
Any 2 to be opted from 4.4.4 to 4.4.16	Pedagogy 1- Course - I	2
	Pedagogy 2- Course - I	2
Semester 6		
Any 2 to be opted from 4.4.4 to 4.4.16	Pedagogy 1- Course – II	2
	Pedagogy 2- Course – II	2
	Total	**16**

4A - Disability Specialization Courses

Code	Course Titles	Credits	Semester
4A - Disability Specialization Courses (Total 08 Credits) #			
4.4.1	Disability Specific Course I	4	3
4.4.2	Disability Specific Course II	2	4
4.4.3	Disability Specific Course III	2	4
	Total	**8**	

 # Above three courses will be provided as per disability specialization:

A. **Autism Spectrum Disorders (ASD)**
B. **Hearing Impairment (HI)**
C. **Intellectual Disabilities (ID)**
D. **Multiple Disabilities (MD)**
E. **Specific Learning Disabilities (SLD)**
F. **Visual Impairment (VI)**

Disability Specialization Courses

Autism Spectrum Disorders

Identification & Need Assessments (ASD)

Course Code: 4.4.1 (ASD) **Credits: 04** **Semester: 3**

About the Course:

This course provides a multidimensional perspective on understanding autism spectrum disorders. Autism is an invisible disability i.e., without any physical markers that can let others around them become aware of their disability, the difficulties they face and things that can be helpful. In the absence of a physical reminder, it is often hard to remember that autistic people have their unique challenges, needs and learning styles. The course is designed to help the learners acquire knowledge to understand and identify autistic individuals, and their learning styles. The course will also highlight the infrastructural, systemic and attitudinal barriers that come with having an invisible disability and its impact on learning. By the end of the course, participants will be adept at using both standardized and informal assessment methods, interpreting assessment results, and helping them to develop tailored intervention plans to support each child's unique educational needs.

Learning Outcomes: After completing the course learners shall

- Demonstrate an understanding and appreciation of the culture and spectrum of autism
- Understand the theoretical perspectives and real-life challenges of autistic students
- Understand and apply various assessment tools and procedures
- Assess and identify correlating conditions that impact autistic students
- Demonstrate the ability to write reports and disseminate findings of the assessments

Unit 1: Introduction to Autism Spectrum Disorders

1.1 Autism Spectrum Disorder: Historical perspectives and the shift to neurodiversity

1.2 Understanding ASD from DSM, ICD, ICF and the neurodiversity paradigm

1.3 Understanding theoretical perspectives: Theory of Mind, Central Coherence Theory, Executive Function Theory, Double Empathy Problem, Polyvagal Theory, Monotropism, Sensory Perception Theory

1.4 Understanding unique manifestations and learning styles of students across the spectrum (splinter skills, context-based, concept-based teaching vs rote learning, concrete learning, literal learning and need for generalisation training)

1.5 Understanding invisible disabilities and their impact on identification and interventions

Unit 2: Identification and Needs Assessments

2.1 Assessments and evaluations: Concepts, types, benefits and limitations, myths and stereotypes that lead to missed / incorrect diagnosis and interventions

2.2 Understanding the role of intersectionality (e.g., cultural context, age, gender, socio-economics, abilities, related conditions)

2.3 Developmental trajectory of autistic learners across domains: Physical, social, cognitive, sensory, language and communication and emotional)

2.4 Tools for autism identification: Application and types of tests and measures (observation-based/parent report, self-report measures, e.g., (e.g., MCHAT-R/F, ISAA, AIIMS Modified INDT-ASD, CARS-2, ADOS-2, ADI-R, RAADS-R, SRS-2)

2.5 Disclosure of diagnosis, report writing and documentation

Unit 3: Assessment Across Domains

3.1 Speech, language and communication (e.g., ABLLS, identify appropriate AACs with speaking and non-speaking autistic individuals, use of textured symbols, manual signs, lexigrams/logos, line drawings, photographs, miniatures, part/whole objects)

3.2 Adaptive, Functional and Cognitive Skills (Portage Guide, Upanayan, VABS 3; VB-MAPP, AFLS, WISC, MISIC, Binet-Kamath, Raven's Progressive Matrices, Seguin Form Board, Bhatia Battery of Tests)

3.3 Educational and program planning (e.g., PEP-R; A-PEP; FACP; EACCID, ABLLS, BASIC-MR, and BASAL-MR)

3.4 Vocational and Independent living: TTAP-2, AFLS

3.5 Benefits and limitations of assessment tools in use with autistic people

Unit 4: Assessment for Related and Cooccurring Conditions

3.1 Motor and coordination

3.2 Sensory processing, its impact on emotional regulation, need and advantages of self-stimulatory behaviours in self-regulation

3.3 Developmental and neurological conditions (e.g., ID, SLD, ADHD, Hyperlexia, Semantic Pragmatic Disorder, seizures, Tourette's Syndrome)

3.4 Physical and mental health (e.g., Autoimmune, gut-related conditions, depression, anxiety, OCD, Masking and camouflaging, bullying and abuse)

3.5 Role of ICT in assessment

Unit 5: Assessment for Educational Planning and Teaching

5.1 Concept, purpose, scope and significance of assessments

5.2 Assessment for educational planning and intervention: Formal and informal assessments, clinical assessment, entry-level, formative and summative assessments, use of Norm-referenced (NRT) and Criterion-referenced tests (CRT), Curriculum-based assessment and Developmental Checklists for assessment and programming

5.3 Considerations during assessments (e.g., cultural and contextual adaptations, infrastructure and environment, the role of family members, observations across multiple settings such as school, home, and community etc)

5.4 Considerations for educational planning and interventions (differences in autistic learning styles, interests, strengths, skills and needs profile, context-based, need for generalisation training, child profile, sensory profile, socio-cultural background, infrastructure, TLMs and environment etc.)

5.5 Consolidating information, documentation, report writing, referrals, and collaborations for continued support in the future: (e.g., further education, work and employment, access to certification, legal support and provisions etc.)

Suggested Coursework/Practicum:

- Develop presentations about autism, differences and neurodiversity to create positive awareness and appreciation amongst educators, other professionals and in general community.
- Carry out appropriate assessments and develop a detailed learning profile for two different persons with ASD ensuring different genders and ages are represented.
- Develop a plan to make autism-friendly environments and supports in their everyday settings (e.g., inclusive school classroom, special school classroom, tuition or hobby class, home etc.)

Suggested Mode of Transaction:

Learners are encouraged to critically review all materials

- Observations
- Demonstrations
- Hands-on experiences
- Field visits
- Audio-video and multimedia resources
- Lectures and discussions
- Presentations and projects
- Workshops and seminars
- Online resources
- Self-study

Suggested Assessment:

- Coursework practicum
- Written assignments and tests
- Individual and group projects
- Classroom presentations
- Sessional and Terminal semester examinations (as per UGC norms)

Suggested Readings:

Achenbach, T. M., Rescorla, L.A. (2001). Child Behaviour Checklist (CBCL). https://aseba.org/wp-content/uploads/2019/02/schoolagecbcl.pdf

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Gathoo, V., Palkar, G., Mathur, D., Mhatre, P., Kapoor, D., & Veling, S. (2023). Curricular Framework for Cross Disability Early Intervention and School Readiness: PEHAL (Birth to 3 years) and NIPUN Inclusive (3 to 6 years) (1st ed.). Rehabilitation Council of India.(ISBN) 978-81-962808-0-2

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Grandin, T., & Panek, R. (2013). The autistic brain: thinking across the spectrum. Boston: Houghton Mifflin Harcourt.

Gray, C. (2016). The New Social Story Book, Revised and Expanded 15th Anniversary Edition. United States: Future Horizons.

Gulati, S. Kaushik, J. S., Chakrabarty, B., Saini, L., Sapra, S., Arora, N. K., Pandey, R. M., Sagar, R., Paul, V. K., Sharma, S. AIIMS-Modified INCLEN Diagnostic Tool for Autism Spectrum Disorder (AIIMS Modified INDT-ASD). http://pedneuroaiims.org/Tools-Combined.pdf

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Jeyachandaran, P., & Vimala, V. (2000). Madras Developmental Programming System. Chennai: Vijay human services

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Mesibov, G. B., Shea, V., Schopler, E. (2010). The TEACCH Approach To Autism Spectrum Disorders. N.Y. Springer.

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Peshawaria, R. & Venkatesan, S. (1992): Behavioural Assessment Scales for Indian Children with Mental Retardation.

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Rao, S., Narayan, J (2000) Aarambh, School readiness package. Secunderabad: NIMH

Ritvo, R. A., Ritvo, E. R., Guthrie, D. et al. (2011). The ritvo autism asperger diagnostic scale-revised (RAADS-R): a scale to assist the diagnosis of autism spectrum disorder in adults: an international validation study. Journal of Autism and Developmental Disorders.

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- https://www.ignouhelp.in/ignou-bed-study-material/
- http://autism-india.org
- https://www.donnawilliams.net/
- http://www.buildsomethingpositive.com/wenn/
- http://www.aspie.com/
- https://thegirlwiththecurlyhair.co.uk
- https://autisticnotweird.com
- https://Feelslikeautism.com
- https://kbrudraakshkb.wixsite.com/autism-advocacy
- https://barryprizant.com/
- https://out-of-sync-child.com/
- https://neuroclastic.com
- https://wrongplanet.net/
- https://thinkingautismguide.com/
- https://teacch.com/resources/
- http://www.autism-india.org/docs/Advocacy_Attachments_Autistic%20Spectrum%20Disorder%20A%20Guide%20for%20Paediatricians.pdf
- https://blog.stageslearning.com/blog/10-tips-for-teaching-young-children-with-autism-spectrum-disorder
- https://files.eric.ed.gov/fulltext/ED358637.pdf
- https://files.eric.ed.gov/fulltext/ED491496.pdf
- https://wac.colostate.edu/resources/teaching/guides/ld/
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- https://www.unom.ac.in/asc/Pdf/CURRICULUM%20DESIGN%20AND%20DEVELOPMENT-1.pdf

Intervention and Teaching Strategies (ASD)

Course Code: 4.4.2 (ASD) **Credits: 2** **Semester: 5**

About the Course:
This course equips the learner with an understanding of the approaches to curriculum development, its types and processes, acquiring knowledge and skills to adapt curriculum and learn strategies to teach students with autism. It prepares the learners to select and adapt teaching strategies as suited to the strengths and needs of children with ASD in different learning environments. Using appropriate teaching strategies can significantly impact the acquisition and development of skills in the long term. By the end of this course, learners will be familiar with the pivotal strategies, that promote skills necessary for overall development. This has the potential to enhance a child's ability to integrate and participate in educational and social settings leading to a more positive experience and well-rounded development. Since autism is a lifelong condition, understanding needs across the lifespan will help the learners be aware of the long-term needs of autistic people while deciding goals, adaptations, and teaching in the present.

Learning Outcomes: After completing the course learners shall

- Understand and apply the concepts of curriculum designing, adaptation and evaluation to meet the learning needs of autistic children
- Apply the information collected from assessments done in planning, documenting and implementing an educational and life skills program.
- Design a holistic curriculum that focuses on developing pivotal skills, using positive strategies.
- Recognise conditions that impact autistic students and implement environmental, attitudinal and teaching facilitators based on the learning styles of autistic learners.
- Understand and implement a positive approach in all interactions including teaching

Unit 1: Curriculum Development and Adaptation for Autistic Learners

1.1 Curriculum development: Types (e.g., core, support, collateral, co-curriculum, hidden); approaches and principles (e.g., developmental, functional, ecological, eclectic, school-based)

1.2 Curriculum designing (e.g., functioning level, age appropriateness, active vs. passive learning, holistic development, learning in natural and routine-based environments); adaptations for different settings (e.g., home-based settings, pre-schools, special and inclusive schools, in-person, online, blended, group, 1:1 settings) and curriculum transaction (e.g., person-centred, activity-centred)

1.3 UDL principles for content decisions (what student learns), process decisions (engaging students in); product decisions (student demonstration of learning)

1.4 Components of IEP and IFSP (e.g., Family background, current level of functioning of the child, goals, task analysis, short-term objectives, teaching strategies, methods, materials and evaluation)

1.5 Integration of ICT in disability-inclusive services (e.g., assessments, curriculum development and adaptations, planning, preparation and implementation of IEP, lesson plans, TLMs, use of AACs and digital resources, report writing etc.) to promote independence across the lifespan

Unit 2: Teaching Methods, Techniques and Strategies

2.1 Principles of teaching (e.g., concrete, iconic, representational, symbolic) and stages of learning (e.g., acquisition, maintenance, fluency and generalization)

2.2 Addressing differing learning needs (visual learners, auditory learners, tactile, kinaesthetic learners, perspective-taking and executive functioning)

2.3 Identification and implementation of appropriate teaching strategies (e.g., concept-building, context-based learning, strength focus, sensory-friendly environmental adaptations; task analysis, prompting, fading, chaining, shaping, modelling etc.)

2.4 Addressing the hidden curriculum (e.g., awareness of expected but implicit rules, processes and procedures, social hierarchies and protocols)

2.5 Classroom management (team teaching, shadow teaching, peer engagement and cooperative learning) and adaptations to meet needs in different settings – individual, small group and large groups, home-based settings, special schools, inclusive schools; vocational and work settings, in-person, online, and blended learning

Unit 3: Academic and Non-Academic Skills

3.1 Need and use of AT for academic learning and evaluation (e.g., reading, writing - talking books, recorder, optical character recognition, speech recognition systems, alternative writing surfaces, pencil grips, podcasts, proofreading software, talking calculators, electronic worksheets, virtual manipulatives, fluidity software etc.)

3.2 Importance and use of AACs with speaking and non-speaking autistic students for communication and evaluation.

3.3 Teaching and application of academic concepts, perspective-taking skills and executive functioning skills (e.g., sticky notes, highlighter pens, or tapes, graphic/ digital organisers, calendars, labelling, to-do lists, timers)

3.4 Focus on emotional regulation self-advocacy skills and positive mental health (e.g., expressing needs and thoughts, asking for help, stress management etc.)

3.5 Focus on non-academic skills such as participation in co-curricular activities (e.g., adapted sports and games, interpersonal skills, conflict resolution, body awareness, privacy and sexuality, facilitating transitions across age, activities and environments, self-advocacy and asking for help, and emotional regulation)

Unit 4: Neurodiversity-Affirming Teaching Strategies

4.1 Using neurodiversity-affirming strategies (e.g., making it sensory-friendly, based on strengths, interests and motivation; creating predictability and facilitating expected and unexpected transitions using structure, visual supports, social stories, comic strips, task analysis etc.)

4.2 Development of person-focussed, environment, TLMs and teaching aids and evaluations (e.g., adaptive books, manipulatives, use of ICT and hands-on activities)

4.3 Addressing the hidden curriculum (e.g., awareness of expected but implicit rules, processes and procedures, social hierarchies and protocols)
4.4 Building agency, confidence and self-esteem (e.g., providing and respecting choices; incorporating interests, avoiding aversive techniques and punishment procedures)
4.5 Facilitating peer relationships inside and outside the classroom and creating an environment that promotes respect for all and minimises opportunities for bullying and abuse

Unit 5: Promoting Positive Behaviours

5.1 Teaching strategies that promote positive behaviour (e.g., using structure and visual supports, providing choices and control, predictable environments, using differentiated instructions)
5.2 Understanding the importance and benefits of self-stimulatory behaviours, sensory processing, focused interests and motivations
5.3 Understanding behaviours (Topography, communicative and non-communicative functions, differences in shutdowns, meltdowns and tantrums)
5.4 Role of internal (e.g., pain, hormones, sleep, health, and medication) and external factors (e.g., unpredictability, lack of clarity, sudden changes)
5.5 Limitations and negative impact of the use of aversive and punishment procedures

Suggested Coursework/Practicum:

- Develop a non-academic curriculum
- Develop lesson plans and teaching aids to teach three non-academic concepts
- Develop lesson plans and teaching aids to teach three academic concepts

Suggested Mode of Transaction:

Learners are encouraged to critically review all materials

- Observations
- Demonstrations
- Hands-on experiences
- Field visits
- Audio-video and multimedia resources
- Lectures and discussions
- Presentations and projects
- Workshops and seminars
- Online resources
- Self-study

Suggested Assessment:

- Classroom presentations
- Individual and group projects
- Written assignments and tests
- Coursework practicum
- Sessional and Terminal semester examinations (as per UGC norms)

Suggested Readings:

Carroll, J.M (2020). Art Therapy and Individuals with Developmental Disabilities, London: Jessica Kingsley Publishers

Eredics,N, (2018) Inclusion in Action: Practical Strategies to modify Curriculum. New York:Paul. H. Brookes Publishing Company

Kranowitz, C. S. & Newman J. (2010). Growing an In-Sync Child: Simple, Fun Activities to Help Every Child Develop, Learn and Grow. Penguin, USA.

Martin, N., Hacker., B.J., Attermeier, S.M., (2004). The Carolina Curriculum for Preschoolers with Special Needs, Baltimore: Paul.H. Brookes

Myles, B.S., Trautman, M.L., Schelvan, R.L. (2004). The Hidden Curriculum: Practical Solutions for Understanding Unstated Rules in Social Situations. USA:AAPI,

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National Council of Educational Research and Training (2017). Learning Outcomes at the Elementary Stage. NCERT, New Delhi

National Council of Educational Research and Training (2019). Continuous and Comprehensive Evaluation Guidelines. NCERT

National Council of Educational Research and Training (2019). Including Children with Autism in Primary Classrooms: A Teachers Handbook. Delhi, NCERT. https://ncert.nic.in/pdf/publication/otherpublications/Including_Children_with_Autism_in_Primary_Classrooms.pdf

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Sarva Shiksha Abhiyan (2013). Module on Training of Resource Teachers for Autism Spectrum Disorders. SSA. http://14.139.60.153/bitstream/123456789/1585/1/Training%20Module%20on%20Autism%20Spectrum%20Disorders.pdf

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Simpson, R.L. & Myles, B.S. (2008). Educating Children and Youth with Autism: Strategies for effective practice, 2nd ed. Pro.Ed. Texas.

Singhal N. (2022). Independence in Self-Care Routines: A Curriculum for Professionals and Parents of Children with Autism and Developmental Conditions. Developed with support from DST, GOI.

Wehmeyer, M.L, Brown, I., Percy, M., Shoegren, K.A.,Fung, W.L.A. (2071). A comprehensive guide to intellectual and developmental disabilities, Baltimore: Paul.H. Brookes.

Online links

- http://autism-india.org
- https://www.donnawilliams.net/
- http://www.buildsomethingpositive.com/wenn/
- http://www.aspie.com/
- https://thegirlwiththecurlyhair.co.uk
- https://autisticnotweird.com
- https://Feelslikeautism.com
- https://kbrudraakshkb.wixsite.com/autism-advocacy
- https://barryprizant.com/
- https://out-of-sync-child.com/
- https://neuroclastic.com
- https://wrongplanet.net/
- https://thinkingautismguide.com/
- https://teacch.com/resources/
- http://www.autism-india.org/docs/Advocacy_Attachments_Autistic%20Spectrum%20Disorder%20A%20Guide%20for%20Paediatricians.pdf
- http://www.tandfonline.com/toc/ceye20/current#.VIi8X3v0_Si
- https://www.tandfonline.com/toc/cijd20/current
- https://www.tandfonline.com/toc/ujec20/current
- https://us.sagepub.com/en-us/nam/journal-of-early-intervention/journal201886
- https://ectacenter.org/portal/journals.asp

Technology, Family and Community Support (ASD)

Course Code: 4.4.3 (ASD) **Credits: 04** **Semester: 6**

About the Course:
Educators most often become the consistent source of trust, support and guidance. A sensitive, skilled, and informed professional can help parents develop healthy and positive parenting skills as well as knit the family together to ensure all family members can enjoy the quality of life. As an advocate within the community, a special educator also has the responsibility of creating awareness and involving the community to support the family. This course discusses the ways and means to achieve these goals.

Learning Outcomes: After completion of this course, the student teacher will be able to:

- Implement ICT tools to create inclusive and supportive learning environments.
- Understand experiences, and perspectives and develop skills necessary to support autistic people and their families
- Identify needs and resources available to the family members
- Sensitively support and empower autistic learners and their family members
- Promote community participation and engagement

Unit 1: Introduction to Assistive Technology (AT) & Universal Design for All (UDL)

1.1 Concept, Definition and the Importance of ICT and AT

1.2 Types of Assistive Technology and the difference between Assistive Devices and Adaptive Devices (low-tech, mid-tech, high-tech)

1.3 Integration of AT in planning and preparation (e.g., select goals and technology, lesson planning, preparation of TLMs, use of AACs and digital resources, implementation of lessons, report writing etc.

1.4 Universal instructional design and designing environments for all (e.g., Infrastructure and physical environment, transport, information and communication, access to facilities, services etc.)

1.5 Role of ICT in disability-inclusive services, development and sharing of digital resources for inclusive education, adaptive and functional skills and promoting independence across the lifespan

Unit 2: Building Personal Competency to Support Family of Autistic Children

2.1 Understanding and appreciating neurodiversity and intersectionality

2.2 Learning from autistic persons and their families about their emotions, goals, positive experiences, challenges, needs and helpful supports (e.g., include perspectives from parents, extended family members, siblings, and also from autistic self-advocates about living with people without autism)

2.3 Skills necessary in educating families (e.g., updated knowledge, neurodiversity-affirming approach, access to local resources and multidisciplinary team, awareness of inherent personal attitudinal barriers, ableism, deficit-based approach etc.)

2.4 Skills necessary in counselling (e.g., non-judgemental, unconditional acceptance, active listening, being non-directive, empathy, paraphrasing and reflecting etc.)
2.5 Awareness of autism and/or co-occurring disabilities in parents or other family members and building support accordingly

Unit 3: Assessment of Family and Community Support

3.1 Understanding the child and family context and resources that impact the needs and intervention (e.g., geographical and socio-cultural setting, socioeconomic status, literacy and language levels, access to resources and services, cultural practices, attitudes and values, role of immediate and extended family members, presence of disabilities within the family; professional and community support available
3.2 Collaborations with multidisciplinary teams and support groups and access to continuous and periodic assessment and programme planning
3.3 Additional resources required (e.g., tuition, choice of academic subjects, plan for higher education, vocational, work and employment, access to legal provisions)
3.4 Key components of Individualised Family Support Plan (IFSP) and steps to develop IFSP
3.5 Observations, record keeping and documentation

Unit 4: Empowering Families of Autistic Children

4.1 Family-centred practices: parent-empowerment training programs, ACT program, family systems program, instructional and interactional programs
4.2 Skills to recognise autism-friendly practices and service providers
4.3 Building access within the community (e.g., public transport, after-school programs (e.g., studies, vocational, employment), formal and informal support groups, professionals and organisations, allied services (e.g., blood tests, dentist etc.), leisure activities)
4.4 Facilitating knowledge of and access to the legal framework and government scheme
4.5 Promoting positive mental health, well-being, community participation and advocacy skills to address stigma and discrimination and build self-esteem and self-confidence

Unit 5: **Home-Based Teaching Using Positive Behaviour Supports**

5.1 Addressing family as a unit: building family bonds, facilitating interactions, and enhancing communication
5.2 Recognition and appreciation of the strengths and needs of neurodiverse individuals
5.3 Teaching skills essential in preparing for transitions, planning and developing predictability and promoting independence through the use of visual supports at home
5.4 Teaching essential life skills such as self-care, time management, independent travelling, budgeting and prioritising, emotional regulation
5.5 Teaching skills essential for community participation (e.g., personal grooming, going to a movie, attending family events, vacations etc.)

Suggested Coursework/Practicum:

- Interact with at least 4 different families of children in different grades. Record the different perspectives of family members. Submit a report on your observations about the similarities and changes in the perspectives and needs of different families

- Develop presentations about autism, differences and neurodiversity to create positive awareness and appreciation amongst educators, other professionals and in general community.
- Develop a participation and support plan for one student with ASD
- Develop a plan for an autistic person to begin the process of advocating for their needs
- Develop a plan for the family of an autistic person to begin the process of advocating for their needs

Suggested Mode of Transaction:

Learners are encouraged to critically review all materials

- Observations
- Demonstrations
- Hands-on experiences
- Field visits
- Audio-video and multimedia resources
- Lectures and discussions
- Presentations and projects
- Workshops and seminars
- Online resources
- Self-study

Suggested Assessment:

- Classroom presentations
- Individual and group projects
- Written assignments and tests
- Coursework practicum
- Sessional and Terminal semester examinations (as per UGC norms)

Suggested Readings:

Kapoor, G. (2020). Beyond the Blue: Love, Life and Autism. India: Notion Press.

Myles, B.S., Trautman, M.L., Schelvan, R.L. (2004). The Hidden Curriculum: Practical Solutions for Understanding Unstated Rules in Social Situations. USA:AAPI,

National Research Council, Commission on Behavioural and Social Sciences & Education, Committee on Early Childhood Pedagogy (2001). Eager to Learn: Educating our Pre-schoolers.

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National Council of Educational Research and Training (2017). Learning Outcomes at the Elementary Stage. NCERT, New Delhi

National Council of Educational Research and Training (2019). Continuous and Comprehensive Evaluation Guidelines. NCERT

National Council of Educational Research and Training (2019). Including Children with Autism in Primary Classrooms: A Teachers Handbook. Delhi, NCERT.

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National Council of Educational Research and Training (2022) National Curricular Framework for Foundational Stage, New Delhi: NCERT

National Council of Educational Research and Training (2022). Toy- Based Pedagogy- A Handbook (Learning for Fun, Joy and Holistic Development) Part- I. MOE, Govt. of India

Neuville, E. (2019). Pathways to the Mainstream: The Promise of Social Role Valorization. In S. Dutta & M. De (Eds.), Understanding Autism (pp.32-46). Kolkata, West Bengal: The Asiatic Society.

Neuville, E., Cardozo, P., De, M., & Lemay, R. (2023). Social Role Valorization Theory in India: An Idea with Consequences. In Understanding Disability: Interdisciplinary Critical Approaches (pp. 25–38). essay, Singapore: Springer Nature

Park, C. C. (1972). The Siege: The First Eight Years of an Autistic Child. United States: Little, Brown.

Paul, D. (2023). I Have Autism and I Like to Play Good Bad Tennis: Vignettes and Insights from My Son's Life. India: Westland Non Fiction.

Prizant, B. M. (2015). Uniquely Human: A different way of seeing autism. NY: Simon & Schuster

Sarva Shiksha Abhiyan (2013). Module on Training of Resource Teachers for Autism Spectrum Disorders. SSA. http://14.139.60.153/bitstream/123456789/1585/1/Training%20Module%20on%20Autism%20Spectrum%20Disorders.pdf

Vaidya, S. (2016). Autism and the Family in Urban India: Looking Back, Looking Forward. Springer.

Online links

- http://autism-india.org
- https://www.donnawilliams.net/
- http://www.buildsomethingpositive.com/wenn/
- http://www.aspie.com/
- https://thegirlwiththecurlyhair.co.uk
- https://autisticnotweird.com
- https://Feelslikeautism.com
- https://kbrudraakshkb.wixsite.com/autism-advocacy
- https://barryprizant.com/
- https://out-of-sync-child.com/
- https://neuroclastic.com
- https://wrongplanet.net/
- https://thinkingautismguide.com/
- https://teacch.com/resources/

- http://www.autism-india.org/docs/Advocacy_Attachments_Autistic%20Spectrum%20Disorder%20A%20Guide%20for%20Paediatricians.pdf
- pecialneedsalliance.org/blog/the-emotional-journey-of-families-with-special-needs/#:~:text=During%20the%201960s%20and%201970s,%2C%20depression%2C%20understanding%20and%20acceptance.
- https://www.virtuallabschool.org/preschool/family-engagement/lesson-4/act/18466
- https://impactparents.com/blog/complex-kids/5-stages-of-the-special-needs-parent/
- https://psycnet.apa.org/fulltext/2014-52730-005.html
- https://ncpcr.gov.in/baalswaraj/
- https://wcd.nic.in/
- https://www.india.gov.in/official-website-ministry-social-justice-and-empowerment
- https://rbsk.mohfw.gov.in/RBSK/

Disability Specialization Courses

Hearing Impairment

Assessment & Intervention Strategies for Students with Hearing Impairment at Secondary Stage

Course Code: 4.4.1 (HI) **Credits: 04** **Semester: 3**

About the Course

Hearing loss impacts language acquisition which has an effect on communication, literacy, academics and socialisation. In most students early identification and appropriate timely intervention helps in overcoming these challenges. While children reach secondary stages they would have established patterns of communication modes, learning and expressing themselves. These would have to be essentially understood and supported, so as to achieve the secondary educational goals and objectives. Towards this it is essential that the disability related aspects are known to the teachers, so that they feel confident of handling and supporting the students with hearing impairment. This course on assessment and intervention of students with hearing impairment is hence designed to enhance knowledge of student teachers about what are the various aspects required to be assessed and intervened for educational purposes. Since students with hearing impairments have preference and options for oral or manual mode using Indian Sign Language i.e. ISL, both listening and speech assessments so also ISL needs to be understood. Accordingly the units have been designed in this course.

Learning Outcomes

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

- Describe various audiological assessments and their relevance in education.
- Explain the role of language and communication and impact of hearing loss on these areas and undertake strategies to enhance it.
- Demystify the myths and explain the reality with respect to various aspects of speech intelligibility, ISL and facilitate their use
- Describe methods, and techniques to facilitate language, literacy and subject knowledge.
- Undertake educational assessment and intervention

Course content

Unit 1: Audiological assessment, interpretations and interventions

1.6 Hearing; its importance and types of hearing loss and its impact. Deaf vs Hard of hearing (D vs. HH).

1.7 Effects of hearing loss on language, communication, literacy, educational achievement and socio-emotional skills

1.8 Assessment of hearing; behavioural and physiological tests; Orientation to various age-appropriate tests, interpretation of aided and unaided audiograms and speech spectrums.

1.9 Interpretations of Audiological evaluations for classroom instructional practices and optimising good acoustics in classrooms and other spaces in schools.

1.10 Hearing devices for listening; Hearing vs. listening. Types of hearing devices, current advanced hearing aids, cochlear implants, Auditory training and its strategies for enhancing listening of students at secondary school stage.

Unit 2: Communication & language of students with hearing impairment

2.1 Communication; meaning and requisites. Modes and methods of communication of D&HH; Oral-aural/spoken, Manual using ISL, Educational Bilingualism and Total communication

2.2 Diversity and Heterogeneity in DHH. Intrinsic (such as ease and preference, availability and acceptance of hearing devices) and extrinsic factors (such as families with and without hearing loss, early intervention) leading to diversity and heterogeneity. Impact on secondary and higher secondary education

2.3 Myths and realities about communication of D&HH students. Strategies for facilitating preferred mode and method of communication between students with and without hearing impairment

2.4 Language and communication. Complementarities. Receptive and expressive language. Second language acquisition, issues challenges.

2.5 Language deprivation; meaning, causes. Impact of language deprivation at secondary stages and strategies to overcome it for further education.

Unit 3: Speech and its facilitation

3.1 Speech and spoken language. Pre-requisites, processes of acquisition and factors enhancing speech acquisition (such as speech perceptual abilities, use of devices, family support and engagement).

3.2 Basics of articulation and phonology (active and passive articulators; classification of vowels and consonants) & its assessment.

3.3 Segmental, non-segmental and supra-segmental aspects of speech and its importance for speech and spoken language. Speech intelligibility and strategies for improvement.

3.4 Speech reading vs. Speech teaching. Barriers and facilitators for speech reading in D&HH. Approaches (Uni sensory and multisensory) to speech teaching.

3.5 Speech correction – Principles, strategies, and role of teachers at the middle stage in speech correction.

Unit 4: Educational Bilingualism and use of ISL

4.1 Importance of Sign Language for students with hearing impairment. Facilitating use of Indian Sign Language (ISL) as first language (L1) in classroom for teaching subjects.

4.2 Developing welcoming school environment for ISL. Dos and don'ts with respect to students using ISL. Use of ISL for teaching school subjects

4.3 Facilitating learning of ISL amongst students without hearing impairment and other stake holders in school.

4.4 Bilingual educational approach using ISL and written language for education of students with hearing impairment; Strategies, Collaborative practices and team-based strategies.

4.5 Assessment of various components of ISL (hand-shape, palm orientation, position of the hands, movement of the hands and non-hand components such as the use of the face, facial expressions, or body posture). Facilitating assessments of students using ISL.

Unit 5: Educational Intervention and Assessment

5.1 Educational challenges of DHH students at Secondary levels. Handling language, literacy and content knowledge of school subjects.

5.2 Factors affecting curricular activities at secondary level and facilitating interventional strategies. Individualised and group support for language and literacy using natural, structural and mixed approach.

5.3 Types of assessment: norm referenced and criterion referenced tests, comprehensive and continuous assessment, summative and formative, formal and informal, conventional and alternate, performance based and curriculum based.

5.4 Tools and techniques of educational assessment: Observations, interviews, developmental scales, standardized and criterion-based tests, teacher made tests at different levels and classroom assessment techniques (conventional and modern).

5.5 Educational concessions for students with hearing impairment. Planning for optional subjects and its assessment.

Suggested Course work/Practicum

- Observe audiological tests and its evaluation.
- Prepare a journal for speech assessment, teaching, and correction.
- Writing live observations and videos of teaching through ISL and oral aural methods.
- Lesson planning for teaching using ISL and oral methods.
- Developing teacher made tests.

Suggested modes of transaction

Lecture cum Demonstrations, Tutorials, Case studies

Suggested modes of assessment

Assignments, tests, group discussions, debates and symposium

Suggested Readings

Aggarwal, J. C. (2010). Principles, Methods and Techniques of Teaching. Vikas Publishing House, New Delhi.

Beattie, R. G. (2001). Ethics in Deaf Education: the first Six Years. Academic Press Inc., New York.

Bel, R. L., & Frisbie, D. A. (1991). Essentials of Educational Measurement (5th ed). Prentice Hall Publication, New Jersey.

Boyle, J., & Fisher, S. (2007). Educational testing (A competence-based approach). BPS Blackwell Publication, Singapore.

Brigance, A. H., & Hargis, C. H. (1993). Educational Assessment, Charles C Thomas publication, USA. https://www.lead-k.org/leadkfaq/

Easterbrooks, S. (2007). Helping Deaf and Hard of Hearing Students to Use Spoken Language: A Guide for Educators and Families. Corwin,

Estabrooks, W., (2006). Auditory-Verbal therapy and practice. Alexander Graham Bell Association for Deaf, Washington DC.

Finitzo-Hieber, T. (1981). Classroom Acoustics. In R. J. Roeser & M. P. Downs (Eds.) Auditory disorders in school children. Thieme-Stratton, New York.

Guralnick, M, J, (2005). The Developmental Systems Approach to Early Intervention. Brooks, London.

Jalvi, R, Nandurkar, A., & Bantwal, A. (2006). Introduction to Hearing Impairment. Kanishka Publication, New Delhi.

Jurs, S. G., & Wiersma, W. (1990). Educational Measurement and Testing (2nded). Allyn and Bacon, Boston.

Ling, D. (2002). Speech and the hearing-impaired child: Theory and practice. (2ndEd). Alexander Graham Bell Association for the Deaf. Washington, DC.

Linn, R. L., & Gronlund, N. E. (1995). Measurement and Assessment in Teaching. (7thed). Prentice Hall Publication, New Jersey.

Livingston, S. (1997). Rethinking the Education of Deaf Students: Theory and Practice from a Teacher's Perspective. Heinemann, London.

Lynas, W. (1994). Communication Options in the Education of Deaf Children. Whurr Publishers Ltd, London.

Martin, F. N., & Clark, J. G. (2012). Introduction to Audiology (11thed.). Pearson Education, Boston.

Mathew, S., & Misra, A. (2010). Knowledge based evaluation of students with hearing impairment. Journal of NCED, Vol 2(1), 26-33.

McMillan, J. H. (2001). Classroom assessment: Principles & practices for effective instruction (2nd Ed). Allyn & Bacon, Boston.

Mahendru, M. (2005). Activity Book for Language Development in Children with Hearing Impairment. Educare Publication, New Delhi.

Mahshie. S. N. (1995). Educating deaf children bilingually, Gallaudet University, Washington

Marschark, M. S., & Patricia, E. (2003). Oxford Handbook of Deaf Studies Language and Education. Oxford University Press, London.

Maxon, A., & Brackett, D. (1992). The Hearing-Impaired Child: Infancy through High School Years. Andover Medical Publishers. Boston.

McAnally, P. I., Rose, S., & Quigley, S. P. (1987). Language Learning practices with Deaf Children. A College-Hill Publication, San Diego.

Moores, D. F. (1997). Educating the deaf. Houghton Mifflin Company, Boston.

Nerbonne, M.A., & Schow, R. L. (2013). Introduction to Audiologic Rehabilitation. 6th ed. Pearson Education, Boston.

Northern, J. L., & Downs, M. P. (2002). Hearing in Children. (5thed.). Lippincott Williams and Wilkins, Philadelphia.

Owens, R. E. (2012). Language development: An introduction. Pearson Education, Boston.

Paul, P. V., & Whitelaw, G. M. (2011). Hearing and Deafness: An Introduction for Health and Education Professionals. Jones and Bartlett Learning, Boston.

Patel, R. N. (1985). Educational Evaluation. Himalaya Publication, Bombay.

Poham, J. W. (1993). Educational Evaluation. Prentice Hall, New Jersey.

Powell, F., Finitzo-Hieber, T., Friel-Patti, S., & Henderson, D. (1985). Education of the Hearing-Impaired Child. Taylor and Francis Ltd., San Diego.

Quigley, S., & Paul, P. (1984). Language and Deafness. College–Hill Press Inc., California.

Research Briefs by VL2 https://vl2.gallaudet.edu/research-briefs Resources by LEAD -K

Rhoades, E., & Duncan, J. (2010). Auditory-verbal practice: Toward a family centered approach. Charles C. Thomas, Springfield: Illinois.

Singh, B. (2004). Modern educational Measurement and Evaluation System, Anmol Publication, New Delhi.

Sanders, D. A. (1993). Management of hearing handicap: Infants to elderly (3rd ed.). Englewood Cliffs, Prentice-Hall, New York.

Status of Disability in India. (2007). Hearing Impairment and Deaf-blindness. Rehabilitation Council of India, New Delhi.

Schirmer, B. R. (2001). Psychological, Social and Educational Dimensions of Deafness. Allyn and Bacon, Boston.

UNICEF. (2006). New Trends in Development Evaluation. Retrieved from http://www.unicef.org/ceecis/new_trends_dev_evaluation.pdf

VanRiper, C., & von Emerick, L. (1984). Speech correction – An introduction to speech pathology and audiology. 7th Ed. Englewood Cliffs Prentice Hall Inc. NJ.

Vasishta, M., & Ahuja, G. (2023). Introduction to education of deaf & hard of hearing children. New Delhi: Kanishka Publisher.

VCSL Checklist: https://vl2.gallaudet.edu/visual-communication-and-sign-language

Pedagogical Supports for Education of Students with Hearing Impairment at Secondary Stage

Course Code: 4.4.2 (HI) **Credits: 2** **Semester: 4**

About the Course

This course on pedagogical supports for education is designed to lay a foundation for facilitating education of students who are Deaf & Hard of Hearing (D&HH). It will help the student teachers to understand the various barriers in education so that they can be mitigated and create a conducive environment. Supports by way of bilingual education and curricular adaptations for D& HH students are covered along with technology for education. Most importantly the course has a unit specifically covering the literacy skills and its development at secondary stage because these are most essential for further independent learning and for pursuing higher education.

Learning Outcomes

After completion of this course, student teachers will be able to

- Explain the various types of barriers experienced by DHH students and ways to create a supportive school environment
- Describe the details of bilingual approach in learning, assessment and for developing self-identity
- Describe ways to enhance literacy skills for supporting academic skills
- Demonstrate knowledge and use of technology for facilitating learning of DHH students Undertake various steps for curricular adaptations

Course Content

Unit 1: Barrier free environment for education at secondary level

1.11 Physical and infrastructural barriers and their mitigation for education of DHH students

1.12 Handling of attitudinal barriers and stereotypes about D&HH and sensitising for etiquettes and acceptable social norms.

1.13 Creating signages, symbolic representations, directions, descriptors, labels in classrooms, assembly halls, laboratories, libraries and other spaces and other noise reducing techniques.

1.14 Creating an ISL rich and fluent environment, with ISL training to the students, teachers and school staff for fluent communication and teaching-learning.

1.15 Noise reducing techniques and other amplification devices.

Unit 2: Supports for bilingual approach at secondary stage

2.1 Principles of bilingual and bimodal education

2.2 Supporting social and emotional development

2.3 Holistic assessment strategies using bilingual approach
2.4 Integration of positive Deaf identity and Deaf culture
2.5 Teaching strategies using a bilingual approach. Accessible e-content and resources. ISL in social media.

Unit 3: Enhancing literacy skills at secondary stage

3.1 Importance of learning to read and reading to learn at secondary stage
3.2 Reading process, struggles and ways to overcome in secondary school DHH students
3.3 Strategies for enhancing reading comprehension; use of background information, reading between lines, inferring, questioning, searching-selecting, summarizing, visualizing-organizing, making connections, inferencing, synthesizing
3.4 Writing process and struggles in planning, drafting, evaluating, revisiting, editing. Creative writing strategies: mind-mapping, outlining, researching
3.5 Use of technology and Apps for supporting literacy skills

Unit 4: Use of technology for facilitating learning at secondary stage

4.1 Technology products for educational purposes: Listening (Induction loop/FM/IR), Visual (Speech to text/text to speech) Audio-Visual (computer-based learning & self-learning packages, Multimedia).
4.2 Technology Based Educational Services: Online learning, Web based learning, Computer assisted Learning, Video remote interpreting, C-Print technology, Open, Closed and real time captioning.
4.3 ICT and education of DHH students: Planning, Implementation & Evaluation of teaching-learning.
4.4 Web based technology for ISL, sign-to-text and text-to-sign technology and closed captioning.
4.5 Augmentative and Alternative communication (AAC) for DHH students with additional/associating concerns

Unit 5: Curricular adaptations and evaluations at Secondary stage

5.1 Curricular adaptation- Need based, for various subjects at secondary level
5.2 Nine types of adaptations, process, and steps
5.3 Differentiated Instruction and Universal Design for Learning (UDL)
5.4 Adaptations in cross curricular activities at secondary stage
5.5 Adaptations in assessments and evaluations

Suggested Course work/Practicum

Suggested mode of Transactions

Activity-based, lecture cum discussion method, project approach, demonstration, language laboratory based, experiential learning, group discussion.

Suggested modes of assessment

Classroom presentation, assignments, workshop, practicum, written test, sessional and terminal examination.

Suggested Readings:

Bialostok, S. (1992). Raising Readers: Helping your child to literacy. Penguin Publishers, Winnipeg, MB.

Bunch, G. O. (1987). The Curriculum and the Hearing-Impaired student: Theoretical and practical considerations. MA: College-Hill Press, Boston.

Culliman, B. E. (2000). Read to Me: Raising Kids Who Love to Read. Scholastic, New York.

Fontas, I. (2001). Guiding readers and writers (Grades3-6): Teaching comprehension, Genre and Context Literacy. NH: Heinemann, Portsmouth.

Hartman MC, Smolen ER, Powell B. (2023), Curriculum and Instruction for Deaf and Hard of Hearing Students: Evidence from the Past—Considerations for the Future. *Education Sciences*.; 13(6):533. https://doi.org/10.3390/educsci13060533

Johnson, C.D., &Seaton, J.B. (2020). Educational Audiology Handbook. San Diego: Plural Publishing

Kusuma, A., G., Reddy, G. L., & Ramar, R. (2010). Hearing Impairment: An Educational Consideration. New Delhi: Discovery Publishing House Pvt. Ltd.

McAnally, P. L., Rose S. and Quigley S. P. (1987), Language Learning Practices with Deaf Children, Boston: College Hill Press.

Marsh, C. J. (2004). Key concepts for understanding curriculum. Routledge Falmer.

Meyer, A., Rose, D., Gordon, D. (2014) Universal Design for Learning: Theory and Practice. CAST Professional Publishing, Wakefield

Moores, D. F., & Martin, D. S. (2006). Deaf Learner: Developments in curriculum and instruction. Gallaudet University Press.

Narayanswami, S., (2011), Communication Options and Students with Deafness, Rehabilitation Council of India, New Delhi.

Pisha, B., & Coyne, P. (2001). Smart from the start: The promise of universal design for learning. Remedial and Special Education, 22(4), 197-203.

Pollack, D. (1974). Education Audiology for the Infant with Limited Hearing. USA: Thomas Publisher.

Pollack, D., Goldberg, D.M., & Caleffe-Schenck, N. (1997). Educational Audiology for the Limited-Hearing Infant and Preschooler: An Auditory-Verbal Programme. Springfield: Charles C Thomas Pub Ltd.

Posner, G. J., & Rudnitsky, A. N. (2005). Course Design: A Guide to curriculum Development for Teachers. Pearson, London.

Randhawa, S., (2011), Communication Options and Students with Deafness, Rehabilitation Council of India, New Delhi.

Rout, N., & Kamraj, P. (2014). Developing Communication - An Activity Book. Chennai: National Institute for Empowerment of Persons with Multiple Disabilities.

Psycho-Social and Family Issues

Course Code: 4.4.3 (HI) **Credits: 2** **Semester: 4**

About the Course

Family and environment play a crucial role in the development and education of a child and the same is true in case of DHH students. As a learner in the field of special education one must not only understand and acknowledge the role of context in which the child is growing, but also try to tune it to facilitate the development of DHH students. The course is expected to draw learner's attention to these factors which are likely to impact the education of children with hearing impairment and keep family as the core for success.

Learning Outcomes

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

- Explain the psychosocial development of DHH students and the role of family and Deaf mentors
- Understand the family needs in empowering children with disabilities.
- Foster family empowerment in the development of DHH students
- Apply collaborative practices for the psychosocial development of DHH students
- Describe the shift in mindset of family and society towards psychosocial development of DHH students

Unit 1: Psychosocial aspects and disability

1.1 Overview of psychosocial development; well-being and quality of life.
1.2 Implications of hearing impairment on domains of psychosocial development.
1.3 Role of family in psychosocial development
1.4 Role of Deaf Mentors / Role Models, Peers and Community
1.5 Challenges and issues in psychosocial development

Unit 2: Family needs

2.1 Identifying family needs for information, decision-making, skill transfer, and referral.
2.2 Fostering family's acceptance: from hearing loss to deaf gain
2.3 Building parents' confidence in making informed choices (mode of communication, amplification devices, school placement).
2.4 Supporting families in raising children with hearing impairment: Facilitation for availing Government concessions, schemes, and provisions.
2.5 Encourage the family for accountability and advocacy in the education of DHH students.

Unit 3: Family empowerment

3.1 Educate and empower the family on the educational rights of DHH students and advocacy skills
3.2 Empower the family on care and maintenance of assistive devices for DHH students

3.3 Empower the family in creating language rich environment
3.4 Involvement of family in educational intervention of DHH students
3.5 Empower the family in community-based rehabilitation programme.

Unit 4: Collaborative practices for psycho-social development

4.1 Interdisciplinary collaboration for psycho-social development of DHH students
4.2 Mental Health support for the empowerment of DHH students
4.3 Community engagement- need and importance
4.4 Skill building and peer mentorship among DHH students
4.5 Preparing teachers for psycho-social development of DHH students

Unit 5: Shifting the mindset

5.1 Shift in the mindset of family towards education of DHH students – Influence of schemes and policies
5.2 Shift of mindset from exclusion to inclusion and effective learning environment
5.3 Promotion of Deaf culture and Identity for shifting the mindset on DHH students
5.4 Community engagement and media representation.
5.5 Professional development on inclusive practices.

Suggested Course work/Practicum

- Family interview and case study: Conduct interviews with families of children with hearing impairment. Develop a case study based on the interview, highlighting family dynamics, challenges, and strategies for support.
- Maintain a reflective journal throughout the course, documenting their interactions with different families during practical engagements, especially note the differences in the experiences within families with multiple deaf members and families with only one deaf member.
- Compile five activities that could be undertaken to foster parents' acceptance of their child's impairment.
- Select a tool to measure a parent's self-efficacy and administer it on three parents and submit with brief reflections.
- Attend a parent meeting of a special school and report tips provided for fostering parent advocacy.

Suggested modes of transaction

Lecture cum Demonstration, seminar, symposium, role play, inviting parents as speakers for sharing their experiences.

Suggested modes of assessment

Group and individual assignments, tests, group discussions, projects

Suggested Readings

Bauman, H. D. (2009). Deaf gain: Raising the stakes for human diversity. Gallaudet University Press.

Beazley, S., & Moore, M. (2005). Deaf children their families and professionals dismantling barriers. David Fulton Publishers, London.

Brown, I., & Brown, R. (2000). Quality of Life and Disability. Jessica Kingsley Publishers, London.

Caspe, M., Lopez, M. E., Chu, A., & Weiss, H. B. (2011). Teaching the teachers: Preparing educators to engage families for student achievement. Harvard Family Research Project, Cambridge.

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Marschark, M., & Clark, M.D. (1998). Psychological Perspectives on Deafness Vol. I & II. Psychological Press, London.

Moodie, A. S. (2014). Bilingual education for deaf and hard of hearing students. Routledge.

Padden, C. (2008). Understanding deaf culture: In search of deafhood. Harvard University Press.

Parasnis, I. (1996). Cultural and Language Diversity and the Deaf Experience. Cambridge University Press, Cambridge.

RCI Manuals - Deaf, Culture, History, Identity and Sign Language (DISLI T2) (https://rehabcouncil.nic.in/manual)

Scheetz, N. A. (2000). Orientation to Deafness. Allyn and Bacon, Boston.

Senner, W. E. (1997). *Positive attitudes toward deafness*. Gallaudet University Press.

Spencer, P. E., Erting, C. J., & Marschark, M. (2000). The deaf child in the family and school. Lawrence Erlbaum, New York.

Online Links

NIOS - ISL curriculum
https://www.nios.ac.in/online-course-material/secondary-courses/indian-sign-language-(230).aspx
ISLRTC YouTube Channel: Vocabulary and Content
https://www.youtube.com/channel/UC3AcGIlqVI4nJWCwHgHFXtg
SIGN LIBRARY by HWSPSHI
https://www.youtube.com/@signlibrarydsl
CSIR ISL Enabled Virtual Lab
https://www.islevl.org/

HEAR A MILLION - YouTube (Role Models, and other topics related to ISL and Deaf Culture)
https://www.youtube.com/@HearAMillion
DEAF ROLE MODELS - Blog
http://deafrolemodels.blogspot.com/

Disability Specialisation Courses

Intellectual Disability (ID)

Identification, Need Assessment and Curriculum Designing

Course Code: 4.4.1 (ID) **Credit: 4** **Semester: 3**

About the Course

The first step in education is assessment and identification of needs, particularly so, when we have children with diverse learning needs. Types and areas of assessment are of utmost importance to help in understanding the needs of the students. This course will prepare the learners to identify the learning needs of students with intellectual disability by selecting appropriate tools and using them suitably to identify their learning needs in different settings. It will also help to prepare the learners to develop skills in curriculum designing considering different domains of learner-centred activities. They will develop insights into transitional determinants of curricular and pedagogical structure across different stages of school education in view of holistic development of children with intellectual disability.

Learning Outcomes:

After completion of the course the student-teacher will be able to

- *Discuss the historical perspective, nature and needs and characteristics of persons with Intellectual Disability.*
- *Understand nature of curriculum, principles and steps of curriculum designing, domains and curriculum evaluation.*
- *Describe the importance of assessment at various levels of school education in special and inclusive settings.*
- *Understand different strategies for curriculum adaptation, accommodation, modification and their significance.*
- *Discuss the significance of different types of family needs, their assessment and implications for extending support to their families..*

UNIT 1: Intellectual Disability - Nature and Needs

1.1 Historic Perspective of Intellectual Disability (ID),Definitions of Intellectual Disability, National and international –e.g. ICD-10, WHO, Rights of Persons with disabilities Act (RPwD, 2016).

1.2 Causes and Prevention of Intellectual disability, Classification – Medical, Psychological, Educational. International classification of Functioning (ICF). Screening, Identification, Characteristics and Needs of persons with intellectual disability

1.3 Concept, Meaning, Definition and purpose of assessment . Assessment for certification, assessment for programming. Areas and of Assessment - Medical, Psychological, Educational, Behavioural & Ecological

1.4 Types and Approaches – Norm Referenced Tests (NRT) . Criterion Referenced Tests (CRT), Curriculum based assessment (CBA) and Teacher Made Tests

1.5 Documentation of assessment, Result interpretation and Report writing– Implication of all the above for Inclusion

UNIT 2: Curriculum Designing for students at different stages

2.1 Meaning, Definition, Concept and Principles of Curriculum ,Types and Approaches of Curriculum Designing

2.2 Curriculum Domains - Personal, Social, Academics, Recreational and Community living, Steps in developing curriculum, challenges of developing curriculum for inclusion.

2.3 Significance of Early Childhood Care and Education (ECCE)and School Readiness, Early Childhood Education Curricular domains – Enhancement of domain in Motor, Personal, Cognitive and Communication areas, Curriculum activities for developing Foundational literacy and numeracy

2.4 Curriculum activities for developing Foundational literacy and numeracy ,Implication for Intervention at ECCE and Preparatory stages, transition, documentation, record maintenance and report writing.

2.5 : Curriculum at Middle and Secondary stages of schooling, Curriculum domains at Middle stage, Curriculum domains at Secondary stage, Curriculum domains for vocational exposure and skill development

Unit 3: Assessment at various levels of School education

3.1 Importance of Assessment at Pre- School and School levels,/ NEP 2020 - Foundational, Preparatory, Middle and Secondary levels.Developmental and Adaptive Behaviour Assessment

3.2 Assessment Tools at Foundational and preparatory levels (preschool) –e.g. Upanayan, Aarambh, Portage guide to early education, Madras developmental Programming system (MDPS), Functional assessment checklist for Programming (FACP), other recently developed tools.

3.3 Assessment Tools at School Ages (NEP 2020 – Middle and secondary levels)– e.g. MDPS, BASIC-MR, Grade level assessment device for children with learning problems in schools (GLAD), Support Intensity Scale, Curriculum based assessment, any recently developed tools.

3.4 Documentation of assessment, Result interpretation and Report writing– Implication of class level and curriculum based assessment and its relation to Inclusion with resource support.

3.5 Significance of Assessment for Independent living of persons with intellectual disabilities. Assessment for Transition from School to Work. Assessment Tools for Independent Living –BASAL-MR, VAPS, Comprehensive Assessment Tool for Adults with Intellectual Disabilities. Provisions and Schemes of Ministry of Social Justice and Empowerment (MSJ&E) for Vocational Skill Development.

UNIT 4: Curriculum Adaptations and Evaluation

4.1 Need for Curricular Adaptation, Accommodation and Modification

4.2 Adaptation, Accommodation and Modification for Foundational literacy and numeracy Curriculum

4.3 Assessment and evaluation- Concept, Nature and Need, Flexibility in assessment, Approaches, types, tools and techniques of assessment

4.4 Emerging practices in assessment –holistic assessment, school based assessment,

competency based assessment, curriculum based assessment, assessment of group and individual learning.

4.5 Differential evaluation and reporting the holistic progress of students with intellectual disability (SwID), Implications of evaluation for vertical and horizontal transition, and inclusion of SwID

UNIT 5: Assessment of Family Needs

5.1 Significance of psychosocial needs and its assessment in family

5.2 Assessment of parental needs and its implication in planning Individualised programmes

5.3 Assessment of siblings and extended family members and its implication in planning education of persons with intellectual disability.

5.4 Assessment of family and community resources for inclusion and strengthening of family.

5.5. Documentation, recording and reporting –using the information in holistic programming with the multidisciplinary team

Suggested Coursework/Practicum

- Compile information on relevant educational assessment tools for different levels of school education developed in India
- Develop a teacher made assessment tool for a subject of your choice.
- Develop an informal assessment tool for assessment of family needs of a person with intellectual disability
- Conduct an assessment of a person at secondary level to identify the needs and make a transition plan from school to work.
- Assess a student with intellectual disability in an inclusive school and highlight his/her learning needs.
- Prepare a need based curriculum for a group of your choice in Activities for daily living, social,
  communication, motor and cognitive skills, Foundational literacy and numeracy
  Preparation of assessment plan and multidimensional holistic reporting
- Develop a plan for Vertical transition from one stage to another stage of schooling (Options may be given to select stages of school transition)
- Develop a plan for Horizontal transition: special/alternative learning centres to regular schooling and vice versa (options may be given to select learning settings).

Suggested Mode of Transaction

The course can be transacted using lecture – discussion mode, the course faculty member as a facilitator may help the learners to find answers that s/he puts across from the curricular content of this course. Can have demonstration of assessment using various tools with different individuals with intellectual disability.

Suggested Assessment

Assessment of the classwork, assignment, group projects related to assessment and evaluation

Suggested Readings

- Chavan, B.S., Ahmad, W. Gupta, R.K (Eds0(2022). Comprehensive Text book on disability/. New Delhi: Jaypee Brothers Medical publishers.
- Hennel, G (2018). Identifying Special Needs: Diagnostic Checklists For Profiling Individual Differences. New York: Routledge
- Jayachandran, P & Vimala, V (1990) Madras developmental Programming systems, Madras: Vijay Human Services.
- Kaufman, A.S and Kaufman, N.L (Eds) . (2016). Essentials of Intellectual Disability Assessment and Identification, Boston: Wiley.
- King-Sears, H.E. (1994). Curriculum Based Assessment in Special Education Singular publishing Group, San Diego.
- Manogna.S.R, Susan.B.K & Kumar. R. J (2022). *Sexuality Education Needs Assessment Checklist.* NIEPID, Secunderabad. Retrieved from www.niepid.nic.in/list.php
- Myreddi, V., & Narayan, J. (2004). FACP – PMR, NIMH, Secunderabad.
- Narayan, J. (2003) Grade Level Assessment Device for Children with Learning Problems in Regular Schools, NIMH, Secunderabad
- Narayan, J., Myreddi, V. Rao, S. (2002). Functional Assessment checklist for programming, NIMH: Secunderabad
- NIEPID (2023). NIEPID Indian Test of Intelligence (NITI). Hyderabad: NIEPID
- Overton, T. (2000) Assessment in special education: An applied approach. Boston: Pearson Education
- Panda, K.C. (1997). Education of Exceptional Children.Vikas, New Delhi.
- Peshawaria R & Venkatesan, S. (1992). Behavioural Assessment Scales for Indian Children wirh Mental Retardation. BASIC MR, Secunderabad: NIMH
- Salvia, J., Ysseldyke, J, E. and Bolt, S. (2007). Assessment in Special and Inclusive Education. Boston: Houghton Mifflin Company
- Srinivasulu. G & Mugesh. T. (2020). *Comprehensive Assessment Tool for Adults with Intellectual Disabilities.* NIEPID, Secunderabad. Retrieved from www.niepid.nic.in/list.php
- essentials-Intellectual-Disability-Identification-Psychological-ebook/dp/B01DRDK7IQ
- https://indianpsychiatricsociety.org/child-psychiatry-disorders-assessment-and-management-clinical-practice-guidelines-on-intellectual-disability/
- https://www.edudel.nic.in/upload/upload_2021_22/289_300_dt_02052022.pdf
- https://specialeducationnotes.co.in/Assessment%20tools%20used%20in%20India.htm
- Kaufman, M.J. (Ed) (2022) Revitalising special education, https://ezaccess.libraries.psu.edu/login?url=https://ebookcentral.proquest.com/lib/pensu/detail.action?docID=7088548

Intervention and Teaching Strategies

Course Code: 4.4.2(ID) **Credit: 2** **Semester: 5**

About the Course:

Once the disability is identified, it is necessary to plan and implement a comprehensive intervention programme to prevent further delay and deficit and improve the condition of students with diverse learning needs. This course will help the learners to understand the levels and types of intervention that need to be prepared for students with special needs. This course will also equip the learners to select and adopt strategies and methods in the intervention programme to improve skills and behaviour for independent living of students with special needs with particular forcu on students with intellectual disabilities.

Learning Outcomes:

After completing the course, the learner will be able to:

- *Explain the importance of early intervention, types and techniques of early intervention*
- *Describe the importance and historical perspective of Individualised Educational Programme (IEP), steps and components involved in developing, implementing and evaluating IEP*
- *Discuss various teaching strategies, methods and approaches, and describe the principles in selecting, developing and using Teaching Learning Material (TLM) for teaching different concepts*
- *Explain types of maladaptive behaviour, Behaviour Modification techniques, procedure to develop management plan for managing problem behaviour of students with special needs*
- *Discuss the need and importance of various therapeutic interventions and their implications in the lives of students with special needs*

Unit 1: Early Intervention

1.1 Concept, Significance, Rationale, Scope, Advantages of Early Intervention

1.2 Types of Early Intervention

1.3 Intervention Techniques

1.4 Record Maintenance and Documentation

1.5 Implication of Early Intervention for pre-school Inclusion

Unit 2: Individualized Education Programme (IEP/IFSP)

2.1 Need, Importance and Historical Perspective of IEP

2.2 Steps and Components of IEP/IFSP

2.3 Developing, Implementation and Evaluation of IEP for PwID and its associated conditions

2.4 Individualised Family support Plan(IFSP) – Planning and writing

2.5 Application of IEP for Inclusion

Unit 3: Teaching Strategies and TLM

3.1 Stages of Learning . Acquisition, Proficiency, Maintenance, Fluency and Generalization.

3.2 Principles of Teaching in special Education , implication for Special and inclusive education.

3.3 Multi-sensory Approaches – Montessori Method, Fernald VAKT Method Orton - Gillingham Method

3.4 Teaching Strategies & methods– Task Analysis, Chaining, Shaping, Modelling, Prompting, Fading and Reinforcement, Role Play, Play Way method .

3.5 Difference between Functional & Learning Aids and Development & Use of TLM for CWID

Unit 4: Intervention for challenging Behaviour

4.1 Over view of Challenging behaviour

4.2 Identification of challenging behaviour

4.3 Functional Analysis and Behaviour Modification Techniques, Cognitive Behaviour Techniques (CBT), Positive Behaviour Intervention and support (PBIS)

4.4 Management of challenging behaviour at Home and School, Parental Counselling -Individual, Group and Community

4.5 Ethical Issues in behaviour management and implications for Inclusion

Unit 5: Therapeutic Intervention

5.1 Occupational Therapy – Definition, Objective, Scope, Modalities and Intervention

5.2 Physiotherapy – Definition, Objective, Scope, Modalities and Intervention

5.3 Speech Therapy – Definition, Objective, Scope and Types of Speech, Language andHearing Disorders and Intervention

5.4 Yoga and Play therapy – Definition, Objective, Scope and Intervention

5.5 Therapeutic intervention: Visual and Performing Arts (e.g., Art and Craft, Music, Drama, Dance and movement, Sports.)

Suggested Coursework/Practicum

- Prepare an adapted lesson on any school subject for a student with special needs from Secondary classes in a regular school.
- Assess and develop a behaviour management plan to be used by parents at home for reducing any one problem behaviour of a student with ID.
- Prepare three teaching learning materials for teaching language (receptive and /or expressive) to a student with ID at foundation/preparatory level.
- Make a plan for organizing a visual art exhibition/competition for students in a special school.

Suggested Mode of Transaction

The course can be transacted using lecture cum discussion mode. To facilitate learning

multimedia presentation can be introduced. Development and implementation of intervention can be demonstrated in real or simulated setting where students' participation may be encouraged.

Suggested Assessment

Assessment of classwork, group work and presentations, projects and assigenments

Suggested Readings

- Alberto, P.A. & Trontman, A. C. (1995). Applied Behaviour Analysis for Teachers (4th edition). London: Merrill Publishing Company.
- David W. (1998). Teaching and Learning in the Early Years. London and New York: Routledge.
- Duncan, E.A.S. (2005). Foundations for Practice in Occupational Therapy (4th edition). Churchill Livingstone, Edinburgh
- Jayachandran, P. (2001) Teaching yogasanas for persons with mental retardation. Vijay Human Services, Chennai
- Manogna.S.R, Susan.B.K & Kumar. R. J (2022). *Sexuality Education - a Pictorial guide for teaching adolescents and adults with intellectual disabilities.* NIEPID, Secunderabad. Retrieved from www.niepid.nic.in/list.php
- Myreddi V. & Narayan J. (1998). Functional Academics for students with mild mental retardation, NIMH, Secunderabad.
- Narayan J. (1990). Towards independence series 1 to 9. NIMH, Secunderabad.
- Narayan J. (2003) Educating children with learning problems in regular schools NIMH, Secunderabad.
- Panda, K.C. (1997). Education of Exceptional Children. New Delhi Vikas
- Pandit, A & Grover U (2001), Self Instructional Modules on occupational therapy/physiotherapy, BED (MR) SPE, Bhoj University, Bhopal
- Peshwaria, R., & Venkatesan. S. (1992) Behavioural retarded children A manual for Publication.
- Robert A. Gable and Steven F.W. (1993). Strategies for Teaching Students with Mild to Severe Mental Retardation, London and Philodelphia: Jessica Kingsley Publisers.
- Schell, B. A. B., Gillen, G., & Scaffa, M., (2014). Willard and Spackman's Occupational Therapy. LWW; Twelfth, New York.
- Sharma,U and Salend, S (Eds) (2021). The oxford encyclopedia of Inclusive and special education. Oxford University Press
- Subba Rao, T.A. (1992). Manual on Developing Communication Skills in Mentally Teachers. NIMH, Secunderabad
- https://childhood-developmental-disorders.imedpub.com/teaching-communication-skills-to-preschool-children-with-mild-intellectual-disabilities-an-evidence-based-study.pdf
- https://niepid.nic.in/87%20Teaching%20&%20Trg%20Material%20on%20Physiotherapy%201%20of%202.PDF

- Training in communication skills for persons with Intellectual Disability: https://niepid.nic.in/Training%20in%20communication%20Skills.pdf
- https://www.verywellfamily.com/essential-parts-of-an-individual-education-program-2162702
- https://www.goodreads.com/book/show/42747086-management-of-behaviour-problems-of-children-with-mental-retardation
- https://www.niepid.nic.in/Early%20Intervention.pdf
- https://www.rasmussen.edu/degrees/education/blog/early-childhood-intervention/
- https://rehabcouncil.nic.in/sites/default/files/pratham_book.pdf

Technology support and Family aspects of Intellectual Disability

Course Code: 4.4.3 (ID) **Credit: 2** **Semester: 6**

About the Course

Technology plays a vital role in development including teaching learning process. With tehnological advances, the role of the teacher is changing to be a facilitator in helping students learn. It is especially beneficial to children with Intellectual Disabilities to access information through different modalities which otherwise would have been inaccessible to them. This course is designed to provide the learners with knowledge and skills in using technology so that can be used effectively with students with intellectual disabilities.

Family and environment play a crucial role in development and education of every child including those with Intellectual Disability. As a learner in the field of special education, one must not only understand and acknowledge the role of context in which the child is growing, but also try to tune it to facilitate age appropriate activities as a contributing member. This course is expected to draw learner's attention to these factors which are likely to impact education of children with Intellectual Disability, keeping family as the focus.

Learning Outcomes

After completing the course the learner will be able to:

- *Explain the meaning, nature and scope of Educational Technology.*
- *Discuss the role of technology in special and inclusive classroom and how it can be integrated in the teaching-learning process;*
- *Integrate ICT into teaching-learning and its evaluation and describe the use and application of educational software and assistive devices for learners with intellectual disability.*
- *Explain the meaning of psychosocial aspects and the impact of psychosocial issues on children with ID and their families.*
- *Define the role of family support for children with ID and to empower families.*

Unit 1 : Educational Technology and Technology support

1.1. Educational technology – definition, meaning, scope and current trends. Use of technology and multimedia in teaching learning environment, Assistive technology - hardware and software in supporting students with Intellectual disability.

1.2. Selection, use and maintenance of appropriate assistive devices for persons with intellectual disability. Advantages and limitations in the use of technology

1.3. Enabling optimum support in education through technology. Schemes for availing assistive devices: ADIP and other schemes

1.4. Computer-Assisted learning - Computer Managed Instructions, Cybernetics, E-learning, Use of Net Search engines and Websites

1.5. Preparation of technology enhanced lessons, Hybrid model of teaching, Application of Technology in Lesson Planning, Worksheet Preparation,

Implementation of lessons, report writing and Evaluation, Technology in inclusive education, Blended learning to meet the learner needs.

Unit 2: Technology-Supported Learning Situations

2.1. Preparation of Learning Schemes and Planning Interactive Use of Audio-Visual Programme

2.2. Developing power point/ Slide Show for Classroom Use; Using of Available Software /CDs with LCD Projection for Subject Learning Interactions

2.3. Generating Subject-Related Demonstrations- Using Computer Software and Enabling Students to Plan and Execute Projects

2.4 Interactive Use of ICT: Participation in Social Groups on Internet, Creation of 'Blogs', Organizing Teleconferencing and Video-Conferencing

2.5. Identifying and Applying Software for Managing Disability Specific Problem

Unit 3: Teaching and learning with ICT tools and **Application of Technology**

3.1. Smart Tutoring System (STS), ICT and Exceptional learning

3.2 Advantages of digital teaching and digital TLM, Digital skill development for inclusion

3.3 Application of Technology in Lesson Planning, Worksheet Preparation, Report writing and Evaluation

3.4 Application of Technology in Instruction – Individual, small group and large group, benefits and challenges.

3.5 Application of Technology in Assistive Devices, professionally advanced software, Role of ICT in disability inclusive services and development programs, Digital resource development for inclusive teaching

Unit 4: Psychological and social aspects

4.1 Psychological aspects – definition, meaning and concept, Social issues-exploitation, delinquency, child labour and abuse of persons with Intellectual disabilities

4.2 Impact of disability on social development, Attitude of family, community, peer group, teacher, co workers

4.3 Creating an environment of psychological well being Role of special educator in ensuring psychological wellbeing and promoting self- esteem and self-confidence of students with ID.

4.4 Need for facilitating suitable social environment , Rights and advocacy, promoting self-advocacy

4.5 Issues related to stages of emotions such as shock, guilt, disappointment, Social attitude – neighbourhood, parents of other children, friendship, support, societal responses, myths and misconceptions

Unit 5: Empowering Families

5.1 Understanding the concerns of parents, Family cantered practices: family systems programs, Instructional programs,

5.2 Identification and special services for parents. Parent management training: parent-child interaction therapy, other interventions Prevention from abuse: e.g., physical, psychological, sexual, emotional

5.3 Counselling and guidance on Issues concerning early identification, diagnosis, assessment and placement Parent child relationship - Planning for support, safety concerns; overprotection and neglect and its impact

5.4 Concept, Definition and Scope of Community, Models of community-based rehabilitation (CBR), advantages and disadvantages, Types of community resources and their mobilization, Organizing services for person with disability. Role of ICT in creating awareness and empowering family and community.

5.5 Implications for inclusion ; Role of special educator, in promoting institution building and community Mobilization.

Suggested Coursework/Practicum

Organize workshop using ICT for disability friendly classroom activities and curricular transaction and submit report

- Develop technology supported lesson plans for PwID and submit
- Use mass media/multi media for creating awareness on disability in rural areas and submit your observation
- Help the families of children with intellectual disabilities form a parent group in a community - Submit report
- Organise parent training programmes for parent groups on specific theme related to Intellectual Disability – Submit report
- Mobilise community resources and carry out a recreation programme/sports event/cultural programme involving children with and without disability – Submit report

Suggested Mode of Transaction

The course can be delivered in the lecture- discussion mode; the learners can be given opportunities to present in the form of seminar and group discussions. Let the learners explore and find ways and means to help persons with intellectual disabilities to help the families and community to accept and include children with intellectual disability.In addition to lecture mode, actual experiences in using technology as part of the teaching learning process is strongly recommended.

Suggested Assessment

Class participation ,Internal tests and assignments

Suggested Readings

- Adamson, L.B., Bakeman, R., Deckner, D.F., and Nelson, P.B. (2012). Rating parent-child interactions: Joint engagement, communication dynamics, and shared topics in autism, Down syndrome, and typical development.

- Basu, S., Das, P., Chakravarty, I. (2007) Family Life of the Disabled Aged, Ageing and Society: Indian Journal of Gerontology, 17 (3 & 4)
- Brown, I., & Brown, R. (2000). Quality of Life and Disability. Jessica Kingsley Publishers, London.
- Caspe, M., Lopez, M. E., Chu, A., & Weiss, H. B. (2011). Teaching the teachers: Preparing educators to engage families for student achievement. Harvard Family Research Project, Cambridge.
- Chand.T. (1992). Educational Technology. Anmol Publication, New Delhi.
- Cramer, H., Carlin, J. (2008) Family Based Short Breaks (Respite) for Disabled Children:
- Green, J. L.(2011).The Ultimate Guide to Assistive Technology in Special Education. New York: Prufrock Press
- Kumar, K.L. (1996). Educational Technology. New Age Publication, New Delhi.
- Lancioni, G.E. & Singh, Nirbhay & O'Reilly, M.F. & Sigafoos, J.. (2011). Assistive technology for behavioral interventions for persons with severe/profound multiple disabilities: A selective overview. European Journal of Behavior Analysis. 12. 7-26.
- Mangal, K. (1990). Fundamentals of Educational technology. Prakash Brothers, New Delhi.
- Manogna.S.R, Susan.B.K & Kumar. R. J (2022). *Sexuality Education Needs Assessment Checklist.* NIEPID, Secunderabad. Retrieved from www.niepid.nic.in/list.php
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- Mehra, V (2004): Educational Technology, New Delhi: SS Publishers.
- Mohanty, J. (1992). Educational Technology. Deep and Deep Publication. New Delhi.
- Mukhopadhaya, M. (2005). Education Technology Knowledge Assessment., New Delhi.: Shipra Publications
- Peshawaria, R Menon, DK Ganguly R. Roy, S. Pillay R.P.R.S. & Gupta A (1995) Understanding Indian families having persons with Mental Retardation,Secunderabad
- Sampath, K., Pannirselvam, A., & Santhanam, S. (1990). Introduction to Educational Technology. Sterling Publishers Private Limited, New Delhi.
- Satyapal, R. (1991). Educational Technology, A systematic Text Book. Associated Publishers, New Delhi.
- Shah, D.B. (1991). Educational Technology for developing teaching competency. Gavendra Prakashan, Surat.

- Srinivasulu. G & Mugesh. T. (2020). *Comprehensive Assessment Tool for Adults with Intellectual Disabilities.* NIEPID, Secunderabad. Retrieved from www.niepid.nic.in/list.php
- Takewale, R. G. (1995). Technologies for Educational Network, Presidential address in the seminar on Technologies for Educational Networking. IGNOU, New Delhi.
- Taub, D.J. (2006). Understanding the Concerns of Parents of Students with Disabilities: Challenges and Roles for School Counselors. Professional School Counseling Journal, October 2006, 10(1),52-57.

Web Resources:-

- www.mental healthgov.basics.m
- www.lmbsorgcommonmisconception
- oshwiki.ed.wiki.pshychosocialissues
- www.whoint.publications>cbr
- www.intechoper.com>books
- www.predictiveindex.com
- **Web resources:**
- www.xceptionalleaningindia.com
- https://thearc.org/our-initiatives/technology/
- www.ataccess.org)
- http://ataporg.org/index.asp
- http://www.beachcenter.org/).
- http://www.colemaninstitute.org
- http://www.pluk.org/AT1.html
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5319964/
- https://study.com/academy/lesson/assistive-technology-for-intellectual-disabilities.html
- https://www.emerald.com/insight/content/doi/10.1108/S0270-401320230000037004/full/html
- https://dsel.education.gov.in/sites/default/files/2021-06/CWSN_E-Content_guidelines.pdf

Disability Specialization Courses

Multiple Disabilities

Identification and Needs Assessment (Multiple Disabilities)

Course code: 4.4.1 MD **Credits: 04** **Semester-3**

About the Course:

This coursework provides a multidimensional perspective on understanding persons with Multiple Disabilities who may have a combination of physical disabilities (like cerebral palsy) and sensory impairments (such as vision or hearing loss), Intellectual disabilities along with other developmental delays or co-occurring conditions like Autism and with chronic medical conditions like Epilepsy or Genetic disorder. Given the nature of needs these learners may have an impact on their motor development affecting mobility, daily activities of self-care, speech, language and communication necessitating alternative communication methods, family/caregiver involvement to support these students. The course intends to develop capacities of student teachers with the knowledge and skills to carry out assessment for educational planning for students with Multiple Disabilities, understand the nature of diversity within the persons with Multiple Disabilities, discuss assessment tools or diagnostic methods used in identifying these disabilities. The course aims to stress the significance of a collaborative team approach involving professionals from various fields such as psychology, medicine, education, and therapy to ensure accurate identification, assessment of needs given the nature of learning characteristics of the students to make decisions related to intervention and holistic support for individuals and their families. The learners should acquire comprehensive knowledge of working with collaborative teams and families.

Learning outcomes:

After completion of the course, student teachers will be able to:

- Acquire basic knowledge about the nature and characteristics of Multiple Disabilities
- Relate the nature and needs of student based on physical, sensory and functional assessment that impacts learning.
- Assess and apply various assessment of students with Multiple Disabilities.
- Assess and identify correlating conditions that impact students with multiple disabilities and their families
- Design a holistic curriculum that focuses on developing pivotal skills, using enabling positive strategies.

Unit 1: Define and understand the characteristics the nature of Multiple Disabilities

1.1. Basic Anatomy- Skeletal, Muscular, Nervous System

1.2 Definition and manifestations of Multiple Disabilities - cognitive motor, neuro-behavioural, neuro-anatomical and neuro-physiological, global developmental delays-meaning and concept.

- Locomotor Impairment- Hansens' disease, arthritis, kyphosis, scoliosis and rickets.
- Neurological impairment- encephalitis, meningitis, head injury, Motor Neuron Disease, Mucopolysaccharidosis, Inborn Errors of Metabolism (IEM), Chromosomal abnormality

- o Deafblindness and additional conditions with special reference to syndromes like Congenital Rubella Syndrome, Usher Syndrome and CHARGE syndrome, dwarfism, and combinations of conditions like ASD associated with physical disabilities and highlighting the primary characteristics, challenges associated with each type.

1.3 Understanding Multiple Disabilities through the lenses of Diagnostic and Statistical Manual of Mental Disorders (DSM), ICD (International Classification of Diseases), and ICF (International Classification of Functioning, Disability, and Health.

1.4. Understanding characteristics of Multiple Disabilities – delayed motor milestones, physical impairments, cognitive impairment, communication, sensory sensitiveness, medical, educational, family supports, and behavioural issues.

1.5. Educational placement avenues for children with Multiple Disabilities in the context of levels of support across domains and focus on integrating health care and allied health care within the educational systems

Unit: 2: Physical, Sensory, communication and functional Assessment

2.1. Functional vision/hearing screening assessment, assessment of vision, tactile, Sensory Profile assessment to evaluates a student's ability to process sensory information from the environment and coping responses to the same.

2.2. Nature, scope and role of assessment Physiotherapy, Occupational Therapy, Speech and Language functional assessment to support students with multiple disabilities to enable student centred seating, mobility, and fine motor skills.

2.3. Speech and language aassessment and AAC assessment to evaluate the student's ability to community effectively using alternative modes such as sign language, communication boards, picture communication symbols and electronic devices

2.4. Assessment of independent living skills and ecological assessment (home, school and community) to identify supports and barriers.

2.5. Functional behaviour assessment- assistive technology assessment, environmental based assessment, curriculum-based assessment.

Unit 3 : Assessment for Educational planning for students with Multiple Disabilities

3.1. Comprehensive Assessments to identify each student's strengths, needs, learning styles, and preferences including psychological, educational, behavioral and activities of daily living.

2.1.1Alternate assessment for students with high support multiple disabilities through coordinated collaborative team – nutrition, mealtime needs, communicative competence (pre-symbolic, emerging symbolic and symbolic) mobility and cognitive.

2.1.2 Portfolio approach (systematic evidence), checklist approach and performance event approach

3.2.3 alignment of curriculum, instruction and assessment.

3.2. Functional assessment for programming and teaching. Norm Referenced Tests (NRT), Criterion Referenced Tests (CRT), Curriculum based assessment and Developmental Checklists for assessment and programming of children with Multiple Disabilities (Portage Guide, Upanayan, Carolina curriculum for special needs, Callier Azuza, INSITE Model for Young Children with Vision Impairment, Vineland Adaptive Behavior Scales (VABS), Bhatia Battery of Tests, GLAD, Functional behaviour assessments (FBA), Learning Media Assessment, Assessment of basic language and learning skills)

3.3. Considerations during assessments through direct observations (e.g., cultural and contextual adaptations, infrastructure and environment, the role of family members, observations across multiple settings such as school, home, and community etc)

3.4 Multi-disciplinary team to carry out a comprehensive, collaborative approach to ensure students receive an inclusive, equitable education that meets their unique needs determined to develop Individualized Educational Plan, student centered accommodations, scaffolded support, nature of flexible grouping, assistive devices, mobility aids, modified equipment (large key boards, head operated stylus or button switches), determine nature of co-teaching needs where special education and general education teachers collaborate to plan and deliver instruction.

3.5. Role of multi-purpose rehabilitation workers such as Orthotists, audiologist, low vision interventionist, physical therapist, occupational therapists, special educators, student and his family in identification and needs assessment.

Unit 4: Assessment of Family and Community Support

4.1 Understanding the child and family context and resources that impact the needs and intervention (e.g., geographical and socio-cultural setting, socioeconomic status, literacy and language levels, access to resources and services, cultural practices, attitudes and values, role of immediate and extended family members, presence of disabilities within the family; professional and community support available

4.2 Collaborations with multidisciplinary teams and support groups and access to continuous and periodic assessment and programme planning

4.3 Additional resources required (e.g., tuition, choice of academic subjects, plan for higher education, vocational, work and employment, access to legal provisions)

4.4 Key components of Individualised Family Support Plan (IFSP) and steps to develop IFSP

4.5 Access to certification, legal support and schemes for students with multiple disabilities

Unit 5: Skills to Support students with Multiple Disabilities and their Families

5.1 Understanding and appreciating concomitant nature and intersectionality of multiple disabilities and impact on the coping of the student and family.

5.2 Learning from students with multiple disabilities, advocates and their families about their emotions, goals, positive experiences, challenges needs and helpful supports (e.g., perspectives from parents, extended family members, siblings, and MD self-advocates about living with people with multiple disabilities)

5.3 Skills necessary in supporting and educating families (e.g., updated knowledge, enabling positive mindsets to work with school and child, neurodiversity-affirming approach,

access to local resources, schemes and benefits, collaborate with the multidisciplinary team, awareness of inherent personal attitudinal barriers, ableism, deficit-based approach, awareness of multiple disabilities and/or co-occurring disabilities in parents or other family members etc.)

5.4 Skills necessary in counselling (e.g., non-judgemental, unconditional acceptance, active listening, being non-directive, empathy, paraphrasing and reflecting etc.

5.5 Development of self-determination, self-efficacy and self-advocacy skills for students and their families

Suggested Coursework/Practicum:

- Develop presentations about multiple disabilities, differences and neurodiversity to create positive awareness and appreciation amongst educators, other professionals and in general community.
- Develop a detailed learning profile for three different students with MD while ensuring different genders, ages and settings (special school, inclusive school, home) are represented.
- Develop a detailed report on meaningful intervention and early communication with children with multiple disabilities
- Develop personal futures planning for a student with multiple disabilities in consultation with the student and family.
- Develop a plan to make Multiple Disability in regard to mobility, barrier free access - across environments and supports in their everyday settings (e.g., inclusive school classroom, special school classroom, tuition or hobby class, home etc.)
- Develop a non-academic curriculum – ways to develop relationship skills to maintain healthy and rewarding relationships with diverse students and groups within the class
- Develop teaching aids for specific lesson plans
- Develop a plan for a student with multiple disabilities for starting the process of advocating for their needs

Suggestive Mode of Transaction:

Learners are encouraged to critically review all materials

- Observations
- Demonstrations
- Hands-on experiences
- Field visits
- Audio-video resources
- Lectures and discussions
- Presentations and projects
- Workshops and seminars
- Online resources
- Self-study

Suggestive Assessment:

- Coursework practicum

- Written assignments and essays
- Individual and group projects

Recommended Readings

- Achenbach, T. M., Rescorla, L.A. (2001). Child Behaviour Checklist (CBCL). https://aseba.org/wp-content/uploads/2019/02/schoolagecbcl.pdf
- Aggarwal, K. (2002). *Handbook for parents of children with Disabilities*. Planning Commission. Govt. of India.
- Asmita.H. (2006).*Language and Communication*. Kanishka Publication, New Delhi.
- American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.). https://doi.org/10.1176/appi.books.9780890425787
- Banerjee, A. & Hamblin, T. (1995). Physical Management: for the child with Cerebral Palsy, IICP, Kolkata
- Banerjee, R.; Kundu, M. & Banerjee, A. (1995)., Feeding: for the child with Cerebral Palsy, IICP, Calcutta
- Bondy, A., Frost, L. (2012). *A Picture's Worth: PECS and Other Visual Communication Strategies in Autism.* Bethesda, MD: Woodbine House.
- Carol, S.L. (2002). Early Childhood Assessment. Wiley, New York.
- Constantino, J. N., & Gruber, C. P. (2012). *Social Responsiveness Scale*, Second Edition (SRS-2). Torrance: Western Psychological Services.
- Doll, E. A. (1935). *Vineland Social Maturity Scale* (VSMS).
- Dunn, W. (2014). *Sensory Profile 2*. Bloomington: Pearson.
- Gathoo, V., Palkar, G., Mathur, D., Mhatre, P., Kapoor, D., & Veling, S. (2023). Curricular. *Framework for Cross Disability Early Intervention and School Readiness: PEHAL (B*irth to 3 years) and NIPUN Inclusive (3 to 6 years) (1st ed.). Rehabilitation Council of India.(ISBN)
- Huebner. K. Mary, Prickett, J.et.all (1995*). Hand in Hand: Essentials of Communication and Orientation and Mobility for Your Students Who Are Deaf-Blind*. New York: American Foundation for the Blind.
- Jenkinson, J., Hyde, T., & Ahmad, S. (2008). *Building blocks for learning occupational therapy approaches: Practical Strategies for the Inclusion of Special Needs in Primary School*. Wiley.
- Joyce, S. C. et al., (1987). *Assessing and programming basic curriculum skills*. Allyn & Bacon, Boston.
- INSITE Checklist : *Assessment of Developmental Skills for Children with Sensory Impairments and Additional Disabilities*, Publisher: SKI-HI Institute, Year: 2021.
- ICD – 10- World Health Organization. (2015). World Heald Organizaton, Geneva.
- Karthik. M. (2011). Introduction to Occupational therapy and occupational therapy

- Sanford. D. LaRhea, & Burnett. R. (2008). *Functional Vision and Learning Media Assessment for students who are Pre-acadamic, Academic and Visually impaired*. American Printing House for the Blind, Inc.
- King-Sears, H.E. (1994). *Curriculum Based Assessment in Special Education*. Singular Publishing Group, San Diego.
- Levitt, S. (2004). *Treatment of Cerebral Palsy and Motor Delay*, Blackwell
- Longone, (1990). *Teaching Retarded learners Curriculum and Methods for improving instruction*. Allyn and Bacon, Boston.
- Michel. H. (2003). *Comprehensive Handbook of Psychological Assessment*, Volume 3, Behavioural Assessment. Wiley, Singapore.
- Miller, M. (2007). *Physical Therapy of Cerebral Palsy.* Springer, New York.
- Narayan, J., & Myreddi, V., & Rao, S. (2002). Functional Assessment Checklist for Programming. NIMH, Secunderabad.
- Overton, T. (1992). *Assessment in Special Education- An Applied Approach*. McMillan International Edition .New York.
- Panda, K.C. (1997) *Education of Exceptional Children*. Vikas Publications. New Delhi
- Porter, S., (2013). *Tidy's Physiotherapy.* Elsevier, Edinburgh.
- Programme Checklist for persons with multiple disabilities a guide for special educators (NIEPMD publications, available in www.niepmd.tn.nic.in /publication.php)
- Sadhana. R. (2006). *Fundamentals of Speech & Speech teaching*. Kanishka Publication, New Delhi.
- Sharma, P. (1995). *Basics on Development and Growth of a Child*. Reliance Publishers, New Delhi
- Sense International India (2017). *Handbook on Deafblindness*. Ahmedabad India
- Subba Rao, T.A. (1992). *Manual on Developing Communication Skills in Mentally Retarded Persons*. NIMH, Secunderabad.
- Taylor, R.L. (1993). Assessment of Exceptional students Educational and Psychological Procedures. Allyn & Baccon, Boston.
- The Diagnostic and Statistical Manual of Mental Disorders- IV-TR. (2000). American Psychiatric Association, Arlington.
- UPANAYAN, National Institute of Mentally Handicapped, Secunderabad.
- Van Riper, C.A., & Emerick. L. (1990). Speech Correction- An Introduction to Speech Pathology and Audiology (8th Edn.). Prentice Hall, New York.
- Wough, A., & Grant, A. (2006). Anatomy and Physiology in health and Illness. Elsevier, Edinburgh.

Web based readings

1. https://ncert.nic.in/pdf/DSCS_booklet.pdf
2. www.niepmd.tn.nic.in /publication.php)
3. https://ncse.ie/wp-content/uploads/2014/10/5_NCSE_Diag_Ass.pdf

4. https://www.unicef.org/eca/media/31131/file/Assessing%20disability%20of%20children%20report.pdf
5. https://www.giz.de/en/downloads/06_Identification%20of%20Children%20with%20Disabilities.pdf
6. https://www.apa.org/pi/disability/resources/assessment-disabilities
7. https://www.thoughtco.com/assessing-students-with-special-needs-3110248

Intervention and Teaching Strategies (Multiple Disabilities)

Course code: 4.4.2 MD **Credits: 2** **Semester- 5**

About the Course:

The course intends to develop capacities of learners in understanding, planning and designing tailored student centric intervention and teaching strategies for persons with MD. The stidemt teacher should acquire comprehensive knowledge about planning intervention strategies that cover all aspects of learning, along with effective tools and strategies to create inclusive and empowering learning environments for individuals with multiple disabilities.

Students with multiple disabilities have concomitants (combinations and continuum of varying degrees of cognitive, orthopaedic. sensory impairments. The course aims to stress the significance of a collaborative team approach involving professionals from various fields such as psychology, medicine, education, and therapy to ensure accurate identification, assessment of needs given the nature of learning characteristics of the students to make decisions related to intervention and holistic support for individuals and their families. The teams can facilitate delivery of instructions, assessments, interventions and related services. The learners should acquire comprehensive require the skills and expertise of all team members to support the student within and across the school Effective program is built on the importance of partnerships between the educational and families. The focus includes a range of instructional and assistive technologies that foster in student self-determination, participation and choice that are guiding values of equity and inclusion.

Learning Outcomes

After completing the course the learner will be able to:

- Understand the strategies, techniques and methods to work with students with multiple disabilities.
- Sensitively support and empower student and families.
- Apply the information collected from assessments done in planning, documenting and implementing an educational and life skills program.
- Sensitivity in supporting and empowering students with multiple disabilities and their families.
- Promote adaptive behaviour skills to enhance community participation and engagement

Unit 1: Teaching Methods, Techniques and Strategies

1.1 Principles of teaching (e.g., concrete, iconic, representational, symbolic) and stages of learning (e.g., acquisition, maintenance, fluency and generalization)

1.2 Addressing differing learning needs (visual learners, auditory learners, tactile, kinaesthetic learners, perspective-taking and executive functioning)

1.3 Identification and implementation of appropriate teaching strategies (e.g., concept-building, context-based learning, strength focus, sensory-friendly environmental adaptations; task analysis, prompting, fading, chaining, shaping, modelling etc.)

1.4 Develop and implement Expanded Core Curriculum (Career awareness, Assistive technology, compensatory skills for accessing curriculum, sensory efficiency, leisure and recreation, social skills, orientation and mobility)

1.5 Classroom management (team teaching, shadow teaching, peer engagement and cooperative learning) and adaptations to meet needs in different settings – individual, small group and large groups, home-based settings, special schools, inclusive schools; vocational and work settings, in-person, online, and blended learning

Unit 2: Neurodiversity-Affirming Teaching Strategies

2.1 Using neurodiversity-affirming strategies (e.g., making it sensory-friendly, based on strengths, interests and motivation; creating predictability and facilitating expected and unexpected transitions using structure, visual supports, social stories, comic strips, task analysis etc.)

2.2 Development of person-focussed, environment, TLMs and teaching aids and evaluations (e.g., adaptive books, manipulatives, use of ICT and hands-on activities)

2.3 Addressing the hidden curriculum (e.g., awareness of expected but implicit rules, processes and procedures, social hierarchies and protocols) and expanded core curriculum for students with multiple disabilities.

2.4 Building agency, confidence and self-esteem (e.g., providing and respecting choices; incorporating interests, avoiding aversive techniques and punishment procedures)

2.5 Facilitating peer relationships inside and outside the classroom and creating an environment that promotes respect for all and minimises opportunities for bullying and abuse

Unit 3: Educational instruction, adaptations, accommodations, and modifications -

3.1 UDL principles for content decisions (what student learns) process decisions (engaging students in learning) and product decisions (student demonstration of learning)

3.1.1 systematic and embedded methods of instructions- natural cues, prompts, fading assistance.

3.2 Key elements of adaptations, accommodations and modifications to support students in their school settings.

3.2.1. (a) The learner and environment, (b) discrepancy analysis (activities, skills and instructional goals), (c) interventional options (guided practice, instructional adaptation, use of assistive technology or omit the task) (d) Implement & Evaluate.

3.3 Creating educational adaptations, accommodations and modifications aligned to the needs of students with multiple disabilities including approaches to alternate assessment – fundamental importance of alignment of curriculum, instruction and assessment. UDL and assessment accessibility.

3.4 Discrete Trial training, Themes, Mind mapping, Calendar system, Probing Teaching strategies and Techniques,

3.5 Class room behaviour management and differentiated instruction strategies

Unit 4: Empowerment in Life Skills and Family Support

4.1 Addressing family as a unit: building family bonds, facilitating interactions, and enhancing communication
4.2 Recognition and appreciation of the strengths and needs of students with multiple disabilities and the diversity withing the group
4.3 Access across school settings around neighbourhood communities to promote independence in essential life skills and community participation (e.g., preparing for transitions, creating predictability, personal grooming, time management, independent travelling, budgeting and prioritising, emotional regulation)
4.4 Building access within the community (e.g., public transport, after-school programs (e.g., studies, therapy centres, vocational, employment), formal and informal support groups, professionals and organisations, allied health services (e.g., blood tests, dentist etc.), leisure activities going to a movie, attending family events, vacations etc)
4.5 Facilitating knowledge of self-determination and self advocacy and knowledge of government scheme

5.0 Promoting Positive Behaviours

5.6 Teaching strategies that promote positive behaviour (e.g., using structure and visual supports, providing choices and control, predictable environments, using differentiated instructions)
5.7 Understanding the importance and benefits of self-stimulatory behaviours, sensory processing, focused interests and motivations
5.8 Understanding behaviours (Topography, communicative and non-communicative functions, differences in shutdowns, meltdowns and tantrums)
5.9 Role of internal (e.g., pain, hormones, sleep, health, and medication) and external factors (e.g., unpredictability, lack of clarity, sudden changes)
5.10 Limitations and negative impact of the use of aversive and punishment procedures

Suggested Coursework/Practicum:

- Develop presentations about multiple disabilities, differences and neurodiversity to create positive awareness and appreciation amongst educators, other professionals and in general community.
- Develop a participation and support plan for one student with MD.
- Develop a detailed learning profile for three different students with MD while ensuring different genders, ages and settings (special school, inclusive school, home) are represented.
- Develop a plan to make Multiple Disability in regard to mobility, barrier free access - across environments and supports in their everyday settings (e.g., inclusive school classroom, special school classroom, tuition or hobby class, home etc.)
- Develop a non-academic curriculum
- Develop teaching aids for specific lesson plans
- Develop a plan for a student with multiple disabilities to begin the process of advocating for their needs

Suggestive Mode of Transaction:

Learners are encouraged to critically review all materials

- Observations
- Demonstrations
- Hands-on experiences
- Field visits
- Audio-video resources
- Lectures and discussions
- Presentations and projects
- Workshops and seminars
- Online resources
- Self-study

Suggestive Assessment:

- Coursework practicum
- Written assignments and essays
- Individual and group projects

Suggested Readings:

- Baine, D. (1988). *Handicapped Children in Developing Countries, Assessment, Curriculum Instruction.* Alberta: University of Alberta.
- Bluma, S.M. Shearer, M.S. Frohman, A.M. & Hilliard, J.M. (1976) Portage guide to early education (revised edition), Wisconsin: Portage project.
- Bhandari R., Narayan J. (ed) 2009 *Creating Learning Opportunities-A step by step guide to teaching students with Vision Impairment and additional disabilities, including Deafblindness*
- Stillman, R., & Battle, C. (1985). *Callier-Azusa Scale (H): Scales for the Assessment of Communicative Abilities*. Callier Center for Communication Disorders, University of Texas at Dallas.
- Cooper, J., & Heron, T., & Heward, W. (2020). *Applied Behavior Analysis*. Pearson Publications.
- David W. (1998). *Teaching and Learning in the Early Years*. London and New York: Routledge.
- Huebner, K. M., Prickett, J. G., Welch, T. R., & Joffee, E. (Eds.). (1995). *Hand in hand: Essentials of communication and orientation and mobility for your students who are deaf-blind.* (Vol. 1). New York: AFB Press.
- Longhorn, L. (2010). *A Sensory Approach for very special people: a practical approach to curriculum planning.* Souvenir Press Ltd.
- Kamen, D. S., Davies, S. J., Kahn, L. E., Nollman, D. S., & Perrault, S. (n.d.). I.C.A.N.: *A functional skills assessment of the deafblind.* Watertown, MA: Perkins School for the Blind.1995.
- Koenig, Alan J.; Holbrook, M. Cay. (1995) *Learning media assessment of Students With Visual Impairment.*Texas School for the Blind and Visually Impaired, Austin.

- King-Sears, H.E. (1994). *Curriculum based Assessment in Special Education*. San Diego Singular Publishing Group.
- *Learning through doing- A manual for parents and caregivers of children who are visually impaired with additional disabilities.* BPA and NIVH, Dehradun, 2002.
- Longone, J. (1990). *Teaching Retarded Learners Curriculum and Methods for Improving Instruction.* Boston: Allyn and Bacon.
- *Learning through doing- A manual for parents and caregivers of children who are visually impaired with additional disabilities*. BPA and NIVH, Dehradun, 2002.
- Panteliadis, P.C. (2018*), Cerebral Palsy a multidisciplinary approach*. Springer Publications.
- Rowland, C (ed.). (2009).*Assessing Communication and Learning in Young Children Who are Deafblind or Who Have Multiple Disabilities*. Design to Learn Projects of Oregon Health & Science University.
- Sense International India. (2016). Screening and Assessment Formats for Children with Deafblindness and Multi-Sensory Impairments. Ahmedabad: Sense International India
- *The Oregon Project for preschool children who are blind or visually impaired,* (2007) Publication Medford, Oregon : Southern Oregon Education Service District.
- Overton, T.(1992). *Assessment in Special Education – An Applied Approach*. New York: McMillan International Edition
- Rosenbaum, L. P., & Rosenbloom. L., (2012). *From Diagnosis to Adult Life,* Mac Keith Press, United Kingdom.
- Van Dijk, J. (1986). *An educational curriculum for deafblind multi-handicapped persons.*

Assessment tools:

- Children's Hand Use Questionnaire, (3-8 years) or (6-18 year)- https://www.cheq.se/miniquestionnaire
- Goal Attainment Scale (GAS)
- Jayanthi, N (2003*)., Grade Level Assessment Device*, NIMH.
- J. Krishnaswamy. (1992). *The UPANAYAN Early intervention programme.* Madras: MNC.
- Jeyachandaran, P., & Vimala, V. (2000*). Madras Developmental Programming System*. Madras: Vijay Human services.,
- M-CHAT R/F: Robins, D., Fein, D., Barton, M. (2009) - Modified Checklist for Autism in Toddlers, revises with follow-u (M-CHAT R/F) https://mchatscreen.com/mchat-rf/
- Manual Abilities Classification System (MACS).
- Parents Evaluation of Development Status
- Short Sensory Profile (SSP)
- Quality of Upper Extremity Skills Test (QUEST)
- Communication Function Classification System (CFCS).
- Eating and Drinking Ability Classification System (EDACS)
- Supports Intensity Scale - Children's Version™ (SIS-C)™ (2016)

Suggested web readings:

Free AAC Picture communication online tool – Picto Selector
https://www.pictoselector.eu/
https://www.cheq.se/questionnaire Fine motor skills 6-18 years
https://www.physio-pedia.com/ABILHAND_Assessment

- https://www.urmc.rochester.edu/childrens-hospital/developmental-disabilities/conditions/cp.aspx
- https://www.neurogenbsi.com/assets/frontend/pdf/books/7-Parent-Guide-for-Cerebral-Palsy.pdf
- https://dsel.education.gov.in/sites/default/files/publication/modulea5.pdf Cerebral Palsy and Locomotor impairment.
- https://niepid.nic.in/disabled_village_children.pdf

Curriculum design and Pedagogical supports for Education of students with Multiple Disabilities

Course code: 4.4.3 (MD) **Credits: 2** **Semester- 6**

About the course

Multiple disabilities, by its very name, means an individual usually has more than one significant disability, such as movement difficulties, sensory loss, and/or a behavior or emotional disorder. Multiple disabilities refer to the coexistence of two or more significant impairments in an individual, which can affect various aspects of physical, intellectual, or sensory functioning. These disabilities are often interrelated and require a comprehensive approach to teaching, learning and enabling support. Given the nature of multiple disabilities the Pedagogy and Curriculum are intrinsically linked and the same has to be aligned to the meet the learning needs of the student. This unit shall focus on effective pedagogical practices and curricular experiences leading to greater engagement and understanding and/or a measurable impact on student learning. To understand the various pedagogic practices, in which contexts and under what conditions, most effectively support all students to learn at primary and secondary levels. Based on the pedagogic approaches, strategies and practices the teacher shall work towards enacting the curriculum.

Learning Outcomes

After completion of this course, the student teacher will be able to:

- State the models and approaches to curriculum development. .
- Examine the various pedagogical approaches to support learning in students with multiple disabilities.
- Explain, design, distinguish, and develop learner centered teaching learning materials.
- Appraise comprehensive assessment and evaluation to identify a student's patterns of strengths and needs.
- ICT and UDL to support learning and flexibility in the ways to access and engage with teaching and learning.

Unit 1: Nature of curricular approaches to support students with multiple disabilities=

1.1 Developmental, Ecological, Functional, Task Analytical and Systems approach to teaching students with multiple disabilities.

1.2 Modes to develop and implement quality IEP/IFSP tailored to each student's unique needs, strengths, and goals in collaboration with parents/caregivers, therapists and other specialists in IEP/IFSP process.

1.3 Develop differentiated individualised instructions based on Learning Media Assessment including enabling sensory friendly environment to enhance learning engagement and collaborative methods of teaching.

1.4 Nature and scope of integrating multi-sensory teaching - visual, auditory, kinaesthetic, and tactile elements into lessons and include adapted assistive

devices to enhance learning experiences with appropriate adaptations or modifications based on content analysis.

1.5 Curricular adaptations for subject based learning with student centred accommodations or modifications, flexible pacing of teaching learning activities, adapted materials, alternative assessment, assistive technology, and environmental modifications.

Unit 2: Pedagogical and Content Planning of Teaching for Learners with Multiple disabilities

2.1 Implications and adaptations of Pedagogical approaches: Constructivist, Collaborative, Integrative, Reflective and Inquiry-Based approaches and Teaching models: Concrete, Representational and Abstract (CRA), Problem-Based Learning, (PBL), Inquiry Training Model (ITM), Concept attainment Model (CAM), Mastery Learning Model, 5E's Learning Model, Activity-Based Learning (ABL)

2.2 Adaptations of curriculum, lesson plans, different teaching methods and strategies and ensuring support for group interaction and participation: Teacher-centric (e.g., lectures, demonstrations presentations, discussions); Learner-centric (e.g. activity-based learning, hands-on activities, play-way methods); Group-centric (problem-solving, project-based, inquiry-based, collaborative, cooperative and blended), use of adaptive tools-talking calculators, adaptive scissors and writing tools, switch activated devices.

2.3 Innovative inclusive, activity-oriented classrooms to promote higher-order thinking skills such as critical reflection, collaboration, and evaluation, creative problem-solving, communication, and decision-making using a) diverse teaching materials and strategies e.g., concrete or digital manipulatives, 3 D models, tactile, audio and visual aids, simplified language, concrete and visual presentation styles, use of diagrams, simplified embossed infographics and diagrams, graphs, decision boxes anecdotes, need for clarity, precision and practice b) online and offline activities suitable for all learners e.g. quizzes, buzz groups, snowballing, brainstorming, discussion, debates, movement and art-based activities such as clay modelling and toy making, presentations, demonstrations, recitations, storytelling, role-play, games, case vignettes

2.4 Develop yearly, unit and lesson plans that promote analytical, and critical thinking, skills to inquire, explore and discover through activities that provide hands-on experience and are integrated with sports, movement, arts and multi-sensory elements. Emphasise the importance of plans based on learning outcomes and experiential-multi-sensory learning by selecting topics with suitable curricular adaptation from textbooks.

2.5 Differentiated instructions, communication support, structured sensory and mobility-friendly accessible environment including adaptive classroom infrastructure promoting collaborative mixed group teamwork.

Unit 3: Teaching Learning Materials.

3.1 Role and importance of teaching-learning material to implement effective instructional strategies such as the use of multi-sensorial, differentiated and individualized instruction techniques, simplified and supplemented lessons, scaffolded learning, and modified approaches and techniques suited to the strengths of student with multiple

disabilities (e.g., presence of splinter skills, using interests and motivations, concrete and context-based learning etc.) to enhance engagement and maintain a motivating learning environment

3.2 Developing an accessible, adaptable sensory-friendly, and integrated learning environment: physical space and infrastructure (e.g., interactive smartboards, chalkboards, flannel boards, pictures/ picture-cut-outs, organised and labelled materials, adjustable height work/table surfaces, or floor space, safety tools and equipment; and TLMs and learning resources like textbooks, reference books, workbooks, multilingual dictionaries and glossaries and educational kits using principles of UDL.

3.3 Identification, design, management and integration of teaching-learning materials including the environment, print material (e.g., textbooks, reference books, workbooks, multilingual dictionaries, glossaries, educational kits, reflective journals, charts, 2D, 3D models, educational toys and games, pictorial presentations, flashcards and reading cards, worksheets, textbooks, charts and handouts, teachers' manual/ handbook, age-appropriate newspapers, magazines, art-based activities) and non-print material (e.g., multimedia, television, websites, animations, audios, voice notes, videos, images, simulations, e-books, e-documents, audio recordings, audio-video presentations, digital repository, AR, VR and AI-based digital resources, and OERs) highlight features that make these resources accessible, such as closed captioning, audio descriptions, and adjustable settings to meet the sensory needs of students with multiple disabilities.

3.4 Importance and benefits of integrating ICT: digital tools (e.g., interactive whiteboards, tablets, learning apps, digital storytelling; Google Classroom, Padlet, Edmodo, multimedia, video editing tools); online resources (e.g., educational websites, e-books, online libraries, MOOCs, OE); AI-based resources and blockchains); in learning and expression (e.g., AACs, text-to-speech, speech-to-text software) and providing alternative formats for effective, interactive and collaborative learning.

3.5 Promoting a collaborative and shared learning environment through a laboratory/resource room/activity room that is learner-centred, interactive, demonstrative and explorative, promotes scientific inquiry, hands-on access and participation in a clear, logical, systematic, real-world context (participating in clubs, fairs, exams, competitions and talent searches; developing educational kits, visiting educational parks, exhibitions, excursions, field trips and interactive simulations, utilizing community experts and cultural artefacts in teaching and pooling resources.)

Unit 4: Assessment and Evaluation.

4.1 Application, relevance, validity, reliability, and equity value of the different types of assessments (e.g., formative, summative, 360-degree, continuous and comprehensive assessment, group assessment and peer assessments), constructive approach to assessment: rubrics, portfolio, journal writing and open-ended test, language lab, group activities, soft skill presentations, and use of digital tools for assessments (e.g., online quizzes, e-portfolios) and strategies for continuous assessment that are adaptive and inclusive (e.g., regular check-ins and progress tracking.

4.2 Differentiating assessment and evaluation, qualitative and quantitative paradigms in teaching; performance assessment (non-testing methods) assessment of group activities, field observations, recording and reporting (using methods that are accessible, such as audio recordings, simplified note-taking, and visual supports), managing portfolios, assessment of lab skills, assignments, projects, demonstrations, presentations and providing alternative methods for demonstrating competence

4.3 Assessing skills and proficiency in listening, speaking, reading, spelling, writing, comprehension, vocabulary, grammar and phonology communication, and expressions with appropriate modification of assessments to ensure fairness, accessibility and evaluation of student's understanding of concepts rather than the ability to memorize the meaning of a question ((e.g., extended time, separate supervised exam room, pre-decide supervised breaks, use of AACs speech recognition technology, modified test formats, simplified instructions, multiple choice questions, offering oral assessments or practical demonstrations, use of noise cancellation headphones to avoid distraction etc.)

4.4 Incorporating positive and constructive written feedback focusing on the facilitation of knowledge acquisition without the use of aversive and punishment procedures.

4.5 Self-reflection on teaching and assessment practices to improve student engagement and interest in the subject matter, error analysis and enrichment measures.

Unit 5: Assistive Technology (AT) and Universal Design for All

5.1 Types and Levels of Assistive Technology mobility devices, glasses, prosthetic limbs, orthoses, seating systems, tools, products/equipment, white canes, and hearing aids.

5.2 Digital Accessibility - content with the accessibility features required by WCAG.

5.3 Lifecycle approaches of using Assistive Technology

5.4 Assistive Technology for Communication, Academic Learning and Assistive Technology in Sports, Dance, Drama and Music

5.5 Universal Instructional Design and Designing Environments for All

- Physical Environment (focus on schools and neighbourhoods)
- Transport Systems – promoting mobility (maintenance of Listening aids, Visual aids, Mobility cane, use of Wheelchair, Motorized wheelchair, Crutches, Callipers, Artificial limbs, Tri-cycles, cars and other mobility equipment)
- Information and Communication – AAC
- Facilities and Services accessibility. (Hospitals, Government departments)

Suggested Coursework/Practicum:

- Develop presentations about multiple disabilities, differences and neurodiversity to create positive awareness and appreciation amongst educators, other professionals and in general community.
- Develop a participation and support plan for one student with MD.
- Develop a detailed learning profile for three different students with MD while ensuring different genders, ages and settings (special school, inclusive school, home) are represented.

- Develop a plan to make Multiple Disability in regard to mobility, barrier free access - across environments and supports in their everyday settings (e.g., inclusive school classroom, special school classroom, tuition or hobby class, home etc.)
- Develop a non-academic curriculum
- Develop teaching aids for specific lesson plans
- Develop a plan for a student with multiple disabilities person to begin the process of advocating for their needs

Suggestive Mode of Transaction:

Learners are encouraged to critically review all materials

- Observations
- Demonstrations h
- Hands-on experiences
- Field visits
- Audio-video resources
- Lectures and discussions
- Presentations and projects
- Workshops and seminars
- Online resources
- Self-study

Suggestive Assessment:

- Coursework practicum
- Written assignments and essays
- Individual and group projects

Suggested Readings:

- Alsop, L (2002) *Understanding Deafblindness: Issues, Perspectives, and Strategies. Hope, Inc A Resource Manual for Understanding and Interacting with Infants, Toddlers and Preschool*
- Age Children with Deaf-Blindness (1993). Ski-Hi Institute. HOPE Publishing. Bender, W. (2008). *Multiple Disabilities: Characteristics, Identification, and Teaching Strategies. P*earson/Allyn and Bacon
- Baine, D. (1988). *Handicapped Children in Developing Countries, Assessment, Curriculum Instruction.* Alberta: University of Alberta.
- Bluma, S.M. Shearer, M.S. Frohman, A.M. & Hilliard, J.M. (1976) Portage guide to early education (revised edition), Wisconsin: Portage project.
- Bigge, J. L., & Stump, C. S. (1999). *Curriculum, Assessment, and Instruction for Students with Disabilities*. Cengage Learning.
- Bhandari R., Narayan J. (ed) 2009 *Creating Learning Opportunities-A step by step guide to teaching students with Vision Impairment and additional disabilities, including Deafblindness*
- Charlson, K. (2009). *Drawing with Your Perkins Brailler*.

- Chen, D. (2014). *Essential Elements in Early Intervention: Visual Impairment and Multiple Disabilities,* Second Edition. American Foundation for the Blind.
- Cooper, J., & Heron, T., & Heward, W. (2020). *Applied Behavior Analysis*. Pearson Publications.
- Dell, A. G., Newton, D. A., & Petroff, J. G. (2012). *Assistive Technology in the Classroom*. Allyn & Bacon
- David W. (1998). *Teaching and Learning in the Early Years*. London and New York: Routledge.
- Huebner, K. M., Prickett, J. G., Welch, T. R., & Joffee, E. (Eds.). (1995). *Hand in hand: Essentials of communication and orientation and mobility for your students who are deaf-blind.* (Vol. 1). New York: AFB Press.
- Longhorn, L. (2010). *A Sensory Approach for very special people: a practical approach to curriculum planning.* Souvenir Press Ltd.
- Karthik. M. (2011). Introduction to Occupational therapy and occupational therapy
- .Kamen, D. S., Davies, S. J., Kahn, L. E., Nollman, D. S., & Perrault, S. (n.d.). I.C.A.N.: *A functional skills assessment of the deafblind.* Watertown, MA: Perkins School for the Blind.1995.
- Koenig, Alan J.; Holbrook, M. Cay. (1995) *Learning media assessment of Students With Visual Impairment.*Texas School for the Blind and Visually Impaired, Austin.
- King-Sears, H.E. (1994). *Curriculum based Assessment in Special Education*. San Diego Singular Publishing Group.
- *Learning through doing- A manual for parents and caregivers of children who are visually impaired with additional disabilities.* BPA and NIVH, Dehradun, 2002.
- Longone, J. (1990). *Teaching Retarded Learners Curriculum and Methods for Improving Instruction.* Boston: Allyn and Bacon.
- *Learning through doing- A manual for parents and caregivers of children who are visually impaired with additional disabilities*. BPA and NIVH, Dehradun, 2002.
- Panteliadis, P.C. (2018*), Cerebral Palsy a multidisciplinary approach*. Springer Publications.
- Peshawaria, R & Venkatesan, S (1992). *Behavioural assessment scales for Indian children with mental retardation*. Secunderabad: NIMH.
- Rowland, C (ed.). (2009).*Assessing Communication and Learning in Young Children Who are Deafblind or Who Have Multiple Disabilities*. Design to Learn Projects of Oregon Health & Science University.
- Stillman, R., & Battle, C. (1985). *Callier-Azusa Scale (H): Scales for the Assessment of Communicative Abilities*. Callier Center for Communication Disorders, University of Texas at Dallas.
- Sense International India. (2016). Screening and Assessment Formats for Children with Deafblindness and Multi-Sensory Impairments. Ahmedabad: Sense International India
- *The Oregon Project for preschool children who are blind or visually impaired,* (2007) Publication Medford, Oregon : Southern Oregon Education Service District.
- Overton, T.(1992). *Assessment in Special Education – An Applied Approach*. New York: McMillan International Edition.

- Sanford. D. LaRhea, & Burnett. R. (2008). *Functional Vision and Learning Media Assessment for students who are Pre-acadamic, Academic and Visually impaired*. American Printing House for the Blind, In
- Turnball, A.P. Srickland, B.B. & Brantlay, J.C. (1990). *Developing and Implementing an individualized education programme*. London: Merrill
- Rosenbaum, L. P., & Rosenbloom. L., (2012). *From Diagnosis to Adult Life,* Mac Keith Press, United Kingdom.
- Van Dijk, J. (1986). *An educational curriculum for deafblind multi-handicapped persons.*

Assessment tools:

- Children's Hand Use Questionnaire, (3-8 years) or (6-18 year)- https://www.cheq.se/miniquestionnaire
- Goal Attainment Scale (GAS)
- Jayanthi, N (2003*)., Grade Level Assessment Device*, NIMH.
- J. Krishnaswamy. (1992). *The UPANAYAN Early intervention programme*. Madras: MNC.
- Jeyachandaran, P., & Vimala, V. (2000*). Madras Developmental Programming System*. Madras: Vijay Human services.,
- Manual Abilities Classification System (MACS).
- Parents Evaluation of Development Status
- Short Sensory Profile (SSP)
- Quality of Upper Extremity Skills Test (QUEST)
- Communication Function Classification System (CFCS).
- Eating and Drinking Ability Classification System (EDACS)
- Supports Intensity Scale - Children's Version™ (SIS-C)™ (2016)

Suggested web readings:

- https://www.cheq.se/miniquestionnaire [APGAR SCORES]
- https://www.urmc.rochester.edu/childrens-hospital/developmental-disabilities/conditions/cp.aspx
- https://www.neurogenbsi.com/assets/frontend/pdf/books/7-Parent-Guide-for-Cerebral-Palsy.pdf
- https://dsel.education.gov.in/sites/default/files/publication/modulea5.pdf Cerebral Palsy and Locomotor impairment.
- https://niepid.nic.in/disabled_village_children.pdf

Disability Specialization Courses

Specific Learning Disabilities

Identification and Need Assessment of Children with Specific Learning Disabilities

Course Code: 4.4.1 (SLD) **Credits: 04** **Semester: 3**

About the Course

The course on Identification and Need Assessment of Children with Specific Learning Disabilities aims to equip teacher trainers with the necessary skills and knowledge to effectively recognize and evaluate students who exhibit learning challenges. Participants will explore the characteristics and indicators of specific learning disabilities such as dyslexia, dysgraphia, and dyscalculia. The course will provide an in-depth understanding of various assessment tools and techniques, enabling teacher trainers to identify learning disabilities early and accurately. By the end of the course, participants will be adept at using both standardized and informal assessment methods, interpreting assessment results, helping them to develop tailored intervention plans to support each child's unique educational needs.

Learning Outcomes:

After completion of this course, the student teacher will be able to:

- Describe the nature and concept of specific learning disabilities (SLD)
- Describe theories used in understanding of SLD
- Narrate the causes of SLD
- Describe the common types of learning disabilities found in children
- Identify the areas of information processing in learning
- Explain the meaning, concept of screening, identification and assessment of children with SLD
- Use the techniques of assessment for learning children with disabilities
- Demonstrate skills in diagnosing the educational problems encountered by children with SLD
- Demonstrate the ability to construct / develop tools for assessment to identify areas of deficits in children with SLD
- Demonstrate the ability to write reports and disseminate findings of the assessments

Unit 1: Introduction to Specific Learning Disability (SLD)

1.1 History of SLD (International and National)

1.2 Definition (NJCLD, 2022 and RPwD, 2016) and characteristics of SLD

1.3 Prevalence of SLD

1.4 Etiology of SLD- medical and social; co-morbidity of SLD with ADHD

1.5 Implications of SLD as an invisible disability; myths, and misconceptions

Unit 2: Types of SLD

2.1 Specific Learning Disorder in Reading

2.2 Specific Learning Disorder inWriting

2.3 Specific Learning Disorder inMathematics

Characteristics and educational implications of

2.4 Dyspraxia; Developmental aphasia

2.5 Non-verbal LD

Unit 3: Assessment of SLD

3.1 Concept of screening and identification of SLD

3.2 Identification Criteria - Latest DSM, distinction between SLD, ID and ASD

3.3 Assessment tools - Screening tools (Prashast) , formal tools (WISC, NIMHANS SLD Index, Woodcock Johnson Test - Cognitive and Achievement, WRAT) and informal tools/ teacher made tools (observation schedules, rating scales, checklists, curriculum based tests, curriculum based assessments, curriculum based measurements, portfolios)

3.4 Guidelines and procedure for assessment of SLD for certification in India

3.5 Writing case reports

Unit 4: Assessment of various areas

4.1 Executive Functioning

4.2 Memory

4.3 Thinking

4.4 Social emotional

4.5 Study skills

Unit 5: Assessment of Curricular areas

5.1 Reading skills - Decoding

5.2 Reading skills - Comprehension

5.3 Spellings Skills

5.4 Written Expression Skills

5.5 Math skills - Concepts, computation, problem solving

Suggested Practicum

- Group discussion on issues related to SLD
- Analyse the causes of SLD for a case
- Diagnose a case based on profile given
- Presentation on the importance of any given process in learning
- Identify the deficits in any case

Suggested Assessment

Written tests, classroom presentations, workshops, seminars, assignments, sessional and terminal semester examinations

Suggested Reading

Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2018). Learning disabilities: From identification to intervention (2nd ed.). The Guilford Press.

Jena, S.P.K. (2013). Specific Learning Disabilities: Theory to Practice. Sage Publications, New Delhi

Kapur, M., John, A., Rozario, J., & Oommen, A. (2002). NIMHANS Index of Specific Learning Disabilities, NIMHANS, Bangalore.

Karande, S. (2017). Current challenges in managing specific learning disability in Indian children. Journal of Postgraduate Medicine, 63(1), 45-49. https://doi.org/10.4103/0022-3859.194210

Karanth, P., & Rozario, J. (2003). Learning disabilities in India willing the mind to learn. Sage, New Delhi.

Lerner, J. W., & Johns, B. H. (2020). Learning disabilities and related mild disabilities: Characteristics, teaching strategies, and new directions (14th ed.). Houghton Mifflin Harcourt.

Nakra, O. (2023). Children and Learning Difficulties. Allied Publishers.

Padhy, S. K., Goel, S., Das, S. S., Sarkar, S., Sharma, V., & Panigrahi, M. (2016).Prevalence and patterns of learning disabilities in school children. Indian Journal of Pediatrics, 83(4), 300-306. https://doi.org/10.1007/s12098-015-1871-2

Raj, F. (2010). Breaking Through – A hand book for parents and teachers of children with specific learning disabilities. Vifa Pub, Secunderabad.

Reddy L. G., Ramaa, R., & Kusuma, A. (2000).Learning Disabilities: A practical Guide to Practitioners. Discovery Publishers, New Delhi.

Reddy, L. G., & Ramar, R. (2019). Learning disabilities: Identification and intervention strategies. Discovery Publishing House.

Shaywitz, S.E. (2020). Overcoming dyslexia: A new and complete science-based program for reading problems at any level. Knopf.

Snowling, M. J., & Hulme, C. (2013). The nature and classification of reading disorders: A commentary on proposals for DSM-5. Journal of Child Psychology and Psychiatry, 53(5), 593-607. https://doi.org/10.1111/j.1469-7610.2011.02495.x

Suresh, V. N., & Sebastina, S. (2019). Educational interventions for children with learning disabilities in India. Journal of Education and Practice, 10(3), 35-43.

Intervention and Teaching Strategies (SLD)

Course Code: 4.4.2 (SLD) **Credits: 04** **Semester: 5**

About the Course

The Intervention and Teaching Strategies course aims to equip student teachers with the knowledge and skills required to implement effective curriculum interventions and teaching strategies for students with Specific Learning Disability (SLD) at secondary stage. The course provides input on specific curricular areas, helping the student teachers to develop targeted interventions for students with SLD that address gaps in knowledge and skills. By the end of the course, the student teachers will be able to design and execute tailored interventions that enhance student learning outcomes, foster critical thinking, and support holistic development. Furthermore, the course emphasises the importance of life skills and metacognitive processes as critical components of the modern educational landscape. The student teachers will explore techniques for integrating these elements into the curriculum, thereby promoting students' self-regulation, problem-solving abilities, and adaptability. The student teachers will gain insights into the theoretical underpinnings of various intervention strategies and will learn to apply these concepts practically within diverse classroom settings

Learning Outcomes:

After completion of this course, the student teacher will be able to:

- Demonstrate skills in applying different intervention programmes for students with SLD
- Discuss the various Teaching Strategies across the curricular hierarchies
- Link the teaching Strategies to the curricular areas
- Make effective use of appropriate teaching strategies as per the specific needs of children with learning disabilities.
- Acquire knowledge of therapeutic techniques and practices to be used with individuals with LD and their parents
- Identify key life skills essential for student development and their integration into the curriculum.
- Develop strategies to teach and assess life skills in secondary education settings.
- Evaluate the effectiveness of life skill intervention on student behavior engagement and overall well being.

Unit 1: Conceptual Understanding of Curriculum Intervention

1.1 Curriculum intervention: Meaning, Definition & Scope
1.2 Diagnostic Prescriptive Teaching
1.3 Steps of intervention
1.4 Cascade of services and Response to Intervention
1.5 Issues and ethics in Intervention

Unit 2: Intervention Approaches

2.1 Concept: Principles & perspective
2.2 Behavioural Approach

2.3 Cognitive Approach
2.4 Multi sensory Approach
2.5 Collaborative Teaching Approach

Unit 3: Intervention in Curricular Area

3.1 Reading skills - Decoding
3.2 Reading skills - Comprehension
3.3 Spelling skills
3.4 Written Expression
3.5 Maths Skills

Unit 4: Life Skill Preparation: Conceptual understanding

4.1 Life skills : Concept , scope, importance for students with SLD
4.2 Transition Planning : Need, importance, process, areas
4.3 Preparation for Independent Living: Guidelines
4.4 Career Planning and Development: Need, scope , process
4.5 Time management and Organization: Importance and implications

Unit 5 : Intervention in Life skills - Strategies and techniques for

5.1 Developing study skills
5.2 Developing social skills - Social competencies, self-awareness, self-regulation, and self-advocacy
5.3 Developing 21st century skills - Collaboration, communication, creativity, critical thinking
5.4 Soft skills - Presenting self, time management, decision making, mindfulness
5.5 Health and mental well being

Suggested Practicum

- Develop and execute a curriculum intervention plan for a specific subject area in real or simulated classroom, documenting the process and outcomes.
- Analyze a case study and identify key areas for planning intervention
- Conduct an action research project to investigate the impact of a specific teaching strategy or intervention on student learning outcome.
- Adapt an existing lesson plan to include intervention strategies for enhancing metacognitive skills and life skills, and implement the adapted lessons in the classroom.
- Participate in a collaborative workshop to design intervention materials and activities, implement and evaluate the material in a classroom setting

Suggested Assessment

Reflective journaling, project presentation, written tests, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

Suggested Reading

Alzahrani, A. (2020). The effects of assistive technology on students with learning disabilities. Journal of Special Education Technology, 35(3), 129-141. https://doi.org/10.1177/0162643419841400

Berk, L. E., & Winsler, A. (2019). Scaffolding children's learning: Vygotsky and early childhood education (2nd ed.). NAEYC.

Connor, C. M., Morrison, F. J., Fishman, B. J., Schatschneider, C., & Underwood, P. S. (2014). Algorithm-guided individualized reading instruction. Science, 315(5811), 464-465. https://doi.org/10.1126/science.1134513

De La Paz, S., & Graham, S. (2019). Strategy instruction in writing for students with learning disabilities. In S. Graham, C. A. MacArthur, & M. Hebert (Eds.), Best practices in writing instruction (3rd ed., pp. 86-108). Guilford Press.

Fuchs, D., & Fuchs, L. S. (2020). Responsiveness-to-intervention: A decade later. Journal of Learning Disabilities, 43(3), 254-273. https://doi.org/10.1177/0022219409340043

Gersten, R., & Dimino, J. A. (2021). The realities of translating research to classroom practice. Learning Disabilities Research & Practice, 35(2), 96-104. https://doi.org/10.1111/ldrp.12234

Graham, S., Harris, K. R., & Santangelo, T. (2015). Research-based writing practices and the common core. Elementary School Journal, 115(4), 498-522. https://doi.org/10.1086/681947

Hall, T. E., Meyer, A., & Rose, D. H. (2014). Universal design for learning in the classroom: Practical applications. Guilford Press.

Hudson, M. E., & Browder, D. M. (2014). Improving listening comprehension responses for students with moderate intellectual disability. Research and Practice for Persons with Severe Disabilities, 39(1), 11-29. https://doi.org/10.1177/1540796914534634

Jitendra, A. K., & Star, J. R. (2017). An exploratory study contrasting high- and low-achieving students' percent word problem-solving performance and strategy use in inclusive classrooms. Learning Disability Quarterly, 35(2), 103-118. https://doi.org/10.1177/0731948711428774

Kavale, K. A., & Forness, S. R. (2020). What definitions of learning disability say and don't say: A critical analysis. Journal of Learning Disabilities, 33(3), 239-256. https://doi.org/10.1177/002221940003300303

King-Sears, M. E. (2019). Universal design for learning: Technology and pedagogy. Learning Disability Quarterly, 32(4), 199-212. https://doi.org/10.2307/27740372

McLeskey, J., Rosenberg, M. S., & Westling, D. L. (2017). Inclusion: Effective practices for all students. Pearson.

Meyer, A., Rose, D. H., & Gordon, D. (2014). Universal design for learning: Theory and practice. CAST Professional Publishing.

Pullen, P. C., & Hallahan, D. P. (Eds.). (2015). Handbook of special education. Routledge.

Reid, R., & Lienemann, T. O. (2018). Strategy instruction for students with learning disabilities. Guilford Press.

Richards, C., & Armstrong, A. (2020). Technology-based interventions for students with learning disabilities: An analysis of research and trends. Computers & Education, 123, 91-104. https://doi.org/10.1016/j.compedu.2018.04.002

Swanson, H. L., Harris, K. R., & Graham, S. (Eds.). (2014). Handbook of learning disabilities (2nd ed.). Guilford Press.

Vaughn, S., & Bos, C. S. (2015). Strategies for teaching students with learning and behavior problems (9th ed.). Pearson.

Wong, B. Y. L., & Butler, D. L. (2017). Learning about learning disabilities. In Learning about learning disabilities (4th ed., pp. 1-10). Academic Press.

Quality of Life, Employability, and Family Issues Related to Specific Learning Disabilities (SLD)

Course Code: 4.4.3 (SLD) **Credits: 04** **Semester: 6**

About the Course

This course aims to provide an in-depth understanding of the multifaceted issues surrounding Specific Learning Disabilities (SLD), focusing on quality of life, employability, and family dynamics. Student teachers will explore the impact of SLD on individuals and families, the challenges faced in educational and employment settings, and strategies to enhance quality of life and support successful transitions into the workforce. By integrating theory and practice, this course prepares student teachers to develop and implement effective interventions that address the unique needs of individuals with SLD and their families. Student teachers will be equipped with the knowledge and skills to create inclusive learning environments, advocate for appropriate accommodations, and support families navigating the complexities of SLD. The course emphasizes evidence-based practices and interdisciplinary approaches, encouraging collaboration between educators, employers, families, and healthcare providers. By the end of the course, student teachers will be prepared to champion the rights of individuals with SLD, fostering their growth, independence, and well-being.

Learning Outcomes:

After completion of this course, the student teacher will be able to

- Understand the impact of SLD on quality of life, including educational, social, and emotional dimensions
- Identify barriers to employability for individuals with SLD and strategies to overcome these barriers
- Explore the role of family dynamics in supporting individuals with SLD
- Develop and implement effective support strategies for individuals with SLD
- Advocate for inclusive practices and policies that enhance the quality of life and employability of individuals with SLD

Unit 1: Secondary and Postsecondary Education

1.1 Skills as a student required for secondary and post secondary education

1.2 Academic Supports, Accommodations, Assistive Technology for Secondary Education

1.3 Transition Planning and Career Guidance for Postsecondary Education

1.4 Nature of Resources, Supports, and Accommodations for and in Higher Education

1.5 Self-Advocacy: Need and strategies for Postsecondary Education

Unit 2 : Mental Health and SLD

2.1: Co-occurring Mental Health Issues

2.2: Therapeutic Interventions and Social Emotional Learning

2.3: Stress Management Techniques

2.4: Counseling and Support Services
2.5: Promoting Positive Mental Health

Unit 3: Quality of Life and SLD

3.1 Quality of Life: Concept and indicators
3.2 Factors affecting quality of life
3.3 Improving quality of life : Areas for intervention
3.4 Strategies for improving quality of life at personal level
3.5 Strategies for improving quality of life at social level

Unit 4: Employability and SLD

4.1 Employment Challenges for Individuals with SLD
4.2 Supporting employability : Career Development and Transition Planning
4.3 Supporting employability : Skill Development and Vocational Training
4.4 Workplace Accommodations and Supports: Meaning and nature
4.5 Legal Protections and Advocacy in the Workplace

Unit 5: Family Dynamics and SLD

5.1 Family Role and Responsibilities for individuals with SLD at secondary and post secondary stage
5.2 Sibling Perspectives and Involvement
5.3 Communication and Support Strategies
5.4 Resources and Advocacy for Families
5.5 Parent-Teacher Collaboration: Need and nature

Suggested Practicum

- Conduct a case study analysis on the impact of SLD on an individual's educational and employment outcomes.
- Evaluate the effectiveness of strategies for improving employability in individuals with SLD.
- Facilitate a workshop on SLD awareness and advocacy for families and educators.
- Conduct an interview with a family member of an individual with SLD to understand their experiences and challenges.
- Develop a transition plan for a high school student with SLD entering the workforce or higher education.
- Create a resource guide for educators on using assistive technology for students with SLD.
- Design a community outreach program to raise awareness about SLD.

Suggested Assessment

Reflective journaling, project presentation, written tests, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

Suggested Reading

American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

Barkley, R. A. (2020). *Taking Charge of ADHD: The Complete, Authoritative Guide for Parents* (4th ed.). New York, NY: The Guilford Press.

Berninger, V. W., & Wolf, B. J. (2016). *Teaching Students with Dyslexia and Dysgraphia: Lessons from Teaching and Science*. Baltimore, MD: Brookes Publishing.

Brady, S. A., Braze, D., & Fowler, C. A. (Eds.). (2016). *Explaining Individual Differences in Reading: Theory and Evidence*. New York, NY: Psychology Press.

Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2018). *Learning Disabilities: From Identification to Intervention* (2nd ed.). New York, NY: The Guilford Press.

Gargiulo, R. M. (2022). *Special Education in Contemporary Society: An Introduction to Exceptionality* (7th ed.). Thousand Oaks, CA: SAGE Publications.

Goldberg, R. J., & Sweeney, B. L. (2017). *Helping Students with Dyslexia and Dysgraphia Make Connections: Differentiated Instruction Lesson Plans in Reading and Writing*. Baltimore, MD: Brookes Publishing.

Gregg, N., & Mather, N. (Eds.). (2016). *Learning Disabilities and Challenging Behaviors: A Guide to Intervention and Classroom Management*. Baltimore, MD: Brookes Publishing.

Hallahan, D. P., Kauffman, J. M., & Pullen, P. C. (2018). *Exceptional Learners: An Introduction to Special Education* (14th ed.). Boston, MA: Pearson.

Lerner, J. W., & Johns, B. (2015). *Learning Disabilities and Related Disabilities: Strategies for Success* (13th ed.). Boston, MA: Cengage Learning.

Lyon, G. R., Shaywitz, S. E., & Shaywitz, B. A. (2003). *A Definition of Dyslexia*. Annals of Dyslexia, 53(1), 1-14.

McCloskey, G., Perkins, L. A., & Diviner, L. (2012). *Assessment and Intervention for Executive Function Difficulties*. New York, NY: Routledge.

Raskind, M. H., & Margalit, M. (2021). *Digital Technology and Learning Disabilities: Research, Theory, and Practice*. New York, NY: Springer.

Reid, G., & Green, S. (Eds.). (2017). *Dyslexia in Context: Research, Policy and Practice*. London, UK: Whurr Publishers.

Shaywitz, S. (2020). *Overcoming Dyslexia: A New and Complete Science-Based Program for Reading Problems at Any Level* (2nd ed.). New York, NY: Knopf.

Silver, L. B. (2018). *The Misunderstood Child: Understanding and Coping with Your Child's Learning Disabilities*(4th ed.). New York, NY: McGraw-Hill.

Snowling, M. J., & Hulme, C. (Eds.). (2012). *The Science of Reading: A Handbook*. Oxford, UK: Wiley-Blackwell.

Swanson, H. L., Harris, K. R., & Graham, S. (Eds.). (2013). *Handbook of Learning Disabilities* (2nd ed.). New York, NY: The Guilford Press.

Vaughn, S., & Bos, C. S. (2014). *Strategies for Teaching Students with Learning and Behavior Problems* (9th ed.). Boston, MA: Pearson.

Wong, B. Y. L. (2011). *Learning about Learning Disabilities* (4th ed.). San Diego, CA: Elsevier

Disability Specialization Courses

Visual Impairment

Identification of Children with Visual Impairment and Assessment of Needs

Course Code: 4.4.1(VI) **Credits: 04** **Semester: 3**

About the Course

This course will equip student trainees on the identification of children with visual impairment and assessment of needs at the Secondary Stage. The student trainees need to understand various eye conditions and related psycho social implications of visual impairment. The course will equip student trainees to gain insights on various kinds of assessment of children with visual impairment and those with associated conditions.

Learning Outcomes

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

- Acquire knowledge on process of seeing, refractive errors and eye disorders
- Explain the etiology of visual impairment.
- Develop skills on screening procedures and identification of children with visual impairment.
- Describe the implications of visual impairment and understand the needs of children with visual impairment.
- Describe reasonable accommodations related to the needs of students with visual disabilities at the Secondary stage.

Unit 1: Understanding Vision and Process of Seeing

1.1 Anatomy and Physiology of Eye; Process of seeing, Visual Perception

1.2 Visual acuity, degree of vision, visual field, colour vision, and contrast sensitivity; Concept and Definitions of Blindness and Low Vision (WHO &RPwD Act, 2016)

1.3 Development of vision in a child

1.4 Common Eye Disorders: Different Refractive Errors; Vitamin-A deficiency, Cataract, Glaucoma, Corneal ulcer, trachoma and other infectious diseases, Strabismus, Nystagmus & Amblyopia,

1.5 Eye Disorders related to receptive aspects: Albinism, Retinal detachment, Retinitis pigmentosa, Retinopathy of prematurity, Cortical Visual Impairment, Optic atrophy and macular degeneration, etc.

Unit 2: Identification and Assessment of Visual Impairment

2.1 Screening Checklists for Identification of Visual Impairment

2.2 Clinical assessment of vision – Concept, need, procedure, and interpretation

2.3 Functional assessment of vision: Concept, need, and methods; Tools for functional assessment of vision

2.4 Psychological Assessment of the students with visual impairment

2.5 Educational Assessment of Children with visual impairment with associated disabilities.

Unit 3: Implications of Visual Impairment

3.1 Psycho-social & Educational 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 Mannerism, Stereotypes and attitudes towards visual impairment; Coping strategies to overcome the implications of visual impairment

3.5 Implications of Visual Impairment with associated disabilities.

Unit 4: Understanding Needs of Students with Visual Impairment

4.1 Braille as a mode of reading -writing, history of tactile scripts, standardisation of Braille

4.2 Emerging Needs of Adolescents with Visual Disabilities (Academic, Psycho-social, Recreational, Vocational, Career etc.)

4.3 Need for learning Expanded Core Curriculum (ECC) Skills for Children with Visual Impairment (e.g. compensatory academic skills, self-determination, career education, independent living skills, social interaction skills, leisure time activities)

4.4 Teaching Methods, Approaches, Strategies, Techniques, and adapted teaching learning material

4.5 Needs of students with visual impairment having associated disabilities.

Unit 5: Reasonable Accommodation for Students with Visual Impairment

5.1 Reasonable accommodation and curricular adaptations in specific subjects for students with visual impairment at the secondary stage.

5.2 Adapted strategies for teaching curricular areas of students with visual impairment

5.3 Accessible laboratories, accessible Geographical maps and landmarks and accessible libraries for students with visual impairment

5.4. Adaptive and Assistive Devices for teaching of Science, Social Science, Mathematics and Languages for Children with visual impairment at Secondary Stage

5.5 Curricular adaptations for children with visual impairment and associated disabilities

Suggested Coursework/Practicum

- Seminar Presentation Psycho social implications of visual impairment
- Use checklists prepared by national-level organizations (NCERT, NIEPVD or others) for the identification of vision-related problems
- Preparation of Materials for functional assessment of visual impairment
- Group discussion on preventive measures of visual impairment
- Report Preparation on assessment of needs of children with visual impairment

Suggested Mode of Transaction

Lecture cum Demonstration, Individual and Group Projects, Workshop, Assignments, Field visits and Hands on Experience

Suggested Assessment

Group Discussions, Project reports, Internal and External assessment tests, Assignments, Lesson plan Records, Braille records, Tactile Material Preparation and Workshop

Suggested Readings:

- Barraga, N. C. (1980). Sequences of Visual Development. University of Texas, Austin.
- Bhan, S., & Swarup, S. (2010). Functional Skills Inventory for the Blind. National Association for the Blind. Mumbai.
- Bhandari, R., & Narayan J. (2009).Creating learning opportunities: a step-by-step guide to teaching students with vision impairment and additional disabilities, including deafblindness. India: Voice and vision.
- Holbrook, M. C., & Koenig, A. J. (2000). Foundations of Education, Vol I: History and Theory of Teaching Children and Youths with Visual Impairments. AFB Press, New York.
- Hyvarinen, L., & Jacob N. (2011).What and how does this child see: assessment of visual functioning for development and learning. Vistest Ltd., Finland.
- Kumar, P. (2018). Alp Drishti Bachhe (Hindi). Delhi: S R Publishing House
- Kundu, C.L. (2000). Status of Disability in India. RCI, New Delhi.
- Leat, S.J., Shute R.H., &Westall, C.A. (1999). Assessing children's vision: A handbook. Butterworth-Heinemann, Oxford.
- Mani, M.N.G. (1992). Concept development of blind children. SRK Vidyalaya, Coimbatore.
- Mani, M.N.G. (2001). Reading Preference Test (REPT) for Children with Low Vision. Coimbatore: International Human Resource Development Centre for the Disabled.
- Mukhopadhyay, S., Mani, M.N.G., RoyChoudary, M., &Jangira, N.K. (1988). Source Book for Training Teachers of Visually Impaired. NCERT, New Delhi.
- National Institute for the Visually Handicapped (1990). Handbook for Teachers of the Blind. NIVH, Dehradun.
- NIEPVD (2020). *Effective Schools for Students with Visual Disabilities (Quality Indicators and Parameters).* NIVH Dehradun. https://nivh.gov.in/pdfdoc/qualityindicators.pdf
- NIEPVD (2022). Expanded Core Curriculum (Hindi) VistaritMoolPathchariya. National Institute for the Empowerment of Persons with Visual Disabilities. https://nivh.gov.in/?page_id=7391
- NIEPVD (2023). Screening Checklist for Vision Difficulties in Students . National Institute for the Empowerment of Persons with Visual Disabilities. https://nivh.gov.in/?page_id=7391
- NIEPVD (2016). Visual Disability: A Resource Book for Teachers. Vo. 1. National Institute for the Empowerment of Persons with Visual Disabilities, Dehradun
- NIEPVD (2016). Visual Disability: A Resource Book for Teachers. Vo. 2. National Institute for the Empowerment of Persons with Visual Disabilities, Dehradun

- Scholl, G. T. (1986). Foundations of the education for blind and visually handicapped children and youth: Theory and Practice. AFB Press, New York.
- Warren, D.H. (1983). Blindness and Early Childhood Development. AFB Press. New York.
- Punani, B., & Rawal, N. (1993). Handbook: Visual Impairment. Ashish Publishing House, New Delhi.
- Bright Hub Education. (2012). Identifying Students with Visual Impairment. http://www.brighthubeducation.com/special-ed-visual-impairments/69240-early-signs-of-visual-impairment-in-a-child/

Online Resource

- https://iris.who.int/handle/10665/58719
- http://lea-test.fi/en/vistests/pediatric/vactests/vatests.html

Intervention and Teaching Strategies for Students with Visual Impairment

Course Code: 4.4.2(VI) **Credits: 2** **Semester: 5**

About the Course

This course equips student trainees on intervention and teaching strategies for children with visual impairment at secondary stage. The course focuses to provide insight to the student trainees about adaptive intervention strategies for various curricular areas of children with visual impairment. They will have an opportunity to know theoretical perspectives on intervention strategies and various assistive devices for learning languages, science, social science and mathematics.

Objectives

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

- Explain various theoretical perspectives related to intervention and 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 Teaching Methods, Approaches, Strategies & Techniques

1.2 Intervention – Concept, Scope and Importance

1.3 Instructional Methods and Approaches; Planning and implementation – Multimodal Instructional procedures

1.4 Learning media assessment: Meaning, importance, and techniques of teaching Braille /Print; Pre-requisite skills for learning Braille.

1.5 Enriched teaching for concepts development: Converting visual concepts into accessible experiences; Mediated teaching-learning

Unit 2: Teaching of Mathematics

2.1 History of braille mathematics code in india and abroad

2.2 Challenges and solutions in teaching-learning Mathematics for children with Visual Impairment

2.3 Teaching strategies for higher order mathematical content

2.4 Assistive devices and adaptive material for teaching Mathematics

2.5 Evaluation procedures in mathematics for children with Visual Impairment

Unit 3: Teaching of Science

3.1 Challenges and solutions of teaching science at the secondary stage

3.2 Teaching strategies for Science learning; Inclusive/collaborative learning for laboratory work

3.3 Introduction to science braille notations

3.4 Teaching Learning Materials and Equipment for teaching Science: Preparation and procurement

3.5 Evaluation procedures in Science to children with visual impairment

Unit 4: Teaching of Social Science

4.1 Techniques of preparation of tactile maps, diagrams, and globe

4.2 Procuring and preparation of 3-D, 2-D tactile models

4.3 Experiential teaching of social science: Organizing field trips, museums, etc.

4.4 Alternative methods of teaching Science: Dramatization, Narration, Story-telling, and Role play

4.5 Adaptations in evaluation of social science for students with visual impairment

Unit 5: Classroom Management for Children with Visual Impairment

5.1 Creating Stimulating and safe Learning Environment

5.2 Classroom Management in special and inclusive educational settings – Seating arrangement, adapted furniture, illumination, color contrast, etc.

5.3 Management of behavioural challenges

5.4 Pedagogical Strategies – Cooperative learning, Peer tutoring, individual/group work

5.5 Classroom management for students with visual impairment with associated disabilities (e.g. use of tactile calendar system, object calendar, etc.)

Coursework / 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.

Suggested Coursework/Practicum

- Seminar presentation on intervention strategies for curricular areas of students with visual impairment
- Organise Workshops for making TLMs, Use of existing resources, no/cost or low cost classroom support resources.
- Presentation of classroom management.
- Prepare a local or outstation trip with students with visual impairment. / Prepare Storytelling and Narration strategies for CwVI at secondary stage.
- Plan and execute Lessons to teach O&M (and other Independent Living Skills) with CwVI at secondary stage

Suggested Mode of Transaction

Presentation, discussion, workshop, Assignment(s) (Group/Small Group/Individual), Project(s) (Group/Small Group/Individual), Field Experience, Small Group, Lecture-cum-Demonstration, Tests, & Experiential training supported

Suggested Assessment

Individual and group projects, Group discussions, class tests, discussion, Periodic tests and assignments and Field visit reports

Suggested Readings:

- Mason, H., & Mc Call, S. (2003). Visual Impairment – Access to Education for Children and Young people. London: David Fulton Publishers.
- 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.
- Cutter, J. (2006). Independent Movement and Travel in Blind Children. IAP, North Carolina.
- Dickman, I.R. (1985). Making life more liveable. AFB, New York.
- Dodds, A. (1988). Mobility training for visually handicapped people. Croom Helm. London.
- Fernandez, G., Koening. C., Mani. M.N.G., & Tensi. S. (1999). See with the Blind. Books for Change, Banglalore.
- Hodapp, R. M. (1998). Developmental Disabilities: Intellectual, Sensory and Motor Impairment. Cambridge University Press, New York.
- Jose, R. (1983). Understanding Low Vision. American Foundation For The Blind. New York.
- Kelley, P., & Gale, G. (1998). Towards Excellence: Effective Education for Students with Vision Impairments.North Rocks Press, Sydney.
- Kumar, P. (2018). Alp Drishti Bachhe (Hindi). Delhi: S R Publising House
- 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. (2011) Educating Exceptional Children: An Introduction to Special Education. PHI Learning Pvt. Ltd., New Delhi.
- Mangold, S. S. (1981). A teachers' Guide to the Special Education needs of Blind and Visually handicapped Children. New York: AFB
- Mani, M. N. G. (1992). Techniques of Teaching Blind Children. Sterling Publishers Pvt. Ltd. New Delhi.
- Mani. M. N. G. (1997). Amazing Abacus. S.R.K. Vidyalaya Colony, Coimbatore.
- Mason, H., & Stephen McCall, S. (2003). Visual Impairment – Access to Education for Children and Young people. David Fulton Publishers, London.
- Mukhopadhyay, S., Mani, M.N.G., Roy Choudary, M., &Jangira, N.K. (1988). Source Book for Training Teachers of Visually Impaired. New Delhi: NCERT.
- National Institute for the Visually Handicapped (1990). Handbook for Teachers of the Blind. NIVH, Dehradun.

- Niemann, S., & Jacob, N. (2009). Helping Children who are Blind. The Hesperian Foundation, California.
- NIEPVD (2016). Visual Disability: A Resource Book for Teachers. Vo. 1. National Institute for the Empowerment of Persons with Visual Disabilities, Dehradun
- NIEPVD (2016). Visual Disability: A Resource Book for Teachers. Vo. 2. National Institute for the Empowerment of Persons with Visual Disabilities, Dehradun
- NIEPVD (2020). *Effective Schools for Students with Visual Disabilities (Quality Indicators and Parameters).* NIVH Dehradun. Retrieved online on 22/11/2023 from https://nivh.gov.in/pdfdoc/qualityindicators.pdf
- NIEPVD (2022). Expanded Core Curriculum (Hindi) VistaritMoolPathchariya. National Institute for the Empowerment of Persons with Visual Disabilities. Available athttps://nivh.gov.in/?page_id=7391
- 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.
- The expanded Core Curriculum. (2013). Retrieved from http: // www.afb.org
- Vijayan, P., & Gnaumi, V. (2010). Education of children with low vision. Kanishka Publication, New Delhi.
- Welsh, R., & Blasch, B. (1980). Foundation Orientation & Mobility. AFB, New York.
- Wright, L. (2013). The Skills of Blindness: What should students know and when students know?

Quality of Life of Persons with Visual Impairment and Family Issues

Course Code: 4.4.3 (VI) **Credits: 2** **Semester: 6**

About the Course

Technology and ICT empower children with visual impairment by providing access to educational content, teaching essential skills, and fostering collaboration among parents, educators, and students. It's essential to strike a balance between accessible materials and teaching adaptive skills to ensure meaningful learning experiences for all students with visual impairment. This course focuses on student teachers to demonstrate knowledge on these issues as it significantly improves the quality of life of persons with visual impairment. The course also gives an opportunity to the prospective teachers to understand and appreciate challenges faced by the family during the transition to the secondary stage. The course also covers the social media concerns for individuals with visual impairment and training of employability skill for persons with visual impairment .

Learning Outcomes:

On completion of this course, the students will be able to:

- Explain the concept and nature of quality of life of persons with visual impairment.
- Acquire understanding of family and support required for families of persons with visual impairment
- Get familiar with family issues and concerns of parental involvement
- Appreciate the importance of involvement of parents and other family members in educational activities of persons with visual impairment.
- Appreciate the role of social media in improving the quality of life and employability of persons with visual impairment.

Unit 1: Accessibility of printed material for the persons with visual impairment

1.1 Concept of Indian and international Screen Readers, OCR software, Stand-alone Reading Machines and their uses, advantages and limitations (eg. Envision AI, KIBO, Smart speakers) with Special Reference to Indian Languages

1.2 Refreshable Braille displays and Braille Translation Software with Particular reference to Indian Languages including DBT and Open-Source Braille Translators such as Braille Blaster by APH, and Braille Embossers.

1.3 Magnifying Software, Smartphone Accessibility, and Open-Source Software

1.4 Taking Books, Daisy Books, E-Pub: Access, Use & Development: advantages and limitations; Conversion from text to braille, text to speech, e-pub to Braille, etc. (including apps such as voice dream reader, voice dream writer, voice dream scanner, google lens, Google look-out and others)

1.5 Use of artificial intelligence (e.g. Chat GPT, Microsoft Bing, Google Bard): Benefits & Challenges.

Unit 2: Technology for Improving Quality of Life of Persons with Visual Impairment

2.1 Role of technology in promoting employability of persons with Visual Impairment

2.2 Addressing User's Perspective in developing Adaptive Technologies
2.3 Role and contribution of academic institutes and the scientific community in developing adaptive technologies for improving quality of life
2.4 Technological support for activities of daily living for effective social integration
2.5 Policies and schemes for supporting life with dignity

Unit 3: Family Issues and Concerns

3.1 Birth of a child with visual impairment and its effect on parents and family dynamics; Parenting styles: Overprotection, Denial, disguised rejection, open rejection and acceptance.
3.2 Challenges faced by the family of adolescents with Visual impairment
3.3 Choosing an educational setting and Transition from middle to Secondary level education
3.4 Stereotypic attitude towards the visually impaired, Mannerisms of persons with visual impairment
3.5 Enhancing acceptable social behavior

Unit 4: Involvement of parents in Educational Aspects

4.1 Parents' involvement is transition planning
4.2 Role of parents in self determination, confidence building, and personality development
4.3 Importance and challenges in sex education of adolescents with visual impairment
4.4 Parental role in career guidance for students with visual impairment at the secondary stage.
4.5 Identified jobs and skill development for persons with visual impairment.

Unit 5: Social Media & Self-determination

5.1 Concept and role of Social Media for improvement of quality of life of persons with visual impairment
5.2 Self advocacy using blogs and vlogs
5.3 Accessible Open Educational Resources (OERs) for students with visual impairment.
5.4 Promoting employability: Need based skill training with respect to career choices and aspiration of persons with visual impairment.
5.5 Development of self-determination in persons with visual impairment.

Suggested Coursework/Practicum

- Hands on drill with screen readers, OCR software, and stand-alone reading machines.
- Organize Workshops with Persons with Visual Impairment on use of AI in the field of disability empowerment
- Workshop for preparing and using OER in accessible formats
- Write a short list of suggestions you will offer to the scientific community for motivating them to develop adaptive technologies for the visually impaired
- Prepare a report on the possibilities and prospects available for the visually impaired students through the use of computers.

- Visit schools for the visually impaired and make presentations before the parents on Government concessions and auxiliary services available

Suggested Mode of Transaction

Presentation, discussion, workshop, Assignment(s) (Group/Small Group/Individual), Project(s) (Group/Small Group/Individual), Field Experience, Small Group, Lecture-cum-Demonstration, Tests, & Experiential training supported

Suggested Assessment

Individual and group projects, Periodic class tests and assignments, Group discussions, Individual and group projects

Suggested Readings:

- Chaudhary, M. (2006). Low Vision Aids. Japee Brothers, New Delhi.
- Fatima, R. (2010). *Teaching aids in mathematics; a handbook for elementary teachers.* Kanishka Publication, New Delhi.
- Hersh. M & Johnson .M (2014). *Assistive Technology for Visually Impaired and Blind People*. Springer Publications.
- Manduchi.R& Sri Kurniawan (2013). *Assistive Technology for Blindness and Low vision.* Taylor & Francis. ISBN-13 : 978-1138073135
- National Institute for the Visually Handicapped (1990). Handbook for Teachers of the Blind. NIVH, Dehradun.
- NCERT (YKN). *NCERT initiatives for Inclusive and Accessible Education.* https://ncert.nic.in/accessibility.php
- Perkins School for the Blind (2023). *A to Z Assistive Technology for Low Vision*. https://www.perkins.org/resource/z-assistive-technology-low-vision/
- Punani, B., & Rawal, N. (2000). *Handbook for Visually Impaired. Blind Peoples' BPA, Ahmedabad*
- RNIB (2023). *Amazon Echo*. https://www.rnib.org.uk/living-with-sight-loss/assistive-aids-and-technology/everyday-tech/technology-in-the-home/amazon-echo/
- XRCVC (2020*). Accessible E-content Creation. Standards and Guidelines*. http://xrcvc.org/docs/Accessible%20E-Content%20Creation%20Standards%20and%20Guidelines.pdf
- Chapman, E. K. (1978). Visually Handicapped Children and Young People. Routledge and Kegan Paul, London.
- 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.

Online Sources:

https://www.sciencedirect.com/science/article/pii/S0141938223000240
https://visionscienceacademy.org/artificial-intelligence-based-devices-for-visually-impaired-people/
https://www.researchgate.net/publication/327545550_Quality_of_life_among_parents_of_children_with_visual_impairment_A_literature_review

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5347211/

4B – Pedagogical Courses

Sl.	Course Title
4.4.4	Content cum Pedagogy of Agriculture at Secondary Stage
4.4.5	Content cum Pedagogy of Arts (Visual & Performing) at Secondary Stage
4.4.6	Content cum Pedagogy of Commerce, Accountancy & Business Studies at Secondary Stage
4.4.7	Content cum Pedagogy of Computer Science at Secondary Stage
4.4.8	Content cum Pedagogy of Home Science at Secondary Stage
4.4.9	Content cum Pedagogy of Language Hindi at Secondary Stage
4.4.10	Content cum Pedagogy of Language English at Secondary Stage
4.4.11	Content cum Pedagogy of Mathematics at Secondary Stage
4.4.12	Content cum Pedagogy of Physical Education at Secondary Stage
4.4.13	Content cum Pedagogy of Science (Biological) at Secondary Stage
4.4.14	Content cum Pedagogy of Science (Physical) at Secondary Stage
4.4.15	Content cum Pedagogy of Social Science at Secondary Stage
4.4.16	Content cum Pedagogy of Vocational Education at Secondary Stage

4.4.4 Agriculture
4.4.5 Arts (Visual & Performing)
4.4.6 Commerce, Accountancy & Business Studies
4.4.7 Computer Science
4.4.8 Home Science
4.4.9 Language Hindi
4.4.10 Language English
4.4.11 Mathematics
4.4.12 Physical Education
4.4.13 Science (Biological)
4.4.14 Science (Physical)
4.4.15 Social Science
4.4.16 Vocational Education

Common Pedagogical Support
for

Autism Spectrum Disorders (ASD)

Hearing Impairment (HI)

Intellectual Disabilities (ID)

Multiple Disabilities (MD)

Specific Learning Disabilities (SLD)

Visual Impairment (VI)

**To be used as scaffolding for teaching pedagogy papers*

AUTISM SPECTRUM DISORDERS

Recent research shows that 1 in 34 persons have autism spectrum disorder a genetic, neurodevelopmental condition that impacts how people perceive, understand, communicate and experience the world. Autism does not impact the ability to learn, it impacts the style of learning and communication. A part of human diversity, autism begins before birth and is a lifelong condition that cannot be 'switched off' or 'cured'. Autism is considered as an invisible disability, because, autistic people often look and talk like neurotypical people. This makes it hard for autistic people and their families to access a diagnosis, services and accommodations. Although there are things that all autistic people have in common, autism is a spectrum condition, and every autistic person experiences being autistic differently. For instance, some autistic people are nonspeaking or speak minimally, some use spoken language, some speaking autistic individuals prefer written communication; some may also have intellectual disability or other conditions. Many autistic people struggle to understand and follow social rules and hierarchies that non-autistic people make and express through actions considered symbolic of love, care, and respect. Some autistic people also have a hard time using gestures or their bodies (e.g., raising a hand to answer a question) or facial expressions (e.g., looking apologetic). Therefore, many are misunderstood, bullied and abused and their needs overlooked. Most autistic people are impacted by their environment. Their senses are so sensitive, that the world can sometimes feel overwhelming. To deal with it, sometimes they might 'stim' i.e., do the same movement repeatedly e.g., rock, flap their hands, or hum. At other times some avoid making eye contact, specific sports, or arts and crafts activities. An important part of self-regulation and paying attention, people benefit from being asked instead of being forced.

Autistic people may make connections and patterns where others see none. This can lead to unique out-of-the-box thinking and problem-solving, and attention to detail that can translate into a preference for consistency and predictability. This also means that autistic people process more information and this naturally takes them longer. Another implication of their attention to detail and deep interest is that it can be hard for them to suddenly move their focus to another thing. Knowing in advance to prepare for an upcoming activity or a change in plan helps.

Understanding and respecting these differences helps create a safer learning environment for all. Like everyone, autistic people learn best in a positive environment with adults and peers who appreciate their differences, their interests, strengths, learning and communication styles. With a combination of theory and hands-on practical experience, this curriculum supports the development of educators with the necessary attitude to appreciate human diversity, respect for different learning styles, skills to teach in home based and educational settings, hospitals and clinics, vocational and work places, assisted living facilities and within the community and a drive to advocate for the disability community and uphold the rights of autistic people and their families and enable full participation in the community.

Essential Supports

Accessible, Autism-Friendly Environment

- Make the physical environment sensory-friendly to control lighting, noise levels, minimize distractions etc.
- Have visually clear environment with clear signages, visually explicit contextual rules and expectations.
- Use a consistent routine and predictable structure to provide stability and predictability.
- Prepare for transitions and processing time to deal with sudden changes.
- Provide or allow audio recording of class for independent study and notes to accommodate for making notes or copy from board.
- Offer the option to use AACs for speaking and non-speaking autistic individuals.

- Incorporate assistive technology and devices (e.g., AACs, screen readers, speech recognition software, speech-to-text software, adaptive keyboards) to facilitate communication and access.
- Foster peer collaboration, and scaffolding by pairing students with different abilities, similar interests, strengths and needs and an environment of support rather than bullying
- Celebrate student successes and provide positive reinforcement to foster motivation.
- Involve the student in decision making.

Curriculum and Content Modifications

- Adapt for individual differences in language development: listening, speaking, reading, comprehension, spelling, writing, grammar, and vocabulary.
- Consider the presence of associated conditions such as hyperlexia, SLD, ADHD etc.
- Break down concepts and chapters into smaller, manageable units.
- Prioritise and focus on essential skills and concepts.
- Offer flexible learning options (choice of activities, pacing).
- Focus on concept development, generalisation and application.
- Aim for context-based learning and development of higher-order skills (such as reflection and critical thinking, creative thinking, questioning, decision-making) rather than rote learning.

Differentiated Instruction

- Based on student assessments and progress, provide tailor lessons, content and activities to meet individual student needs, and provide scaffolding and support where necessary.
- Keep instructions simple, clear, and precise appropriate to developmental level
- Use assistive technology to support access and participation.
- Provide frequent opportunities for repetition and practice to enhance retention.

Instructional Strategies

Make teaching concrete and understandable by use of:

- Learner interests and motivations
- Concrete and digital manipulatives
- Multi-sensory TLMs that engage various senses (e.g., auditory, visual, tactile
- Multiple representations of information (e.g., 2D, 3D objects, audio-video formats, written text, figures, diagrams, graphic organisers, charts, tables, flowcharts, decision boxes etc.)
- Planning and organising tools to provide visual clarity (e.g., sticky notes, highlighter pens, or tapes, graphic/ digital organisers, calendars, labelling, to-do lists, timers)
- Demonstrations, experiments and exploration
- Hands-on experiential learning and real-life experiences
- Real-world examples and relatable contexts to connect concepts
- Integration of interest-based sports, movement, arts, ICT etc
- Subject specific simulations, physical and virtual laboratories and clubs (such as math club, science lab, literary corner) and interactive learning experiences.

- Access to online resources and supplemental materials that support learning.
- Field visits and video tours of educational parks, exhibitions, excursions, field trips and interactive simulations

Evaluations

- Provision for assistance (e.g., scribe, help with writing), modify materials (e.g., large print, tactile), use of AACs and ATs (e.g., use calculator, speech recognition technology etc.)
- Provide options for a separate, sensory friendly, supervised exam room, use of noise cancellation headphones to avoid distraction etc.
- Have pre-decide supervised breaks
- Extended time for assignments and assessments.
- Offer with simplified instructions, with multiple-choice questions,
- Provide options for alternative testing via modified assignments or test formats such as viva, oral recitation, multiple choice questions, brief/bulleted answers, descriptive/reflective essays, use of AACs, typed, handwritten assignments or multimedia presentations, demonstrations, portfolios, projects, practical work and home assignments,

Pedagogical Strategies for Teaching Deaf and Hard of Hearing (DHH) Students

1. **Development of Pedagogy-Specific Vocabulary in Indian Sign Language (ISL)**
    - Focus on creating and consistently using a specialized vocabulary in ISL that corresponds with educational concepts.
    - Encourage collaboration between educators and ISL experts to develop signs for new or complex terms.
2. **Meaning-Making and Concept Translation of Pedagogical Topics**
    - Strategies to ensure that pedagogical topics are effectively translated into ISL, maintaining the integrity and nuance of the concepts.
    - Use visual aids, demonstrations, and interactive activities to reinforce understanding.
3. **Peer Learning Strategies for Concept Development**
    - Implement peer learning approaches where students can collaborate, share insights, and support each other's understanding.
    - Promote group activities and discussions that enable DHH students to learn from their peers in a structured environment.
4. **Learner-Centered Strategies for Concept Mapping**
    - Adapt teaching methods to meet the individual needs and language levels of DHH students.
    - Use concept mapping techniques that allow students to visually organize and relate educational content in a way that makes sense to them.
5. **Connecting Examples to the Real Lives of DHH Students**
    - Adapt examples and teaching materials to reflect the real-life experiences and contexts of DHH students.
    - Use relatable scenarios to make abstract concepts more tangible and understandable, enhancing the relevance and impact of the learning experience.

Pedagogical Strategies for Teaching students with Intellectual Disability

With advancement of progressive legislation and policies in Indian scenario the education of students with intellectual disability has been risen to a great extent .There is a significant increase in the number of students with Intellectual Disability in inclusive schools specially in middle and secondary stage .Though initially it was conceptualised that students who have intellectual disability will not be able to come upto higher educational level ,but due to the advancement in digitalisation ,implementation of alternate/flexible curriculum and evaluation and specific focus on skilling , there is evidence that some students are able to reach this level.The prime duty of the teacher is to teach them in the way they learn and apply different pedagogical teaching strategies to teach them in Inclusive classes, to help them develop optimally, cognitively and socially to bring out the best of their potential.

The Teacher trainee needs to get oriented on the following strategies while teaching different pedagogy papers in secondary stage.

- **USE OF PRINCIPES/LAWS /MAXIMS OF SPECIAL EDUCATION**
- **USE OF ADAPTATIONS** -Plan adaptation in areas of Curricular, Instructional and Ecological .Further Curricular aspect you can design your teaching depending upon the students need in terms of Supplemented contents ,Simplified contents and /or Alternative contents
- **DIFFERENTIATED INSTRUCTIONS** - Offer students options to choose content and process at their level .Provide multiple texts and types of learning materials, Utilize a variety of personalized learning methods and student assessments, Customize teaching to suit multiple forms of learning needs .
- **MODIFICATION IN QUANTITY**-Adapt the number of items that the learner is expected to learn or number of activities student will complete prior to assessment for mastery.
- **MODIFICATION IN TIME**-Adapt the time allotted and allowed for learning, task completion, or testing.
- **MODIFICATION IN LEVEL OF SUPPORT**-Increase the amount of personal assistance to keep the student on task .Reinforce or prompt use of specific skills based on the requirement . Enhance positive Teacher-student relationship, use physical space and environmental structure effectively.
- **MODIFICATION IN INPUT**-Adapt the way instruction is delivered to the learner to suit his needs.
- **MODIFICATION IN DIFFICULTY**-Adapt the skill level, problem type, or the rules on how the learner may approach the work.
- **MODIFICATION IN OUTPUT-** Adapt the way the students can student can respond to instruction by offering multiple means of expression.
- **MODIFICATION IN PARTICIPATION**-Adapt the students involvement to maximize the students participation .
- **MODIFICATION IN ALTERNATE GOALS**-Adapt the goals or outcome expectations while using the same materials.
- **MODIFICATION IN SUBSTITUTE CURRICULUM**-Provide different content ,instruction and materials to meet a learner's individual goals.

Suggestions for the Pedagogical Strategies for Teaching Students with Multiple Disability

Modifying Curriculum Content	• Break down complex concepts into smaller, manageable units. • Use concrete examples, hands-on activities, and visual aids to enhance and support understanding. • Focus on essential skills and concepts, eliminating unnecessary or abstract material. • Provide multiple representations of information (e.g., written text, diagrams, charts). • Model scientific inquiry and problem-solving strategies explicitly.
Instructional strategies	• Multisensory Approach: Engage students through various senses (e.g., auditory, visual, tactile) to enhance retention. • Differentiated Instruction: Tailor lessons to meet individual student needs, providing scaffolding and support where necessary. • Small Group Work: Encourage collaboration and peer support among students with similar strengths and challenges. • Visual Supports: Utilize graphic organizers, charts, diagrams, and real-life objects to support understanding. • Assistive Technology: Incorporate assistive devices (e.g., speech-to-text software, adaptive keyboards) to facilitate communication and access. Leverage technology for simulations, virtual labs, and interactive learning experiences. Provide access to online resources and supplemental materials that support STEM learning.
Accommodations and modifications **M.A.P.E.S**	• Modified assignments • Alternative Testing (portfolios, projects, practical assignments) • Physical Support: Provide physical assistance (e.g., help with writing, using a calculator) or modify materials (e.g., large print, braille). • Extended Time: Additional time for assignments and assessments. • Sensory Accommodations: Control lighting, noise levels, and classroom environment to minimize sensory distractions.

Assessment	• Diagnostic Assessment: Regularly assess student understanding to identify areas for improvement. • Formative Assessment: Provide ongoing feedback through quizzes, discussions, and observations. • Summative Assessment: Use modified assessments to evaluate student progress and identify areas for future support. • Alternative Assessments: Explore alternative assessment methods (e.g., portfolios, exhibitions, self-assessments) to capture student learning.
Collaboration & Communication	• Student, Special, General educators, therapist to share progress, advocate for their own learning needs and involve student in decision making. Seek guidance on adaptations and assistive technology recommendations.
UDL	• Provide multiple representations (visual, auditory, tactile) of the content. • Offer flexible learning options (choice of activities, pacing). • Create an accessible learning environment (sensory-friendly, technology-supported
Differentiated Instruction	• Adapt content and activities to meet individual needs and abilities. • Use assistive technology to support access and participation. • Provide tailored support based on student assessments and progress.
Hands-on and experiential learning	• Engage students in hands-on activities to make concepts more tangible. • Design experiments that allow for adaptive modifications and accommodations. • Utilize real-world examples to connect STEM concepts to daily life.
Technology integration	• Use assistive technology tools (e.g., screen readers, speech recognition software) to enhance accessibility.
Flexible grouping	• Mixed ability grouping • Group students based on their strengths and needs to create appropriate learning environments. • Provide peer support and scaffolding by pairing students with different abilities.

Consistent Routine	• Use a consistent routine and predictable structure to provide stability and predictability. • Provide frequent opportunities for repetition and practice to enhance retention. • Incorporate games and puzzles into instruction to make learning more engaging. • Celebrate student successes and provide positive reinforcement to foster motivation

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Suggestions for the Pedagogical Strategies for Teaching Students with Specific Learning Disability

Teaching students with specific learning disabilities (SLD) in this stage requires tailored pedagogical strategies to support their unique learning needs. We can include the following strategies:

1. **Developing Concepts:**
   - Concentrate on defining concepts accurately and concisely, to help students learn skills and concepts in a systematic and structured way.
   - Identify the key characteristics, construct examples to demonstrate the concept.
   - Discuss time lines wherever applicable.

2. **Teaching and Learning support**
   - Furnish summaries, graphic organizers, or outlines of instructional in accessible formats.
   - Provide additional time and extra support to students and simplify instructional materials to empower them to take ownership of their learning.
   - Offer multiple methods of information and manage learning systems to reduce course load

3. **Instructional and Pedagogical Enhancement**
   - Provide academic support by using active learning strategies.
   - Offer highly structured instructions or demonstrations presented in more than one way.
   - Provide scaffolding or step-by-step guidelines of each aspect/concept.
   - Offer a variety of pedagogical choices in each discipline for diverse learning styles and functional needs
   - Encourage students to question, explore, and discover. Present challenges that require application of the concept.
   - Use diagrams, graphs, charts, and images to represent concepts visually, create connections between the new concept and known ones.
   - Foster group work, collaboration, organization and study skills

4. **Inclusive Teaching Strategies**
   - Present concepts in various formats to cater to different learning styles.

- Encourage flexible grouping and provide options for students to demonstrate understanding at different levels.
- Utilize digital resources to enhance concept exploration.
- Facilitate knowledge sharing and peer feedback.
- Provide extra support and strategies to teach students to self-monitor.
- Encourage peer tutoring, cooperative learning and building self-esteem

5. Bridging Curriculum with the Real Lives experiences of SLD Students

- Construct examples and teaching materials that reflect real-life experiences in the contexts of students with SLD.
- Create relatable scenarios to enhance learning by making abstract concepts more tangible and understandable.

6. Evaluation and Feedback

- Create alternate modalities for examination and evaluation, prepare alternate /adapted question papers
- Monitor students' understanding by evaluating overall concept mastery throughout the learning process
- Offer constructive feedback to guide improvement.
- Develop clear rubrics and grading criteria.
- Ensure flexibility in good quality assessment and evaluation methods.

Suggestions for the Pedagogical Strategies for Teaching Students with Visual Impairment

1. **Development of Pedagogy-Braille skills**
    - Focus on developing Braille skills to ensure fluency in reading and writing.
    - Enhance skills in Arithmetic Braille codes and Science Braille notations.
2. **Concept formation through mediated learning**
    - Convert visual ideas into non-visual experiences.
    - Concrete and experiential learning through cooperative teaching-learning.
3. **Use of appropriate teaching-learning material**
    - Use of Indigenous tactile, large print, and good colour contrast teaching learning material.
    - Appropriate use of 3-D and 2-D models, and embossed diagrams and maps.
4. **Integrated use of assistive devices and ICT**
    - Effective use of assistive devices of screen reading softwares, text to speech, text reading machines/softwares.
    - Traditional devies (e.g Abacus, taylor frame, Tactile Geomerty kit etc.) and modern technological devices (Refreshable Braille display and note takers, GPS, smart phones, Braillers, Braille Embossers, Daisy players, Plextalk, accessible libraries etc.)
5. **Connecting Examples to the Real Lives of Students with Visual Impairment**
    - Adapt examples and teaching materials to reflect the real-life experiences and contexts of students with visual impairment.
    - Give context specific examples as per specific needs of students with visual impairment.

Content cum Pedagogy of Agriculture at Secondary Stage – Course (I)

Course Code: 4.4.4 I **Credit: 2** **Semester: 5**

About the Course

Agriculture is based on the life cycle of all living things. Aside from the fact that Agriculture is generally relevant to our daily lives, there are other advantages to making it a required subject in schools. Agriculture is a field based practical-orientated subject; hence, the learners are expected to actively participate in the learning process. The purpose of teaching Agriculture is to integrate education, research, and extension to provide the human resources, skills, and technology needed for the sustainable development of agriculture. It is helpful in achieving food security and SDGs 1 & 2. For becoming an effective teacher in Agriculture, it is important to understand pedagogical content analysis. It enables teachers to compile and analyze differences in the subject matter, student perceptions, and pertinent trends. The course units focusses on highlighting importance for the teaching of Agriculture, the process of Pedagogical Analysis of Content. Quality teaching can change beliefs and approaches to Agriculture and empower dedicated teachers to teach Agriculture in more scientific ways. Keeping this in mind, the course comprises three units focused on the concept of Modern and Sustainable Agriculture, the history of Agriculture in India, the purpose of teaching Agriculture in schools, its correlation with other subjects and the Pedagogical aspects of teaching Agriculture. The course deals with approaches, different methods and techniques for providing varied student-centric, participatory learning experiences to the students.

Learning Outcomes

After completion of this course, student teachers will be able to:

- describe the meaning of agriculture, modern and sustainable Agriculture and its importance in a country like India, interpret the need of Agriculture in nation development,
- outline aims, objectives and learning outcomes of teaching Agriculture at school level, and analyse different contents from textbooks for pedagogical aspects,
- discuss significance of Agriculture in school and its relationship with other subjects,
- select objectives and competencies for teaching of agriculture, reflect upon and adopt various methods for teaching of agriculture,
- reflect on Role of the teacher in facilitating the learning of Agriculture as subject.

UNIT 1: Nature, Scope, and Historical Perspective of Agriculture

1.1 Describe the nature, scope and its importance in national economy, modern and sustainable agriculture,

1.2 Historical perspective and major landmarks in the evolution of Agriculture in India as a subject.

1.3 Elaborate the importance of Agriculture as a discipline and profession.

1.4 State the scope of purposeful, responsible and sustainable practices in Agriculture

1.5 Recommendations/suggestions of various committees (Swaminathan committee, Rangrajan Committee) Royal commissions and Agricultre and price policies, provisions in NEP 2020 in reference to Agriculture.

Unit 2: Aims and Objectives of Agriculture Teaching

2.1 Aims of teaching Agriculture at school level.

2.2 Objectives of teaching Agriculture at secondary level.
2.3 Learning outcomes and competencies of teaching Agriculture at secondary stage.
2.4 Place and significance of Agriculture in secondary school; its linkages with other school subjects.
2.5 Inculcation of values through teaching of Agriculture.

Unit 3: **Pedagogical Aspects of Agriculture Teaching**

3.1 Implication of various approaches such as inductive-deductive, constructivist, experiential learning, blended learning, interdisciplinary and multidisciplinary approaches in teaching of Agriculture.
3.2 Analytical pedagogical aspects in teaching of Agriculture for the development of higher order thinking skills such as critical, creative, communication, decision making, collaborative and reflective.
3.3 Importance of practice-oriented training and interactive educational strategies that promote critical thinking, collaboration and diversity of perspective learning.
3.4 Methods of teaching agriculture: learner-centric and participatory methods. lecture cum demonstration, activity based, discussion, problem-solving, project based, scientific inquiry, hands on activity, making rural exposure cum farmers' field based observations, direct observation of agricultural practices, collecting field specimens, successful case studies on agri-strat-up/contract farming, assignments, discovery, experimentation, collaborative and cooperative learning, peer learning.
3.5 Applications of suitable methods in Agriculture for learning the selected chapters/concepts in Agriculture textbooks.

Unit: 4 Content analysis and Planning for teaching Agriculture

4.1 Pedagogical analysis of content taking examples from topics of agricultural from textbooks of secondary stage, identification of concepts, listing learning outcomes and competencies, planning and evaluating learning experiences in an inclusive setup.
4.2 Concept, types and importance of unit planning and lesson planning.
4.3 Steps of Pedagogical analysis: identification of concepts, listing learning outcomes and competencies, planning and evaluating learning experiences in an inclusive setup
4.4 Developing unit plans and lesson plans based on learning outcomes (topics to be taken from textbooks), art and sports integrated lesson plan, experiential learning in Agriculture teaching.
4.5 Need for pedagogical modelling and enrichment of content knowledge in teaching Agriculture.

Unit 5: 21st Century skills for learning Agriculture

5.1.1 21st century skills for Learning: Meaning, Concept and Types.
5.2 Need for and importance of how to learn 21st century skills for learners and teachers of Agriculture.
5.3 Qualities of a teacher of Agriculture as a professional for enhancing teaching learning skills.
5.4 Psychological, sociological, and philosophical perspective of teaching and learning of Agriculture. Qualities of agricultural teachers as professionals, role of a teacher in facilitating learning and creating dynamic learning environment of Agriculture.

5.5 Role of a teacher in facilitating learning and creating dynamic learning environment of teaching the subject of Agriculture

Suggestive Practicum (Any Three)

- Prepare a report on Sustainable Agriculture in relation to achievement of sustainable development goals.
- Analyze NEP 2020 with reference to emphasis on Agriculture Education.
- Prepare a report on interdisciplinary and multidisciplinary approaches used in the practices of Agriculture.
- Write learning outcomes and competencies for two topics of Agriculture at Secondary Stage.
- Collect Field Specimens and prepare herbarium.
- Any other project assigned by HEI.

Suggestive Mode of Transaction

Lecture cum demonstration, field observations, experimental method, field-based experiences, project method, laboratory method, discovery, problem solving method, inquiry method, success stories, discussions, self-study, and experiential method.

Suggestive Mode of Assessment

Written test, classroom presentations, discussion forums, observation, research/study report, assignments, practicum, sessional and terminal examination (As per UGC Norms).

Suggestive Reading Materials

- Draft National Curriculum Framework for School Education,
- National Education Policy 2020, MoE, Government of India
- National Steering Committee for National Curriculum Frameworks, (2023).
- NCERT Textbooks for Agriculture.

Journal online

Kumar, A. & Kumar. A. Vandana,.(2014). Pedagogy in Higher Education of Agriculture. Procedia - Social and Behavioral Sciences 152, 89 – 93.

Content cum Pedagogy of Agriculture at Secondary Stage – Course (II)

Course Code: 4.4.4 II **Credit 2** **Semester: 6**

4.4.12.1 About the Course

For becoming an effective teacher in Agriculture, it is important to understand pedagogical content analysis to develop curricular experiences that are interactive, intrinsically motivating and engages the affective/psychomotor/cognitive potential in diverse community of learners. It enables teachers to compile and analyze differences in the subject matter, student perceptions, and pertinent trends. The course comprises three units highlighting the types of teaching-learning resources and their importance for the teaching of Agriculture, the process of Pedagogical Analysis of Content and application of ICT in teaching of Agriculture The course focuses on types of learning resources used in the teaching of Agriculture, laboratory organization and its maintenance, developing the abilities related to listing behavioural outcomes, planning activities, experiments, observing, and evaluating by developing pedagogical content analysis skills. Also, it develops the skills related to selecting content in textbooks, teaching-learning resources, and applying TPCK in the teaching of Agriculture. The course deals with agricultural teaching and lesson planning. It explains how to integrate various pedagogical techniques in the content related to Agriculture.

Learning Outcomes

After completion of this course, student teachers will be able to:

- identify and use learning resources from the local environment, distinguish learning resources and e-resources for Agriculture teaching,
- integrate agriculture and TPCK strategies that utilizes ICT based opportunity to learn
- discuss the importance of evaluation and assessment through systematic approaches to observation, tailored timely feedback for each student in an inclusive set-up.
- conduct action research in the teaching of Agriculture.
- promote a holistic understanding of disability, recognize the diversity within the disability community to enable inclusion and learning access for all people with disabilities

UNIT - I

Unit 1: Teaching Learning Resources for Teaching Agriculture

1.1 Teaching learning resources: concept, characteristics, and importance in teaching of Agriculture

1.2 Use of differentiated instructions, universal instructional design, access the curriculum, such as speech-to-text software, screen readers, and adaptive ergonomically designed and accessible for students with physical disabilities tools for practical training, interactive models, hands-on activities and communication aids like AAC.

1.3 Types of teaching learning aids/ materials: print media (such as textbook, teachers' manual/ handbook, laboratory manual and other print materials), non-print and digital media such as radio, TV, websites, animations, audios, videos, images, simulations, digital repository, Augmented Reality (AR), Virtual Reality (VR) and Artificial Intelligence (AI) based digital resources and Open Educational Resources (OERs) for offline/ online classrooms, reflective journals, charts, 2-D and 3-D models, games, worksheets, multimedia etc.

1.4 Identification and use of learning resources from the local environment in teaching of Agriculture, nearby farms, agricultural field notes, reports and records.
1.5 Resource room/ laboratory/ library - management and practices; virtual laboratories, teaching learning kits, subject clubs, fairs, exhibitions, educational parks, excursions, community resources and pooling of resources, Agriculture field as a learning center, tools of Agriculture and their importance.

Unit 2: ICT Integration and Applications

2.1. Scop Scope and importance of using ICT in teaching learning process of Agriculture.
2.2. Use of ICT in the classroom and beyond.
2.3. Artificial Intelligence, machine learning, smart boards for student development.
2.4. Tools, software, and platform for teaching learning of Agriculture at secondary stage.
2.5. Developing ICT integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for classroom and online teaching using digital resources and multimedia.

Unit 3: Assessment and Evaluation

3.1. Assessment and evaluation: need for and importance of Agriculture.
3.2. Development of learning indicators, performance-based assessment, learners' records ofobservations.
3.3. Strategies for continuous assessment, school-based assessment, formative and summativeassessment, formal, informal and 360o assessment.
3.4. Performance assessment: inquiry-based assessment of group activities, field observations, recording and reporting, creating platform and portfolio management, assessment of lab skills, assignments, projects, and presentations.
3.5. Tools and techniques of assessment and evaluation; unit test based on Table of Specification (TOS) and its importance; basic steps of question paper setting, types of testitems and preparing answer key and criteria for school, assessment, and feedback mechanism in teaching learning of Agriculture.

Unit 4: Research and Innovative Practices in teaching Agriculture

4.1 Divergent thinking and innovation in psychological, sociological, and philosophical perspectives for quality learning experiences in teaching of Agriculture.
4.2 Recent trends in research and innovation related to teaching learning of Agriculture and agribusiness as a potential career choice.
4.3 Evidence-based practices and reflection, School-based research in Social Sciences.
4.4 Action research in agriculture, meaning, significance, steps, and planning.
4.5 School based research in agriculture, evidence-based practices, and reflection.

Unit 5: Cross disability approach for teaching Agriculture

5.1 Teaching Social Sciences for Students with Diversity, Adaptation and modification of the content, teaching methods and evaluation depending on the diverse needs of students with disabilities.
5.2 Differentiated Instruction, providing students with activities and resources based on individual needs, reading level, level of support.

5.3 Teaching Strategies for students with diversity, Visual aids, Auditory aids, Role play, simplifying language, Use of Technology, use of visual, auditory, and kinesthetic strategies , real-life examples to clarify new and abstract social studies concepts,

5.4 Social studies textbook readings by previewing vocabulary, breaking down assignments into small segments, and summarizing key ideas , Use mnemonic devices and other memory strategies such as acronyms, songs, highlighting, keywords, and pictures, Use of explicit instruction principles such as modeling, repetition, drill, extensive review and practice, structure, and feedback , Use of alternative assessment techniques such as shorter tests, tests broken down into shorter segments, allowing clarifying questions, reading tests aloud, interviewing students, and using journals

5.5 Development of Resource Laboratory, green house school project, roof-vegetable garden as laboratory, Creation of accessible materials, digital resources, Use of visual, tactile, auditory, and kinesthetic materials including maps, illustrations, stories, videos etc.

Suggestive Practicum (Any Three)

1. Develop e-Content for teaching Agriculture.
2. Critically evaluate the available MOOCs on Agriculture and prepare a report.
3. Use Platforms along with National Teacher's Portal, DIKSHA SWAYAM and prepare a report.
4. Critically evaluate a textbook for Agricultural components and prepare a report.
5. Conduct school-based research and prepare evidence-based report.
6. Prepare a plan for action research.
7. Conduct case studies, market surveys, field visit of organic farming, and prepare a report.
8. Enumerate the qualities and attributes of a teacher for teaching Agriculture.
9. Construct an Achievement test as per Table of Specifications.
10. Any other project assigned by HEI.

Suggestive Mode of Transaction

Lecture cum demonstration, field observations, experimental method, field-based experiences, project method, laboratory method, discovery, problem solving method, inquiry method, success stories, discussions, self-study, and experiential method.

Suggestive Mode of Assessment

Written test, classroom presentations, discussion forums, observation, research/study report, assignments, practicum, sessional and terminal examination (As per UGC Norms).

Suggestive Reading Materials

- Draft National Curriculum Framework for School Education, • National Education Policy 2020, MoE, Government of India.
- National Steering Committee for National Curriculum Frameworks, (2023).
- NCERT Textbooks for Agriculture.

Content cum Pedagogy of Arts Education at Secondary Stage - Course (I)

Course code: 4.4.5 I **Credit: 2** **Semester:5**

About the Course:

The term 'Art' refers to a wide range of human endeavors and the resulting works that reflect technical mastery, aesthetic beauty, emotional depth, or intellectual concepts. Arts, crafts, and design education plays a critical role in the holistic development of individuals, engaging the heart, mind, and hands. This course comprises three units related to the nature, scope and historical perspective of Arts Education, aims and objectives of Arts Education teaching and pedagogical aspects of Arts Education. The course deals with knowledge of Indian Arts which will enable the students to appreciate the diversity and richness of artistic traditions, as well as to become liberal, original thinkers, and responsible citizens of the country, provisions in NEP 2020 in reference to Arts Education, learning outcomes and competencies of teaching arts at the secondary stage and the inculcation of associated values. It emphasizes the implication of various approaches to teaching arts, the development of high order thinking skills, to adapt different methods and techniques for effective teaching and develop skills for providing varied student-centric, participatory quality learning experiences to the students, with specific adaptations and accommodations for students with multiple disabilities.

Learning Outcomes

After completion of this course, student teachers will be able to:

- Explain the nature and scope of teaching Arts and describe the concept of art, art education and its place in the school curriculum;
- Elaborate the aims and objectives of teaching Arts,
- Examine the pedagogical aspects of the Arts
- Prepare lesson plan based on Learning outcomes.
- Identify the role of teacher in facilitating leaning for Art education.

UNIT 1: Nature, Scope and Perspectives of Arts

1.1 Nature and scope of Arts and its importance in the development of nation and as a profession, emphasize on inclusive practices that allow students with disabilities to pursue arts as a career.

1.2 Historical development to contemporary changes in teaching of Art as a subject, and major landmarks in the evolution of arts (visual and performing arts) as a subject, incorporating adaptive learning materials to make this knowledge accessible to students with multiple disabilities

1.3 Methods and techniques of art pedagogy and their ability to act as an effective means of increasing students' motivation in teaching the discipline and their interrelationship with other subject areas keeping in mind methods, methodology and materials.

1.4 Modes and methods of content selection in terms of dimensions of the learner and his access needs and ways to establish interlinkages with other subject areas.

1.5 Recommendations and suggestions of various committees, commissions, and policies in reference to Art teaching.

UNIT - 2 Aims and Objectives of Arts Teaching

2.1 Aims and objectives of teaching Arts at secondary stage with a focus on inclusivity and accessibility for students with multiple disabilities.

2.2 Learning outcomes and competencies of teaching Arts at secondary stage, developing strategies to achieve these outcomes, ensuring they are attainable for all students, including those with multiple disabilities.

2.3 Understanding mixed medium art, arts/craft (visual and performing) traditions of India and its relevance in secondary school, traditional crafts as a pedagogy assimilating with other school subjects. Adaption of these traditions to be accessible and meaningful for students with multiple disabilities.

2.4 Inculcation of different values through teaching of Arts-as a creative and therapeutic experiences, ways to understand and appreciate cultures and histories, support social emotional development and strengthens civic and community engagement, implementing inclusive teaching strategies that ensure all students, including those with multiple disabilities, benefit from the value-based education provided through arts.

2.5 Place of Art as a subject and corelating with other school activities and values of art as an education in holistic development

UNIT - 3 Pedagogical Aspects of Arts Education

3.1. Implication of various approaches- inductive deductive, constructivist, experiential learning, art-integrated learning, sports integrated learning, field visit, discovery, project methods for learning of the selected chapters/concepts in Arts textbooks.

3.2. Moving towards more holistic, interdisciplinary, and multidisciplinary approaches of learning Art, learning exclusive of pre-conceptions and misconceptions, blended learning and integrating arts and creative expression with other fields as a pedagogical strategy can be seen in the

3.3. Methods of teaching arts: learner-centric and group-centric, activity based, discussion, problem-solving, role play, inquiry approach, problem-solving, concept mapping, collaborative & cooperative learning approach, field based experiential learning

3.4. Applications of suitable adaptation of tools, media and techniques in Art Education for learning the selected chapters/concepts in Arts.

3.5. Critical, creative and analytical pedagogical concerns in teaching the Art Education with special reference to higher-order thinking .

UNIT 4: Content Analysis and Planning for Teaching Arts

4.1 Concept, types and importance of unit, lesson planning and essential components of lesson plan for the teaching of Arts tailored to diverse learning needs.

4.2 Pedagogical analysis: Meaning, Concept and Significance. Identification of Concepts, Listing Learning Outcomes and Competencies, Planning and Evaluating Learning Experiences in an inclusive/special education set up with focus on mobility access and adapted, height adjustable work tables, use of assistive technology and devices for students with disabilities regard to adaptation of tools, media and techniques.

4.3 Steps of Pedagogical analysis: identification of concepts, listing learning outcomes and competencies,planning and evaluating learning experiences in an inclusive setup.

4.4 Developing unit plans and lesson plans based on learning outcomes and experiential learning (math, language art, social science and sports integration) of Art .

4.5 Need for enrichment of content knowledge in Art education to provide varied experiences and exploration through art to enable students to be engaged and support their learning.

UNIT 5: 21st Century Skills for Learning

5.1 Need for and importance of how to learn, 21st century skills for learners and teachers of Arts Education, creative and imaginative expression of the learners in fostering inclusive learning environments that accommodate diverse abilities, including multiple disabilities.

5.2 Psychological, sociological, and philosophical perspective of teaching and learning of arts that promotes collaboration, communication, creating exploration, application of arts and

aesthetics in day-to-day life to support the holistic development of students with disabilities and promoting social inclusion, emotional well-being, and cultural appreciation among all learners.

5.3 Qualities of arts teachers as professionals, role of a teacher in facilitating learning and creating dynamic learning environment for Arts Education, proficiency in inclusive teaching practices tailored to diverse learning needs, including those with disabilities.

5.4 Highlight case studies or examples where adaptive strategies have been successfully implemented in arts classrooms to support students with diverse learning needs, including those with visual, auditory, motor, and combination of any of the disabilities.

5.5 Role of teacher to facilitating a dynamic and interactive opportunities for Art exploration that enables creativity, critical thinking and problem solving

Suggestive Practicum (Any Three)

1. Organize a workshop on how Art forms can be integrated in teaching and learning of other school subjects and prepare a report.
2. Report on how the Artist design their products, manage their resources, including raw materials, its marketing and other challenges they face.
3. Explore traditional Art forms in the community or neighborhood and prepare a report.
4. Make puppets and their costumes and prepare a write up of the entire process.
5. Applied Arts activities: Design the school magazine and bulletin boards, make posters, and greeting/invitation cards, stage scenes for music, dance, and drama performances.
6. Analyze NEP 2020 with reference to emphasis on Arts Education.
7. Write learning outcomes and competencies for two topics of Arts Education at Secondary Stage.
8. Visit any monumental place and observe its aesthetics. Prepare a report based on your observations relating it to different forms of Art.
9. Any other project assigned by HEI.

Suggestive Mode of Transaction

Lecture cum demonstration, Experimental method, Field-based experiences, Project method, Laboratory method, Hands on Activity, Problem solving method, Inquiry method, Success stories, Discussions, Self-study, Brainstorming and Experiential method.

Suggestive Mode of Assessment

Written test, classroom presentations, discussion forums, observation, research/study report, assignments, practicum, performance based, sessional and terminal examination (As per UGC Norms).

Suggestive Reading Materials

- Draft National Curriculum Framework for School Education,
- National Education Policy 2020, MoE, Government of India
- National Steering Committee for National Curriculum Frameworks, (2023).
- NCERT Textbooks for Art Education

- UNESCO, (2006), *Appeals for the Promotion of Arts Education and Creativity at School to help Construct a Culture of Pace,* Paris, November 3 {No.99-241}UNESCO PRESSE. http://www.://www.unesco.org/education/ecp/Arts_edu.htm,19.09.2019, 20:20.9.
- UNESCO, (2006), *Road Map for Arts Education*. The World Conference on Arts Education: Building Creative Capacities for the 21st Century, Lisbon, 6-9 March 2006, http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CLT/CLT/pdf/Arts_Edu_Road Map_en.pdf,13.08.2019,09(PDF) 3.
- **https://digitalcommons.cwu.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1225&context=etd** The Impact of the Arts for Students with Moderate to Severe Disabilities

Content cum Pedagogy of Arts Education at Secondary Stage – Course (II)

Course code: 4.4.5 II Credit: 2 Semester:6

4.4.9.1 About the Course

Art focuses on the presentation of ideas, emotions, and visual aspects. A person who produces or develops Arts by applying deliberate skill and imaginative creativity is called an Artist. Comprehending content analysis is crucial for teaching arts to students with special needs. It enables teachers to gather and compare variations in the subjects being taught, as well as student perceptions and relevant trends. This course encompasses three key areas of Arts Education, Teaching Learning Resources for Arts Teaching, Content Analysis and Planning for Teaching Arts and ICT Integration and Applications in Arts Education. The course aims to develop the skills of effective teaching by student teachers including listing behavioral outcomes, planning activities, and ways to supplement classroom instruction or stimulate learner interest, particularly in the context of their access needs and artistic expressions for learners with multiple disabilities. Student teacher shall be able to choose evaluation procedures, identification and selection of teaching learning resources, and how integrating various pedagogical techniques in the teaching of content related to Arts Education adaptive to the learner needs making Art barrier free. It emphasizes the skill of developing lesson plans for the teaching of Arts (Visual, Tactile and Performance art) ensuring accessibility for all.

Learning Outcomes

After completion of this course, student teachers will be able to:

- distinguish learning resources and e-resources for inclusive Arts teaching, and classify, identify, and use learning resources from the local environment for diverse learners,
- analyze different contents from textbooks for pedagogical aspects ensuring ICT integration and develop collaborative interactive art projects with adaptations for students with multiple disabilities
- assess and evaluate using multiple modes of assessment that include tailored timely feedback incorporating diverse perspectives and abilities based on performance or portfolios,
- plan action research project in the teaching of Arts Education
- apply cross disability approach to promote a holistic understanding of disability and to recognise the diversity within the within learners with disability.

UNIT - I Teaching Learning Resources for Arts Teaching

1.1 Teaching learning resources: concept, characteristics, and importance in teaching of Arts.

1.2 Types of teaching learning aids/ materials: print media (such as textbook, teachers' manual/ handbook, laboratory manual and other print materials), braille non-print and digital media such as radio, TV, websites, animations, audios, videos, images, simulations, digital repository, Haptic Augmented Reality (AR), Virtual Reality (VR) and Artificial Intelligence (AI) based digital resources and Open Educational Resources (OERs) for offline/ online classrooms, reflective journals, posters, braille art, charts, 2-D and 3-D models/vibrotactile gloves, worksheets, multimedia etc.

1.3 Identification and use of learning resources available locally and cross collaboration with professional artists, general and special educators for high quality of experiences.

1.4 Resource room/ laboratory/ library adaptive to the access needs of person with tailored needs - management and practices; virtual laboratories, teaching learning kits, subject

clubs, fairs, exhibitions, excursions, community resources and pooling of resources; management of resource center for arts crafts and design, maintaining report, records and registers to support inclusive arts education.

1.5 Develop art experience zones to enable classroom management through choice based Art curriculum for independent practice, group learning, necessary accommodation and levels of support.

Unit 2: ICT Integration and Applications in Arts Education

2.1 Scope and importance of ICT in arts education by for users to synthesizing visual, aural, tactile and moving images in one communication object.

2.2 Examine ways to include ICT in Arts to create multilevel informational objects that reveal their contents in the process of spatial-temporal-haptic-kinaesthetic experiences, non-linear interaction between users and interactive elements and interactive objects such as Artificial Intelligence, machine learning, smart boards in the teaching of arts, assessment process and resource management.

2.3 Use of tools, software, and platforms for teaching learning of arts at secondary stage by integrating humanities and technologies by means of arts by ensuring these software and platforms accessible to accommodate diverse learners.

2.4 Developing ICT integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for face to face and online teaching.

2.5 Apply ICT as a collaborative learning experiences for students for development of skills for joint creative activities,

Unit 3: Assessment and Evaluation in Teaching of Arts

3.1 Assessment and evaluation: need for and importance of Arts Education, emphasize the importance of formative assessment for continuous improvement and personalized learning experiences in arts education.

3.2 Assessment based on learning outcomes, strategies for continuous assessment that accommodate the varied learning styles and needs of students with multiple disabilities, finding gaps in learning and planning further activities for improvement, qualitative assessment, 360◦ assessment in Arts Education.

3.3 Performance based assessment that are inclusive and adaptable for students with multiple disabilities, assessment of group activities, field observations, reflection of artistic process, recording and reporting, creating platform and portfolio management, authentic assessments, assignments, projects, and presentations.

3.4 Tools and techniques of assessment and evaluation in arts education; unit test based on Table of Specification (TOS) that accommodate diverse learning needs and assess higher-order thinking skills and its importance; assessment strategies, feedback techniques, and staying current with current trends/tools/materials and practices in the arts field for students with disabilities. .

3.5 Include assessment of individual students on techniques, artistic expressions and personal grown and assessment of group with focus teamwork, communication, and collaboration skills with mixed group of students.

Unit 4: Research and Innovative Practices for teaching Arts

4.1 Divergent thinking and innovation in psychological, sociological, and philosophical perspectives for quality learning experiences in teaching of Arts, promoting creativity and innovation.

4.2 Recent trends in research related to teaching learning of Arts for students with disabilities who may also use mobility devices or sensory aids.

4.3 Action research in arts education, meaning, significance, steps, and planning.

4.4 School based research in Adapted Art Education, arts education, evidence-based practices, UDL, and reflection, arts & design and skill development and entrepreneurship.

4.5 Integrating Technology – digital Art Tools, VR/AR exploration of Art in new, immersive and historical contexts, Interdisciplinary approach (combining Art with STEAM) , and Project based learning to promote critical thinking and collaboration.

UNIT 5 Cross disability Approach to teaching Art

5.1 Identify the key principles and philosophies of Cross Disability Approach; UDL principles are applied to art education to ensure that lessons are accessible to all students. as it provides multiple means of representation, expression, and engagement.

5.2 Project-based learning, collaborative activities, and interdisciplinary approaches to relating Art contextualised to real experiences.

5.3 Incorporate assistive technologies both adaptive and digital tools that can promote engagement of students with disabilities in art activities to aesthetic, visual, spatial, aural, tactile, haptic expressions of art.

5.4 Enhance student engagement with Art as education learner centered assessment strategies, feedback techniques, and staying current with current trends and practices in the arts field in regard to adaptation of tools, techniques and mediums for teachers as part of professional development.

5.5 Art lessons tailored and differentiated each students abilities, interest and flexible grouping that promotes creativity, collaboration, problem solving, communication, digital literacy ICT integrated Art

Suggestive Practicum (Any Three)

1. Prepare a report on Indian local Arts after meaningful observation and judgement.
2. Prepare a write-up on the quality of experiences for teaching of Arts.
3. Construct a Table of Specification/Achievement test.
4. Prepare a Portfolio/e-portfolio.
5. Prepare a plan for action research of arts integration.
6. Conduct School Based Research and prepare an evidence-based report.
7. Visit various traditional arts school – around the community and prepare a report of integration of art for students with multiple disabilities.
8. Any other project assigned by HEI.

Suggestive Mode of Transaction

Lecture cum demonstration, experimental method, field-based experiences, project method, laboratory method, hands on activity, problem solving method, inquiry method, success stories, discussions, self-study, brainstorming and experiential method.

Suggestive Mode of Assessment

Written test, classroom presentations, discussion forums, observation, research/study report, assignments, practicum, performance based, sessional and terminal examination (As per UGC Norms).

Suggested Readings

- Draft National Curriculum Framework for School Education,
- National Education Policy 2020, MoE, Government of India
- National Steering Committee for National Curriculum Frameworks, (2023).

- NCERT Textbooks for Art Education
- UNESCO, (2006), Appeals for the Promotion of Arts Education and Creativity at School to help Construct a Culture of Pace, Paris, November 3 {No.99-241}UNESCO PRESSE. http://www.://www.unesco.org/education/ecp/Arts_edu.htm,19.09.2019, 20:20.9.
- UNESCO, (2006), *Road Map for Arts Education. The World Conference on Arts Education*:
- *Building Creative Capacities for the 21st Century*, Lisbon, 6-9 March 2006, http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CLT/CLT/pdf/Arts_Edu_ Road Map_en.pdf,13.08.2019,09(PDF) 3.

Web resources

https://ncert.nic.in/pdf/announcement/AILG-Secondary-English.pdf
https://iite.unesco.org/pics/publications/en/files/3214631.pdf
https://www.kennedy-center.org/globalassets/education/networks-conferences--research/research--resources/vsa-resources/parents-and-educators/professional_papers_vol_1.pdf
Vescio, V., Bondy, E., Poekert, P. E. (2009). Preparing multicultural teacher educators: Toward a pedagogy of transformation. *Teacher Education Quarterly, 36*(2), 5-24. https://files.eric.ed.gov/fulltext/EJ857473.pdf Retrieved on 30th June, 2024

Content cum Pedagogy of Commerce, Accounting and Business studies Secondary Stage - Course (I)

Course Code: 4.4.6 I **Credit: 2** **Semester: 5**

About the Course: Commerce, Commerce, Accounting and Business studies is an important school subject and students are expected to master knowledge and skills related to business, accounts, Finance, and allied areas during study. The subject deals with economic issues and concerns of a society thus this course focuses on the real-life situations and primary sources of information so that the student-teachers can grasp concepts and develop thinking skills. 'Teaching of Accountancy and Commerce' at school level has a great relevance to acquaint prospective schoolteachers with various pedagogical aspects and interventions in commerce. It also focuses on textbook analysis and planning for teaching Commerce. and its pedagogical issues in the light of NEP 2020. This course encompasses focusses on the scope of Commerce, Business studies and accountancy and allied subjects and the purpose of teaching Commerce in schools, nature, scope and importance of Commerce teaching, its historical perspective. The course emphasizes the aims, objectives and learning outcomes of teaching Commerce at the secondary. The 21st century skills are the major concerns for a progressive society. Development of 21st century skills are important for a teacher of Commerce, Accounting and Business studies and for the learner.

Course 1

Unit 1: Nature, Scope and Perspectives of Commerce, Commerce, Accounting and Business studies

1.1 Purpose, nature, scope and importance of Commerce, Commerce, Accounting and Business studies for developing basic understanding about Commerce, Commerce, Accounting and Business studies as an information system and process of business in a given environment respectively.

1.2 Overview of traditional and contemporary teaching approaches; key milestones, historical developments, and notable contributions by Indian and international theorists using multimedia resources such as videos, audio recordings, and illustrated books to make them accessible.

1.3 Principles and Functions of Commerce, Commerce, Accounting and Business studies

1.4 Understanding constitutional provisions and a critical review of commerce specific recommendations from various committees, commissions, and policies e.g., Hartog Committee 1929, Special Committee on Commerce Education. CABE (2005), Secondary Education Commission 1952/53 and NEP 2020, NMEICT (National Mission on Education through Information and Communication Technology), CIET, e-path Shala, and National Digital Library of India) and the impact on the education system especially from the perspective of autistic children

1.5 Understand the Paradigm shift from pedagogy to Andragogy to Heuagogy.

UNIT 2: Aims and Objectives of Teaching Commerce, Accounting and Business studies

2.1 Aims and objectives of teaching Commerce, Commerce, Accounting and Business studies and as a component of multidisciplinary science.

2.2 Interrelationships of Commerce, Accounting and Business studies with other disciplines and applications in everyday life through interdisciplinary projects and activities while drawing similarities to the students' own lives and communities adapted to access needs of students with disabilities.

2.3 Learning outcomes and competencies of teaching Commerce, Accounting and Business studies including its various branches at the secondary stage

2.4 Recognise social values, ethical, legal and sustainability concerns in relation to the economy and community.

2.5 Newer approaches to understanding the economic, human, national and global objectives of Commerce, Accounting and Business studies across different contexts – personal, social, political and best way to use the resources – financial and business.

Unit 3: Pedagogical Practices of teaching Commerce, Commerce, Accounting and Business studies .

3.6 Approaches and implications of pedagogical approaches: Constructivist, Collaborative, Integrative, Reflective and Inquiry-Based approaches and a critical analysis of pedagogical adaptations for teaching Commerce, Accounting and Business studies for students with disabilities.

3.7 Teaching models: Concrete, Representational and Abstract (CRA), Problem-Based Learning, (PBL), Inquiry Training Model (ITM), Concept attainment Model (CAM), Mastery Learning Model, 5E's Learning Model, and Activity-Based Learning (ABL) and a critical analysis of universal instructional design for students with disabilities.

3.8 Adaptations of the different teaching methods and strategies: Teacher-centric (e.g., lectures, demonstrations presentations, discussions); Learner-centric (e.g. activity-based learning, hands-on activities, play-way methods) and Group-centric (problem-solving, project-based, inquiry-based, collaborative, cooperative and blended) using STEM and STEAM and ensuring support for group interaction and participation

3.9 Innovative inclusive, differentiated instructions to meet the diverse needs and learning styles, activity-oriented activities involving group projects with mixed ability students, demonstration, integrate real world problems, gamification, case vignettes, discussion, classrooms using manipulatives, visual aids and simplified language, online and offline activities suitable for all learners

3.10 Use of ICT such as accounting and business soft wares, adaptive and assistive technologies (e.g. AACs smart boards, handheld computing devices, computer testing), and emerging technologies (e.g., artificial intelligence machine learning) and their potential to enhance accessibility and engagement of students with disabilities.

Unit 4: Content Analysis and Planning

4.1 Understand the textbook, analyse the content from the Pedagogical Content Knowledge (PCK) perspective to avoid biased representation, identify facts and concepts, organize and plan appropriate and relevant strategies, and list learning outcomes and competencies considering the diverse needs of autistic learners.

4.2 Pedagogical aspects of teaching for higher order thinking skills such as critical, creative, communication, decision making, and reflection. Emphasize the importance of structured planning, and practical applications, diverse teaching materials and strategies (e.g., concrete and visual presentation styles, use of diagrams, graphs, decision boxes anecdotes, need for clarity, precision and practice) and modifications as required to accommodate diverse learning styles

4.3 Importance of analysis and planning along with the necessary adaptation and modification content for students with disabilities by incorporating visual, and tactile aids, concrete manipulatives, and audio formats, and adjusting lessons to simplify or supplement the curriculum, including the development of a functional curriculum for accessible and relevant learning experiences.

4.4 Develop yearly, unit and lesson plans that promote analytical, and critical thinking, skills to inquire, explore and discover through activities that provide hands-on experience and are integrated with sports, movement, arts and multi-sensory elements. Emphasise the importance of plans based on learning outcomes and experiential-multi-sensory learning by selecting topics with suitable curricular adaptation from textbooks.

4.5 Plan for learner-centred activities- that promotes active learning, universal instructional design, collaborative learning, inquiry-based learning, case-based instruction, problem-based learning, project-based learning, discovery learning, and just-in-time teaching.

UNIT 5: 21st Century Skills for Learning for Commerce, Accounting and Business Studies

5.1 Need for and importance of how to develop 21st-century skills for learners and teachers of to teach Commerce, Accounting and Business studies .

5.2 Psychological, sociological, and philosophical perspectives of teaching and learning that promote collaboration, innovation, communication, information and media literacy in students with diverse learning needs.

5.3 Qualities of a teacher as a professional for enhancing teaching-learning that promotes inclusive practices, UDL, accommodation and universal design in instructional planning.

5.4 Role and Responsibilities of a teacher to develop analytical skills of reasoning in students with diverse needs, enable a curricular framework that integrates real world problems to and opportunities across other disciplines and to develop entrepreneurial mind-set and collaborative endeavours in students

5.5 Relate Commerce, Accounting and Business studies education to the environment (natural environment, artefacts and people), local as well as global and appreciate the issues at the interface of science, technology and society by enabling a dynamic learning environment.

Suggestive Practicum (Any Three)

9. Prepare a report on types of banks in India and its relevance to rural and urban economy.
10. Prepare a write-up on the quality of experiences for teaching of Commerce, Accounting and Business studies for students with diverse needs.
11. Construct a Table of Specification/Achievement test.
12. Prepare a Portfolio/e-portfolio.
13. Prepare a plan for action research.
14. Conduct School Based Research and prepare an evidence-based report.
15. Conduct Case Studies/ Market Surveys/ Field visit and prepare a report.
16. Any other project assigned by HEI.

Suggestive Mode of Transaction

Lecture cum demonstration, experimental method, field-based experiences, project method, laboratory method, hands on activity, problem solving method, inquiry method, success stories, discussions, self-study, brainstorming and experiential method.

Suggestive Mode of Assessment

Written test, classroom presentations, discussion forums, observation, research/study report, assignments, practicum, performance based, sessional and terminal examination (As per UGC Norms).

Suggested Reading:

- Aggarwal, J.C. (2006).*Essentials of Educational Technology Teaching and Learning*. New Delhi: Vikas Publishing House
- Bhaskara Rao, Digumarti, (2004) *Methods of Teaching Commerce*: Discovery Publishing House, New Delhi
- Bhatia, S.K. (2012). *Teaching of Business Studies and Accountancy*. New Delhi:
- Arya Book Depot.
- Bhatia. S.K. (1996). Methods of Teaching Accounting. Publication No. 16. CIE.
- Delhi.
- Laewis.D. (1955). *Methods of Teaching Book-Keeping*. Cincinnti; South
- Western Publishing Co.
- Forkher Handen L., R.M. Swanson and R. J. Thompson (1960) *The Teaching of*
- *Book*-Keeping South Western Publishing.
- Lulla B.P. (1990) *Teaching Commerce in Secondary Schools*: M.S.U., Baroda.

- Maheswari, S.B. (1969) *Teachers' Guide in Book-Keeping & Accountancy*,
- Monograph. NCERT Regional College of Education, Ajmer.
- Ments, M. (1960). *Simulations, Games and Role Pl*ay. Handbook of Education Ideas
- and Practices, London: Routledge.
- Musselman, Vernon A and J.M. Hanna (1960). .*Teaching Book-Keeping and*
- *Accounting*. New York. McGraw Hill Book Co.
- Sapre, P.M. (1968), *Trends in Teaching Book-Keeping and Accountancy*, Regional
- College of Education, Mysore.
- P.Segwalkar, P.C & Sarlekar(2000): *The structure of Commerce*. Kitab Mahal. Allahabad
- Support material for PGT (Commerce) (2011). New Delhi: State Council of
- Verma, D.P.S.(2000); Commerce Education in Rajput, J.S. (Ed.) Encyclopaedia of
- Indian Education, Vol. I; NCERT.

Content cum Pedagogy of Commerce, Accounting and Business studies at Secondary Stage – Course (II)

Course Code: 4.4.6 II **Credit: 2** **Semester: 6**

About the Course

The course is devoted to introducing various teaching aids material types and uses for teaching the concepts of Commerce (Commerce, Accounting and Business studies) at secondary stage. This course discusses different types of teaching aids/materials for teaching learning concepts of Commerce. It emphasizes learning resources in Commerce to enable student teachers to make use of available learning resources and how to generate new resources for teaching learning the concepts of Commerce. It focuses on Psychological, Sociological and Philosophical Perspective of Activity Oriented Classrooms in Commerce. In this course student teachers will learn how to plan different types of activities in online and offline mode. It emphasizes how to integrate and use ICT in the classroom of Commerce**.** Accordingly, they are expected to develop lesson plans based on learning outcomes and experiential learning for classroom and online teaching. The unit on assessment and evaluation based on learning outcomes, strategies for continuous assessment, school based 360◦ assessment. Student teachers are expected to identify various concepts and processes, list learning and behavioral outcomes, find out about various activities and experiments, and identify relevant evaluation techniques and strategies. Assessment serves the dual purpose of tracking the performance of the learners as well as feedback mechanism for effectiveness of teaching. The course describes various evaluation strategies and devices which can be efficiently used in the teaching of Commerce and in the development of skills among the student teachers for improving student outcomes, conduct action research and school-based research in the teaching of Commerce.

Unit 1: Teaching Learning Material and Learning Resources

1.1 Role and importance of teaching-learning material to implement effective instructional strategies such as the use of multi-sensorial, differentiated and individualized instruction techniques, simplified and supplemented lessons, scaffolded learning, and modified approaches and techniques suited to the strengths of students with disabilities to enhance engagement and maintain a motivating learning environment

1.2 Developing an accessible, adaptable sensory-friendly, and integrated learning environment: physical space and infrastructure (e.g., smartboards, chalkboards, flannel boards, pictures/ picture-cut-outs, organised and labelled materials, adjustable height work/table surfaces, or floor space, safety tools and equipment; and TLMs and learning resources like textbooks, reference books, workbooks, multilingual dictionaries and glossaries and educational kits using principles of UDL.

1.3 Identification, design, management and integration of teaching-learning materials print material (e.g., textbooks, reference books, workbooks, multilingual dictionaries, glossaries, educational kits, reflective journals, charts, 2D, 3D models, educational toys and games, pictorial presentations, flashcards and reading cards, worksheets, textbooks, charts and handouts, teachers' manual/ handbook, age-appropriate newspapers, magazines, art-based activities) and non-print material (e.g., multimedia, television, websites, animations, audios, voice notes, videos, images, simulations, e-books, e-documents, audio recordings, audio-video presentations, digital repository, AR, VR and AI-based digital resources, and OERs) ensuring they are accessible, to meet the sensory needs of students with multiple disabilities.

1.4 Importance and benefits of integrating ICT: digital tools (e.g., interactive whiteboards, tablets, learning apps, digital storytelling; Google Classroom, Padlet, Edmodo, multimedia, video editing tools); online resources (e.g., educational websites, e-books, online libraries, MOOCs, OE); AI-based resources and blockchains); in learning and expression (e.g., AACs, text-to-speech, speech-to-text software) and providing alternative formats for effective, interactive and collaborative learning.

1.5 Promoting a collaborative and shared learning environment through a resource room/activity room that is learner-centred, interactive, demonstrative and explorative, promotes scientific inquiry, hands-on access and participation in a clear, logical, systematic, real-world context visiting various types of business enterprises across various sectors, visiting educational

parks, exhibitions, field trips and interactive simulations, utilizing community experts and cultural artefacts in teaching and pooling resources.

Unit 2: ICT Integration with Commerce, Accounting and Business studies .

2.6. Scope and importance of using ICT in learning process of Commerce, Accounting and Business studies .

2.7. Use of ICT in the classroom for teaching-learning process with a primary focus on adaptive software and hardware, multimedia, interactive simulations, resources, AAC devices, virtual labs and simulations (e.g., microscopes, dissection tools, 3-D modelling software, virtual microscope and virtual dissection tools.

2.8. Integrating Tools, software, and platform for teaching learning to enhancing collaborative activities among students and for developing highly relevant generic skill both online and offline differentiated to the learner with disabilities.

2.9. Developing ICT-integrated lesson plans by taking topics of physical sciences at the secondary stage using Technological Pedagogical Content Knowledge (TPCK) for classroom and online teaching – keeping in mind the multi-sensory needs of the students.

2.10. Specific access needs, suitability and required customization of devices and content in an accessible format that allows autistic students to adapt subject-specific information to a format that is suitable for them.

Unit 3: Assessment Intervention and Evaluation in teaching Commerce, Accounting and Business studies

3.1 Application, relevance, validity, reliability, and fairness of the different types of assessments (e.g., formative, summative, 360-degree, continuous and comprehensive assessment, group assessment and peer assessments), constructive approach to assessment: rubrics, portfolio, journal writing and open-ended test, language lab, group activities, soft skill presentations, and use of digital tools for assessments (e.g., online quizzes, e-portfolios) and strategies for continuous assessment that are adaptive and inclusive (e.g., regular check-ins and progress tracking)

3.2 Differentiating assessment and evaluation, qualitative and quantitative paradigms in teaching; performance assessment (non-testing methods) assessment of group activities, field observations, recording and reporting (using methods that are accessible, such as audio recordings, simplified note-taking, and visual supports), managing portfolios, assessment of lab skills, assignments, projects, demonstrations, presentations and providing alternative methods for demonstrating competence

3.3 Assessing skills and proficiency in listening, speaking, reading, spelling, writing, comprehension, vocabulary, grammar and phonology communication, and expressions with appropriate modification of assessments to ensure fairness, accessibility and evaluation of student's understanding of essential concepts rather than the ability to memorize the meaning of a question, use of AACs speech recognition technology, modified test formats, simplified instructions, multiple choice questions, offering oral assessments or practical demonstrations, use of noise cancellation headphones to avoid distraction.

3.4 Incorporating positive and constructive tailored feedback focusing on the facilitation of knowledge acquisition without the use of aversive and punishment procedures.

3.5 Self-reflection on teaching and assessment practices to improve student engagement and interest in the subject matter, error analysis and enrichment measures by the teacher.

UNIT 4: Research and Innovative Practices - Commerce, Accounting and Business studies

4.1 Divergent thinking and innovation in psychological, sociological, and philosophical perspectives for quality learning experiences, creating a sensitive and conducive classroom environment for learning and practising life skills students with special needs .

4.2 Recent trends in research related to teaching-learning of Business Sciences.

4.3 Action research: meaning, significance, steps, and planning.

4.4 Evidence-based practices and reflections.

4.5 School-based research in Commerce, Accounting and Business studies.

UNIT 5: Cross Disability Approaches for Teaching Commerce, Accounting and Business studies

5.1 Concept, meaning, scope and nature of Cross Disability Approach in teaching Commerce, Accounting and Business studies that includes all students with disabilities.

5.2 Examine the role of families, community and key partnerships including students with disabilities that promote and advocate for a cross-disability approach to include ALL.

5.3 Identify the key principles and philosophies of the cross-disability approach.

5.4 State the role of special teachers, allied health professionals, key strategies to promote in knowledge of Commerce, Commerce, Accounting and Business studies in the context of developing generic practices as well as person-centred learning, scaffolding strategies, UDL, adapted or modified for students with mixed abilities.

5.5 Examine the cross-disability approach in regard to enabling policies, services, and environments that are accessible and inclusive for all people with disabilities to enhance participation in all aspects life including curricular and non-curricular activities, beyond school or school to college/work.

Suggestive Practicum

- Prepare an essay on identifying and Evaluating ICT resources suitable for teaching Accountancy.
- Prepare a workbook of any three Accountancy topics.
- Take up a project on any unit of +2 accounting and write a model report
- Develop a Multi-Media lesson using appropriate ICT resources and transacting the same before peers in simulated teaching exercise.
- To Prepare Teacher Made Test in the Subject of Commerce.
- Essay on consumer protection
- To Prepare ICT integrated lesson plans

Suggestive Mode of Transaction:

Learners are encouraged to critically review all materials

- Observations
- Demonstrations
- Hands-on experiences
- Field visits
- Audio-video and multimedia resources
- Lectures and discussions
- Presentations and projects
- Workshops and seminars
- Online resources
- Self-study

Suggestive Assessment:

- Classroom presentations
- Individual and group projects
- Written assignments and tests
- Coursework practicum
- Sessional and Terminal semester examinations (as per UGC norms)

Suggestive Reading Materials:

- Allen, O.C., & Francis P.H. (1988).*Curriculum: Foundations, principles and issues*. New Jersey: Prentice Hall. Bining A.C., &Bining D.A. (1962).Teaching of Social Studies in Secondary Schools.New York: Mc Graw

- Boynlon, L.O. (1995). *Methods of Teaching Book-Keeping*. Cincinnatti: South Western Publication Company.
- Chauhan, S.S. (2008).*Innovations in Teaching Learning Process.* Uttar Pradesh: Vikas Publishing House Pvt. Ltd. Douglas.
- Edward, F.O., Raymond, W.K., & Ronald J.M. (1971*). Programmed Instruction Techniques and Trends*. New York: Century.
- Gupta Rainu .(2009*). Teaching of commerc*e. Shipra Publications. New Delhi.
- Hill. Boynlon, L.O. (1995). *Methods of Teaching Book-Keeping.*Cincinnatti: South Western Publication Company
- Khan, M.S. (1982). *Commerce Education.* New Delhi: Sterling Publishers Private Limited.
- Palnford., &Anderson.(2000).Teaching Business Subjects. New York: Prentice Hall.
- Singh, R.P. *Teaching of Commerce*. Surya Publication: Meerut.
- Well. (2004).Models of Teaching. U.K.: Prentice Hall of India.

Content cum Pedagogy of Computer Science at Secondary Stage - Course (I)

Course Code: 4.4.7 I **Credit: 2** **Semester: 5**

About the Course

Computer Science is a rapidly evolving discipline that lies at the core of the modern technological era. It is the study of algorithms, data structures, and the principles of computation, encompassing a wide range of topics related to computing and information technology. As a discipline, it blends theory and practice, fostering innovation and problem-solving in diverse fields. This course on the pedagogy of Computer Science comprises of three units and a practicum. It aims to provide student teachers with a comprehensive understanding of the Computer Science discipline's nature, historical context, evolving trends, and its correlation with other school subjects. It focuses on defining the aims and objectives of teaching Computer Science, along with the development of learning outcomes and competencies for student teachers. The course also explores different pedagogical approaches and teaching methods to foster higher-order thinking skills and prepare student teachers for the practical, social, disciplinary, and cultural aspects of Computer Science. By the end of the course, student teachers will be equipped with effective strategies to engage learners and facilitate their learning in the field of Computer Science.

Learning Outcomes

After completion of this course, student teachers will be able to:

- identify the nature, scope, and Importance of Computer Science, discuss the policy recommendations and suggestions in regard to Computer Science
- explain aims and objectives of teaching Computer Science,
- examine the implications of different pedagogical approaches of teaching Computer Science
- Prepare a lesson plans for teaching Computer Science including the multidisciplinary nature of Computer Science and its linkages with other school subject,
- Identify role of facilitating teaching learning Computer Science.

Unit 1: Nature, Scope and Historical Perspective of Computer Science A.

1.1 Nature, scope and importance of Computer Science field.

1.2 Historical perspective of Computer Science.

1.3 Computer Science as an evolving discipline and its application across various aspects of society across various sectors.

1.4 Explore the interlinkages between Computer Science

1.5 Recommendations/suggestions of various committees, commissions, and policies in reference to Computer Science.

Unit 2: Aims and Objectives of Teaching Computer Science

2.1 Aims and objectives of teaching Computer Science.

2.2 Learning outcomes and competencies of teaching Computer Science at secondary stage.

2.3 Linkages of Computer Science with other school subjects and its place in school curriculum.

2.4 Relate how computing technology presents new ways to address problems; and to use computational thinking to analyse problems and to design, develop and evaluate solutions
2.5 Values of teaching Computer Science: practical, social, disciplinary, and cultural values.

Unit 3: Pedagogical Aspects of Computer Science

3.6. Implication of various approaches- inductive deductive, constructivist, experiential learning, art-integrated learning, sports integrated learning, field visit, discovery, projectmethods for learning of the selected chapters/concepts in Computer Sciences textbooks.
3.7. Moving towards more holistic, interdisciplinary, and multidisciplinary approaches of learning computer Sciences, learning exclusive of pre-conceptions and misconceptions, blended learning.
3.8. Methods of teaching Computer Sciences: learner-centric and group-centric, activity based, discussion, problem-solving, role play, inquiry approach, problem-solving, concept mapping, collaborative & cooperative learning approach, field based experiential learning
3.9. Applications of suitable methods in Computer Sciences for learning the selected chapters/concepts in SocialSciences textbooks.
3.10. Critical, creative and analytical pedagogical concerns in teaching the Computer Sciences with special reference to higher-order thinking.

Unit 4: Content Analysis and Planning for Teaching Computer Science

4.1 Pedagogical analysis of content taking examples from topics of Computer Science textbooks at secondary stage,
4.2 Identification of concepts, listing learning outcomes and competencies, planning and evaluating learning experiences in an inclusive setup.
4.3 Concept, types and importance of unit planning and lesson planning.
4.4 Developing unit plans and lesson plans based on learning outcomes and experiential learning by selecting topics from textbooks of Computer Science at secondary stage.
4.5 Need for enrichment of content of Computer Science based student interests, motivation and strengths.

Unit 5: 21st Century Skills in teaching Computer Science

5.1 Need for and importance of how to learn 21st century skills for learners and teachers of Computer Science.
5.2 Develop activities that promote computational thinking skills by leveraging these skills across different subjects and real-life situations, from math to social studies, to solve problems creatively and efficiently relevant to real world.
5.3 Psychological, sociological, and philosophical perspective of teaching and learning Computer Science.
5.4 Qualities of a Computer Science teacher as professional for enhancing teaching learning skills.
5.4 Role of a teacher in facilitating learning and creating dynamic learning environment of Computer Science.

Suggestive Practicum (Any Three)

1. Analyze recommendations of policies/commissions in context to Computer Sciences.

2. Prepare a write-up on any two topics of Computer Science regarding their learning outcomes and competencies at Secondary Stage.
3. Create an interactive multimedia presentation, including videos, animations, and simulations, to explain complex Computer Science concepts.
4. Prepare a report on interdisciplinary and multidisciplinary approaches used in the practices of Computer Sciences.
5. Identify the challenges and benefits of implementing CAI in educational settings and prepare a report.
6. Identify and integrate values in Computer Science concepts and prepare a PowerPoint presentation.
7. Any other project assigned by HEI.

Suggestive Mode of Transaction
Lecture cum demonstration method, discussion method, laboratory method, project method, inquiry approach, problem solving, experiential learning approach, flipped classrooms, mobile apps and interactive methods such as group discussions, peer tutoring, workshops, observations and presentations.

Suggestive Mode of Assessment
Seminars, demo lessons, case studies, practical tasks, hands-on activities in laboratories, written tests, classroom presentations, workshops, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

Suggestive Reading Materials:

- National Council of Educational Research and Training. (April 2022). Mandate documents Guidelines for the development of National Curriculum Frameworks.
- National Education Policy 2020, MoE, Government of India
- National Steering Committee for National Curriculum Frameworks, (2023). Draft National Curriculum Framework for School Education.
- NCERT (2019). Computer Science: Textbook for class XI – XII.
- NCERT (2019). Information and Communication Technology: A Textbook for Class IX X.

Content cum Pedagogy of Computer Science at Secondary Stage - Course (II)

Course Code: 4.4.7 II **Credit: 2** **Semester: 6**

About the Course

This course aims to equip student teachers with the necessary knowledge and skills to effectively teach Computer Science at the secondary stage. The course comprises of three units and a practicum. The course focuses on various teaching-learning resources, content analysis and planning, as well as the integration of Information and Communication Technology (ICT) to enhance the teaching-learning experience. The primary objective is to create a dynamic and inclusive learning environment that enables learners to grasp fundamental concepts in Computer Science while keeping up with the rapid advancements in technology. Furthermore, the course will explore the significance and organization of Computer Science laboratories and libraries, as well as the integration of social media platforms as valuable teaching-learning resources. Student teachers will learn how to identify core concepts, list learning outcomes and competencies, and effectively plan and evaluate inclusive learning experiences. Student teachers will also gain insights into educational software, mobile apps, and websites specifically designed for Computer Science education at the secondary stage. The course also emphasizes the development of ICT integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for both traditional classroom settings and online teaching.

Learning Outcomes

After completion of this course, student teachers will be able to:

- Identify after analysis of the computer science text book various types of teaching learning aids/materials and illustrate their importance in teaching of Computer Science,
- develop lesson plans based on specified learning outcomes,
- apply the concept of Technological Pedagogical Content Knowledge (TPCK) to create ICT-integrated lesson plans for effective implementation in online teaching learning environments.
- identify recent trends in research related to the teaching and learning and its implications in teaching learning of Computer Science,
- Determine the methods and significance of teaching social sciences to students with diversity

Unit 1: Teaching Learning Resources

1.1 Teaching learning aids/materials: concept, definition, role, and importance in teaching learning of Computer Science.

1.2 Types of teaching learning aids/ materials: print media such as textbook, teachers' manual/ handbook, laboratory manual, worksheets and other print materials, non-print and digital media such as charts, 2-D and 3-D models, radio, TV, websites, multimedia (animations, audios, videos, images, digital text), simulations, digital repository, Augmented Reality (AR), Virtual Reality (VR) and Artificial Intelligence (AI) based digital resources and Open Educational Resources (OERs) for offline/ online teaching learning of Computer Science.

1.3 Identification and use of learning resources in Computer Science from the local environment.

1.4 Integrating ICT in both online and offline settings to create interactive and engaging learning environments that accommodate various learning preferences

1.5 Resource rooms, Computer Science laboratory – layout, management, accessibility, and practices; Computer Science library – importance and its organization; social media as teaching learning resources, virtual laboratories and e-library, Computer Science clubs, fairs, exhibitions, excursions, community resources and pooling of resources.

Unit 2: ICT Integration and Applications

2.1 Scope and importance of ICT in Computer Science.

2.2 Use of ICT such as Artificial Intelligence, machine learning, smart boards in the teaching learning, assessment process and resource management of Computer Science.

2.3 Role of teachers in utilizing ICT as a medium of self-paced learning tool for students by way of assignments, gaming, online quizzes, interactive collaborative groups assignments to arouse inquiry, curiosity and exploration.

2.4 Tools, software, and platform for teaching learning of Computer Science at secondary stage that are integrated to the various access assistive technology that students with disabilities to access information.

2.5 Developing ICT integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for classroom and online teaching.

Unit 3: Assessment and Evaluation in Computer Science

3.1 Assessment and evaluation: need for and importance of Computer Science Development of learning indicators, performance-based assessment, learners' records of observations.

3.2 Assessment based on learning outcomes, strategies for continuous assessment, school based assessment, formative and summative assessment, formal, informal and 360^{o} assessment given in alternative accessible formats for students with disabilities.

3.3 Performance assessment: assessment of group activities, field observations, recording and reporting, creating platform and portfolio management, assessment of lab skills, assignments, projects, and presentations.

3.4 Tools and techniques of assessment and evaluation; unit test based on Table of Specification (TOS) and its importance; basic steps of question paper setting, types of test items and preparing answer key and criteria for school, assessment, and feedback mechanism in teaching learning of Computer Science.

3.5 Self-reflection on teaching and assessment practices to improve student engagement and interest in the subject matter, error analysis and enrichment measures

Unit 4: Research and Innovative Practices in Teaching of Computer Science

4.1 Divergent thinking and innovation in psychological, sociological, and philosophical perspectives for quality learning experiences in teaching of Computer Science.

4.2 Recent trends in research related to teaching learning of Computer Science.

4.3 Action research: meaning, significance, steps, and planning related to student learning within or across other subjects.

4.4 Evidence-based practices and reflection,

4.5 School-based research in Computer Science.

Unit 5: Cross disability approach to teaching Computer Science

5.6 Concept, meaning, scope and nature of Cross Disability Approach in teaching Computer Science that includes all students with disabilities.
5.7 Examine the role of families, community and key partnerships including students with disabilities that promote and advocate for a cross-disability approach enhance participation and to include ALL.
5.8 Identify the key principles and philosophies of the cross-disability approach.
5.9 State the role of special teachers, allied health professionals, key strategies to promote Computer Education in the context of person-centred learning, scaffolding strategies, UDL, adapted or modified for students with mixed abilities.
5.10 Examine the role of accessibility and universal design making environments, services, and equipment accessible to all students regardless of their abilities to enhance participation in all aspects of life based on motivation and interest of the learner in computer science, and independent living skills.

Suggestive Practicum (Any Three)

1. Explore different learning resources inside and outside the school and document the findings.
2. Collaborate with local Computer Science clubs, fairs, exhibitions, and consolidate Critically analyze two chapters of Computer Science textbooks at secondary stage.
3. Develop an e-Content on any one topic from Computer Science textbook at secondary stage.
4. Develop an outcome-based lesson plan on a topic of Computer Science at secondary stage by integrating ICT tools.
5. Take a real-life case study where Computer Science played a vital role in solving problems and analyze its impact in such scenario and present your findings as a report.
6. Analyze the ethical dilemmas related to Computer Science, such as data privacy, AI ethics and cyber security concerns. Reflect on the broader societal impact of these issues and prepare a PowerPoint presentation.
7. Apply innovative practices in classroom teaching learning of Computer Science and prepare an e-portfolio.
8. Plan action research for continuous professional development of Computer Science teacher.
9. Plan judicious use of technology in inclusive classrooms and prepare a PowerPoint presentation.
10. Any other project assigned by HEI.

Suggestive Mode of Transaction

Lecture cum demonstration method, discussion method, laboratory method, project method, inquiry approach, problem solving, experiential learning approach, flipped classrooms, mobile apps, and interactive methods such as group discussions, peer tutoring, workshops, observations and presentations.

Suggestive Mode of Assessment

Seminars, demo lessons, case studies, practical tasks, hands-on activities in laboratories, written tests, classroom presentations, workshops, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

Suggestive Reading Materials

- National Council of Educational Research and Training. (April 2022). Mandate documents Guidelines for the development of National Curriculum Frameworks.
- National Education Policy 2020, MoE, Government of India
- National Steering Committee for National Curriculum Frameworks, (2023). Draft National Curriculum Framework for School Education.
- NCERT (2019). Computer Science: Textbook for class XI – XII.
- NCERT (2019). Information and Communication Technology: A Textbook for Class IX X.

Content cum Pedagogy of Human Ecology and Family Science (Home Science) at Secondary Stage - Course (I)

Course Code: 4.4.8 I Credit 2 Semester: 5

About the Course

Human Ecology and Family Science **(HEFS**), formerly and commonly known as Home Science, encompasses various aspects of daily living and aims to enhance the quality of life. The course aims to provide students with the knowledge and skills necessary to improve the quality of life through better management of resources, enhanced meal planning, effective communication, family resource management, clothing, textile and sustainable living. This course encompasses three units describing the modern meaning of homemaking, purpose of teaching HEFS in schools, nature, scope and importance of HEFS teaching, its historical perspective. The course emphasizes the aims, objectives, learning outcomes and standards of teaching HEFS at the secondary level. It focuses on fostering independent living skills, with special differentiation for students with Disabilities (MD). This is achieved by adapting content and pedagogy to meet their specific needs, ensuring inclusivity, accessibility, and engagement. The course covers the implications of various approaches, the development of high-order thinking skills, and various methods of teaching HEFS, with specific attention to adaptations or accommodations for students with disabilities.

It also focuses on fostering independent living skills, especially differentiated for students with disabilities, by adapting content and pedagogy to meet their specific needs. The content and pedagogy must be adapted to ensure inclusivity, accessibility, and engagement. The course deals with the implication of various approaches, development of high order thinking skills and various methods of teaching HEFS with specific attention to adaptations or accommodations for students with disabilities.

Learning Outcomes

After completion of this course, student teachers will be able to:

- explain the modern meaning of **HEFS** and its nature, and discuss evolution of Home Science as a school subject examine the scope and importance of HEFS in daily life and its interlinkages with other subjects,
- outline the aims, objectives and learning outcomes of the teaching of Home Science,
- explore unified approach to teaching that encompasses all three elements of approaching pedagogy -constructivism, behaviorism and liberalism and matching it to curricular, instructional and ecological settings for students with disabilities
- modifications for students with low or high support needs with Disabilities in regard to learning goals, teaching processes, assignments and/or assessments to adapted to the needs of the student,
- demonstrate values related to **HEFS** including facilitating understanding of self in relation to family and society.

UNIT - 1Nature, Scope, and Historical Perspective of Human Ecology and Family Science

1.1 Modern meaning and nature of HEFS as a discipline, ddefine the contemporary

understanding of HEFS and its relevance in today's context and discuss the nature of HEFS as a holistic and inclusive discipline.

1.2 Historical perspective and major landmarks in the evolution of **HEFS** as a subject. Discuss the evolution of HEFS in the educational curriculum and its impact

1.3 Scope of HEFS and its importance in daily life and as a profession, emphasize how HEFS can be adapted to meet the needs of students with disabilities in daily life and professional settings.

1.4 Explore human ecology as an inter-disciplinary and trans-disciplinary study of dynamic relationship between humans, their nature and social environments as influenced by the physical, economic, social, and psychological elements and its interconnectedness and application of these concepts in inclusive education settings.

1.5 Recommendations/suggestions of various committees, commissions and policies related to education of **HEFS.**

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UNIT 2: Aims and Objectives of Human Ecology and Family Science Teaching

2.1 Aims and objectives of teaching **HEFS** with focus on understanding self in relation to family and society and connecting knowledge of life beyond school

2.2 Examine the need and significance of HEFS at secondary stage for students that adhere to the principle of developing sensitivity and undertake a critical analysis of issues and concerns of equity and diversity and practicality (related to real world).

2.3 Define competencies that students should develop, ensuring they are achievable for all learners, including those with disabilities.

2.4 Place of **HEFS** in school curriculum, its interlinkages with other school subjects, like economics, psychology, biology, physiology, Sociology.

2.5 Inculcation of associated values for teaching **HEFS** by implementing inclusive teaching strategies that ensure all students, including those with disabilities, can engage with and benefit from HEFS education.

UNIT – 3: Pedagogical Aspects of Human Ecology and Family Science

3.1 Implication of various approaches such as inductive-deductive, informative, constructivist, learner centered experiential learning, interdisciplinary and multidisciplinary and blended learning approaches in **HEFS**.

3.2 Examine these approaches to cater to the diverse learning needs of students with disabilities, ensuring it is accessibility, engaging and connected to the real world.

3.3 Analyze pedagogical aspects of teaching HEFS, for the development of high order thinking skills such as critical, creative, communication, decision making, collaborative and reflective ensuring the teaching learning experiences that are scaffolded appropriately for students with disabilities in developing these skills.

3.4 Methods of teaching **HEFS**: learner centered, activity oriented, interactive, constructivist, collaborative, observation, activity based, discussion, problem-solving, laboratory, project based, hands on multi-sensory activities, inquiry based, experimentation, exhibition and displays, collaborative and cooperative learning, peer learning and flipped classroom teaching and learning experiences.

3.5 Develop a differentiated curricular transaction with contingent levels of support which are scaffolded based on UDL principles with appropriate assistive technology such as AACs, speech generating devices, switch operated devices, screen readers like JAWS,

adaptive cooking tools and adaptive sewing equipment, adjustable work tables to name a few.

UNIT 4: Content Analysis and Planning for teaching Human Ecology and Family Science.

4.1 Pedagogical analysis of content taking examples from topics of **HEFS** textbooks of secondary stage, identification of concepts, listing learning outcomes and competencies, planning, and evaluating learning experiences that includes user centered assistive technology and devices for students with disabilities to support their engagement and progress.

4.2 Concept, types (theory and practical) and importance of unit and lesson planning in HEFS that are modified or adapted to meet high support needs students, teaching, essential components in the lesson plan of HEFS .

4.3 Developing unit plans and lesson plans based on learning outcomes (topics to be taken from **HEFS** textbooks of secondary level), art integrated lesson plan, experiential learning in Home Science teaching including adaptive assessment materials that are accessible and relevant to students with disabilities.

4.4 Develop plans that include adaptations for diverse learners, such as: modified tools/equipment, accessible physical environment, height adjustable work desks/tables, sensory-friendly activities including real-time hands-on work, tactile experiences catering to the diverse sensory needs of learners.

4.5 Adapt a structured approach to teaching plan such as collaboration with multi-disciplinary team, identify essential practical skills that are relevant beyond school, establish predictable routines, provide clear, tailored instructions in alternate formats like visuals, braille, speech to text tools.

UNIT 5: 21ST Century Skills for learning Human Ecology and Family Science

5.1 **HEFS** with focus on tailored efficient instructional strategies that promotes opportunities for diverse learners in a mixed group to experiences and practice skills that promote problem solving, collaboration, communication, self and others awareness, flexibility, leadership and ownership of responsibilities .

5.2 Psychological, sociological, and philosophical perspective of teaching and learning of **HEFS,** highlighting their application in supporting the self-efficacy, autonomous behavior in students with disabilities leading to social inclusion, self-determination, emotional well-being, and self-advocacy as the focus is on practical skills, independence, and holistic development.

5.3 **HEFS** teachers as professionals, with attributes of flexibility, adaptability, to develop student-centred learning experiences by collaborating with other multidisciplinary team, network while abiding by the values that supports diversity in learners and values equity for all learners, including disabilities

5.4 Role of a teacher in facilitating learning and creating dynamic inclusive learning environment of **HEFS,** that incorporates Universal Instructional Design and appropriate levels of support.

5.5 Develop strategies to support teachers to develop digital competencies and ensure a framework of mentoring support that prevents burn out, enables creativity, communication and collaboration with experienced teachers.

Suggestive Practicum (Any Three)

1. Prepare a report on the significance of **HEFS** in daily life for students with disabilities.
2. Formulate Individualized Educational Plans based on learning outcomes and standards for two chapters of **HEFS** at secondary stage,
3. Analyze recommendations of NEP 2020 and NCF:SE-2023, with reference to **HEFS** education for students with disabilities,
4. Prepare a report on interdisciplinary and multidisciplinary approaches used in the practices of **HEFS,** with a focus on their applicability for secondary students with disabilities
5. Prepare Project based on exploring careers and post school opportunities in HEFS for students with MD.
6. Identify and integrate values in HEFS concepts and prepare a write up.

Suggestive Mode of Transaction

Lecture cum demonstration with appropriate adaptations, experimental method, observation method, project method, laboratory method, discovery, problem solving method, inquiry method, success stories, discussions, self-study, and experiential method.

Suggestive Mode of Assessment

Written test, classroom presentations, discussion forums, observation, research/study report, assignments, practicum, sessional and terminal examination (As per UGC Norms).

Suggestive Reading Materials:

- Balyan, P. & Bhalla, I, & Wadhawa. (2024*). Human Ecology and Family Sciences for Class XII (Part 1&2.*Premier Publications.
- Food Safety and Standards Authority of India. Ministry of Health and Family Welfare, Government of India.
- Human Ecology and Family Science- Part-1 and Part-11 (N.C.E.R.T) for class 11 and 12
- National Council of Educational Research and Training. (April 2022). Mandate documents Guidelines for the development of National Curriculum Frameworks.
- National Education Policy 2020, MoE, Government of India
- National Curriculum Framework for School Education, 2023.
- Sharma, B.L & Saxena, B. M. (2016), *Pedagogy Of School Subject Home Science.* R.Lall.

Content cum Pedagogy of Human Ecology and Family Science at Secondary Stage - Course (II)

Course Code: 4.4.8 II **Credit 2** **Semester: 6**

About the Course

Home Economics and Family Sciences (HEFS) is an inherently practical subject that thrives on activities and hands-on learning. To excel as an HEFS educator, particularly for students with disabilities at the secondary stage, it is crucial to cultivate the ability to identify, adapt, and utilize a wide range of teaching and learning resources. This course equips educators with the skills to analyze content effectively, tailoring it to the unique needs and perceptions of learners with disabilities. It also addresses the importance of staying informed about pertinent trends in education and disability support. This course consists of five sub-units related to the importance and types of teaching-learning resources, development of the skill for pedagogical analysis of content for listing behavioral outcomes, planning activities, development of unit and lesson plan, and ICT integration, its applications in the teaching of **HEFS,** Assessment, evaluation, and a cross-disability approach to work with diverse group of students. The course provides a platform for student teachers to learn about varied kinds of resources which can be used in the teaching of **HEFS**, those available in the local environment and develops the skill of how to develop learning resources as well as the pool resources. It deals with the development of art with ICT-integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for face-to-face and online teaching of **HEFS.** Throughout the course, student teachers are encouraged to develop a rich pool of resources and to hone their skills in adapting and creating materials that cater to the diverse needs of learners with disabilities. This course not only provides a solid foundation in HEFS education but also emphasizes the importance of inclusivity and accessibility in teaching practices.

Learning Outcomes

After completion of this course, student teachers will be able to

- identify and use teaching-learning resources from the local environment that are engaging, bridging learning gaps, critical thinking, problem solving and accessible for students with disabilities, ensuring inclusivity and engagement in HEFS education.
- Apply ICT across every day practice in a broad number of activities like use of tools, software, and platforms for online teaching of HEFS to make it student driven/centred, interactive, using multi-sensory mode, and integrated with AAC.
- analyze the content of **HEFS** and identify concepts for integration in pedagogical activities including listing learning outcomes and standards, plan teaching learning process that are adapted to the abilities and needs of learners with disabilities.
- construct Table of Specification and write items that are sensitive to the diverse needs of students with disabilities, ensuring these assessments are fair, accurate, and supportive of their learning journey
- plan action research in the teaching of HEFS with focus on improving curricular learning and outcomes for students with disabilities.

UNIT - I : Teaching Learning Resources for Human Ecology and Family Science (Home Science) Teaching

1.1 Teaching learning resources: concept, characteristics, and critical importance of teaching learning resources in the education of **HEFS,**

1.2 Role of teaching learning resources that promote active learner engagement- quiz, roleplay, models, charts maps, student portfolio, vlogs, videos

1.3 Identification and use of low cost learning resources from the local environment in teaching of **HEFS** with accessible literacy material, contextualized, relatable resources, delivered through sequenced routines during teaching learning activities**,**

1.4 Types of teaching learning aids/ materials that engage, motivate, enhance comprehension, retention, supporting differentiated instrucions: print media (such as large print textbook, teachers' manual/ handbook, laboratory manual and other print materials in alternative formats), non-print and digital media such as radio, TV, websites, animations, audios, videos, images, simulations, digital repository, Augmented Reality (AR), Virtual Reality (VR) and Artificial Intelligence (AI) based digital resources and Open Educational Resources (OERs) for offline/ online classrooms, reflective journals, charts, 2-D and 3-D models, games, worksheets, multimedia with accessible interfaces etc.,

1.5 Accessible Resource room/laboratory/ library - management and practices; virtual laboratories supported by assistive technology, teaching learning kits or equipment adapted to students with disabilities, subject clubs, fairs, exhibitions, educational parks, excursions, community resources and pooling of resources, equipment in **HEFS** their importance and maintenance.

UNIT – II: ICT Integration and Applications in Human Ecology and Family Science Teaching

2.1 Scope and importance of ICT in **HEFS**, including the accessibility benefits of ICT for students with disabilities occurring in an inclusive learning environment, exploring how ICT can enhance learning experiences and outcomes for these students.

2.2 Explore the Macro and Micro functions of ICT that encompasses educational technology that bridges the needs of learners with diverse learning needs.

2.3 Use of ICT such as Artificial Intelligence, machine learning and robotics, smart boards in teaching learning, assessment, and resource management, emphasis on how these technologies can be adapted and utilized to support the learning needs of students with disabilities, ensuring their active participation and engagement.

2.4 Tools, software, and platform for teaching learning of **HEFS** at secondary stage with focus on assistive technology enablers such as AAC, input/output devices (screen readers, braille displays), speech recognition, word prediction software,

2.5 Developing ICT integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for classroom and online teaching.

UNIIT – III **Assessment and Evaluation in Teaching of Human Ecology and Family Science**

3.1 Assessment and evaluation: need for and importance of **HEFS.** Understanding the critical role of assessment and evaluation in HEFS education, particularly for students with disabilities

3.2 Assessment based on learning outcomes, that emphasizes the importance of formative/summative, adaptive assessment for continuous improvement and targeted supported learning experiences in HEFS.

3.3 Strategies for continuous assessment, finding gaps in learning and planning further activities for improvement, qualitative assessment, 360◦ assessment, that accommodate the varied learning styles and needs of students with disabilities

3,4 Performance based assessment that are adaptive the learning styles and needs of students with disabilities, assessment of group (mixed ability grouping as interaction with others benefits students) activities with focus on equity in learning experiences, field observations (accessible to all), recording and reporting, creating platform and portfolio management, assessment of lab skills, assignments, projects, and presentations with a focus on equity in learning experiences.

3.5 Tools and techniques of assessment and evaluation that are ; unit test based on Table of Specification (TOS) and its importance; basic steps of question paper setting with focus on differentiated assessment for students with disabilities, types of test items and preparing answer key and criteria for school, assessment, and feedback mechanism in teaching of **HEFS**.

UNIT IV Research and Innovative Practices in Teaching of Human Ecology and Family Science

4.1 Action research in HEFS, meaning, significance, steps focusing on planning that considers the learning and access needs of students with disabilities. This involves designing research that is inclusive, adaptive, and aimed at improving educational outcomes for these learners.

4.2 Divergent thinking and innovation in psychological, sociological, and philosophical perspectives for quality learning experiences in teaching of **HEFS,** with anecdotal evidence and documentation of practices that are innovative, low cost, adapted to the learner with disabilities,

4.3 Recent trends in research related to teaching learning of **HEFS**, with focus on STEM, kinds of data in **HEFS** and its management, with focus on effective teaching strategies, accessible learning materials, and adaptive technologies for students with disabilities,

4.4 School based research in **HEFS**, evidence-based practices, and reflection. Exploring vocations through human ecology and family science. Discuss how HEFS education can open pathways to various vocations and career opportunities, with a focus on how these pathways can be made accessible and engaging for students with disabilities.

4.5 Develop Skill development and entrepreneurship training such as tailoring, knitting, cooking, baking, embroidery, jewelry designing, budgeting that are differentiated, accessible with real world relevance/applications that will be motivating to the learners with disabilities with focus on developing on skills, possible income generation potential, financial autonomy that are aligned with their interests and motivations.

UNIT V: Cross Disability approaches to teaching Human ecology and family science

5.11 Concept, meaning, scope and nature of Cross Disability Approach in teaching HEFS that includes all students with disabilities.

5.12 Examine the role of families, community and key partnerships including students with disabilities that promote and advocate for cross-disability approach to include ALL.

5.13 Identify the key principles and philosophies of Cross Disability Approach.

5.14 State the role of special teachers, allied health professionals, key strategies to promote HEFS in the context of person centered learning, scaffolding strategies, UDL, adapted or modified for students with mixed abilities.

5.5 Examine the role of accessibility and universal design in making environments, services, and equipment accessible to all students regardless of their abilities to enhance participation in all activities.

Suggestive Practicum (Any Three)

1 Develop e-Content with features such as text-to-speech, closed captions, and interactive elements for teaching HEFS with focus that students with disabilities can access.
2 Search MOOCs available in the field of **HEFS** and prepare a report mentioning link and their suitability for students with focus on inclusivity features and suggesting improvements for learners with diverse needs keeping in mind UDL.
3 (Identify Massive Open Online Courses (MOOCs) available in the field of HEFS and prepare a comprehensive report. Include the links to these courses, evaluate their suitability for students with disabilities, focusing on inclusivity features such as accessibility options and Universal Design for Learning (UDL) principles.)
4 Critically evaluate a textbook of **HEFS** and prepare a report,
5 Prepare a **HEFS** kit – where tools and equipment are adaptive to the user,
6 Organize an exhibition/ seminar that is accessible for ALL and prepare a report,
7 Prepare an art integrated lesson plan based on experiential learning on any topic of **HEFS**,

Suggestive Mode of Transaction

Lecture cum demonstration, experimental method, observation method, project method, laboratory method, discovery, problem solving method, inquiry method, success stories, discussions, self-study, and experiential method.

Suggestive Mode of Assessment

Written test, classroom presentations, discussion forums, observation, research/study report, assignments, practicum, sessional and terminal examination (As per UGC Norms).

Suggested Reading Materials:

- Chandra A. (1995) Fundamentals of Teaching Home Science, ND: Sterling publishers.
- Dale Edgar (1962), Audio Visual Methods in Teaching, revised edition, Hold, Rivehart and Winston, New York.
- Food Safety and Standards Authority of India. Ministry of Health and Family Welfare, Government of India.
- National Council of Educational Research and Training. (April 2022). Mandate documents Guidelines for the development of National Curriculum Frameworks.
- National Education Policy 2020, MoE, Government of India
- National Curriculum Framework for School Education, 2023.
- Human Ecology and Family Science- Part-1 and Part-11 (N.C.E.R.T) for class 11 and 12,

Suggestive Web Links

- http://Arts.brighton.ac.uk/__data/assets/pdf_file/0004/65308/Susan-Orr-Artsicle-Issue10-pp-9-13.pdf
- http://egyankosh.ac.in/bitstream/123456789/46799/1/BES-143B2-E.pdf
- http://egyankosh.ac.in/bitstream/123456789/6691/1/Unit-4.pdf
- http://pedagogybyvasu.blogspot.com/2015/08/unit-test.html
- http://www.bdu.ac.in/cde/docs/ebooks/Bd/I/TEACHING%20OF%20MATHEMATICS.pdf

- http://www.englishclub.com/
- http://www.language-education.com/eng/index.asp
- http://www.mocp.org/
- http://www.ncert.nic.in/departments/nie/dse/activities/advisory_board/PDF/teaching_mat hs.pdf
- http://www.ncert.nic.in/oth_anoun/npe86.pdf
- http://www.ncert.nic.in/rightside/links/pdf/framework/english/nf2005.pdf
- http://www.tnteu.in/pdf/3-maths.pdf
- https://actascientific.com/ASAG/pdf/ASAG-03-0669.pdf
- https://doi.org/10.1111/j.1476-8070.1990.tb00482.x
- https://doi.org/10.1201/9781003245759
- https://doi.org/10.5032/jae.2018.03001
- https://doi:10.5032/jae.2019.02085
- https://dpi.wi.gov/sites/default/files/imce/cal/pdf/planning-curriculum-in-Arts-anddesign.pdf
- https://dsel.education.gov.in/sites/default/files/NCF2023.pdf
- https://egyankosh.ac.in/handle/123456789/46528
- https://en.unesco.org/silkroad/sites/default/files/knowledge-bank-Article/vol_IVb%20silk%20road_Arts%20and%20crafts%20BIS.pdf
- https://files.eric.ed.gov/fulltext/ED484721.pdf
- https://indl.iitkpg.ac.in
- https://link.springer.com/chapter/10.1007/978-94-011-2968-8_5
- https://link.springer.com/chapter/10.1007/978-94-011-2968-8_7
- https://lup.lub.lu.se/luur/download?func=downloadFile&recordOId=9028066&fileOId=9 028067
- https://mospace.umsystem.edu/xmlui/bitstream/handle/10355/14417/research.pdf?sequen ce=2&isAllowed=y
- https://ncert.nic.in/deaa/pdf/tpaev201.pdf
- https://ncert.nic.in/desm/pdf/phy_sci_partI.pdf
- https://ncert.nic.in/ncerts/l/hess404.pdf
- https://ncert.nic.in/pdf/Mandate-NCF.pdf
- https://ncert.nic.in/pdf/ncfse2023.pdf
- https://ncert.nic.in/science-laboratory-manual.php
- https://ncert.nic.in/textbook.php
- https://ncert.nic.in/textbook.php?jesc1=9-16
- https://ncert.nic.in/textbook.php?kecs1=0-11
- https://ncert.nic.in/textbook.php?khgv1=1-10
- https://ncert.nic.in/textbook.php?lefa1=1-8 • https://ncert.nic.in/textbook.php?lefa1=2-8 • https://ncert.nic.in/textbook.php?lefa1=3-8 • https://ncert.nic.in/textbook.php?lefa1=4-8 • https://ncert.nic.in/textbook.php?lefa1=5-8 • https://ncert.nic.in/textbook.php?lefa1=6-8 • https://ncert.nic.in/textbook.php?lefa1=7-8
- https://ncert.nic.in/textbook.php?lefa1=8-8
- https://ncert.nic.in/textbook/pdf/kecs1ps.pdf
- https://ncert.nic.in/textbook/pdf/lecs1ps.pdf

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माध्यमिक स्तर पाठ्यक्रम में हिंदी भाषा की विषय-वस्तु एवं शिक्षणशास्त्र (I)
Course Code: 4.4.9 I Credit: 2 Semester: 5

पाठ्यक्रम के बारे में परिचय

एनईपी 2020 के उद्देश्यों को देखते हुए गुणवत्तापूर्ण शिक्षकों का हस्तक्षेप महत्वपूर्ण है। ठोस शैक्षणिक सामग्री ज्ञान और शिक्षण विधियां एक शिक्षक की गुणवत्ता और व्यावसायिकता के निर्धारक हैं। अध्यापक शिक्षा कार्यक्रम शिक्षणशास्त्र, उसके सिद्धांतों तथा शिक्षण एवं अधिगमके अभ्यास पर दृढ़ता से बल देता है। विभिन्न अनुसंधानों से स्पष्ट होता है कि बच्चे भाषा को बहुत जल्दी सीख लेते हैं। यह भी एक सर्वविदित तथ्य है कि विद्यार्थी अपनी मातृभाषा या स्थानीय भाषा के माध्यम से अमूर्त अवधारणाओं को अधिक तेज़ी से सीखते और समझते हैं। इसलिए किसी भी भाषा को शिक्षण-अधिगम के लिए उस भाषा का अधिकतम अनुभव देना आवश्यक है। इस पाठ्यक्रम में विद्यार्थी-शिक्षक के लिए भाषा के शिक्षण कौशल विकसित करने के ज्ञान पर बल देने वाली तीन इकाइयाँ शामिल हैं। यह पाठ्यक्रम किसी भाषा की प्रकृति, क्षेत्र, महत्व और कार्यों की समझ पर भी केंद्रित है। यह बच्चों में भाषा कौशल के विकास के लिए भाषा शिक्षण के दृष्टिकोण, विधियों के साथ-साथ ऐतिहासिक/नीतिगत परिप्रेक्ष्य से भी संबंधित है।

अधिगम के परिणाम

इस पाठ्यक्रम के पूर्ण होने के बाद, विद्यार्थी-शिक्षक :

- माध्यमिक स्तर पर भाषा शिक्षण के लक्ष्य और उद्देश्यों की रूपरेखा तैयार कर सकेंगे,
- भाषा के मूल्यों को अन्य विषयों के साथ पहचान एवं संबंधित कर सकेंगे,
- भाषा के ऐतिहासिक परिप्रेक्ष्य को संक्षेप में प्रस्तुत कर सकेंगे,
- भारतीय संदर्भ में माध्यमिक स्तर पर भाषा शिक्षण के विधियों, उपागमों और सामग्रियों पर चर्चा कर सकेंगे,
- परिवेश की भाषा विविधता का मूल्यांकन कर सकेंगे।
- कक्षा शिक्षण के दौरान विभिन्न प्रकार की शिक्षण-अधिगम सामग्रीयों को लागू कर सकेंगे|

इकाई 1: भाषा की प्रकृति, क्षेत्र और ऐतिहासिक परिप्रेक्ष्य

1.1 भाषा की प्रकृति, क्षेत्र और महत्व। भाषा की भाषाई विशेषताएं।

1.2 भाषा के कार्य, भाषा अधिगम और भाषा अर्जन।

1.3 भाषा अधिगम के लिए कक्षाओं में समावेशन पर विशेष बल देने के साथ भाषा का ऐतिहासिक परिप्रेक्ष्य।

1.4 प्रवचन के रूप में भाषा: भाषा - पहचान और लिंग।

1.5 विद्यालयी शिक्षा में भाषा शिक्षण-अधिगम पर विभिन्न समितियों, आयोगों और नीतियों की सिफारिशें/सुझाव।

इकाई 2: भाषा का व्यावहारिक पक्ष

2.1 भाषा शिक्षण के लक्ष्य और उद्देश्य (एल1 और एल2)।

2.2 विद्यालय के अन्य विषयों के साथ भाषा का संयोजन।

2.3 साहित्य और समाज के बीच संबंध।

2.4 राष्ट्रीय एवं अंतर्राष्ट्रीय परिदृश्य में विद्यालयीपाठ्यचर्या में भाषा का स्थान।

2.5 भाषा के मूल्य: कार्यक्षमता, प्रवाह, सुसंगतता।

इकाई 3: भाषा का शैक्षणिक पक्ष

3.1 भाषा शिक्षण के उपागम - आगमनात्मक निगमनात्मक, रचनावादी, अनुभवात्मक अधिगम, कला-एकीकृतशिक्षा, मिश्रित शिक्षा, अंतःविषय और बहु-विषयक उपागम।

3.2 उच्च-स्तरीय चिंतन कौशल (HOTS) पर विशेष ध्यान देने के साथ भाषा शिक्षण से संबंधित महत्वपूर्ण और विश्लेषणात्मक शैक्षणिक चिंताएँ।

3.3 भाषा शिक्षण की विधियाँ: शिक्षार्थी-केंद्रित और समूह-केंद्रित, व्याख्यान-सह-प्रदर्शन, व्याकरण-सह-अनुवाद विधि, प्रत्यक्ष विधि, श्रव्य-भाषिक विधि, कार्य-आधारित अधिगम, शाब्दिक उपागम, गतिविधि-आधारित चर्चा, समस्या-समाधान , व्यावहारिक गतिविधि, अवधारणा-मानचित्रण, सहयोगात्मक और सहकारी अधिगम।

3.4 भाषा कौशल और चिंतन में विद्यार्थियों की क्षमताएं।

3.5 भाषा अर्जन पर विभिन्न दिव्यांगताओं का प्रभाव।

इकाई 4: भाषा शिक्षण के लिए सामग्री विश्लेषण और योजना

4.1 इकाई योजना: अवधारणा, प्रकार और महत्व।

4.2 पाठ योजना: अवधारणा, प्रकार और महत्व।

4.3 माध्यमिक स्तर की भाषा पाठ्यपुस्तकों के विषयों से उदाहरण लेते हुए विषय-वस्तु का शैक्षणिक विश्लेषण।

4.4 अवधारणाओं की पहचान, अधिगम के परिणामों और दक्षताओं को सूचीबद्ध करना, योजना बनाना और एक समावेशी वातावरण में सीखने के अनुभवों का मूल्यांकन करना।

4.5 भाषाओं के अधिगम के परिणामों और अनुभवात्मक शिक्षण (कला एकीकृत) के आधार पर इकाई योजनाएं और पाठ योजनाएं विकसित करना।

इकाई 5: अधिगम के लिए 21वीं सदी के कौशल

5.1 भाषा अधिगमकर्ता और शिक्षकों के लिए 21वीं सदी के कौशल कैसे सीखें इसकी आवश्यकता और महत्व।

5.2 भाषा शिक्षण एवं अधिगम का मनोवैज्ञानिक, समाजशास्त्रीय और दार्शनिक परिप्रेक्ष्य।

5.3 शिक्षण-अधिगम कौशल को बढ़ाने के लिए पेशेवर के रूप में एक भाषा शिक्षक के गुण।

5.4 भाषा शिक्षक की योग्यताएँ।

5.5 भाषा अधिगम को सुविधाजनक बनाने और इसके लिए सुगम्य वातावरण बनाने में शिक्षक की भूमिका।

सुझावात्मक अभ्यास (कोई तीन)

1. अपने पड़ोस की किसी एक भाषा पर एक रिपोर्ट तैयार करें जिसमें इस बात पर ध्यान दिया जाए कि वह कैसे विकसित हुई है।
2. भाषा के मूल्यों की गणना करें और एक लेख तैयार करें।
3. भाषा विकास के संदर्भ में एनईपी 2020 की सिफारिशों पर एक लेख लिखें।
4. माध्यमिक स्तर पर भाषा की प्रासंगिक संसाधन सामग्री तैयार करें।
5. भाषा शिक्षण के लिए विभिन्न शैक्षणिक गतिविधियों पर एक रिपोर्ट तैयार करें।
6. उच्च शिक्षा संस्थान द्वारा सौंपी गई कोई अन्य परियोजना।

कार्य-सम्पादन का सुझावात्मक साधन

इस पाठ्यक्रम के शिक्षण हेतु व्याख्यान-सह-चर्चा, परियोजना-आधारित विधि, समस्या-समाधान विधि, अनुभवात्मक अधिगम, पूछताछ उपागम, आईसीटी एकीकृत अधिगम, संवादात्मक विधि जैसे- समूह चर्चा, सहकर्मी शिक्षण, कार्यशालाएं, अवलोकन एवंप्रस्तुतियों का प्रयोग किया जा सकता है।

मूल्यांकन का सुझावात्मक साधन

पाठ्यक्रम के परिणामों का आँकलन करने के लिए लिखित परीक्षा, कक्षा प्रस्तुतियाँ, सेमिनार, असाइनमेंट, प्रैक्टिकम, सेशनल और सत्रांत परीक्षाओं का उपयोग किया जाना चाहिए।

सुझावात्मक पठन सामग्री

- स्कूली शिक्षा के लिए राष्ट्रीय पाठ्यचर्या की रूपरेखा, भारत सरकार
- राष्ट्रीय शिक्षा नीति 2020 (NEP 2020)। भारत सरकार। (अंग्रेजी/हिन्दी)।
- राष्ट्रीय शिक्षा नीति (1992 में किए गए संशोधनों के साथ)। मानव संसाधन विकास मंत्रालय: नई दिल्ली.
- बच्चों को निःशुल्क एवं अनिवार्य शिक्षा का अधिकार अधिनियम-2009, भारत का राजपत्र, 2009।

नोट: शिक्षक विद्यार्थियों की आवश्यकता और अधिगम की विषय-वस्तु के अनुसार अन्य किताबें पढ़ने का सुझाव भी दे सकते हैं।

माध्यमिक स्तर पाठ्यक्रम में भाषा की विषय-वस्तु एवं शिक्षणशास्त्र (II)

Course Code: 4.4.9 II **Credit: 2** **Semester: 6**

पाठ्यक्रम के बारे में परिचय

भाषा दर्शन के पूर्व स्तर के ज्ञान पर आधारित, पाठ्यक्रम विद्यार्थियों को माध्यमिक स्तर पर भाषा शिक्षा में शिक्षणशास्त्र और योजना के मूल ज्ञान से परिचित कराएगा। इसे विद्यार्थी-शिक्षक को उपलब्ध शिक्षण-अधिगम सहायता और अन्य संसाधनों के बारे में जागरूक करने के साथ-साथ भाषा अधिगम को सार्थक और आनंददायक बनाने के लिए डिज़ाइन किया गया है।इससे उन्हें ऐसे संसाधनों की प्रभावशीलता और बच्चों के भाषा कौशल पर पड़ने वाले प्रभाव को जानने में भी मदद मिलेगी। यह एनईपी 2020 के आलोक में भाषा एवं साहित्य तथा इसके शैक्षणिक मुद्दों को पढ़ाने के लिए पाठ्यपुस्तक विश्लेषण और योजना पर भी ध्यान केंद्रित करता है। विद्यार्थी-शिक्षकों से विभिन्न अवधारणाओं और प्रक्रियाओं की पहचान करने की अपेक्षा की जाती है। तदनुसार, उनसे कक्षा और ऑनलाइन शिक्षण के लिए अधिगम के परिणामों और अनुभवात्मक शिक्षा के आधार पर पाठ योजनाएं विकसित करने की अपेक्षा की जाती है। इस पाठ्यक्रम के अंत में, प्रशिक्षक विद्यार्थियों को आँकलन और मूल्यांकन की अवधारणाओं को समझने के साथ-साथ भाषा अधिगम के लिए आँकलन और मूल्यांकन के बीच अंतर करने में सक्षम करेगा।

अधिगम के परिणाम

इस पाठ्यक्रम के पूर्ण होने के बाद, विद्यार्थी - शिक्षक :

- एनईपी 2020 के संदर्भ में भाषा शिक्षा से संबंधित शिक्षण-अधिगम सामग्री की व्याख्या कर सकेंगे,
- भाषा शिक्षण में मल्टीमीडिया का उपयोग कर सकेंगे,
- ऑनलाइन संसाधनों के माध्यम से भाषा के बारे में ज्ञान अर्जित कर सकेंगे,
- भाषा के प्रभावी शिक्षण के लिए पाठ योजना विकसित कर सकेंगे,
- भाषा की अवधारणाओं को सीखने के तरीके के अर्थ और आवश्यकता को संक्षेप में बता सकेंगे,
- भाषा अधिगमको सुगम्य बनाने में शिक्षक की भूमिका की पहचान कर सकेंगे।

इकाई 1: शिक्षण अधिगम संसाधन

1.1 शिक्षण अधिगम सहायक सामग्री/सामग्री: कक्षा में भाषा शिक्षण-अधिगम में इसकी अवधारणा, भूमिका और महत्व।

1.2 शिक्षण अधिगम सहायक सामग्री/सामग्री के प्रकार: मुद्रित मीडिया जैसे पाठ्यपुस्तक, शिक्षक मैनुअल/हैंडबुक और अन्य मुद्रित सामग्री, अमुद्रित और डिजिटल मीडिया जैसे रेडियो, टीवी, वेबसाइट, एनिमेशन, ऑडियो, वीडियो, चित्र, अनुरूपता, डिजिटल भंडारण, संवर्धित वास्तविकता (एआर), वर्चुअल रियलिटी (वीआर) और आर्टिफिशियल इंटेलिजेंस (एआई) आधारित डिजिटल संसाधन और ऑफ़लाइन/ऑनलाइन कक्षा शिक्षण सीखने के लिए ओपन एजुकेशनल रिसोर्सेज (ओईआर) (चिंतनशील जर्नल, चार्ट, 2-डी और) 3-डी मॉडल, गेम, खिलौने, फ्लैश कार्ड, वर्कशीट, मल्टीमीडिया आदि)

1.3 परिवेश से शिक्षण सहायक सामग्री/शिक्षण अधिगम सामग्री की पहचान एवं उपयोग।

1.4 भाषा प्रयोगशाला - प्रकार, डिज़ाइन, प्रबंधन और अभ्यास; आभासी प्रयोगशालाएँ, शिक्षण अधिगम किट, विषय क्लब, मेले, प्रदर्शनियाँ, शैक्षिक पार्क, भ्रमण, सामुदायिक संसाधन और संसाधनों का संयोजन।

1.5 दिव्यांगों की आवश्यकताओं के अनुसार शिक्षण अधिगम संसाधनों का अनुकूलन।

इकाई 2: आईसीटी एकीकरण और अनुप्रयोग

2.1 भाषा अधिगम की प्रक्रिया में आईसीटी के उपयोग का क्षेत्र और महत्व।

2.2 कक्षा में आईसीटी का उपयोग: अधिगम को बढ़ाने के लिए कृत्रिम बुद्धिमत्ता, मशीन लर्निंग, स्मार्ट बोर्ड।

2.3 माध्यमिक स्तर पर भाषा के शिक्षण-अधिगम के लिए उपकरण, सॉफ्टवेयर और ऑनलाइन प्लेटफार्म

2.4 तकनीकी शैक्षणिक विषय-वस्तु ज्ञान (टीपीसीके) का उपयोग करके कक्षा के लिए आईसीटी एकीकृत पाठ योजनाएं विकसित करना तथा डिजिटल संसाधनों और मल्टीमीडिया का उपयोग करके और ऑनलाइन शिक्षण करना।

2.5 दिव्यांग विद्यार्थियों के लिए उपकरण, सॉफ्टवेयर, प्लेटफॉर्म और आईसीटी का अनुकूलन।

इकाई 3: आँकलन और मूल्यांकन

3.1 आँकलन एवं मूल्यांकन: भाषाओं के लिए आवश्यकता एवं महत्व।

3.2 अधिगम के सूचकों का विकास, प्रदर्शन-आधारित आँकलन, शिक्षार्थियों के अवलोकन के रिकॉर्ड।

3.3 सतत मूल्यांकन, विद्यालय-आधारित मूल्यांकन, रचनात्मक और योगात्मक मूल्यांकन, औपचारिक, अनौपचारिक और 360° मूल्यांकन के लिए रणनीतियाँ।

3.4 प्रदर्शन मूल्यांकन: समूह गतिविधियों का मूल्यांकन, क्षेत्र अवलोकन, रिकॉर्डिंग और रिपोर्टिंग, मंच बनाना और पोर्टफोलियो प्रबंधन, प्रयोगशाला कौशल, असाइनमेंट, परियोजनाओं और प्रस्तुतियों का मूल्यांकन।

3.5 आँकलन एवं मूल्यांकन के उपकरण और तकनीकें; विशिष्टता तालिका (टीओएस) पर आधारित इकाई परीक्षण और इसका महत्व; प्रश्न पत्र निर्माण के बुनियादी चरण, परीक्षण आइटम के प्रकार और उत्तर कुंजी तैयार करना तथा भाषा अधिगम-शिक्षण में विद्यालय, मूल्यांकन और फीडबैक तंत्र के लिए मानदंड तैयार करना।

इकाई 4: भाषा शिक्षण में अनुसंधान और नवीन कार्य-प्रणाली

4.1 गुणवत्तापूर्ण अधिगम अनुभवों के लिए मनोवैज्ञानिक, समाजशास्त्रीय और दार्शनिक दृष्टिकोण में अपसारी चिंतन और नवाचार।

4.2 भाषा शिक्षण-अधिगम से संबंधित अनुसंधानमें नवीनप्रचलन।

4.3 क्रियात्मक अनुसंधान: अर्थ, महत्व, पद और योजना।

4.4 साक्ष्य-आधारित अभ्यास और चिंतन, भाषा में विद्यालय-आधारित अनुसंधान|

4.5 भाषा प्रयोगशाला और आभासी प्रयोगशाला का उपयोग करके बहुभाषावाद के विशेष संदर्भ में प्रभावी संप्रेषण

इकाई 5: क्रॉस-दिव्यांगता हेतु हिन्दी शिक्षण के उपागम

5.1 विभिन्न दिव्यांगता वाले विद्यार्थियों हेतु हिन्दी अधिगम की उपयोगिता

5.2 दिव्यांग विद्यार्थियों हेतु हिन्दी शिक्षण में आने वाली बाधायें एवं उनका निराकरण

5.3 दिव्यांग विद्यार्थियों को हिन्दी अधिगम हेतु अनुकूलन प्रविधियाँ

5.4 दिव्यांग विद्यार्थियों को हिन्दी अधिगम हेतु उपलब्ध तकनीकी

5.5 दिव्यांग विद्यार्थियों के भाषा अधिगम हेतु राष्ट्रीय शिक्षा नीति 2020 में वर्णित प्रावधान

सुझावात्मक अभ्यास (कोई तीन)

1. भाषा कौशल विकसित करने के लिए एक शिक्षण अधिगम संसाधन तैयार करें।
2. माध्यमिक स्तर पर भाषा पाठ्यपुस्तकों में से किसी एक विषय पर इलेक्ट्रोनिक विषय-वस्तु विकसित करें।
3. साहित्य की एक सूची विकसित करें जो पाठ्यक्रम संवर्धन में सहायक भूमिका निभा सके।
4. राष्ट्रीय शिक्षा नीति 2020 के संदर्भ में भाषा शिक्षण के शैक्षणिक पहलुओं पर एक लेख तैयार करें।

5. भाषा के गद्य, पद्य और व्याकरण पर परिणाम-आधारित पाठ योजनाएँ तैयार करें।
6. उच्च शिक्षा संस्थान द्वारा सौंपी गई कोई अन्य परियोजना।
7. SWAYAM पोर्टल से भाषा पर ऑनलाइन सर्टिफिकेट कोर्स पूरा करें।
8. राष्ट्रीय शिक्षा नीति 2020 के सुझाओं के संबंध में भाषा की शक्ति पर एक लेख लिखें।

कार्य-सम्पादन का सुझावात्मक साधन

इस पाठ्यक्रम के शिक्षण हेतु व्याख्यान-सह-चर्चा, परियोजना-आधारित विधि, समस्या-समाधान विधि, अनुभवात्मक अधिगम, पूछताछ उपागम, आईसीटी एकीकृत अधिगम, संवादात्मक विधि जैसे- समूह चर्चा, सहकर्मी शिक्षण, कार्यशालाएं, अवलोकन एवं प्रस्तुतियों का प्रयोग किया जा सकता है।

मूल्यांकन का सुझावात्मक साधन

पाठ्यक्रम के परिणामों का आँकलन करने के लिए लिखित परीक्षा, कक्षा प्रस्तुतियाँ, सेमिनार, असाइनमेंट, प्रैक्टिकम, सेशनल और सत्रांत परीक्षाओं का उपयोग किया जाना चाहिए।

सुझावात्मक पठन सामग्री

- स्कूली शिक्षा के लिए राष्ट्रीय पाठ्यचर्या की रूपरेखा, भारत सरकार
- राष्ट्रीय शिक्षा नीति 2020 (NEP 2020)। भारत सरकार। (अंग्रेजी/हिन्दी)।
- राष्ट्रीय शिक्षा नीति (1992 में किए गए संशोधनों के साथ)। मानव संसाधन विकास मंत्रालय: नई दिल्ली.
- बच्चों को निःशुल्क एवं अनिवार्य शिक्षा का अधिकार अधिनियम-2009, भारत का राजपत्र, 2009।

नोट: शिक्षक विद्यार्थियों की आवश्यकता और अधिगम की विषय-वस्तु के अनुसार अन्य किताबेंपढ़ने का सुझाव भी दे सकते हैं।

Content cum Pedagogy of Language 1/ Language 2 at Secondary Stage – Course (I)

Course code: 4.4.10 I Credit: 2 Semester: 5

4.4.2.1 About the Course

Sound pedagogical content knowledge and teaching methods are the determinants of a teacher's quality and professionalism. Teacher education programme strongly emphasizes pedagogy, its principles, and the practices of teaching and learning. Research clearly shows that children pick up language very quickly. It is also a well-known fact that students learn and grasp abstract concepts more quickly through their mother tongue or local language. Therefore, for teaching learning any language, maximum exposure of the language needs to be given. This course comprises of three units emphasizing the knowledge of developing the teaching skills of language for the pupil-teacher. The course also focuses on the understanding of nature, scope, importance, and functions of a language. It also deals with the historical/policy perspectives along with the approaches, methods of teaching the language for development of language skills among the children.

Learning Outcomes

After completion of this course, pupil teachers will be able to:

- outline the nature, aims, objectives and historical perspectives of teaching Language at the secondary level,
- discuss methods, approaches, and materials for teaching Language at the secondary stage in the Indian context,
- appraise the Language diversity of the surroundings.
- Examine the pedagogical aspects of teaching language.
- Enumerate the characteristics of innovative practices in the teaching-learning process of the
- Language,

UNIT - I Nature, Scope, and Historical Perspective of Language

1.1 Nature, scope, and importance of the Language; Linguistic features of the Language
1.2 Functions of Language, Language learning and Language acquisition
1.3 Historical perspective of the Language with a special focus on inclusivity in classrooms to learn the Language, evolution of Language with the power dynamics.
1.4 Language as discourse: Language - Identity and Gender, Universality of Languages
1.5 Recommendations/suggestions of various committees, commissions, and policies on teaching-learning the Language in school education.

UNIT 2:Integrative Approaches to Language Learning

2.1 Aims and objectives of teaching the Language (L1 and L2).
2.2 Linkages of the Language with other school subjects.
2.3 Linkages with literature and society.
2.4 Place of the Language in school curriculum at the national and international scenario.
2.5 Values of Language: functionality, fluency, coherence.

UNIT 3: Pedagogical Aspects of Language

3.1 Approaches of teaching Language – inductive deductive, constructivist, experiential learning, art-integrated learning, blended learning, interdisciplinary and multidisciplinary approaches.
3.2 Critical and analytical pedagogical concerns related to teaching Language with special focus on Higher-Order Thinking skills (HOTs).
3.3 Methods of teaching Language: learner-centric and group-centric, lecture-cum-demonstration, grammar-cum-translation method, direct method, audio-lingual method, task-based learning, lexical approach, activity-based discussion, problem-solving, hands-on activity, concept-mapping, collaborative and cooperative learning.
3.4 Capabilities of students in Language skills and reflection.
3.5 Teaching approaches and methods-communicative, task-based language and content based instructions.

UNIT 4: Content Analysis and Planning for Teaching Language

4.1 Pedagogical analysis: Meaning, Concept and Significance
4.2 Concept, types and importance of unit and lesson planning based on learning outcome and competencies, planning and evaluating learning experiences in an inclusive set up.
4.3 Pedagogical analysis of content taking examples from topics of Language textbooks of secondary stage, identification of concepts, listing learning outcomes and competencies, planning, and evaluating learning experiences in an inclusive setup.
4.4 Developing unit plans and lesson plans based on learning outcomes and experiential learning (art integrated) of Languages.
4.5 Need for enrichment of content knowledge in Language

UNIT 5: 21st Century Skills for Learning

5.1 21st century skills for Learning: Meaning, Concept and Types
5.2 Need for and importance of how to learn 21st century skills for learners and teachers of Language. 5.3 Psychological, sociological, and philosophical perspective of teaching and learning Language.
5.4 Professional Qualities of a Language teacher for enhancing teaching learning skills.
5.5 Role of a teacher in facilitating learning and creating dynamic learning environment of Language.

Suggestive Practicum (Any Three)

1. Prepare a report on any one Language in your proximity focusing on how it has evolved.
2. Enumerate values of the Language and prepare a write up.
3. Write an article on the recommendations of NEP 2020 in context to Language development.
4. Prepare relevant resource materials of the Language teaching at the secondary level.
5. Prepare a report on various pedagogical activities to teach the Language.

Suggestive Mode of Transaction

Lecture-cum-discussion, project-based method, problem-solving method, experiential learning, inquiry approach, ICT integrated learning, interactive methods such as group discussions, peer tutoring, workshops, observations, and presentations.

Suggestive Mode of Assessment

Written tests, classroom presentations, seminars, assignments, practicum, sessional, and terminal semester examinations (As per UGC norms).

Suggestive Reading Materials

- Agnihotri, R. K. (1996). *Kaun Bhasha Kaun Boli*. Sandarbh 13, 37-43
- Agnihotri, R. K. (2009). Language and dialect. Learning curve, 13.
- Agnihotri, R.K., & Kumar, S. (2001). Bhasha, boli, laursamaj. Deshkal Publications.
- Agnihotri & Khanna (eds.) (1991). *Second Language Acquisition*. New Delhi : Sage.
- Atwell, N. (1987). In *the Middle: Writing, reading, and learning with the adolescents*. Portsmouth:.Heineman. Bhargava S.N. (2013). *Child Development and Pedagogy,* Pragun Publications
- Bruner, J.C. (2006) in search of Pedagogy Vol . J & N Rout ledge, London.
- Hughes, A. (1989). *Testing for Language Teachers* Cambridge : CUP.
- Kunwar, N. (2015). 'Right writing' in Indian clasroom: learning tobe artificial. Language and language teaching.Vol 4, No. 1, Issue 7.
- National Curriculum Framework for School Education, Government of India
- National Education Policy 2020 (NEP 2020). Government of India. (English/ Hindi).
- National Policy on Education (With Modifications Undertaken In 1992). Ministry of Human Resource Development: New Delhi.
- The Right of Children to Free and Compulsory Education Act-2009, The Gazette of India, 2009.
- Parrott, M. (1993). *Tasks for Language Teachers*. Cambridge : CUP.
- Prabhu, N. S. (1987*). Second Language Pedagogy*. Oxford : OUP.
- Rai, M. (2015). *Writing in Indian schools: the product priority. Language and language learning.*Vol 4, No 1, Issue 7, 32-36
- Richards & Lockhart (1994) *Reflective Teaching in Second Language Classrooms*. Cambridge: CUP
- Sinha, S. (2012). *Reading without meaning: The dilemma of Indian classrooms. Language and Language Teaching*, 1:1. 22- 26.
- Sinha, S. (2009), *Rosenblatt's theory of reading: Exploring literature, Contemporary Education*

*Teachers may also suggest books/readings as per the need of the learners and learning content.

Content cum Pedagogy of Language 1/ Language 2 at Secondary Stage – Course –(II)

Course code: 4.4.10 II **Credit: 2** **Semester: 6**

4.4.2.1 About the Course

Building on the previous level's knowledge of the philosophy of the Language, the course will introduce students to the core knowledge of pedagogy and planning in Language education at the secondary level. It is designed to make pupil-teacher aware of the teaching-learning aids and other resources available as well as created for making Language learning meaningful and joyful. It will also help them to know the effectiveness of such resources and the impact on the children's Language skills. It also focuses on textbook analysis and planning for teaching Language and Literature and its pedagogical issues in the light of NEP 2020. Pupil teachers are expected to identify various concepts and processes. Accordingly, they are expected to develop lesson plans based on learning outcomes and experiential learning for classroom and online teaching. This course comprises three units and a practicum. It focuses on assessment and evaluation. It also focuses on assessment based on learning outcomes, strategies for continuous assessment, school-based assessment, formative and summative assessment including 360◦ assessment. The students will be exposed to research and innovative practices in teacher education. In this course student teachers will learn how to plan different types of activities in online and offline mode. It emphasizes how to integrate and use ICT in the classroom of Language and Literature. Assessment serves the dual purpose of tracking the performance of the learners as well as feedback mechanism for effectiveness of teaching. Today's scenario emphasizes competency-based assessment practices and tests higher order thinking skills and conceptual clarity. Major reforms in assessment are need of the hour to stay vibrant and effective in the process of teaching learning of Language and Literature. Finally, the instructor will enable the students to understand the concepts of assessment and evaluation as well as differentiate between assessment and evaluation for Language learning.

Learning Outcomes

After completion of this course, student teachers will be able to:

- explain teaching-learning materials related to Language education with reference to NEP 2020,
- apply ICT in the teaching-learning process of Language,
- discuss tools and techniques of assessment and evaluation in Language Teaching,
- Explore modes and methods of innovative practices in teaching, assessment of Language to evaluate the impact. ,,
- identify the role of a teacher in facilitating learning of the Language for diverse students with inclusive strategies.

Unit 1: Teaching Learning Resources

1.1 Teaching learning aids/materials: concept, role and importance in classroom teaching learning of Language.

1.2 Interactive collaborative activities, use of games, plays, role plays, language puzzles, work books for additional practice activities.

1.3 Types of teaching learning aids/ materials: print media such as textbook, scrambled books, teachers' manual/ handbook and other print materials., non-print and

digital media such as radio, TV, websites, animations, audios, videos, images, simulations, digital repository, Augmented Reality (AR), Virtual Reality (VR) and Artificial Intelligence (AI) based digital resources and Open Educational Resources (OERs) for offline/ online classroom teaching learning (reflective journals, charts, 2-D and 3-D models, games, toys, flash cards, worksheets, multimedia etc.)
1.4 Identification, creation and use of teaching aids/teaching learning materials from the environment.
1.5 Language laboratory – types, design, management, and practices; Virtual laboratories,local libraries, cultural centres, teaching learning kits, subject clubs, fairs, exhibitions, educational parks, excursions, community resources and pooling of resources.

Unit 2: ICT Integration and Application
2.1 Scope and importance of using ICT in learning process of Languages.
2.2 Use of ICT in the classroom: artificial intelligence, machine learning, smart boards, for enhancing learning.
2.3 Intelligence, machine learning, smart boards for student development.
2.4 Tools, software and platform for teaching learning of Language at secondary stage.
2.5 Developing ICT integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for classroom and online teaching using digital resources and multimedia.

Unit 3: Assessment and Evaluation
3.1 Assessment and evaluation: need for and importance of Languages.
3.2 Development of learning indicators, performance-based assessment, learners' records of observations.
3.3 Strategies for continuous assessment, school-based assessment, formative and summative assessment, formal, informal and 360o assessment.
3.4 Performance assessment: assessment of group activities, field observations, recording and reporting, creating platform and portfolio management, assessment of lab skills, assignments, projects, and presentations.
3.5 Tools and techniques of assessment and evaluation; unit test based on Table of Specification (TOS) and its importance; basic steps of question paper setting, types of test items and preparing answer key and criteria for school, assessment, and feedback mechanism in teaching learning of Languages.

Unit 4: Research and Innovative Practices in Teaching Languages
4.1 Divergent thinking and innovation in psychological, sociological, and philosophical perspectives for quality learning experiences.
4.2 Recent trends in research related to teaching learning of Language.
4.3 Action research: meaning, significance, steps and planning.
4.4 Evidence-based practices and reflection, school-based research in Language.
4.5 Effective communication with special reference to multilingualism using Language lab and virtual lab.
Unit 5: Cross-disability approach to teaching Language

5.1 Concept, meaning, scope and nature of Cross Disability Approach in teaching Language for diverse learners.
5.2 Teaching Language for Students with Diversity, Adaptation and modification of the content, teaching methods and evaluation depending on the diverse needs of students with disabilities.
5.3 Differentiated Instruction, providing students with activities and resources based on individual needs, reading level, level of support.
5.4 Teaching Strategies for students with diversity, Visual aids, Auditory aids, Role play, simplifying language, Use of Technology, use of visual, auditory, and kinaesthetic strategies , real-life examples to clarify new and abstract social studies concepts,
5.5 Language textbook readings by previewing vocabulary, breaking down assignments into small segments, and summarizing key ideas , Use mnemonic devices and other memory strategies such as acronyms, songs, highlighting, keywords, and pictures, Use of explicit instruction principles such as modeling, repetition, drill, extensive review and practice, structure, and feedback, Use of alternative assessment techniques such as shorter tests, tests broken down into shorter segments, allowing clarifying questions, reading tests aloud, interviewing students, and using journals

Suggestive Practicum (Any Three)

1. Prepare a teaching learning resource for developing Language skills.
2. Develop an e-content on any one topic from Language textbooks at secondary stage.
3. Develop a list of Literature which can play instrumental role in curriculum enrichment.
4. Prepare a write-up on pedagogical aspects of Language teaching in reference to NEP 2020.
5. Prepare outcome-based lesson plans on Prose, Poetry, and Grammar of Language.
6. Application of a recent ICT tool in the classroom activities.

Suggestive Mode of Transaction

Lecture-cum-discussion, project-based method, problem-solving method, experiential learning, inquiry approach, ICT integrated learning, interactive methods such as group discussions, peer tutoring, team teaching, workshops, observations and presentations.

Suggestive Mode of Assessment

Written tests, classroom presentations, seminars, assignments, practicum, sessional, terminal semester examinations will be used to assess the course outcomes (As per UGC norms).

Suggestive Reading Materials

- Benkler, Y (2006) *The Wealth of Networks: How social production transforms markets and freedom*. Yale University Press
- Castells, M. (2009)The *Rise of the Network Society, The Information Age: Economy, Society and Culture* Vol. I, II and III. John Wiley & Sons.
- Cuban, L. (2001). Oversold & Underused: Computers in the classroom. Cambridge, MA: Harvard University Press.
- DSERT Karnataka (2012). *Position Paper on ICT Mediation in Education*. DSERT
- Jeswani,K.K. :*Teaching and Appreciation of Art In Schools, .* Atma Ram and Sons, Delhi, 1965.
- Jeswani,K.K. : *Appreciation of Art.* Atma Ram and Sons, Delhi, 1965.

- Jeswani, K.K. :*Art in Education*. Atma Ram and Sons, Delhi. 1966.
- Mishra, S. & Sharma, R.C. (eds) (2005). I*nteractive Multimedia in Education and Training*. London: Idea Group Inc (IGI).
- National Curriculum Framework for School Education, Government of India
- National Education Policy 2020 (NEP 2020). Government of India. (English/ Hindi).
- National Policy on Education (With Modifications Undertaken In 1992). Ministry of Human Resource Development: New Delhi.
- Prasaad, Devi :*Art:The Basis of Education*. National Book Trust, Delhi. 1998.
- Sharma, S. & Gupta, N. (2007). Shaishik Takniki Evam Kaksha Kaksh Prabandhan. Jaipur: Shyam Prakashan.
- The Right of Children to Free and Compulsory Education Act-2009, The Gazette of India, 2009.
- GoI (2012) National Policy on ICTs in School Education, MHRD, Govt. of India.
- Pathak, R. P. (2007): *Shaikshik Prodyogiki Ke Naye Aayaam*. Delhi: S. M. Books.
- Roblyer, M.D. (2007). *Integrating Educational Technology into Teaching*, (Edn 4). Delhi: Pearson Education India.
- Saxena, P. K. (2008). *Shaikshik Prodyogiki Evam Kaksha Prabandh*. Delhi: KK Publications.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

Content cum Pedagogy of Mathematics at Secondary Stage - Course (I)

Course Code: 4.4.11 I **Credit: 2** **Semester: 5**

About the Course

Mathematics is an important school subject and students are expected to master computational and problem-solving skills with the help of mathematical concepts and reasoning during study. Teaching of Mathematics is not only concerned with the computational know-how of the subject but is also concerned with pedagogical content knowledge and communication leading to its meaningful learning amongst students. development of students' ability to apply mathematics in a variety of contexts in order to enhance and encourage their participation in post-school contexts. This course enables the student-teachers to understand the nature of mathematical knowledge and the mathematics curriculum at secondary stage and be able to adapt/modify/simplify the curriculum to meet the needs of students with disabilities. It is the integration or the synthesis of teachers' pedagogical knowledge and their subject matter knowledge that comprises pedagogical content knowledge. Planning of the learning experiences is a must for the quality learning outcome and the better use of resources and this course provides skills to develop the planning of Mathematics teaching learning for classroom with diverse learners. The objectives of teaching Mathematics should not be limited to the development of computational skills but to enable mathematical reasoning to solve problems related to every day experiences. Student teachers will develop skills to formulate classroom objectives that are individualized and differentiated for students as well as plan for development of the values through Mathematics. Student teachers will have a thorough understanding of Mathematics content and their relevant specific pedagogy including differentiated instructions for the effective learning of Mathematics. They would be exposed to various pedagogical approaches, methods, techniques including use of assistive technologies so that they will be able to create a learner centered classroom environment.

Learning Outcomes

After completion of this course, student teachers will be able to:

- appraise the contribution of Indian Knowledge Systems in development of Mathematics and explain the nature of Mathematics as an important subject for human development,
- interpret the recommendation of the various policy documents in reference to Mathematics education,
- State the aims and objectives of teaching Mathematics,
- formulate objectives based on learning outcomes for Mathematics teaching, • select and demonstrate various approaches and methods of teaching Mathematics,
- plan strategies to inculcate values through teaching Mathematics.

UNIT - I

Unit 1: Nature, Scope and Historical Perspective of Mathematics

1.1 Meaning and building blocks of mathematics-undefined terms, definitions, axioms, theorems, patterns, and language of mathematics and its need and importance of Mathematics at secondary stage.

1.2 Development of Mathematics from a historical perspective with recommendations of various committees, commissions and policies related to

Mathematics education at Secondary stage (especially in National Education Policies and National Curriculum Frameworks).
1.3 Values of Mathematics: Cultural, Disciplinary and Utilitarian values, Place of Mathematics in School Curriculum, Correlation of Mathematics with other subjects
1.4 Contribution of the Indian Mathematicians, Vedic Mathematics, Indian knowledge system of mathematics.
1.5 Explore Mathematics as an inter-disciplinary and trans-disciplinary study of dynamic relationship across other subjects. humans and its interconnectedness and application of these concepts in inclusive education settings.

Unit 2: Aims and Objectives of Teaching Mathematics

2.1 Aims and objectives of teaching Mathematics at secondary stage.
2.2 Difference between Aims and Objectives, General and Specific Objectives of teaching Mathematics at secondary stage.
2.3 Developing General and Specific/ Learning Objectives of teaching Mathematics w.r.t. the taxonomy of educational objectives (Bloom's Taxonomy with Anderson's revision)
2.4 Importance of aims and objectives in Learning Outcomes and Competencies of teaching Mathematics at secondary stage.
2.4 Develop an understanding of ideas and operations in number and quantity needed in daily life.

Unit 3: Pedagogical Aspects of Mathematics

3.1 Implication of various approaches of teaching Mathematics – inductive deductive, analytical synthetical, constructivist, blended learning, experiential learning, transdisciplinary, interdisciplinary, and multidisciplinary with focus on adaptable lesson plans that cater to diverse learning needs, including strategies for differentiated instruction, personalized learning plans, and the use of assistive technologies to support students with disabilities

3.2 Learner-centric and participative methods of teaching of Mathematics: lecture cum demonstration, problem-solving, laboratory, project based. adaptable lesson plans that cater to diverse learning needs, including strategies for differentiated instruction, personalized learning plans, and the use of assistive technologies to support students with disabilities

3.3 Utilizing interactive and engaging teaching techniques to promote higher order thinking gained through collaborative and cooperative activities such as simulations, role-plays, debates, and gaming based learning activities, that actively involves all students in the learning process that develop their critical thinking, creativity, and analytical skills.

3.4 Techniques of teaching learning of Mathematics mediated through differentiated instruction, personalized learning plans, and the use of assistive technologies to support students with disabilities including ways to consolidate learning through oral, written, drill work, homework, self-study, group study, supervised study, concept-mapping, learning, art and sports integrated learning through inclusive and mixed ability grouping.

3.5 Use of ICT, adaptive and assistive technologies (e.g. AACs smart boards, handheld computing devices, computer testing), and emerging technologies (e.g., artificial

intelligence machine learning) and their potential to enhance accessibility and engagement for students.

Unit 4: Content Analysis and Planning for Teaching Mathematics

4.1 Analysis for identification of axioms, concepts, rules, formulas, theorems, corollaries; pedagogical content knowledge of arithmetic, algebra, geometry, mensuration, and trigonometry of secondary stage.

4.2 Planning and evaluating learning experiences in an inclusive setup based on learning outcomes and competencies, building a community of mathematicians in classrooms.

4.3 Designing of learning experiences in Mathematics: Yearly plan, Unit plan, Lesson plan, elaborating specific steps of each type of Plan, 5E, ICON model based.

4.4 Strategies for method-based lesson plan for secondary classes - inductive-deductive, analytical- synthetical, lecture cum demonstration, problem-solving, laboratory, and project based

4.5 Plan for learner-centred activities- that promotes active learning, universal instructional design, collaborative learning, inquiry-based learning, case-based instruction, problem-based learning, project-based learning, discovery learning, and just-in-time teaching of Mathematics.

Unit 5: 21st Century Skills for learning Mathematics.

5.1 Develop competency in Mathematics, Generate Mathematization.

5.2 Real-life experience of use of Mathematics in various professional fields.

5.3 Need for and importance of how to learn 21st century skills such as practicing imagination, spatial visualization, mathematical reasoning, problem solving for learners and teachers of Mathematics.

5.4 Qualities of a Mathematics teacher as professional & Role of a teacher in facilitating learning and creating dynamic learning environment of Mathematics.

5.5 Relate Mathematics education to the environment (natural environment, artefacts and people), local as well as global and appreciate the issues at the interface of mathematics, technology and society by enabling a dynamic learning environment.

Suggestive Practicum (Any Three)

1. Prepare a collage/ biographic sketch on the contribution of Indian mathematician.
2. Present a paper on comparison of nature of mathematical knowledge with other school subjects.
3. Formulate objectives based on learning outcomes and experiential learning for any one unit of secondary Mathematics that is differentiated, uses multi-sensory approach, curricular adaptations related to the learning outcomes and use of appropriate assistive technology.
4. Develop strategy to connect any three topics for value inculcation in teaching of Mathematics contextualized to realtime/every day experience of life.
5. Analyze the content of one chapter of Mathematics textbook and develop concept maps at secondary stage with appropriate adaptations and modifications.
6. Select and list approaches and methods for teaching various topics of secondary stage Mathematics uses multi-sensory approach, curricular adaptations and use of appropriate assistive technology including alternative modes of assessment.
7. Any other project assigned by HEI.

Suggestive Mode of Transaction
Demonstration, field-based experience, library visits, classroom discussions, self-study, field observations, assignment preparation, classroom presentations, discussion forums, observation, research report, engaging in dialogue, flipped classroom.

Suggestive Mode of Assessment
Written test, classroom presentation, workshop, assignments, practicum, sessional and terminal semester examination (As per UGC norms).

Suggestive Reading Material

- MESE 001(2003) *Teaching and Learning Mathematics*. IGNOU series
- NCERT Publications: *Pedagogy of Mathematics* (Code-13074)
- Kilpatrick J, Holes C and Skovsmose, O. (Eds.) (2005). *Meaning in mathematics education.*
- National Council of Educational Research and Training (2005). National curriculum framework. New Delhi: NCERT
- NCERT (2006). Position Paper: National Focus Group On Teaching of Mathematics. New Delhi: National Council of Educational Research and Training.
- James, A. (2005). *Teaching of Mathematics*, New Delhi: Neelkamal Publication.
- Kumar, S. (2009). *Teaching of Mathematics*, New Delhi: Anmol Publications.
- Mangal, S.K. (1993). *Teaching of Mathematics*, New Delhi: Arya Book Depot.
- Siddhu, K.S. (1990). *Teaching of Mathematics*, New Delhi: Sterling Publishers.
- Teaching of Mathematics (ES-342), Blocks 1-4. (2000). IGNOU, New Delhi.
- Butler, D., & Wren, D. (1965). *The Teaching of Secondary Mathematics* (4th ed.). London: McGraw Hill Book Company
- Stillwell, J. (1989). *Mathematics and its History* (Undergraduate Texts in Mathematics). New York: Springer-Verlag New York Inc.
- Servas, W., & Varga, T. (UNESCO source book*). Teaching School Mathematics.*
- *Somashekar, G., Viswanathappa, G., & James, A. (2014). Methods of Teaching Mathematics. Hyderabad: Neelkamal Publications Pvt Ltd.*

Content cum Pedagogy of Mathematics at Secondary Stage – Course (II)

Course Code: 4.4.11 II **Credit: 2** **Semester:6**

About the Course

The teaching learning of Mathematics is a complex activity, and many factors determine the success of this activity depends on strategies and considerations to create an inclusive and effective learning environment for students with disabilities. The nature and quality of instructional material, the presentation of content, the pedagogic skills of the teacher, the learning environment have to be adapted, contextualized to real life, and differentiated with focus on multi-sensory approach. The course emphasizes innovative and inclusive resource development based on Universal Design for Learning (UDL) principles as students at this stage are keen in exploring and constructing their own knowledge, so facilitating with resources that accessible for students with disabilities are important for the schoolteacher. Teaching Mathematics requires a thorough understanding of the pedagogical content knowledge and ways to assess and evaluate the learning outcomes. The teacher thus focusses on planning and executing activities in online and offline modes using accessible materials, assistive technology, tactile learning aids, auditory aids, interactive experiential learning, modified curriculum, physical accommodations, personalized instructional strategies, and communication strategies such as AAC. This course also extends the support of technology integration for enhancement of pedagogical planning. The course will be helpful for Student teachers in knowing how the mathematical content knowledge is organized and used in the teaching learning process with support of technological tools.

Learning Outcomes

After completion of the course, student teachers will be able to:

- discuss the nature and functions of various instructional resources,
- explore and utilize the teaching learning resources to support pedagogical experiences of Mathematics,
- organize and manage supportive activities for development of mathematical aptitude of secondary school students,
- plan appropriate experiences for teaching Mathematics,
- explore diverse backgrounds and interests' children bring to set up the inclusive classroom for Mathematics learning,
- elaborate technological tools for teaching and learning of Mathematics,
- integrate technology to judiciously facilitate learning for enhancing inclusive environment.

Unit 1: Teaching Learning Resources

1.1 Teaching learning aids/materials: concept, definition, role, and importance in classroom teaching learning

1.2 Types of teaching learning resources: print media (Mathematics textbook, teachers' manual/ handbook, laboratory manual), Abacus, Cuisenaire Rods, Fractional Discs, Napier Strips, non-print and digital media (charts, 2-D and 3-D models, games, web resources, interactive boards, animations, videos, images, simulations) for offline/ online classroom teaching and learning

1.3 Identification and use of learning resources in Mathematics from the local environment, community resources and pooling of resources.

1.4 Mathematics resource room/ laboratory – equipment and management, concept of virtual laboratories, Organization of Mathematics club, fairs, exhibitions, learner community.

1.5 Creating Different Situations of Learning Engagement: Group Learning, Student centered learning, Small-Group, Cooperative (Peer-Tutoring, Jigsaw, etc.), and Situational/Contextual Learning

Unit 2 :ICT Integration and Applications in Teaching of Mathematics

2.1 Scope and importance of ICT for teaching and learning Mathematics.

2.2 Scope and benefits of using ICT in the teaching-learning process with a primary focus on adaptive software and hardware, multimedia, interactive simulations, resources, AAC devices, virtual labs and simulations (e.g., microscopes, dissection tools, 3-D modelling software, virtual microscope and virtual dissection tools.

2.3 Use of ICT -digital repository, in the teaching learning, assessment and resource management of secondary Mathematics. Augmented Reality (AR), Virtual Reality (VR) and Artificial Intelligence (AI) based digital resources and Open Educational Resources (OERs) for offline/ online classroom teaching learning (reflective journals, charts, 2-D and 3-D models, games, toys, flash cards, worksheets, multimedia, screen readers, tactile graphics, and other assistive technologies to support students.

2.4 Use of tools, software, and platforms such as GeoGebra, Khan Academy along with national teacher's portal, DIKSHA, SWAYAM.

2.5 Developing ICT integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for Mathematics classroom and online teaching – based on needs of students through accessible technology, adaptive tools like key boards, or mouse alternatives, pace/flexibility in lessons with suitable pedagogical approaches – direct instructions, collaborative learning or hands-on learning.

Unit 3: Assessment for Learning in Mathematics

3.1 Designing of learning experiences in Mathematics Assessment of Mathematics learning: Unit test, designing blueprint, item construction, marking schemes, assignments, Projects and portfolios in Mathematics.

3.2 Construction of types of questions in Mathematics: objective, short answer, long answer, considerations for the marking different types of questions in Mathematics.

3.3 Diagnosis of difficulties in learning Mathematical concepts, Remediation of the difficulties, Enrichment programs in Mathematics learning.

3.4 Planning and developing teachers made tests in Mathematics & Planning for continuous assessment of classroom learning in Mathematics.

3.5 Self-reflection on teaching and assessment practices to improve student engagement and interest in the subject matter, error analysis and enrichment measures..

Unit 4: **Research and Innovative Practices in Teaching of Mathematics**

4.1 Divergent thinking for innovation in psychological, sociological, and philosophical perspectives of Mathematics for quality learning experiences, Innovative practices in Mathematics.

4.2 Research on issues of gender, class and culture in Mathematics learning and achievement - expectations, attitudes and stereotypes; access to higher Mathematics; interrogating the notion of 'Achievement Gap'; construction of learners' identity in a Mathematics classroom.

4.3 Recent trends and research related to teaching learning of Mathematics – digital gaming, digital storytelling, using Artificial Intelligence for Mathematics teaching and learning.

4.4 Action research for solving problems of teaching and learning of Mathematics: meaning, significance, steps, and planning.
4.5 Evidence-based practices and reflections and School-based research in Biological Sciences

Unit 5: Cross-disability approach to teaching Mathematics

5.15 Concept, meaning, scope and nature of Cross Disability Approach in teaching Biological that includes all students with disabilities.
5.16 Examine the role of families, community and key partnerships including students with disabilities that promote and advocate for a cross-disability approach to include ALL.
5.17 Identify the key principles and philosophies of the cross-disability approach.
5.18 State the role of special teachers, allied health professionals, key strategies to promote learning of mathematics for students with disabilities education in the context of person-centred learning, scaffolding strategies, UDL, adapted or modified for students with mixed abilities.
5.19 Examine the role of accessibility and universal design making environments, services, and equipment accessible to all students regardless of their abilities to enhance participation in all aspects of life including career planning based on motivation and interest of the learner in biological science, and independent living skills.

Suggestive Practicum (Any Three)

1. Develop learning resources for Mathematics teaching learning for students with psycho-motor-sensory needs.
2. Prepare annual plan for any secondary class
3. Prepare a unit plan from the mathematics textbook at secondary stage.
4. Prepare learning outcomes-based lesson plan using experiential learning for any one topic of Mathematics at secondary stage.
5. Develop a lesson plan on a topic of Mathematics at secondary stage by integrating ICT tools.
6. Write script for developing e-content on any one topic of Mathematics for online teaching.
7. Any other Project assigned by HEI.

Suggestive Mode of Transaction

Lecture cum discussion, group work, ICT enabled methods, Activity based and Art Integrated Demonstration, Field-based experiences, Library Visits, Self-study, Field observations, Assignment preparation. Classroom presentations, Discussion forums, Observation, Flip classroom, Use of digital platform.

Suggestive Mode of Assessment

Written test, classroom presentation, workshop, assignments, practicum, sessional, and terminal semester examination (As per UGC norms).

Suggestive Reading Materials

• Askew, M., Brown, M., Rhodes, V., Johnson, D., & Wiliam, D. (1997). Effective teachers of numeracy. London: School of Education, King's College.

• Attard, C. (2010). Students' experiences of mathematics during the transition from primary to secondary school. In L. Sparrow, B. Kissane & C. Hurst (Eds.), Shaping the future of mathematics education (Proceedings of the 33rd annual conference of the Mathematics Education Research Group of Australasia, pp. 53-60). Fremantle, WA: MERGA.
• Beatty, R. & Geiger, V. (2010). *Technology, communication and collaboration: Rethinking communities of inquiry, learning and practice*. In C. Hoyles, & J.B. Lagrange (Eds.), Mathematics education and technology – Rethinking the terrain (pp. 251-284). New York, NY: Springer.
• Beswick, K., & Muir, T. (2011). *Interactive whiteboards as potential catalysts of pedagogic change in secondary mathematics teaching*.
• Bobis, J. (2009). *Count me in too: The learning framework in number and its impact on teacher knowledge and pedagogy*. Sydney: NSW Department of Education and Training
• Boiler, J. (2013 March). Ability and Mathematics: The mindset revolution that is reshaping education. In Forum (Vol. 55, No. 1, pp. 143-52).
• Butler, D., & Wren, D. (1965). *The Teaching of Secondary Mathematics* (4th ed.). London: McGraw Hill Book Company.
• Davis, R. B. (1984). *Learning Mathematics: The Cognitive Approach to Mathematics Education*. Sydney: Croom Helm Australia Pty Ltd.
• Gafoor, K. A. & Sarabi, M.K. (2015). *Need for Equipping Student Teachers with Language of Mathematics*. UGC Sponsored National Seminar on Pedagogy of Teacher Education- Trends and Challenges, Farook Training College, Kozhikkode. 8th and 19th August 2015 (eric document ED560111).
• Gupta, H. N., & Shankar, V. (Eds.). (1984). *Content cum Methodology of Teaching Mathematics*. New Delhi: NCERT.
• Polya, G. (1957). *How to Solve It*. Garden City, New York: Doubleday.
• Robert B Davis (1984), *Learning Mathematics-The cognitive approach to Mathematics Education,* Sydney, Croom Helm Australia Pty Ltd
• Servas, W., & Varga, T. (UNESCO source book). *Teaching School Mathematics*.

Content cum Pedagogy of Physical Education and Yoga at Secondary Stage – Course (I)

Course Code: 4.4.12 I **Credits: 2** **Semester: 5**

About the Course:

The focus of the National Education Policy (NEP) 2020 is on the holistic development of students. Sound pedagogical content knowledge and teaching methods are the determinants of a teacher's quality and professionalism. When we integrate content and pedagogy for Physical Education (PE) and Yoga at the secondary stage involves designing a curriculum that not only focuses on the physical development of students with multiple disabilities but also emphasizes their mental and emotional well-being. Teaching physical education (PE) and Yoga to students with multiple disabilities requires careful planning, adaptation, and a focus on individualized instruction. Adapted Physical Education (APE) is physical education and Adapted Yoga is Yoga that has been adapted or modified suitable for students with a disability as it is for a person without one. Tailored and age-specific methods are used to prevent exhaustion and injuries for students with multiple disabilities as well as ensure their inclusion into all physical education and Yoga activities. This pedagogical course in Physical Education and Yoga is intended to enhance the pedagogical content knowledge of student teachers through different learning approaches and methods that are adapted and contextualized in terms of activities, games, sports, yoga and rhythms suited to the interests, capabilities, and limitations of students with multiple disabilities. This course comprises of five units and a practicum. The course is devoted to developing an understanding of the nature and scope of Physical Education and Yoga, aims, and objectives of teaching Physical Education and Yoga differentiated and integrated with other disciplines. Critical, creative, and analytical pedagogical concerns in teaching Physical Education and Yoga with special reference to higher order thinking are also placed in unit third. The focus for students with multiple disabilities are on multi-dimensional approach to learning experiences with focus on creativity, collaboration, innovation, technology literacy, fun promoted through experiences that develop cognition, self-awareness and interpersonal skills.

Learning Outcomes

After completion of this course, student teachers will be able to:

- explain nature, scope and importance of Physical Education and Yoga,
- discuss aims and objectives of teaching Physical Education and Yoga at secondary stage, with primary focus on adapting them to the students with multiple disabilities keeping mind the sensory-motor needs of students with Multiple Disabilities to prevent falls/injuries.
- outline linkages between Physical Education and Yoga with other school subjects,
- summarize the historical perspective of Physical Education and Yoga in regard to policies /commissions,
- promote effective communication, collaboration and others skills by aligning with ICT with content and pedagogy, approaches and methods of teaching Physical Education and Yoga to develop higher order thinking skills.

Unit 1: Nature, Scope and Historical Perspective of Physical Education and Yoga

1.1 Nature, scope and historical perspective of Physical Education and Yoga

1.2 Nature in scientific perspective (Fitness, Wellness, Education through Movement and physical Activities), professional and educational scope, and importance of Physical Education and Yoga promote cognition, psycho-motor and social emotional well-being promoting quality of life.

1.3 Historical perspective of Physical Education and Yoga in India, Greece, U.S.A, Japan, Sweden. Denmark, Greece and contributions of Indian (ancient and modern) sports and Yoga and the key personalities of the field.

1.4 Role of Physical Education & Yoga in society and sustainable development in regard to kinesiology, mind-body balance, Yoga, sports, physical education.

1.5 Recommendations/suggestions/Ancient manuscript of Epics, Upanishad and various committees, commissions, and policies till present.

Unit 2 : Aims and Objectives of Teaching Physical Education and Yoga

2.1 Aims and objectives of teaching Physical Education and Yoga since ancient period to modern period in India and other countries with focus on psycho motor, affective and cognitive domain of well-being and to participate safely and meaningfully.

2.2 Learning outcomes and competencies (adapted any five Yoga-asanas, knowledge of basic sequencing of skills (biomechanics) with appropriate modifications and adaptive tools or equipment for any one individual and team Sports Performance (adapted groups sports), that promotes inclusion, growth, and development

2.3 Integrate Physical Education and Yoga with other school subjects and apply a multidisciplinary approach to Physical Education and Yoga in school curriculum. Brief Introduction of Anatomy and physiology, sports Biomechanics, Sports Sociology, Sports Psychology in the field of Physical Education, Physiological concept of physical fitness, warming up, conditioning and fatigue. Concept of EPOC, O2 debt and second wind. with focus on these parameters by evaluating their suitability including essential precautions for students with multiple disabilities.

2.4 Promote the values of discipline, responsibility, inclusivity, respect, adaptability, problem solving skills through physical education and Yoga activities, including participation in competitive and non-competitive sports to promote psychological, emotional, academic well-being and to enhance motor skills, mobility, muscle strengthening and cardiovascular health with appropriate adaptation, equipment and tailored activities.

2.5 Plan and carry out in collaboration with the multidisciplinary team criterion referenced tests with suitable adaptations and modifications of test items for students with multiple disabilities such as Cardio-vascular endurance, muscular strength and endurance, Modified Sit-and-Reach and shoulder stretch Test, Sports Skill Tests, Social Efficiency Tests, behavior rating scale.

Unit 3: Pedagogical Aspects of Physical Education and Yoga

3.1 Implication of various approaches- inductive-deductive, constructivist, experiential learning, interdisciplinary and multidisciplinary approaches in teaching and learning of one student and team games (adapted game) and any five adapted yogic skills for students with multiple disabilities by means of analyzing behaviors of self and others in activity, ways to develop and implement game strategy in a group game, creativity, innovation designing own games or modify the game or Yoga poses to ensure inclusivity for students with multiple disabilities

3.2 Relate pedagogical concerns in aligning student learning outcomes, activities and assessment that promotes foundational and advanced higher order thinking sports-integrated activities for students with multiple disabilities– problem solving activities that

promotes (obstacle course, team challenges, strategy/skill in modified games, choosing types of physical education activities to do, and access to multiple fitness corners in the school to choose from)

3.3 Apply student centred approaches to foster physical abilities, enhancing motor, cognitive, affective well-being promoting social interaction while ensuring safety and inclusivity based on assessment of student, adaptation and modification related to activity and equipment, differentiated with consistent repetitions, and adapt traditional games to be inclusive, with safety considerations for students with multiple disabilities.

3.4 Methods of teaching learning of sports-integrated differentiated activities including modified/adapted sports skill coaching and physical endurance/stamina/balance related to movements, sports education model driven by value of equity, fitness education, adventures education adapted and modified for students with multiple disabilities.

3.5 Teaching sports skills: that are adapted/modified to the learner with multiple disabilities and group centric (mixed ability grouping), lecture cum demonstration that are in accessible format, activity based, imitation, drill and practice, discussion, problem-solving, project based, hands-on activity, discovery, experimentation, field activities (ensuring safety and accessible to all built environment/transport systems), collaborative, cooperative and peer learning.

Unit 4: Content Analysis and Planning for Teaching Physical Education and Yoga

4.1 Pedagogical analysis of content taking examples from topics of: anatomy and physiology, sports Biomechanics, Kinesiology, Sports Sociology, Sports Psychology, Rules and regulation of games and yogic skills of secondary stage with focus on structured approach with clear objectives, diverse teaching methods, and ongoing assessment adapted for students with multiple disabilities.

4.2 Identification of required skills, listing learning outcomes and competencies, planning and evaluating learning experiences in an inclusive setup by analysing/modifying Yoga poses, yoga sequence with focus assistive tools such as wedges, blocks, straps, and bolsters to support students in maintaining pose, safe accessible Physical Education environment with using non-slip mats, ramps, and padded areas.

4.3 Concept, types and importance of unit and lesson planning in teaching fundamental and advance skills of sports and yoga with attention to delivery of content through a mix of direct instruction, visual/tactile aids, demonstration, and hands-on assistance with differentiated instructions for students with multiple disabilities.

4.4 Developing unit plans and lesson plans based on learning outcomes and experiential learning by selecting skills from selected games at secondary stage keeping in mind the psycho-motor-sensory needs of students with multiple disabilities by including adaptive equipment and assistive devices

4.5 Developing individual plans and lesson plans based on gender and group of students with mixed abilities including students with multiple disabilities for skills teaching of selected games at secondary stage with adaptations of the rules of the game and as well as the equipment in consultation with the multi-disciplinary team.

Unit 5: 21st Century skills for Learning of Physical Education and Yoga.

5.1 Need for and importance of how to learn 21st century skills for learners with multiple disabilities and teachers of Physical Education and Yoga by demonstrating ways to enhance critical thinking, creativity, collaboration, communication, digital literacy, and social-emotional learning in an inclusive mixed-group environment.

5.2 Design games and activities that require students to think strategically and solve problems by modifying traditional sports or Yoga to accommodate students with various abilities. Psychological, sociological and philosophical perspective of teaching and learning Physical Education and Yoga that promotes creativity, innovation, sense of community collaboration and communication skills.

5.3 Qualities of a Physical Education and Yoga teacher as professional in enhancing holistic learning that promotes learning that is both relevant and meaningful for students with multiple disabilities

5.4 Role of a teacher in facilitating learning and creating a dynamic learning environment of Physical Education and Yoga that promotes experiential learning, promote self-reflection, emotional reflection with scaffolded exposure to activities in an safe and nurturing environment that motivates students with continuous, tailored, timely feedback, and recognize unique student strengths by including activities that are relevant and realistic to the interests and abilities of the student.

5.5 Responsibilities of a teacher to promote Physical Education and Yoga through a supportive, safe and inclusive learning environment by using modified sports equipment, supportive seating, or assistive devices, modification of exercises or Yoga, close supervision including preparedness for emergencies and collaborate with family and professionals.

Suggestive Practicum (Any Three)

1. Explore and prepare a write up on the contributions of Indian personalities in the development of Physical Education and Yoga.
2. Evaluation through competition any one Individual and team games and any five yogic skills suitably adapted to the psycho-motor-sensory needs of the students with multiple disabilities.
3. Organize intramural competition of any adapted team sports as per schedule once in a week with learner-centred modifications and accommodations for students with multiple disabilities.
4. Make a presentation on the historical development of Physical Education and Yoga.
5. Analyze recommendations of policies/commissions in context of Physical Education and Yoga.
6. Identify and analyze the types of values inculcated through teaching concepts of Physical Education and Yoga for students with multiple disabilities and prepare a report.
7. Prepare write-ups on the teaching of Physical Education and Yoga using interdisciplinary and multidisciplinary approaches as recommended in NEP 2020 by focusing on suitable modifications and accommodations for students with multiple disabilities.
8. Design and develop an adapted low cost assistive device to do a physical education activity or Yoga.
9. Prepare an Inclusive fitness awareness programme for locals, remote area and others to develop interest for games and sports as a cultural heritage

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Suggestive Mode of Transaction

Lecture cum discussion, demonstration, hands-on activities, experiential learning, play field activities, lead up game and toy /sports integrated learning.

Suggestive Mode of Assessment

- Field and lab test, Competitions without comparisons written tests, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms), assess their personal and social responsibility based on five different levels:
    - Level I – Respecting the rights and feelings of others
    - Level II – Participation and effort
    - Level III – Self-direction
    - Level IV – Caring about and helping others
    - Level V – Outside of the gym

Suggestive Reading Material:

- Aditya Publishers. Shekar,K. C. (2003). *Yoga for health*. Delhi: Khel Sahitya Kendra
- Bhardwaj, A. (2003). *New media of educational planning*. NewDelhi:Sarup of Sons.
- Bhatia,& Bhatia, (1959). *The principles and methods of teaching*. New Delhi: Doaba House.
- Brown, F. Y.(2000). *How to use yoga.* Delhi:Sports Publication.
- Gupta, A. P. (2010). *Anatomy and physiology*. Agra: SumitPrakashan.
- Gupta, M. and Gupta, M. C. (1980). *Body and anatomical science*. Delhi: Swaran Printing Press.
- Guyton, A.C. (1996). *Textbook of Medical Physiology*, 9th edition. Philadelphia: W.B. Saunders.
- Greenberg (2018) *Organization and Administration of Physical Education*: Human Kinetics Publisher
- National Council of Educational Research and Training. (April 2022). Mandate documents Guidelines for the development of National Curriculum Frameworks.
- National Education Policy 2020, MoE, Government of India.
- National Steering Committee for National Curriculum Frameworks, (2023). Draft National Curriculum Framework for School Education.
- NCERT, Health and Physical Education. Textbook for IX-XII class New Delhi.
- Reddy (2011) *Administration and Management of Physical Education Sports*, Friends kinetics.
- Hay, J.G. & Reid, J.G. (1982). *The anatomical and mechanical basis of human motion.* Englewood Cliffs, N.J.: Prentice Hall Inc.
- Karpovich, P. V. (n.d.). *Philosophy of muscular activity*. London: W.B. Saunders Co. Lamb.
- Kochar, S.K. (1982). *Methods and techniques of teaching*. New Delhi: Sterling Publishers Pvt. Ltd.
- Shankar,G.(1998). *Holistic approach of Yoga*. New Delhi.
- Shaver, L.J.(1982). *Essentials of exercise physiology*. Delhi: Surjeet Publication.
- Moorthy, A. M. (2014). *Anatomy physiology and health education*.Karaikudi: Madalayam Publications.
- Morehouse, L. E. & Miller, J. (1967). *Physiology of exercise*. St. Louis: The C.V. Mosby Co.
- Pearce, E.(1962). *Anatomy and physiology for nurses*. London: Faber & Faber Ltd.
- Sharma, R. D. (1979). *Health and physical education*, Gupta Prakashan.

- Singh, S. (1979). *Anatomy of physiology and health education*. Ropa
- Rajjan, S. M. (1985). *Yoga strengthening of relexation for sports man*. New Delhi:Allied Publishers.
- Sampath, K.,Pannirselvam, A. &Santhanam, S. (1981). *Introduction to educational technology.* New Delhi: Sterling Publishers Pvt. Ltd.
- Walia, J.S. (1999). *Principles and methods of education*. Jalandhar: Paul Publishers.

Online Links
https://www.myphysicaleducator.com/

Content cum Pedagogy of Physical Education and Yoga at Secondary Stage – Course (II)

Course Code: 4.4.12 II **Credits: 2** **Semester: 6**

About the Course

This course comprises two units and the practicum. The course is devoted to introducing various teaching aids material types and uses for teaching the concepts of Physical Education and Yoga at secondary stage with attention to adaptation and modifications for students with multiples disabilities. The key enablers that promote learning that is student centered and differentiated are given enough knowledge, skills and attributes to student teachers to discuss different types of teaching aids/materials for teaching learning concepts of Physical Education and Yoga. It focuses on learning resources in Physical Education and Yoga to enable student teachers to make use of available learning resources and how to generate new resources for teaching learning the concepts of Physical Education and Yoga. In this course student teachers will learn how to plan different types of activities in online and offline mode. It emphasizes how to integrate and use ICT in classroom of Physical Education and Yoga. Assessment serves the dual purpose of tracking the performance of the learners as well as feedback mechanism for effectiveness of teaching. Today's scenario emphasizes competency-based assessment practices and also tests higher order thinking skills and conceptual clarity. Major reforms in assessment are need of the hour to stay vibrant and effective in the process of teaching learning of Physical Education and Yoga.

Learning Outcomes

- After completion of this course, student teachers will be able to:
- identify, categorize and develop teaching aids/materials/learning resources such as aids/material/kits/learning resources for teaching learning the concepts of topics in Physical Education and Yoga adapted to student with multiple disabilities with varying degrees of motor, sensory and cognitive abilities.
- appraise different types of assessment and strategies for continuous assessment and distinguish between assessment and evaluation,
- relate ICT integration and elaborate its use in classroom / play field situations
- Evaluate the current research and trends in innovative practices Emphasis on inclusive education, ensuring that students with disabilities can participate alongside their peers.

Unit 1: Teaching Learning Resources

1.1 Teaching learning aids/materials: concept, definition, role and importance in classroom/ field / playground teaching learning in the Physical Education and Yoga to engage and motivate students with multiple disabilities to engage. in activities with educational content to enhance motor skills and cognitive development for students.

1.2 Discuss Adapted Physical Education and Adapted Yoga and ways to modifying the traditional physical education/ Yoga curricular experiences to accommodate the individual abilities and limitations of each student – differentiated approach, adapting activities, rules, and adaptive equipment including protective gears, mobility aids to ensure accessibility and participation, adapting activities, rules, and equipment to ensure accessibility and participation.

1.3 Types of teaching learning aids/ materials: adapted/modified equipment, assistive devices, print media such as textbook, teachers' manual/ handbook and other print materials designed for accessibility (e.g., large print, Braille), non-print and digital media such as

radio, TV, websites, animations, audios, videos, images, simulations, digital repository, Augmented Reality (AR), Virtual Reality (VR) and Artificial Intelligence (AI) based digital resources and Open Educational Resources (OERs) for offline/ online classroom teaching learning (reflective journals, charts, 2-D and 3-D models, games, toys, flash cards, worksheets, multimedia, screen readers, tactile graphics, and other assistive technologies to support students with multiple disabilities.)

1.4 Identification and use of learning resources in Physical Education and Yoga from the local environment that are adapted and modified to ensure safety while promoting fun and recreation alongside peers while ensuring they are accessible and inclusive

1.5 Resource room/ laboratory/ library, virtual laboratories, teaching learning kits, Physical Education and Yoga clubs, fairs, exhibitions, educational parks, excursions, community resources and pooling of resources that promotes an inclusive learning environment.

Unit 2:ICT Integration and Applications

2.1 Scope and importance of ICT in Physical Education and Yoga that promotes integrates technology such as video tutorials, wearable technologies, interactive multimedia content to demonstrate exercises and yoga poses.

2.2 Use of ICT such as Artificial Intelligence, machine learning, smart boards in the teaching learning, assessment and resource management. (any one individual and team game and five yogic skills, drill using mobility equipment, that promotes the outcomes of social values and physical attribute through sports and yogic competitions providing opportunities to include students with multiple disabilities.

2.3 Tools, software, and platforms for Physical Education and Yoga such as interactive play panels, movement and skill analysis – balance, coordination, agility, speed, reaction time, psychological parameters, and other physiological abilities (heart rate, pulse)

2.4 Developing ICT integrated lesson plans by selecting sports and yogic skills at secondary stage using Technological Pedagogical Content Knowledge (TPCK) for classroom and online teaching using digital resources, multimedia, and assistive technologies to optimize learning experiences including students with multiple disabilities.

2.5 Developing ICT integrated feedback including student monitored tools like self-monitored wearable devices/interactive apps and teacher mediated feedback that are tailored, timely to students with multiple disabilities.

Unit 3: Assessment and Evaluation.

3.1 Assessment and evaluation: need for and importance of Physical Education and Yoga with emphasizing the inclusive practices to promote learning for students with diverse abilities, including those with multiple disabilities.

3.2 Assessment based on learning outcomes, strategies for continuous assessment, school-based assessment, qualitative assessment; formative and summative assessment, formal, informal and 360◦assessment.

3.3 Assessment that focuses on identifying activity needs of the students with multiple disabilities and the interpretation of measurements obtained through testing such as , Flexibility Test of muscles and joint range of movements, Sports Skill Tests, Sports Skill Tests, Posture Test, Balance, Coordination, Speed tests, Social Efficiency Tests, behavior rating scale and activities and Khelo India Fitness Assessment in Schools - version 2.0.

3.4 Performance assessment tailored and criterion referenced: assessment of group activities, field observations, recording and reporting, creating platform and portfolio management,

assignments, projects, and presentations including focus on adaptive equipment and modified activities.

3.5 Accessible Tools and techniques of assessment and evaluation - unit test based on Table of Specification (TOS) and its importance, basic steps of question paper setting including the alternative formats, diverse types of test items and preparing answer key and inclusive criteria for school, assessment, and feedback mechanism in teaching learning the content of Physical Education and Yoga.

Unit 4: **Research and Innovative practices in Physical education and Yoga**.

4.1 Divergent thinking and innovation in psychological, sociological, and philosophical perspectives for quality learning experiences through Physical Education and yogic science with focus on inclusive practices with mixed ability students, Adaptive Physical education and Yoga practice.

4.2 Recent trends and career perspective in research related to teaching learning of Physical Education and Yoga in regard to Assistive technology, equipment.

4.3 Future trends on intelligent technologies and adaptive fitness enhancement models exploring new technologies, refining instructional strategies, and evaluating the long-term impact of adaptive PE/Yoga programs on students' physical and psychosocial well-being.

4.4 Action research: meaning, significance, steps, and planning in physical education and Yoga promoting inclusion across the school.

4.5 Evidence-based practices and reflection, school-based research in Physical Education and Yoga.

Unit 5 Cross disability approach to teach Physical Education and Yoga

5.1 Concept, meaning, scope and nature of Cross Disability Approach in teaching Physical Education and Yoga.

5.2 Examine the role of families, community and key partnerships including students with disabilities that promote cross-disability approach to include ALL.

5.3 Identify the key principles and philosophies of Cross Disability Approach.

5.4 State the key strategies to promote Physical Education and Yoga adapted or modified for students with mixed abilities.

5.5 Examine the role of accessibility and universal design making environments, services, and equipment accessible to all students regardless of their abilities to enhance participation in all aspects of life including sports, physical education and Yoga for mind body balance.

Suggestive Practicum (Any Three)

1. Prepare one working model/toy/game on the concepts of Physical education or Yoga preferably a tactile or sensory-based model, toy, or game that illustrates a concept
2. Prepare, administer, and analyze scores of a sports achievement test adapted to students with special needs.
3. Conduct Simulated Teaching session for the concepts and skills of Physical Education and Yoga and observation by self, peer, and teacher with adaptions and modifications keeping in mind multiple disabilities.
4. Explore AI based assessment tools and prepare an E-Portfolio of a student of Secondary Stage. Reflect on the effectiveness of these tools in capturing diverse learning achievements.

5. Interpret the concept of Physical Education and Yoga with Psychological, Sociological and Philosophical Perspective with primary focus on students with multiple disabilities.
6. Apply innovative practices in classroom teaching learning of Physical Education and Yoga that are inclusive and adapted to a mixed group of students.
7. Make a presentation on the role of Physical Education and Yoga in sustainable development of society.
8. Conduct action research for Continuous Professional Development (CPD) of Physical Education and Yoga teacher.
9. Any other project assigned by HEI.

Suggestive Mode of Transaction

Lecture cum discussion, demonstration, hands-on activities, experiential learning, art integrated learning, field activities.

Suggestive Mode of Assessment

Field and lab test, Competitions without comparisons, Written tests, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

Suggestive Reading Material:

- Ball, D. W. & Loy, J. W. (1975). *Sport and social order; Contribution to the sociology of spor*t. London: Addison Wesley Publishing Co., Inc.
- Blair, J.& Simpson, R.(1962). *Educational psychology*, New York:McMillan Co.
- Cratty, B. J.(1968). *Psychology and physical activity*. Eaglewood Cliffs. Prentice Hall.
- Garrett, H.E. (1981). *Statistics in psychology and education*. New York: VakilsFeffer and Simon Ltd.
- Harre, D.(1982).*Principles of Sports training*. Berlin: Sporulated
- National Council of Educational Research and Training. (April 2022). Mandate documents Guidelines for the development of National Curriculum Frameworks.
- National Education Policy 2020, MoE, Government of India.
- National Steering Committee for National Curriculum Frameworks, (2023). Draft National Curriculum Framework for School Education.
- NCERT, *Health and Physical Education*. Textbook for IX-XII class New Delhi
- Dick, W. F. (1980).*Sports training principles*.London: Lepus Books.
- Jensen, R. C.& Fisher, A.G. (1979). *Scientific basis of athletic conditioning.* Philadelphia: Lea and Fibiger, 2ndEdn.
- Kamlesh, M.L. (1998). *Psychology in physical education and sport*. New Delhi:Metropolitan Book Co.
- Loy, J. W., Kenyon, G. S. & McPherson, B. D. (1978). Sport and social system. London: Addison, Wesley Publishing Company Inc.
- Loy, J. W., Kenyon, G. S. & McPherson, B. D. (1981).*Sports culture and society*.Philadelphia: Lea &Febiger.
- Matvyew, L.P. (1981). *Fundamental of sports training*. Moscow: Progress Publishers.
- Singh, H.,(1984).*Sports training, general theory* and methods.Patials: NSNIS.
- Uppal, A.K., (1999).Sports Training.New Delhi: Friends Publication..
- Verma, J. P. (2000). *A text book on sports statistics*. Gwalior: Venus Publication.

Content cum Pedagogy of Biological Sciences at Secondary Stage – Course (I)

Course Code: 4.4.13 I **Credit: 2** **Semester: 5**

About the Course

Biology is an inseparable part of human life and is hence learning biological concepts and principles is given ample importance in school curricula. Knowledge of Biological Sciences enables students to recognize and value the diverse living forms, their structure and method of functioning, co-existence and how they harmoniously blend with other natural/physical factors that constitutes the complex environment. Biology is an inseparable part of human life and is hence learning biological concepts and principles is given ample importance in school curricula. Knowledge of Biological Sciences enables students to recognize and value the diverse living forms, their structure and method of functioning, co-existence and how they harmoniously blend with other natural/physical factors that constitutes the complex environment. To enable school students adequately learn these aspects, teachers must design and adopt appropriate teaching-learning methods for teaching Biological Sciences. Biological Sciences offer us the unique facility of seeing, touching and observing materials. This course aims to educate the student teachers to learn the various methods and strategies in teaching Biological Sciences. The course comprises of five units describing the aims and scope of Biological Sciences in Secondary level. A glimpse of the history of Biological Sciences is dealt with ancient and modern Indian and contributions in the study of biological methods and practices in building the modern-day Biological Sciences. Salient features of selected earlier curricular exercises with special reference to biology at secondary level are also emphasized.

Learning Outcomes

After completion of this course, Student teachers will be able to:

- explain nature, scope, and importance of Biological Sciences, summarize the historical/policies perspective of Biological Sciences,
- illustrate aims and objectives of teaching Biological Sciences for sustainable development of society, identify the values and importance of Biological Sciences and alternative knowledge systems,
- examine pedagogical concerns of Biological Sciences and apply proper pedagogy in teaching learning the concepts of Biological Sciences,
- Plan and categorize approaches and methods of teaching learning Biological Sciences, apply appropriate method/s in teaching concepts of Biological Sciences,
- Plan and enable a dynamic student centred learning that promotes collaboration, creativity, innovation, communication among learners with diverse learning needs.

UNIT 1: Nature, Scope and Historical Perspective of Biological Sciences

1.1 Nature, scope, and importance of Biological Sciences.
1.2 Historical perspective of Biological Sciences.
1.3 Contributions of Indian (ancient and modern) and other scientists.
1.4 Biological science for sustaining self, society, environment, and world.
1.5 Recommendations/suggestions of various committees, commissions, and policies in reference to Biological Sciences.

UNIT 2: Aims and Objectives of Biological Sciences

2.1 Aims and objectives of teaching biological science as a component of multidisciplinary science.
2.2 Learning outcomes and competencies of teaching Biological Sciences at secondary stage.
2.3 Linkages of Biological Sciences with other school subjects and place of the Biological Sciences in school curriculum.
2.4 Values of Biological Sciences; ethical, environmental and sustainability concerns.
2.5 Explore the values of teaching biological science.

UNIT 3: Pedagogical Aspects of Biological Sciences

3.1 Implication of various approaches – inductive deductive, constructivist, experiential, art integrated, blended learning, interdisciplinary and multidisciplinary approaches, stimulating the spirit of investigation and enquiry, adapting lesson plans/approaches that would address the diverse learning needs with a comprehensive approach by the way of strategies; student centered assistive devices, ensuring accessibility and engagement of students with multiple disability.
3.2 Analytical pedagogical concerns in teaching of physical sciences for higher order thinking skills such as critical, creative, communication, decision making, reflective.
3.3 Methods of teaching learning Biological Sciences: learner-centric and group-centric, lecture cum demonstration, activity based, discussion, problem-solving, laboratory and hands on activity based, sports- integrated, project based, inquiry, discovery, experimentation, concept-mapping, collaborative and cooperative learning;
3.4 STEM and STEAM concept using the necessary interactive aids such as field trips, laboratory experiments, visual aids, 3D models, Vernier Software & Technology, LabQuest linked to embosser, videos, and hands-on activities to engage multiple senses including ICT enabled technology such as tactile/embossed miniature models, speech-to-text software, adaptive keyboards, braille reader, and touch screens to aid learning.
3.5 State the new approaches to provide accessible labs and effective instruction – universal instructional design, teaching practices, flexible curriculum with focus on essential requirements, communication and content delivery, selection of accessible, multi-sensory enabled lab equipment.

UNIT 4: Content Analysis and Planning for Teaching Biological Sciences

4.1 Need, importance and process of content analysis and types of content analysis to identify essential requirements of the subject matter for inclusion of diverse student needs.
4.2 Pedagogical analysis of content taking content/examples from topics of Biological Sciences textbooks at secondary stage, identification of concepts, listing learning outcomes and competencies, planning, and evaluating learning experiences in an inclusive setup.
4.3 Concept, types and importance of unit and lesson planning along with the necessary adaptation and modification to enhance the learning of children with multiple disability
4.4 Developing unit plans and lesson plans based on learning outcomes and experiential-multi-sensory learning by selecting topics with suitable curricular adaptation from textbooks of Biological Sciences and establish curricular linkages between Biological Sciences and other subjects,

4.5 Plan for learner-centered activities- that promotes active learning, universal instructional design, collaborative learning, inquiry-based learning, case-based instruction, problem-based learning, project-based learning, discovery learning, and just-in-time teaching.

UNIT 5: 21st Century Skills for Learning

5.6 Need for and importance of how to learn 21st century skills for learners and teachers of Biological Sciences.

5.7 Psychological, sociological, and philosophical perspective of teaching and learning Biological Sciences that promotes – collaboration, innovation, communication, information and media literacy.

5.8 Qualities of a Biological Sciences teacher as professional for enhancing teaching learning that promote inclusive practices, UDL, accommodation and universal design in physical accessibility of Science lab.

5.9 Role of a teacher in facilitating learning Biological Sciences requirements more creatively and inclusively by identifying the essential requirements of the curriculum.

5.10 Relate science education to environment (natural environment, artifacts and people), local as well as global and appreciate the issues at the interface of science, technology and society by enabling a dynamic learning environment of Biological Science.

Suggestive Mode of Transaction

Lecture cum discussion, demonstration, hands-on activities, experiential learning, inquiry, Group work, Presentations, multimedia.

Suggestive Mode of Assessment

Written tests, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

Suggestive Reading Material

- National Council of Educational Research and Training. (April 2022). Mandate
- documents Guidelines for the development of National Curriculum Frameworks.
- National Education Policy 2020, MoE, Government of India.
- National Steering Committee for National Curriculum Frameworks, (2023). Draft
- National Curriculum Framework for School Education.
- NCERT, Textbooks of Biological Sciences at Secondary Stage
- Pedagogy of Physical Science Textbook for B.Ed. Part I. National Council of Education Research and Training, New Delhi: Publication Division, NCERT
- Venugopal, K and Nagarajan, K. (2013). Teaching of Biological Science. Chennai: Ram Publications.

Online Links:

https://www.accessiblecampus.ca/wp-content/uploads/2017/01/Creating-an-Accessible-Science-Laboratory-Environment.pdf retrieved on 30.06.24

Content cum Pedagogy of Biological Sciences at Secondary Stage – Course (II)

Course Code: 4.4.13 II Credit: 2 Semester: 6

bout the Course

A wide array of teaching-learning resources is available to modern day teachers. This course comprises of three units which aims to introduce various resources and discuss their appropriate utilization in teaching. In this course, student teachers are introduced to different units and lesson plan based on learning outcomes and experiential learning. Requisite skills such as the use of print media, non-print media and digital resources are discussed in the course. This course also focuses on familiarizing student teachers in ICT integration in teaching and preparing ICT based lesson plans for online teaching using suitable tools. This course aims to prepare student teachers for teaching Biological Sciences using different dimensions pedagogical and technological aspects. Assessment and Evaluation are an inseparable component of teaching learning of Biological Sciences. In this course, student teachers will be exposed to various assessment practices that can be followed in assessment of Biological Sciences. The course also deals with planning action research in classroom situations. It focuses on Psychological, Sociological and Philosophical Perspective of Learning of Biological Sciences. The importance of planning science learning and teaching in secondary schools.

Learning Outcomes

After completion of this course, Student teachers will be able to:

- categorize different teaching learning resources and plan their appropriate usage in teaching learning of concepts of Biological Science,
- develop low cost teaching learning materials using easily available/local materials,
- analyze the content of Biological Science textbooks at secondary stage, develop unit plans and lesson plans on different chapters in biology (Grades IX to XII).
- review various methods and strategies for teaching Biological Sciences,
- develop learning outcome-based lesson plan to promote experiential learning and higher order thinking skills.

UNIT 1: Teaching Learning Resources

1.1 Teaching learning aids/materials: concept, definition, role, and importance in classroom teaching learning the Biological Sciences.

1.2 Types of teaching learning aids/ materials: print media such as textbook, teachers manual/ handbook, laboratory manual and other print materials including large print and braille, non-print and digital media such as museum, aquarium, terrarium, games, toys, radio, TV, websites, animations, audios, videos, images, simulations; Biological Sciences mobile apps, digital repository, Augmented Reality (AR), Virtual Reality (VR) and Artificial Intelligence (AI) based digital resources and Open Educational Resources (OERs) for offline/ online classroom teaching learning (reflective journals, charts, 2-d and 3-d models, games, cards, worksheets, multimedia etc.

1.3 Identification and use of learning resources in Biological Sciences from the local environment - using nature as a laboratory; biology laboratory - designing, management and safe practices; virtual laboratories and museums and to provide necessary support for making the resources and accessible for students with disabilities .
1.4 Resource room/ laboratory/ library, virtual laboratories, teaching learning kits, Biological Sciences clubs, fairs, exhibitions, science parks, zoo, botanical gardens, excursions community resource, pooling of resources.
1.5 Organise exposure visits to facilitate science education to explore nature (natural environment, artifacts and people), local as well as global, science centers and ensure the students with disabilities are able to access them both in terms of physical but also information that meets their multi-sensory needs.

UNIT 2: ICT Integration and Application
3.1 Scope and benefits of using ICT in teaching learning process; Artificial Intelligence, machine learning, smart boards and providing the required assistive devices for children with multiple disability.
3.2 Specific access features, suitability or customization for the students with disabilities and limitations of using matching ICT to the learner given the diversity in learners with primary focus on adaptive software and hardware, multimedia, interactive simulations, resources, AAC devices, virtual labs and simulations, 3 D modelling software, virtual microscope and virtual dissection tools.
3.3 Open Educational Resources in Biological Sciences – BIOIDAC, MOOC, National Teachers Portal, DIKSHA, SWAYAM.
3.4 Developing ICT integrated lesson plans by taking topics of physical sciences at secondary stage using Technological Pedagogical Content Knowledge (TPCK) for classroom and online teaching – keeping in mind the multi-sensory needs of the students.
3.5. Device content and provide to student's materials in an accessible format that allows users with disabilities to adapt the information to a format which is suitable for them

UNIT 3: Assessment and Evaluation
2.1 Assessment and evaluation: concept, need for and importance of teaching learning the Biological Sciences.
2.2 Assessment based on learning outcomes, strategies for continuous assessment, school-based assessment, qualitative assessment; formative and summative assessment, formal, informal, and 360-degree assessment by providing tailored, student centered, timely feedback.
2.3 Performance assessment: assessment of group activities, field observations, recording and reporting, creating platform and portfolio management, assessment of lab skills,
2.4 Assignments, projects, and presentations based on the concepts of Biological Sciences.
2.5 Unit test based on Table of Specification (TOS) and its importance; basic steps of question paper setting of Biological Sciences, types of test items and preparing answer key and criteria for school, assessment, and feedback mechanism in teaching learning the concepts of physical science at secondary stage.

Unit 4: Research and Innovative Practices in Biological Sciences

4.1 Divergent thinking and innovation in psychological, sociological, and philosophical perspectives for quality learning experiences, creating a sensitive and conducive classroom environment for learning and practicing life skills.
4.2 Recent trends in research related to teaching learning of Biological Sciences.

4.3 Action research: meaning, significance, steps, and planning.
4.4 Evidence-based practices and reflection,
4.5 School-based research in Biological Sciences.

UNIT 5:Cross disability approaches for teaching Biological Science

5.20 Concept, meaning, scope and nature of Cross Disability Approach in teaching Biological that includes all students with disabilities.
5.21 Examine the role of families, community and key partnerships including students with disabilities that promote and advocate for cross-disability approach to include ALL.
5.22 Identify the key principles and philosophies of Cross Disability Approach.
5.23 State the role of special teachers, allied health professionals, key strategies to promote Vocational education in the context of person centered learning, scaffolding strategies, UDL, adapted or modified for students with mixed abilities.
5.24 Examine the role of accessibility and universal design making environments, services, and equipment accessible to all students regardless of their abilities to enhance participation in all aspects of life including career planning based on motivation and interest of the learner in biological science, and independent living skills.

Suggestive Mode of Transaction

Lecture cum discussion, demonstration, hands-on activities, experiential learning, inquiry, Group work, Presentations, multimedia.

Suggestive Mode of Assessment

Written tests, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

Suggested Reading Materials:

- R.M. Felder and R. Brent, "Active Learning: An Introduction." A short tutorial that defines active learning, gives examples of activities and formats, and answers frequently-asked questions about the method. You can also take a multiple-choice quiz on the tutorial contents that provides feedback on incorrect responses.
- R. Brent, M.J. Prince, and R.M. Felder, "Promoting and Managing Student-Student Interactions in Online STEM Classes: Approaches and Recommendations." *International Journal of Engineering Education, 37*(3), 797-813 (2021). Strategies for engaging students in group work in synchronous and asynchronous online courses, including discussion boards and team assignments and projects.
- M.J. Prince, R.M. Felder, and R. Brent, "Active Student Engagement in Online STEM Classes: Approaches and Recommendations." *Advances in Engineering Education, 8*(4), December 2020. Strategies for actively engaging students in synchronous and asynchronous online instruction, and research supporting the effectiveness of the strategies.
- L. Bullard, R.M. Felder, and D. Raubenheimer, "Effects of Active Learning on Student Performance and Retention." *2008 ASEE Annual Conference Proceedings*, ASEE, June 2008. Exam grades and curricular retention of students taught actively in the

introductory chemical engineering course were compared with grades and retention of students taught with traditional lecturing.

Web portals

https://engr.ncsu.edu/stem-resources/legacy-site/education-related-papers/active-learning-introduction/
https://www.youtube.com/watch?v=0p7gNXGvcww

Content cum Pedagogy of Physical Sciences at Secondary Stage – Course (I)

Course Code: 4.4.14 I **Credits:2** **Semester: 5**

About the Course

The focus of the National Education Policy (NEP) 2020 is on the holistic development of students. To achieve the objectives, interventions from quality teachers are vital. Sound pedagogical content knowledge and teaching methods are the determinants of a teacher's qualityand professionalism. Teacher education program strongly emphasizes pedagogy, itsprinciples, and the practices of teaching and learning. Pedagogical knowledge and approaches refer to the specialized knowledge of the teacher for creating an active, child-centered, and inclusive teaching-learning environment for the students and need to be developed among the student teachers. This pedagogical course in Physical Sciences is intended to enhance the pedagogical content knowledge of student teachers through different learning approaches and methods to ensure students with disabilities are included in the curricular transactions that are adapted or modified to their needs. The course is devoted to developing an understanding of the nature and scope of Physical Sciences and the aims and objectives of teaching Physical Sciences and its linkages with other disciplines. Historical/policy perspectivesof Physical Sciences are discussed in unit. Physical Sciences is conceptualized in very broad terms by relating it to technology, society, humans, and sustainable development. It also focuses on the place of Physical Sciences in school curriculum including an emphasis on how to build inclusive classrooms. It focuses on pedagogical concerns of Physical Sciences. Critical, creative, and analytical pedagogical concerns in teaching Physical Sciences with special reference to higher-order thinking are also placed in unit third.

Learning Outcomes

After completion of this course, student teachers will be able to:

- explain nature, scope and importance of Physical Sciences and summarize the historical/policies perspective of Physical Sciences
- illustrate aims and objectives of teaching Physical Sciences for sustainable developmentof society and outline linkages between Physical Sciences and other subjects,
- examine pedagogical concerns of Physical Sciences to apply appropriate pedagogy in teaching learning the concepts of Physical Sciences.
- categorize approaches and methods of teaching learning Physical Sciences,
- enumerate the characteristics of innovative practices, flexibility, in teaching-learning process of Physical Science with a focus on inquiry-based learning, critical thinking, communication, teamwork, and creativity, accessibility and engagement for all learners

Unit 1: Nature, Scope and Historical Perspective of Physical Sciences

1.1 Nature, scope, and importance of Physical Sciences.

1.2 Historical perspective of Physical Sciences and contributions of Indian (ancient and modern) and other scientists.

1.3 Significance of Inquiry, Observation and Experiments in Physical Science Interdisciplinary Linkages and its Societal Concerns.

1.4 Physical Sciences, society and human and sustainable development.
1.5 Recommendations/suggestions of various committees, commissions, and policies inreference to Physical Sciences.

Unit 2: Aims and Objectives of Physical Sciences

2.1 Aims and objectives of teaching Physical Sciences
2.2 Explore the impact of Physical science on society and appraise ways align self with the environment.
2.3 Linkages of Physical sciences with other subjects and its place in school curriculum.
2.4 To evaluate ways of the 'scientific methods' and to develop a scientific attitude and temper to think analytically, critically, creatively and to communicate scientific ideas, arguments, and practical experiences accurately in many and alternative ways.
2.5 Values of Science and Physical science in particular – utilitarian, cultural, aesthetic, moral, psychological, vocational values, and interconnected.

Unit 3: Pedagogical Aspects of Physical Sciences

3.1 Implication of various approaches - inductive deductive, constructivist, experiential learning, art integrated learning, sports integrated learning, blended learning, interdisciplinary and multidisciplinary approaches in Physical Sciences.
3.2 Analytical pedagogical concerns in teaching of Physical Sciences for higher order thinking skills such as critical, creative, communication, decision making, reflective.
3.3 Methods of teaching learning Physical Sciences: learner-centric and group-centric, lecture cum demonstration, activity based, discussion, problem-solving, laboratory, stem and steam, project based, scientific inquiry, hands on activity, discovery, experimentation,concept-mapping, collaborative and cooperative learning.
3.4 Examine the various disciplines of Physical Science and establish linkages with other disciplines,
3.5 Discuss the issues related to pedagogical practices in social sciences for diverse learners with various access needs.

Unit 4: Content Analysis and Planning for Teaching Physical Sciences

2.1 Pedagogical analysis of content taking examples from topics of physical sciences textbooks at secondary stage.
2.2 Identification of concepts, listing learning outcomes and competencies.
2.3 Planning, and evaluating learning experiences in an inclusive setup.
2.4 Concept, types and importance of unit and lesson planning.
2.5 Developing unit plans and lesson plans based on learning outcomes and experiential learning by selecting topics from textbooks of physical sciences at secondary stage**.**

Unit 5: 21st Century Skills for Learning Physical Science

5.1 Need for and importance of how to learn 21st century skills for learners and teachers of Social Sciences emphasizing inclusivity for students with diverse abilities.
5.2 Psychological, sociological, and philosophical perspective of teaching and learning Social Sciences with focus on developing higher order thinking in students that promotes problem solving, self-direction, creativity, collaboration, innovation, communication in a mixed ability inclusive setting.
5.3 Qualities and attributes of a Social Sciences teacher as professional for enhancing teaching learning skills in fostering inclusive learning environments that cater to diverse learning styles and abilities.

5.4 Role of a teacher in facilitating learning and creating dynamic student-centered learning environment of physical Science education.
5.5 Active learning by learners to develop and practice the knowledge, beliefs, and behaviors that are contextualized to their real environment.

Practicum (Any Three)

- Explore contributions of Indian scientists in the development of Physical Sciences and make presentations on historical development of Physical Sciences.
- Analyze recommendations of policies/commissions in context of Physical Sciences.
- Develop concept maps on different concepts of Physical Sciences.
- Identify and integrate values in Physical Sciences concepts.
- Demonstrate different pedagogical approaches and strategies for transacting concepts of Physical Sciences.
- Develop e-content for the concepts of Physical Sciences at Secondary Stage.
- Analyze the content of textbooks of Physical Sciences (Classes 9-12).
- Prepare write-ups on the teaching of science using interdisciplinary and multidisciplinary approaches as recommended in NEP 2020.
- Any other project assigned by HEI.

Suggestive Mode of Transaction

Lecture cum discussion/demonstration, hands-on activities, experiential learning, art and environment integrated learning, sports integrated learning.

Suggestive Mode of Assessment

Written tests, classroom presentations, workshops, seminars, assignments, practicums, sessionaland terminal semester examinations (as per UGC norms).

Suggestive Reading Material

- National Council of Educational Research and Training. (April 2022). Mandate documents Guidelines for the development of National Curriculum Frameworks.
- National Education Policy 2020, MoE, Government of India.
- National Steering Committee for National Curriculum Frameworks, (2023). Draft National Curriculum Framework for School Education.
- NCERT, Textbooks of Physical Sciences at Secondary Stage.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

Content cum Pedagogy of Physical Sciences at Secondary Stage - Course (II)

Course Code: 4.4.14 II **Credits:2** **Semester: 6**

About the Course

This course comprises three units and the practicum. The course is devoted to introducing various teaching aids material types and uses for teaching the concepts of physical sciences at secondary stage. Enough space is provided to discuss different types of teaching aids/materials for teaching learning concepts of physical sciences. It focuses on learning resources in physical sciences to enable student teachers to make use of available learning resources and how to generate new resources for teaching learning the concepts of physical sciences. It also focuses ontextbook analysis and planning for teaching physical sciences. and its pedagogical issues in the light of NEP 2020. Student teachers are expected to identify various concepts and processes, listlearning and outcomes, find out about various activities and experiments. Accordingly, they areexpected to develop lesson plan based on learning outcomes and experiential learning for classroom and online teaching. It focuses on Psychological, Sociological and Philosophical Perspective of Activity Oriented Classrooms in Physical Sciences that are adapted and modified for students with disabilities. In this course student teachers will learn how to plan different types of activities in online and offline mode. It emphasizes how to integrate and use ICT in the classroom of Physical Sciences. Assessment serves the dual purpose of tracking the performance of the learners as well as feedback mechanism for effectiveness of teaching. Today's scenario emphasizes competency-based assessment practices and tests higher order thinking skills and conceptual clarity. Students are also exposed to action research to investigate ways of developing a more interactive and engaging pedagogical approach, thar are differentiated to the diverse learners, authentic, inquiry-based learning and explore students' thinking more explicit through discussions and other social interactions.

Learning Outcomes

After completion of this course, student teachers will be able to:

- identify teaching learning aids / materials and illustrate their importance in teachinglearning the concepts of Physical Sciences,
- categorize teaching aids/materials/learning resources, develop teaching learning aids/material/kits/learning resources for teaching learning theconcepts of Physical Sciences with focus on tools, materials and modes suitable for students with disabilities to access and explore-visual, aural, tactile, kinesthetic.
- appraise various assessment strategies for continuous assessment in reference toteaching of Physical Sciences and use criterion referenced tools and techniques for assessment and evaluation in teaching learning of Physical Sciences,
- relate ICT integration along with assistive technology suitable for learners with muldisabilities and elaborate its use in classroom situations,
- understand cross disability approach to recognise the diversity within the disability community to promote inclusion, accessibility, and equality for all people with disabilities.

UNIT-I: Teaching Learning Resources

1.1 Teaching learning aids/materials: concept, definition, role and importance in classroom

teaching learning the physical sciences.

1.2 Types of teaching learning aids/ materials: print media such as textbook, teachers' manual/ handbook, laboratory manual and other print materials, non-print and digital media such as radio, TV, websites, animations, audios, videos, images, simulations, digital repository, Augmented Reality (AR), Virtual Reality (VR).

1.3 Artificial Intelligence (AI) based digital resources and Open Educational Resources (OERs) for offline/ online classroom teaching learning reflective journals, charts, 2-D and 3-D models, games, cards, worksheets, multimedia.

1.4 Identification and use of learning resources in physical sciences from the local environment.

1.5 Resource room/ laboratory/library, virtual laboratories, teaching learning kits, physical sciences clubs, fairs, exhibitions, educational parks, excursions, community resources and pooling of resources.

UNIT-II: Content Analysis and Planning for Teaching Physical Sciences

2.1 Pedagogical analysis of content taking examples from topics of physical sciences textbooks at secondary stage.

2.2 Identification of concepts, listing learning outcomes and competencies.

2.3 Planning, and evaluating learning experiences in an inclusive setup.

2.4 Concept, types and importance of unit and lesson planning.

2.5 Developing unit plans and lesson plans based on learning outcomes and experiential learning by selecting topics from textbooks of physical sciences at secondary stage.

UNIT-III: ICT Integration and Applications

3.1 Scope and importance of ICT in physical sciences.

3.2 Use of ICT such as Artificial Intelligence, machine learning, smart boards in the teaching learning, assessment, and resource management.

3.3 Tools, software, and platforms for teaching learning of physical sciences at secondary stage.

3.4 Developing ICT integrated lesson plans by taking topics of physical sciences at secondary stage using Technological Pedagogical Content Knowledge (TPCK) for classroom and online teaching.

UNIT-IV: Assessment and Evaluation

4.1 Assessment and evaluation: need for and importance of Physical Sciences.

4.2 Assessment based on learning outcomes, strategies for continuous assessment, school-based assessment, qualitative assessment; formative and summative assessment, formal, informal and 360^{o} assessment.

4.3 Performance assessment: assessment of group activities, field observations, recording and reporting, creating platform and portfolio management, assessment of laboratory skills, assignments, projects, and presentations.

4.4 Tools and techniques of assessment and evaluation - unit test based on Table of Specification (ToS) and its importance, basic steps of question paper setting, types of test items and preparing answer key.

4.5 Criteria for school, assessment, and feedback mechanism in teaching learning the content of Physical Sciences.

UNIT-V: Research and Innovative Practices in Physical Sciences

5.1 Divergent thinking and innovation in psychological, sociological, and philosophical perspectives for quality learning experiences.

5.2 Recent trends in research related to teaching learning of Physical Sciences.

5.3 Action research: meaning, significance, steps and planning.

5.4 Evidence-based practices and reflection.
5.5 School-based research in Physical Sciences.

Suggestive Practicum (Any Three)

1. Develop e-content for the concepts of Physical Sciences at Secondary Stage.
2. Analyze the content of textbooks of Physical Sciences (Classes 9-12).
3. Identify the learning resources for transiting the concepts of Physical Sciences.
4. Develop teaching aids/teaching materials for teaching concepts of Physical Sciences at secondary stage.
5. Develop learning outcomes for the concepts of Physical sciences at the secondary stage.
6. Prepare learning outcomes and experiential learning-based lesson plan for the concepts of Physical Sciences.
7. Develop a project on the concepts of Physical Sciences using interdisciplinary and multidisciplinary approaches as recommended in NEP 2020.
8. Any other project assigned by HEI.

Suggestive Mode of Transaction

Lecture cum discussion/demonstration, hands-on activities, demonstration, discovery approach, project approach, inquiry approach, experimentation, problem-solving, concept mapping, experiential learning and ICT integrated approach.

Suggestive Mode of Assessment

Written test, classroom presentations, workshops, seminars, assignments, practicum, sessional and terminal semester examinations (as per UGC norms).

Suggestive Reading Materials

- Draft National Curriculum Framework for School Education,
- Laboratory Manual of Science (Grade 9 & 10), NCERT.
- National Education Policy 2020, MoE, Government of India.
- National Steering Committee for National Curriculum Frameworks, (2023).
- NCERT Laboratory Manuals.
- NCERT Textbooks, Chemistry for Class XI and XII.
- NCERT Textbooks, Physics for Class XI and XII.
- NCERT Textbooks, Science for Class IX and XI.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

Pedagogy of Social Sciences at Secondary Stage – Course (I)

Code: 4.4.15 I **Credit: 2** **Semester: 5**

About the Course

The focus of the National Education Policy (NEP) 2020 is on the holistic development of students. To achieve the objectives, interventions from quality teachers are vital. Teacher education programme strongly emphasizes pedagogy, its principles, and the practices of teachingand learning. Sound pedagogical content knowledge and teaching methods are the determinants of a teacher's quality and professionalism. Pedagogical knowledge and approaches refer to the specialized knowledge of the teacher for creating an active, child-centered, and inclusive teaching-learning environment for the students and need to be developed among the student teachers. This pedagogical course in Social Sciences is intended to enhance the pedagogical content knowledge of student teachers through use of different learning approaches and methods. This course is devoted to developing an understanding of the nature and scope of Social Sciences, aims and objectives of teaching Social Sciences and its linkages with other disciplines. Critical, creative, and analytical pedagogical concerns in teaching Social Sciences with special reference to higher-order thinking are also placed in unit third.

Learning Outcomes

After completion of this course, student teacher will be able to:

- Explain the nature and scope of Social Sciences,
- Elaborate the aims and objectives of the Social Sciences,
- Examine the pedagogical aspects of the Social Sciences,
- Prepare lesson plan based on Learning outcomes.
- Identify the role of teacher in facilitating leaning for Social Sciences

UNIT 1: Nature, Scope and Perspectives of Social Sciences

1.6 Nature and scope of Social Sciences.
1.7 Historical development of Social Sciences, and role of Social Sciences in daily life.
1.8 Disciplines of Social Sciences and their interrelationship.
1.9 Concept of Social Sciences and Social Studies.
1.10 Recommendations and suggestions of various committees, commissions, and policies in reference to Social Sciences.

UNIT 2: Aims and Objectives of Teaching Social Sciences

2.1. Aims and objectives of teaching Social Sciences at secondary stage.
2.2. Learning outcomes and competencies of teaching Social Science at secondary stage.
2.3. Linkages of Social Sciences with other subjects
2.4. Place of Social Sciences as subject in school curriculum.
2.5. Values of Social Sciences such as intellectual, utilitarian, moral and aesthetic andenvironmental.

UNIT 3: Pedagogical Aspects of Social Sciences

3.11. Implication of various approaches- inductive deductive, constructivist,

experiential learning, art-integrated learning, sports integrated learning, field visit, discovery, projectmethods for learning of the selected chapters/concepts in Social Sciences textbooks.

3.12. Moving towards more holistic, interdisciplinary, and multidisciplinary approaches of learning Social Sciences, learning exclusive of pre-conceptions and misconceptions, blended learning.

3.13. Methods of teaching Social Sciences: learner-centric and group-centric, activity based, discussion, problem-solving, role play, inquiry approach, problem-solving, concept mapping, collaborative & cooperative learning approach, field based experiential learning

3.14. Applications of suitable methods in Social Sciences for learning the selected chapters/concepts in SocialSciences textbooks.

3.15. Critical, creative and analytical pedagogical concerns in teaching the Social Sciences with special reference to higher-order thinking.

UNIT 4: Content Analysis and Planning for Teaching Social Sciences

4.6 Concept, types and importance of unit and lesson planning.

4.7 Pedagogical analysis: Meaning, Concept and Significance.

4.8 Steps of Pedagogical analysis: identification of concepts, listing learning outcomes and competencies,planning and evaluating learning experiences in an inclusive setup.

4.9 Developing unit plans and lesson plans based on learning outcomes and experiential learning (art and sports integration) of Social Sciences.

4.10 Need for enrichment of content knowledge in Social Sciences.

UNIT 5: 21st Century Skills for Learning Social Sciences

5.1.21st century skills for Learning: Meaning, Concept and Types.

5.2.Need for and importance of how to learn 21st century skills for learners and teachers ofSocial Sciences.

5.3.Psychological, sociological, and philosophical perspective of teaching and learningSocial Sciences.

5.4.Qualities of a Social Sciences teacher as professional for enhancing teaching learningskills.

5.5.Role of a teacher in facilitating learning and creating dynamic learning environment ofSocial Science.

Suggested Coursework/Practicum

- Prepare a detailed project on the curricular integration of skills, capacities, and values in Social Sciences.
- Demonstrate different pedagogical approaches and strategies for transacting concepts of Social Sciences
- Prepare one working model/toy/game on the concepts of Social Sciences.
- Create an e-content on any two concepts of Social Sciences at secondary stage.
- Prepare a lesson plan keeping in view blended learning and experiential learning approach for the concepts of Social Sciences followed by presentation in the class.
- Any other project assigned by HEI.

Suggested Mode of Transaction

Lectures with discussion, Hands-on activities, project approach, discovery approach, inquiry approach,problem-solving, experimentation, concept mapping, collaborative & cooperative approach, experiential learning, and toy/art/sports integrated learning.

Suggested Assessment

Written tests, classroom presentations, workshops, seminars, assignments, practicums, sessionaland terminal semester examinations (as per UGC norms).

Suggested Readings

- NCERT Textbooks of Social Sciences for Classes IX - XII
- Epistemology of Social Sciences, the scientific status, values and Institutionalization, Vol.XXXVI, UNESCO publications, (1984)
- National Policy on Education 1968, 1986 and 2020.
- *National Policy on Education, 1968, 1986 and 2020*
- NCERT (2023) *National Curriculum Framework of School Education (Draft)*
- NCTE (2009) National *Curriculum Framework for Teacher Education: TowardsPreparing Professional and Humane Teacher*. NCTE, New Delhi.
- UNESCO, (1984) Epistemology of Social Science, the Scientific Status, Values andInstitutionalization, Vol. XXXVI, UNESCO Publications.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

Pedagogy of Social Sciences at Secondary Stage – Course (II)

Code: 4.4.15 II **Credit: 2** **Semester: 6**

About the Course

The learners will understand the role of a teacher as facilitator in imparting learning in Social Science. The learners will reconcile themselves as per National Professional Standards for Teachers (NPST) and National Mentoring Mission (NMM). They will understand the importance of continuous professional development to meet the current challenges. They will get motivated to participate in professional development activities to develop 21st century skills to deal with various issues. They will also understand action research and will be able to conduct it for the improvement of Social Science practices. They will develop leadership attributes to lead for a good cause keeping in view Indian values and ethos. This course focuses on how to learn Social Science along with psychological, sociological, and philosophical perspective. It also emphasizesinnovative practices to enhance effective communication to be a dynamic and innovative Social Science teacher. Therefore, the course highlights the need and significance of continuousprofessional development of a teacher to meet the current and forthcoming challenges. Assessment serves the dual purpose of tracking the performance of the learners as well as feedback mechanism for effectiveness of teaching. National Education Policy (NEP) 2020 emphasizes on the formative assessment, which is more competency based, promotes learning and holistic development of the students, and tests higher order skills such as analysis, critical thinking and conceptual clarity. It also focuses on assessment based on learning outcomes, strategies for continuous assessment, school-based assessment, formative and summative assessment including 360◦ assessment. This pedagogical course of Social Sciences aims to provide details about the concepts of assessment and evaluation, tools and techniques of assessment in Social Sciences.

Learning Outcomes

After completion of this course, student teacher will be able to:

- Utilize online and other resources in the teaching-learning process of Social Sciences, Prepare lesson plans based on learning outcomes.
- Prepare ICT integrated lesson plans for online classroom teaching using digital resourcesand multimedia.
- Enumerate the characteristics of innovative practices in the teaching-learning process of social science.
- Develop the learning indicators and construct test items to measure learning achievement,
- Determine the methods and significance of teaching social sciences to students with diversity

UNIT 1: Teaching Learning Resources

1.1. Teaching learning aids/materials: concept, definition, role, and importance in classroom teaching learning Social Sciences.

1.2. Types of teaching learning aids/ materials: print media such as textbook,

teachers' manual/ handbook and other print materials, non-print and digital media such as radio, TV, websites, animations, audios, videos, images, simulations, digital repository, Augmented Reality (AR), Virtual Reality (VR) and Artificial Intelligence (AI) based digital resources and Open Educational Resources (OERs) for offline/ online classroom. teaching learning (reflective journals, charts, 2-D and 3-D models, games, toys, flash cards, worksheets, multimedia etc.)

1.3. Identification and use of learning resources in Social Sciences from the local environment

1.4. Social Sciences projects, clubs, fairs, exhibitions and visits to places of historical and geographical importance.

1.5. Social Sciences laboratory and museum as a learning resourceincluding virtual laboratories, community resources and pooling of learning resources.

UNIT 2: ICT Integration and Application

2.11. Scope and importance of using ICT in learning process of Social Sciences.

2.12. Use of ICT in the classroom.

2.13. Artificial Intelligence, machine learning, smart boards for student development.

2.14. Tools, software, and platform for teaching learning of Social Science at secondary stage.

2.15. Developing ICT integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for classroom and online teaching using digital resources and multimedia.

UNIT 3: Assessment and Evaluation

3.6. Assessment and evaluation: need for and importance of Social Sciences.

3.7. Development of learning indicators, performance-based assessment, learners' records ofobservations.

3.8. Strategies for continuous assessment, school-based assessment, formative and summativeassessment, formal, informal and 360o assessment.

3.9. Performance assessment: assessment of group activities, field observations, recording and reporting, creating platform and portfolio management, assessment of lab skills, assignments, projects, and presentations.

3.10. Tools and techniques of assessment and evaluation; unit test based on Table of Specification (TOS) and its importance; basic steps of question paper setting, types of testitems and preparing answer key and criteria for school, assessment, and feedback mechanism in teaching learning of Social Sciences.

UNIT 4: Research and Innovative Practices in teaching Social Sciences

4.1 Divergent thinking and innovation in psychological, sociological, and philosophicalperspectives for quality learning experiences.

4.2 Recent trends in research related to teaching learning of Social Sciences.

4.3 Action research: meaning, significance, steps and planning action research in social sciences..

4.4 Evidence-based practices and reflection, School-based research in Social Sciences.

4.5 Use of technology in Teaching social sciences.

UNIT 5: Cross Disability Approaches for Teaching Social Sciences

5.6 Teaching Social Sciences for Students with Diversity, Adaptation and modification of the content, teaching methods and evaluation depending on the diverse needs of students with disabilities.

5.7 Differentiated Instruction, providing students with activities and resources based on individual needs, reading level, level of support.

5.8 Teaching Strategies for students with diversity, Visual aids, Auditory aids, Role play, simplifying language, Use of Technology, use of visual, auditory, and kinesthetic strategies , real-life examples to clarify new and abstract social studies concepts,

5.9 Social studies textbook readings by previewing vocabulary, breaking down assignments into small segments, and summarizing key ideas , Use mnemonic devices and other memory strategies such as acronyms, songs, highlighting, keywords, and pictures, Use of explicit instruction principles such as modeling, repetition, drill, extensive review and practice, structure, and feedback , Use of alternative assessment techniques such as shorter tests, tests broken down into shorter segments, allowing clarifying questions, reading tests aloud, interviewing students, and using journals

5.10 Development of Resource Laboratory, Creation of accessible materials,digital resources, Use of visual, auditory, and kinesthetic materials including maps, illustrations, stories, videos etc.

Suggested Coursework/Practicum

1. Prepare, administer, and analyze scores of an achievement test.
2. Explore AI based assessment tools and prepare an E-Portfolio of a student of SecondaryStage.
3. Plan action research for Continuous Professional Development (CPD) of SocialSciences teacher.
4. Organize a field trip and write a detailed report evaluating the learning processes.
5. Any other project assigned by HEI.

Suggested Mode of Transaction

Lectures cum discussion, observation, project approach, field based, inquiry approach, experimentation, problem-solving, concept mapping, collaborative & co-operative approach,experiential learning.

Suggested Assessment

Written tests, classroom presentations, workshops, seminars, assignments, practicums, sessionaland terminal semester examinations (as per UGC norms).

Suggested Readings

- National Policy on Education, 1968, 1986 and 2020
- NCERT (2023) National Curriculum Framework of School Education (Draft)
- NCTE (2009) National Curriculum Framework for Teacher Education: TowardsPreparing Professional and Humane Teacher. NCTE, New Delhi.
- UNESCO, (1984) Epistemology of Social Science, the Scientific Status, Values andInstitutionalization, Vol. XXXVI, UNESCO Publications.
- Mary z. Mcgrath and beverley h. Johns(2008)Reaching Students with Diverse DisabilitiesCross-Categorical Ideas and Activities, https://www.goodreads.com/book/isbn/9781578868124

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*Teachers may also suggest books/readings as per the need of the learners and learning content.

Content cum Pedagogy of Vocational Education at Secondary Stage - Course (I)

Course Code: 4.4.16 I **Credit: 2** **Semester: 5**

4.4.10.1 About the Course

Vocational Education is a critical aspect of education and training that prepares individuals for the workforce including students with disabilities who are a major untapped potential. Vocational education for secondary-grade students with disabilities involves a focus on practical skills, independence, and career readiness. There is an imperative need to reconceptualize from the theoretical constructs that are aligned with learning in secondary stage that taps the productive potential in students with disabilities in Indian economy. The course should be tailored to meet diverse needs, incorporating individualized support and accommodations. It provides practical hard and soft skills and knowledge necessary for specific trades and professions, and it will pay the way for them to plays significant role in the inclusive economy's growth. The objective is to provide student teachers with the tools to make students with disabilities self-sufficient and productive members of society as the focus is on practical job skills, daily living skills, social skills, and self-advocacy in them. This course encompasses five units related to the nature, scope, and relevance of Vocational Education, nature, scope and historical perspective of Vocational Education, aims and objectives of Vocational Education Teaching and Pedagogical Aspects of Vocational Education. The course emphasizes the formulation of objectives in behavioural terms, learning outcomes and competencies of teaching Vocational Education, place, and significance of Vocational Education at the secondary stage with specific frameworks and support systems to ensure inclusivity and accessibility for students with disabilities. It focuses on the implication of various approaches for the development of higher order thinking skills and different methods of teaching learning Vocational Education.

Learning Outcomes

After completion of this course, student teachers will be able to:

- explain the nature, structure and scope of Vocational Education in the context of the need of Vocational Education and skill development,
- list the aims and objectives of Vocational Education at the secondary stage,
- discuss significance of Vocational Education in school and its relationship with other subjects,
- The pedagogical approach and content to address the need for transversal integrated competencies with emphasis on student centred and project or problem based, involving a focus on a design process.
- appraise 21st century skills for learners and teachers of Vocational Education for students with special needs.

Unit 1 : Nature, Scope, and Historical Perspective of Vocational Education

1.1 Meaning and types of Vocational Education that incorporates a range of fields, industries, and occupations that it covers, as well as the various levels of education and training that it encompasses with focus on hands-on skills, preparing students for specific trades, crafts, or professions.

1.2 Nature, scope and relevance of Vocational Education, aims and objectives of teaching Vocational Education at the secondary stage with emphasis on practical knowledge, real-world experiences. relevance and application to meet the needs of the economy.

1.3 Trace historical perspectives with major landmark evolution in Vocational Education as a subject with relevance to the current economic need of the country along with focus on types of vocational education leading to different career pathways with specific skills in trades, artisans or as technicians.

1.4 Role of subject teacher development of a professional identity, through the development of appropriate disciplinary habits that promotes a culture of facilitative, authentic, practice oriented, questioning, collaborative mixed group approach to activities, developing autonomy and multi-model ways of hybrid training contexts.

1.5 Recommendations/suggestions of various committees, commissions and policies, provisions in NEP 2020 in reference to Vocational Education and the various schemes at central and state level for vocational education.

UNIT - II

Unit 2: Aims and Objectives of Vocational Education Teaching

2.1 Learning outcomes and competencies of teaching Vocational Education at secondary stage with focus on technical vocational skills. Dealing with difficult situations in classrooms.

2.2 Place and significance of Vocational Education in secondary school to tap the productive potential of students with disability, address gaps in vocational skilling in women, rural, and tribal students that promotes social and economic equity.

2.3 Identify and integrate values in Vocational Education concepts that promotes vocationalisation of education by unlearn and relearn of various concepts and practices.

2.4 Mentoring students and guiding them on different career paths with focus on employability skills dignity of labour, and sensitize parents, and the community to be more aware and compassionate towards promoting inclusive work force.

2.5 Develop contextualized, flexible, student-centered vocational skills and knowledge with appropriate support of multidisciplinary team, assistive devices, adapted training tools/equipment, scaffolded learning experiences that leverages UDL to give them both soft and hard skills.

Unit 3: Pedagogical Aspects of Vocational Education

3.1 Implication of various approaches such as inductive-deductive, constructivist, experiential learning, blended learning, interdisciplinary and multidisciplinary approaches in teaching of Vocational Education for students with disabilities.

3.2 Analytical pedagogical aspects in teaching of Vocational Education for the development of higher order thinking skills such as critical, creative, communication, decision making, collaborative and reflective.

3.3 Methods of teaching Vocational Education: learner-centric and participatory methods. lecture cum demonstration, activity based, discussion, problem-solving, project based, scientific inquiry, hands on activity, real experiences, making field-based observations, apprenticeships, and internships, case study, assignments, discovery, experimentation, collaborative and cooperative learning, peer learning.

3.4 State and demonstrate use and importance of guided practice, modeling, scaffolded instructions, assistive devices and technology, adaptive modifications to tools/equipment, and accessibility to work stations, across the school environment.

3.5 Strategies to develop engagement of family and local communities to develop access to students with disabilities to real world learning opportunities as part of career awareness and learning.

Unit 4 Content Analysis and Planning for Teaching Vocational Education

4.1 Pedagogical analysis of content taking examples from topics of Vocational Education from textbooks of secondary stage, identification of concepts, listing learning outcomes and competencies, planning, and evaluating learning experiences in an inclusive setup with mixed ability learners.

4.2 Identify student needs in regard to access to knowledge, skills and abilities and collaborate with multi-disciplinary team with focus on soft and hard skills for students with disabilities.

4.3 Curricular design, delivery and experiences to be adapted to include life skills such as time management, self-advocacy, communication, collaboration skills and application of UDL to enable flexible learning environment for students with diverse learning needs.

4.4 Concept, types and importance of unit planning and lesson planning, essential components in the lesson plan of Vocational Education. Developing art integrated unit plans and lesson plans based on learning outcomes (topics to be taken from Vocational Education textbooks)

4.5 Planning of guest lectures that includes persons with disabilities to share their lived experiences, internships, field visits and to develop for the schools to network of local community, industries and enterprises to create internship opportunities and promote transitional planning for students with disabilities to move from School to work or School to other higher education pursuits

Unit 5: 21st Century Skills for Learning Vocational Education

5.1 Need for and importance of how to learn 21st century skills for learners with disabilities and teachers of Vocational education by demonstrating ways to enhance critical thinking, creativity, collaboration, communication, digital literacy, and social-emotional learning in an inclusive mixed-group environment.

5.2 Design project-based experiences, group projects and activities that require students to think strategically and solve problems that are contextualised to the real work, meaningful to the students' interests, capacities incorporating ppsychological, sociological and philosophical perspective of teaching and learning Vocational education that promotes creativity, innovation, sense of community collaboration and communication skills.

5.3 Qualities of a teacher of Vocational Education subject that reflects professional skills that promote holistic learning that is both relevant to student interests, motivational, and meaningful for students with disabilities

5.4 Role of a teacher in facilitating learning and creating a dynamic learning environment of Vocational education that promotes experiential learning, promote self-reflection, emotional reflection with scaffolded exposure to activities in a safe and nurturing environment that motivates students with continuous, tailored, timely feedback, and recognize unique student strengths by including activities that are relevant and realistic to the interests and abilities of the student.

5.5 Responsibilities of a teacher to deliver Vocational education through a ssupportive, safe and inclusive learning environment by using modified tools/ equipment, work

surfaces supportive seating, or assistive devices, modification of hands-on training, close supervision including preparedness for emergencies and collaborate with family and professionals.

Suggestive Practicum (Any Three)

- Analyze recommendations of NEP 2020 with reference to emphasis on Vocational Education.
- Prepare a portfolio/kit of any Vocation with focus on hard skills, soft skills and environmental and occupational accessibility of the work place.
- Present a case study that captures successful inclusion of person with disability related to inclusion, or skill development and entrepreneurship in Vocational Education and appreciate their uniqueness in the form of a report.
- Identify a problem and plan action research project for Vocational Education.
- Conduct School Based Research/ case study/ industry and market related surveys and prepare an evidence-based report on competency based vocational skilling.
- Prepare a write up on quality of learning experiences for teaching Vocational Education.
- Prepare a report on interdisciplinary and multidisciplinary approaches used in the practices of Vocational Education for students with disabilities.
- Write learning outcomes and competencies for two topics of Vocational Education at Secondary Stage.
- Develop a campaign to promote inclusive work culture for a world of work that includes neurodiversity.
- Conduct a short survey to know the expectations of students, parents, industries, and society about Vocational Education and compile a report.
- Organize a workshop on 'Methods and Materials for Vocational Education Teaching to includes diverse student' in which every student teacher will be assigned a topic to make presentation using a specific method and material.
- Visit to Vocational Education institutions/industry/workplaces to explore and prepare a report
- Any other project assigned by HEI.

Suggestive Mode of Transaction

Lecture cum demonstration, field observations, experimental method, industry visit, real-world experiences, project method, laboratory method, discovery, problem solving method, inquiry method, success stories, discussions, self-study, and experiential method.

Suggestive Mode of Assessment

Written test, classroom presentations, discussion forums, observation, research/study report, assignments, practicum, sessional and terminal examination (As per UGC Norms).

Suggestive Reading Materials

- Draft National Curriculum Framework for School Education,
- FICCI. (n.d.). *Reimagining vocational education in India: The missing piece.* https://www.globalskillsummit.com/2.pdf

- National Education Policy 2020, MoE, Government of India (Hindi and English).
- National Steering Committee for National Curriculum Frameworks, (2023).
- Jordan, Anne, Stack, Annetta, Carlile, Orison (2008). *Approaches to Learning: A Guide for Teachers: A Guide for Educators*
- Mishra, Krishna Kumari (2024). *Work education for advanced beginners*-A series of pre-vocational education

Content cum Pedagogy of Vocational Education at Secondary Stage – Course (II)

Course Code: 4.4.16 II **Credit: 2** **Semester:6**

About the Course

Vocational Education is a critical aspect of education and training that prepares individuals for the workforce including students with disabilities who are a major untapped potential. Vocational education for secondary-grade students with disabilities involves a focus on practical skills, independence, and career readiness. There is an imperative need to reconceptualize from the theoretical constructs that are aligned with learning in secondary stage that taps the productive potential in students with disabilities in Indian economy. The course should be tailored to meet diverse needs, incorporating individualized support and accommodations. It provides practical hard and soft skills and knowledge necessary for specific trades and professions, and it will pay the way for them to plays significant role in the inclusive economy's growth. The objective is to provide student teachers with the tools to make students with disabilities self-sufficient and productive members of society as the focus is on practical job skills, daily living skills, social skills, and self-advocacy in them. This course encompasses five units related to the nature, scope, and relevance of Vocational Education, nature, scope and historical perspective of Vocational Education, aims and objectives of Vocational Education Teaching and Pedagogical Aspects of Vocational Education. The course emphasizes the formulation of objectives in behavioural terms, learning outcomes and competencies of teaching Vocational Education, place, and significance of Vocational Education at the secondary stage with specific frameworks and support systems to ensure inclusivity and accessibility for students with disabilities. It focuses on the implication of various approaches for the development of higher order thinking skills and different methods of teaching learning Vocational Education.

Unit 1: Teaching Learning Resources for Vocational Education Teaching

1.1 Teaching learning resources: concept, characteristics, and importance in teaching of Vocational Education that promotes student interests, motivation, engagement in an inclusive learning environment while promoting motor, affective and cognitive experiences for students with disabilities.

1.2 Types of teaching learning aids/ materials: adapted/modified equipment, assistive devices, print media such as textbook, teachers' manual/ handbook and other print materials designed for accessibility (e.g., large print, Braille), non-print and digital media such as radio, TV, websites, animations, audios, videos, images, simulations, digital repository, Augmented Reality (AR), Virtual Reality (VR) and Artificial Intelligence (AI) based digital resources that promote practical abilities, innovating teaching of concepts and Open Educational Resources (OERs) for offline/ online classroom teaching learning (reflective journals, charts, 2-D and 3-D models, games, manipulative jigs that promote fine motor skills, flash cards, work systems, worksheets, multimedia, screen readers, tactile graphics, and other assistive technologies to support students with disabilities.

1.3 Identification and use of learning resources in Vocational education from the local environment/contexts that are adapted and modified to ensure safety while promoting real-time experiences alongside peers which are accessible both in regard to tools/equipment. work surfaces. built environment, and inclusive mixed ability groups.

1,4 Develop resource room/ laboratory/ library - management and practices; virtual laboratories, teaching learning kits, fairs, exhibitions, industry excursions, community resources and pooling of resources.
1,5 Develop vocational educational work sheets with task analysis of skills that lists communication, motor, communication, stamina, endurance, social demands, standards of work performance, simulated work environments that mocks real time set up,

Unit 2: ICT integration in teaching Vocational Education

2.1 Role and importance of ICT in driving social change in information based society that promotes access and reach of vocational education for all including students with disabilities gender, tribal and rural communities.
2.2 Scope and importance of ICT in Vocational Education and determine the challenges in use and integration of ICT in teaching Vocational education.
2.3 Use of ICT such as Artificial Intelligence, machine learning, smart boards in the teaching of Vocational Education, assessment process and resource management.
2.4 Use of adapted tools, software, and platforms of Vocational Education such as simulated work experiences that teach both soft and skills at secondary stage that are inclusive and accessible to learners with disabilities.
2.5 Developing ICT integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for face to face and online teaching multimedia, and assistive technologies to optimize learning experiences including students with disabilities.

Unit 3: Assessment and Evaluation in Vocational Education

3.1 Assessment and Evaluation: Need for and importance of assessment of student knowledge, skills and abilities for Vocational Education based on current level of performance, needs and development of student-centered individualized transition plan.
3.2 Assessment students with disabilities based on collaborative team approach to administer appropriate criterion referenced assessment tools/checklists that are with validated content, consistent, flexible/adaptable, and fair for students with disabilities.
3,3 Assessment Based on learning outcomes, product based assessment, portfolio assessment direct assessment, peer assessment, strategies for continuous assessment with tailored and immediate feedback, finding gaps in learning and planning further activities for improvement, qualitative assessment, 360◦ Assessment that enhances both the soft and hard skills in students with disabilities.
3.4 Performance based assessment, alternative and adapted assessments, assessment of Group Activities, on-site field experience of small, medium enterprises in the neighbourhood, recording and reporting, portfolio management, ICT enabled assessments, performance task and projects including competency based assessment.
3.5 Tools and Techniques of Assessment and Evaluation; unit test based on Table of Specification (TOS) and its Importance; Basic Steps of question paper setting including paper setting in alternative formats, Types of Test Items and preparing answer key for self-evaluation by students, and criteria for school, assessment and feedback mechanism in teaching of Vocational Education.

Unit 4: Research and Innovative practices in teaching Vocational Education

4.1 Divergent Thinking and innovation in psychological, sociological and philosophical perspectives for enabling learning experiences in teaching of Vocational Education adapted and modified for students with disabilities.

4.2 Recent trends in research related to Teaching Learning of Vocational Education for students with disabilities.

4.3 Action Research in Vocational Education, meaning, significance, steps and planning of inclusive work places OR Collaborative curriculum planning within context of personalized planning that includes interventions and other supports to address identified student learning and support needs.

4.4 School Based/Industry based research in Vocational Education, evidence-based practices that promote neurodiverse work environment, gaps/mismatch on account of curriculum misalignment and reflection on work readiness knowledge, Attributes, Skills needed for school to work or for higher education

4.5 Identify innovating vocational Education practices, skill development, Make in India, innovative ventures of entrepreneurs with disabilities, models of vocational enterprises including income generation activities that optimizes the local resources, skill sets and traditional trades.

Unit 5: Cross disability approach for teaching Vocational education.

5.1 Concept, meaning, scope and nature of Cross Disability Approach in teaching Vocational Education that includes all students with disabilities.

5.2 Examine the role of families, community and key partnerships including students with disabilities that promote and advocate for cross-disability approach to include ALL.

5.3 Identify the key principles and philosophies of Cross Disability Approach.

5.4 State the role of special teachers, allied health professionals, key strategies to promote Vocational education in the context of person centered learning, scaffolding strategies, UDL, adapted or modified for students with mixed abilities.

5.5 Examine the role of accessibility and universal design making environments, services, and equipment accessible to all students regardless of their abilities to enhance participation in all aspects of life including Vocational education, career planning, and independent living skills.

Suggestive Practicum (Any Three)

1. Organize a workshop on 'Methods and Materials for Vocational Education Teaching' in which every student teacher will be assigned a topic to make presentation using a specific method and material.
2. Visit to Vocational Education institutions/industry/workplaces to explore and prepare a report.
3. Design and develop simulated work experience project
4. Develop e-Content for teaching Vocational Education.
5. Search MOOCs available in the field of Vocational Education and prepare a report mentioning link and their appropriateness.
6. Critically evaluate a textbook of Vocational Education and prepare a report.
7. Any other Project assigned by HEI.

Suggestive Mode of Transaction

The course will be transacted through Lecture cum demonstration, Field observations, Experimental method, Industry Visit, Real-World Experiences, Project method, Laboratory method, Discovery, Problem solving method, Inquiry method, Success stories, Discussions, Selfstudy, and Experiential method.

Suggestive Mode of Assessment

Written test, classroom presentations, discussion forums, observation, research/study report, assignments, practicum, sessional and terminal examination (As per UGC Norms).

Suggestive Reading Materials

- Charania, Amina (Ed.) (2024). Integrated Approach to Technology in Education in India.
- Graham, L. (2019). *Inclusive Education for the 21st Century*. Routledge.
- Draft National Curriculum Framework for School Education,
- FICCI. (n.d.). *Reimagining vocational education in India: The missing piece.* https://www.globalskillsummit.com/2.pdf
- J. S. Saini, J.S & Singh, Jasmer (Eds).(2005). *Vocational and Technical Education for the Disabled*. National Institute of Technical Teachers' Training & Research (Chandigarh, India). Ashoka Publications
- National Education Policy 2020, MoE, Government of India (Hindi and English).
- National Steering Committee for National Curriculum Frameworks, (2023).
- Narasimhan, G., (2022). *INVAS : An Integrated Curriculum for Vocational & Skill-Based Training A Standard Operating Procedure for NGO & Vocational Units.* Notion Press.
- Sitlington, P. L., Neubert, D. A., & Begun, W. H. (2007). *Assess for success: A Practitioner's Handbook on Transition Assessment*. Corwin.

5.0 ABILITY ENHANCEMENT & VALUE-ADDED COURSES

5.1 has a sample paper on Hindi which is one of the 8th schedule languages. Universities and Institutions can retain this or prepare any other regional language based on the sample provided.

5.2 has two sample courses; English and Indian Sign Language (ISL). It is suggested that students opting specialisation in Hearing Impairment take ISL as a mandatory course and others may either choose ISL or any other non-schedule languages. A sample course of English has been provided. Universities and Institutions can retain this or prepare any other language course based on the sample provided.

Language I (As per the VIII Schedule of the constitution of India)

Course Code: 5.1 **Credits: 4** **Semester: 1**

About the Course

Language is a system of conventional, spoken, manual or written symbols by means of which human beings as members of social group express themselves. Language has undeniable links with all kinds of learning. This comprehensive course is designed to provide student-teachers with the essential skills and knowledge required to effectively preserve and promote linguistic diversity in India, focusing on the 8th Scheduled languages. The curriculum encompasses a wide range of topics, including understanding language acquisition, first language learning, and practical strategies for teaching first languages. It also covers the development of language skills, multilingualism, utilizing local resources, the socio-cultural contexts of languages, and the creation of high-quality language teaching materials and assessment techniques. Additionally, the course integrates the practical aspects of language teaching, including fieldwork, classroom observations, and community engagement to foster inclusive education practices in diverse settings.

Learning outcomes

After completion of this course, the student-teachers will be able to:

- Differentiate between language, communication and cognition.
- Explain the importance of preserving linguistic diversity and promoting mother tongue-based education.
- Highlight guidelines of NEP 2020 in language teaching, focusing on mother tongue instruction and inclusive practices.
- Develop high-quality language teaching resources for inclusive classrooms.
- Demonstrate social tolerance and effective communication through bilingual and multilingual education practices.

Course Content

Unit 1: Understanding Language, Communication and Cognition

1.1 Introduction to Language, Communication and Cognition; Language as a means of communication and language as a medium of cognition
1.2 Types of Communication (linguistic and non-linguistic communication, formal and informal communication, verbal and nonverbal communication, gestures, Sign Language)
1.3 Language and Society: Functions of language, Multilingualism in India, Language variations and standardization
1.4 Language acquisition and language learning, Barriers to language and communication in the context of different disabilities
1.5 Teaching of Mother Tongue (L1) in the context of different disabilities

Unit 2: Language Skills and Instruction in Special Schools/ Inclusive Schools

2.1 Aims and objectives of teaching the First Language at different stages of schooling and language skills (listening, speaking, reading and writing)
2.2 Listening Skills (Comprehension) in the context of different disabilities
2.3 Speaking Skills (Communication) in the context of different disabilities
2.4 Reading Skills in the context of different disabilities
2.5 Writing Skills in the context of different disabilities

Unit 3: Approaches and Methods of Teaching the First Language in Special and Inclusive Schools

3.1 Principles of teaching language.
3.2 Approaches to teaching language (Task-Based Approach, Collaborative Learning, Experiential Learning, Reflective, Inquiry-Based Approach, Language Across Curriculum, Communicative Language Teaching, Bilingual, Multilingual, Eclectic, and Constructive Approach etc.)
3.3 Methods of teaching language (Natural, Structural and Combined Method)
3.4 Techniques of Teaching Language (Directed Activity, News, Stories, Poems, Total Physical Response etc.)
3.5 Reasonable Accommodations and Exemptions in Teaching Language to Children with Disabilities

Unit 4: Creating Language Teaching Materials

4.1 Principles of developing language teaching materials
4.2 Designing age-appropriate and inclusive learning resources
4.3 Utilizing digital & ICT tools for language teaching
4.4 Creating dictionaries and other reference materials for language teaching
4.5 Developing culturally relevant and inclusive teaching aids for diverse learners

Unit 5: Enhancing Language Teachers' Skills

5.1 Understanding the socio-cultural context of languages in education
5.2 Techniques for effective language instruction in classrooms
5.3 Professional development for language teachers
5.4 Strategies for inclusive education and effective communication in multilingual environments
5.5 Assessment and evaluation in language teaching

Suggested Coursework/Practicum

- Development of inclusive language teaching materials and hands-on training sessions for different educational settings: Inclusive and special schools.
- Classroom Observation and analysis of multilingual education settings.
- Participation in language teaching practicum.
- Research Project on language education for diverse learners.
- Fieldwork involving language preservation efforts in educational contexts.
- Interactive field visits to multilingual classrooms and community language centres.
- Developing collaborative projects with peers on language education practices.

- Community engagement activities to understand and document socio-cultural contexts.

Suggested modes of transaction

- Interactive Lectures, Discussions, and Workshops on Language Education.
- Hands-on training sessions for creating inclusive language teaching materials
- Field visits to multilingual classrooms and community engagement with diverse learners.
- Collaborative projects and peer learning on language education practices.
- Use of multimedia, digital resources, and assistive technologies for education.

Suggested modes of assessment

- Written assignments and reflective journals on language 1 teaching.
- Practical projects and teaching demonstrations for language instruction.
- Class participation, group discussions, and presentations on language education practices.
- Oral presentations, viva voce, and reflections on language teaching experiences.
- Fieldwork reports and evaluations on language education in diverse settings.
- Develop and present inclusive language teaching materials with manuals.
- Written reports and reflections on classroom observations and field visits.
- Group discussions and presentations on field research findings.
- Practical demonstrations of teaching strategies in diverse educational settings.

Suggested readings

Books

Agnihotri, R. K. (2015). Multilingual Education in India: A Case for English Language Teaching. Springer.

Baron,J. & Watkins, P. (2023). Pragmatics in Language Teaching: From Research to Practice. Routledge, Denver.

Clare, A. Gregrson, T., & Mercer, S. (2024). Positive language education: Teaching global life skills in the language classroom. Routledge, Denver.

Cummins, J., & Hornberger, N. H. (2008). Encyclopaedia of Language and Education. Springer.

Goh, C.C. & Liu, X. (2023). Confident speaking: Theory, Practice, and Teacher inquiry. Routledge.

Khanna, A. L., Agnihotri, R. K., and Gupta, S. A. (2017). Trends in Language Teaching, The Orient Blackswan Pvt. Ltd.

Kroth, R. L. & Edge, D. (1997). Strategies for communicating with parents and families of Exceptional Children. Denver: Love Publishing Company.

Mishan, F. & Kiss, T. (2024). Developing Intercultural language materials. Routledge.

Puar, S. S. (2017). Language across the Curriculum, Twenty first Century Publications, Patiala

Skutnabb-Kangas, T., & Phillipson, R. (1994). Linguistic Human Rights: Overcoming Linguistic Discrimination. Mouton de Gruyter.

Spiro, J. & Paran, A. (2023). Becoming a reading teacher: Connecting research and practice.

Trenholm, S. (2021). Thinking through communication: An introduction to the study of Human communication. Routledge

Journals

Agnihotri, R. K. (2007). Towards a Pedagogical Paradigm rooted in multiliguality. International Multilingual Research Journal, 1(2). 79-88.

Language, Culture, and Curriculum.
Journal of Multilingual and Multicultural Development.

Online Links

National Education Policy 2020: [NEP 2020]. http://www.education.gov.in/nep/about-nep and http://education.gov.in/national-education-policy
UNESCO World Atlas of Languages: [UNESCO] (https://en.unesco.org/world-atlas-of-languages) http://en.wal.unesco.org/world-atlas-languages

Portals:

Central Institute of Indian Languages: [CIIL] https://www.ciil.org/

Language 2: Indian Sign Language (ISL)

Course Code: 5.2 (a) **Credits: 4** **Semester: 2**

About the course

This course will help students understand Indian Sign Language (ISL) and its importance for communicating with Deaf and hard-of-hearing individuals. The content covered includes the basics of ISL, grammar, vocabulary, and the application of ISL in educational settings. This course focuses on inclusion and equity principles to help teachers create a classroom that meets the needs of all students. The course also incorporates practical components, including fieldwork, classroom observations, and community engagement, to provide hands-on experience in using ISL effectively.

Learning outcomes

After completion of this course, the student-teacher will be able to:

- Demonstrate proficiency in basic ISL vocabulary and grammar.
- Apply ISL in classroom interactions and instructional activities.
- Develop lesson plans that incorporate ISL to support inclusive education.
- Evaluate the communication needs of students with hearing impairments and adapt teaching strategies accordingly.
- Collaborate with parents, teachers, and specialists to support students using ISL.

Course Content

Unit 1: Introduction to Indian Sign Language

1.1 Overview of Indian Sign Language
1.2 History and development of ISL
1.3 Importance of ISL in inclusive education
1.4 Useful phrases and prerequisites for learning ISL
1.5 Everyday communication

Unit 2: ISL Grammar and Syntax

2.1 Sentence structure in ISL and Role of space
2.2 Use of Non-Manual Signals
2.3 Verb Modifications, Affixes, and Temporal Aspects in ISL
2.4 Question Formation in ISL
2.5 Complex Sentences and Narratives

Unit 3: Effective Communication in ISL in Educational Settings

3.1 Vocabulary for Educational Settings
3.2 Subject-Specific Vocabulary (e.g., Math, Science, Social Studies)
3.3 Everyday Conversation Phrases
3.4 Classroom Management Phrases
3.5 Signs for Topics in Inclusive Education

Unit 4: Teaching Strategies Using ISL

4.1 Multilingual-Multimodal Methods
4.2 Integrating ISL into Lessons - Classroom Activities to Enhance ISL Learning
4.3 Adapting Curriculum Materials for ISL Users
4.4 Visual Aids and Resources for Teaching ISL
4.5 Assessing Student Progress in ISL

Unit 5: Collaboration and Support

5.1 Working with Parents and Families
5.2 Collaborating with Other Educators and Specialists
5.3 Creating an Inclusive Classroom Environment and Working with ISL Interpreters
5.4 Working with the Deaf Community and Advocacy for ISL and Deaf Culture
5.5 Resources and Support Networks for ISL Users

Suggested Coursework/Practicum

- Practical sessions on ISL communication.
- Development of inclusive lesson plans incorporating ISL.
- Bilingual-bimodal practice.
- Role-playing and simulation exercises.
- Observations and reflections on ISL usage in classrooms.
- Collaboration projects with peers and specialists.

Suggested modes of transaction

- Interactive lectures and demonstrations.
- Group discussions and collaborative activities.
- Hands-on practice and role-playing.
- Use of multimedia resources for ISL learning.
- Guest lectures from ISL experts and Deaf educators.

Suggested modes of assessment

- Continuous assessment through practical demonstrations.
- Written assignments and reflections on ISL usage.
- Lesson plan development and presentation.
- Peer and self-assessment of ISL proficiency.
- Final practical examination on ISL communication skills.

Suggested readings

Books

RCI. (2023). Deaf Culture, History, Identity and Sign Language. New Delhi: RCI. Available online at https://rehabcouncil.nic.in/sites/default/files/2023-5/DISLI%20T2.pdf

Indian Sign Language (ISL) Textbooks by HWSPSHI for Foundation till Class VIII

Zeshan, U., & Webster, J. (Eds.). (2019). Sign multilingualism (Vol. 7). Walter de Gruyter GmbH & Co KG.

Journals

Zeshan, U., Vasishta, M. N., & Sethna, M. (2005). Implementation of Indian Sign Language in educational settings. Asia Pacific Disability Rehabilitation Journal, 16(1), 16-40.
Sign Language Studies. (Gallaudet University).
Journal of Deaf Studies and Deaf Education.
The Journal of Special Education.

Online Links

National Institute of Speech and Hearing: www.nish.ac.in
Sign Language Linguistics Society: www.slls.eu

Portals

ISLRTC (Indian Sign Language Research and Training Centre): www.islrtc.nic.in

Dictionaries and YouTube Channels

ISLRTC: https://www.youtube.com/@islrtcnewdelhi4069
ISLRTC Portal: https://divyangjan.depwd.gov.in/islrtc/
Haryana Welfare Society for Persons with Speech and Hearing Impairment - www.youtube.com/@signlibrarydsl and www.youtube.com/@EarlyInterventionProject
India Signing Hands: https://www.youtube.com/@ISHShiksha/shorts and www.youtube.com/@ishkids
Digital Database of Indian Sign Language and Educational Resources- [NERIE-NCERT| ISL] www.nesignlanguage.in

Apps

ISLRTC's Sign Learn App
Deaf Enabled Foundation's DEF-ISL App
Meghalaya Sign Bank app [Meghalaya SignBank - Apps on Google Play] https://play.google.com/store/apps/details?id=com.signbank

Language 2
English

Course Code: 5.2 (b) **Credit 4** **Semester: 2**

About the Course:

The purpose of the course is to get students ready to teach language in a classroom. It focuses on teaching students about English language sounds systems, word formation procedures, sentence structure, semantics, and pragmatics. The goal of the course is to give the students the ability to use various genres to integrate all four language abilities. The primary goal of this course is to enable students to participate in discussions on a range of topics and themes. In addition, the course introduces students to the use of various digital media and technology for the development of their own communication abilities in English and those of the pupils they would eventually teach. The course helps improve basic communication skills such as listening, speaking, reading, and writing skills among English language learners. The course is designed to enhance knowledge of grammar of English language and enable the students to formulate grammatically correct and contextually appropriate sentences and words and empower the students with summarizing skills, oral presentations skills effectively.

Learning Outcomes

After completing the course, student teachers will be able to:

- Discuss the importance of language in the context of society
- Demonstrate reading, writing, listening, speaking, and thinking abilities in English,
- Recognize the link between language and mental skills and demonstrate their knowledge and skills effectively for all purposes,
- Build inter-personal relationships and enhance social skills based on English language.
- Develop communication skills in English language

Unit 1: Language, Society, and learning

1.1 Multilingualism and scholastic achievements; need to promote multilingualism; Language variation and social variation;
1.2 English languages, dialects and varieties, cultural transmission of language; language and gender; language and identity; language and power;
1.3 Constitutional provisions, National Education Policy 2020 and other policies related with promotion of English Language.
1.4 Language acquisition and Language learning; l
1.5 Language learning from mother tongue to other languages; advantages of learning other languages; language and education; notion of first language, second language and others.

Unit 2: Speech and Writing

2.1 Writing System in English Speech and writing.
2.2 Arbitrariness in language; types of writing systems.
2.3 Classification sessions of speech sounds.

2.4 Teaching segmental, non-segmental and suprasegmentals.
2.5 Use of stress, pitch, rhythm, tone, intonation, and juncture; Acoustic phonetics.

Unit 3: Understanding Grammar

3.1 Word and meaning; parts of speech, grammatical categories;
3.2 Word formation: affixation, compounding, reduplication,
3.3 Vocabulary building.
3.4 Sentence and its constituents: simple, complex, and compound sentences;
3.5 Semantics and pragmatics: lexical meaning- synonymy, antonymy, meronymy, grammatical meaning, speech acts.

Unit 4: Basic Communication Skills

4.1 Pronunciation and listening comprehension skills.
4.2 Reading and reading comprehension skills.
4.3 Effective writing skills;
4.4 Effective presentation and speaking skills;
4.5 Summarizing and paraphrasing skills.

Unit 5: Critical Reading and Thinking Skills

5.1 Components of critical thinking and reading;
5.2 High order cognitive development;
5.3 Critical thinking and problem solving; rational inquiry;
5.4 Writing papers/articles in English;
5.5 Soft Skills with English language

Suggested Coursework/Practicum

- Listen to a recorded speech and classify it based on sounds: vowels, consonants, and others; suprasegmental: stress, pitch, tone, intonation, and juncture; Acoustic phonetics.
- Analyze sentences and their constituents as simple, complex, and compound sentences from written work.

Suggested Mode of Transaction

Interactive lectures, tutorials, and practical involves such as discussion, role plays, projects, simulations, workshops and language-awareness activities. The teaching intends deeper approaches to learning involving in- class room discussion, developing the critical thinking/ problem solving abilities among the students and will also focus on situations where in our daily lives the one would be performing tasks that involve a natural integration of language skills.

Suggested modes of assessment:

The assessment of the learner will be primarily based on the assessment of both linguistic and communicative skills using a battery of tests and test types, group work and projects.

Suggested Readings:

Fluency in English - Part II, Oxford University Press, 2006.

Business English, Pearson, 2008. 3. Language, Literature and Creativity, Orient Blackswan, 2013.

Language through Literature (forthcoming) ed. Dr. Gauri Mishra, Dr Ranjana Kaul, Dr Brati Biswas

Adrian Doff, Teach English: A Training Course For Teachers (Teacher's Workbook) (Cambridge: CUP, 1988).

Business English (New Delhi: Pearson, 2008). 5. R.K. Bansal and J.B. Harrison, Spoken English: A Manual of Speech and Phonetics (New Delhi: Orient BlackSwan, 4th edn, 2013).

Lakshmi, H. Problems of Translation. Hyderabad: Booklings Corporation, 1993.

M. Frank. Writing as thinking: A guided process approach, Englewood Cliffs, Prentice Hall Reagents. 38 38

L. Hamp-Lyons and B. Heasely: Study Writing; A course in written English. For academic and professional purposes, Cambridge Univ. Press.

Inclusive Art Education

Course Code: 5.3 Credits: 2 Semester: 1

About the course

This course explores the rich field of Indian art and its integration into the education system, with a focus on inclusive and accessible art practices. It aims to give students exposure to various art forms, learning and appreciating them, and using them within teaching, advocacy, and sensitization. The course also emphasizes modifications and adaptations to facilitate the participation of individuals with disabilities, ensuring that all learners have appropriate learning opportunities and evaluative tasks.

Learning Outcomes

After completion of this course, the student teacher will be able to:

- Exhibit a basic understanding of art appreciation, art expression, and art education.
- Understand the diversity within artistic expression.
- Apply art as 'critical pedagogy' in classrooms.
- Adapt and modify activities to enhance learning and teach through art forms.
- Promote inclusive art and facilitate participation in cultural and community events.
- Understand and explain the principles of inclusive art.
- Analyze and evaluate case studies of inclusive art programs.
- Develop and implement strategies for creating inclusive art projects.
- Advocate for accessibility and representation in the art community.
- Collaborate with diverse groups to create inclusive art experiences.

Course Content

Unit 1: Introduction to Art Education and Inclusive Art

1.1 Art and art education: Meaning, scope, and perspectives
1.2 Breaking stereotypes: Understanding diversity and different perspectives within artistic expression
1.3 Artistic expression: Creative and emotional expression and regulation
1.4 The role of art in social change and disability justice movement
1.5 Adaptations, modifications, and strategies to facilitate learning and participation in cultural and community settings

Unit 2: Performing Arts: Dance, Music, and Drama

2.1 Range of activities related to dance and music
2.2 Experiencing, responding, and appreciating dance, music, and drama
2.3 Exposure to selective basic skills required for dance, music, and drama
2.4 Enhancing learning through movement, dance, music, role plays, and drama: Strategies and adaptations
2.5 Accessibility in art spaces and representation in artistic content

Unit 3: Visual Arts

3.1 Range of activities related to visual arts
3.2 Experiencing, responding, and appreciating visual arts
3.3 Exposure to selective basic skills
3.4 Enhancing learning through visual arts: Strategies and adaptations
3.5 Designing accessible art spaces and policies for accessibility

Unit 4: Media and Electronic Arts

4.1 Range of art activities in media and electronic art forms
4.2 Experiencing, responding, and appreciating media and electronic arts
4.3 Role of ICT and exposure to selective basic skills
4.4 Enhancing learning through media and electronic art: Strategies and adaptations
4.5 Technological innovations in accessibility and inclusive programming

Unit 5: Art Integrated Learning and Creating Inclusive Art

5.1 Concept, meaning, and significance of Art Integrated Learning for children with disabilities
5.2 Competency development and planning of activities for Art Integrated Learning
5.3 Assessment through Art Integrated Learning
5.4 Developing inclusive art programs and advocacy campaigns
5.5 Evaluating the impact of inclusive art and future trends

Suggested Coursework/Practicum

- Debates or performances to advocate opinions and thought processes.
- Self-reflective essays on ways to include art to facilitate better teaching.
- Group teaching of academic or non-academic concepts using art.
- Development and implementation of community sensitization and awareness activities (e.g., Nukkad Natak, art show, awareness campaigns, or posters).
- Using different art forms to change the narrative of disability to diversity as an integral part of our cultural narrative.
- Practical workshops on creating inclusive art projects.
- Field visits to accessible museums and galleries.
- Collaborative art projects with community groups.
- Research and presentation on notable artists with disabilities.
- Development of a proposal for an inclusive art program.
- Suggested Mode of Transaction
- Lectures and discussions
- Field visits
- Hands-on experiential demonstrations
- Workshops and seminars
- Self-study and use of online resources
- Presentations and projects
- Guest lectures from practitioners and experts in inclusive art
- Group projects and collaborative learning
- Hands-on workshops and practical sessions

- Field trips and experiential learning opportunities

Suggested modes of transaction

Demonstration, Field Based experience, storytelling/success stories, classroom discussion, self-study, field observations, and preparation of study reports, classroom presentation, discussion forums, observation, research report, engaging in dialogue.

Suggested modes of assessment

- Organize class debates or performances to advocate opinions and thought processes about a particular topic.
- Self-reflective essays on ways to include art to facilitate better teaching.
- Create TLMs to teach individuals with disabilities in inclusive and special schools.
- Written assignments and reflective essays.
- Practical project reports and presentations.
- Participation in group discussions and workshops.
- Case study analysis and evaluation.
- Final project showcasing an inclusive art initiative.

Books

कलासमेकित अधिगम: दिशानिर्देश (2019) राष्ट्रीय शैक्षिक अनुसन्धान और प्रशिक्षण परिषद् नई दिल्ली। ISBN 978-93-5292-212-3

कलाशिक्षापर प्रशिक्षण पैकेज खंड 1: प्राथमिक शिक्षकों के लिए (2018) राष्ट्रीय शैक्षिक अनुसन्धान और प्रशिक्षण परिषद् नई दिल्ली। ISBN 978-93-5292-105-8

कलाशिक्षापर प्रशिक्षण पैकेज खंड 2: प्राथमिक शिक्षकों के लिए (2018) राष्ट्रीय शैक्षिक अनुसन्धान और प्रशिक्षण परिषद् नई दिल्ली। ISBN 978-93-5292-106-5

संगीत शिक्षक संदर्शिका उच्च प्राथमिक स्तर: छठीसे आठवीं तक (2018) राष्ट्रीय शैक्षिक अनुसन्धान और प्रशिक्षण परिषद् नई दिल्ली। ISBN 978-93-5292-020-4

Joy of Theatre: Teachers Handbook Upper Primary Stage Class 6 to 8 (2018) NCERT ISBN 978-93-5292-017-4

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Finlay, V. (2014). The brilliant History of Color in Art. Getty Publications, Finlay.

Greene, S., & Hogan, D. (2005). Researching children's experience. Sage Publication: London.

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Lewiecki-Wilson C., & Brueggemann, B. J. (2008). Disability and the teaching of writing: A critical sourcebook. Bedford/St. Martin's, Boston, MA.

Shirley, G. (2000). Art, an A-to-Z guide. Franklin Watts, New York.

Vaze, P. (1999). How to Draw and Paint Nature. Jyosna Prakashan, Mumbai

Ward, A. (1993). Sound and Music. Franklin Watts, New York.

Kuppers, P. (2014). Studying Disability Arts and Culture: An Introduction. New York: Palgrave Macmillan.
Diedrich, L. (2018). Disabled Theater. Minneapolis: University of Minnesota Press.

Journals

Journal of Visual Art Practice
Disability Studies Quarterly
International Journal of Art and Design Education

Online Links

The Museum of Art & Photography https://map-india.org/
Museum of Possibilities https://tnmop.in/
Deaf Art https://deaf-art.org/
Access for All https://www.accessforall.co/
Artists with Disabilities https://atypicaladvantage.in/inclusive-hirings/visual-artists

Exploring Disability Intercepts in Indian Knowledge Systems and Ethos

Course code: 5.4 **Credits: 2** **Semester: 1**

About the Course

Today's contemporary world and society share a common knowledge system and values but also identify with specific rooted knowledge traditions, culture, values, and ethics. To address the explosion of information and knowledge, identifying true knowledge necessary for human life and survival, and to face multiple challenges due to geopolitical, technological advancements, and environmental changes, we need to look back at our rich past to build the young minds of India.

This course will enable student-teachers to conduct critical analysis and exercise independent thought regarding the formulation and evolution of diverse Knowledge traditions in India. It helps in discerning the accomplishments and constraints inherent in India's varied traditions, exploring disability intercepts in the practical application of these knowledge traditions, and understanding and appreciating the status of persons with disabilities in the past. The course also critically traces the references of inclusivity prevailing in Indian society from a multidisciplinary perspective, yielding valuable insights for acquiring transferable and 21st-century skills for the rehabilitation and inclusion of persons with disabilities.

Learning Outcomes

After completing this course, the student teacher will be able to:

- Critically analyse the conceptualization of Knowledge and Myths, misrepresentations , misconceptions associated with Indian Knowledge system and Ethos
- Acknowledge India’s extensive body of knowledge traditions, Critical analysis and appreciation.
- Gain a comprehensive understanding of the interrelationship of education and philosophy (Darshan) in the Indian context.
- Trace the intercepts of disability and other SEDGs in the Indian Knowledge system and Education.
- Develop critical insights about disability narratives available within Indian literature.

Course Content

Unit 1: Understanding Knowledge (Gyaan)

1.1 Knowledge (Gyaan): Concept, definition, and etymological interpretation in vernacular languages. Philosophical (Darshan) understandings of Knowledge (Gyaan)
1.2 Ancient Indian Knowledge Traditions (Bhartiya Gyaan Parampara) to Modern Changing Perspectives of Knowledge, Difference in philosophical traditions and global impact
1.3 Relevance of Knowledge (Gyaan) specific to the human race, including disability
1.4 Understanding Myths, Misconceptions and Facts in the context of Indian Knowledge system
1.5 Technology in Revival, Storage, archives and easy access of knowledge for all

Unit 2: Understanding India through its Knowledge Systems (Gyaan Pranali)

2.1 Conceptualization of the terms "Knowledge of India" and "Knowledge in India"
2.2 Ethos (Lokachar) and Ethics: Concept, nature, characteristics
2.3 Indian Ethos, Culture, Folklore: Distinguished features & values
2.4 Indian Knowledge System: Concept, chronicles, and narratives
2.5 Basic understanding of the Indian Knowledge System

Unit 3: Education and Philosophy (Darshan)

3.1 Education and Philosophy (Darshan): Concept and relationship
3.2 Education in the Indian Knowledge System (Bhartiya Gyaan Parampara)-Vedangas
3.3 Education as a pious obligation for all (Dharma - Duty not religion) (Bhartiya Gyaan Parampara)
3.4 Acquisition, dissemination, and transmission of knowledge (Gyaan) - Learner (Grahi) and Teacher (Professionally Competent & Committed)
3.5 Curriculum, Pedagogy & Evaluation - Immaterial & Material curriculum and content (Laukik & Alaukik), Pedagogy-Hetu-vidya (logic & reasoning), Interest-driven pedagogy, Discussions, Debates (Shastratrtha), Differentiated instructions, Experiential Learning, Storytelling, Performance-based learning assessment & evaluation

Unit 4: Intercepts of Modern Concepts (SEDGs) in Indian Knowledge Traditions

4.1 The Society: Nature, Demographic Perspectives
4.2 Evolution of Concepts through Time: Diversity, Inclusion & Disability
4.3 Inclusion of SEDGs in the Indian Knowledge Traditions (Concepts, Body of Knowledge, Authors, etc.)
4.4 Perception & Inclusion of PWDs & Other SEDGs (Women, transgender, Caste, Class) in Culture and Society
4.5 Inclusion of PwDs and SEDGs in the Education System (Formal & Informal)

Unit 5: Disability Narratives in Indian Literature

5.1 Literature (Sanskrit literature, Hindi literature, religious literature, Indian poetry, folk literature, Indian fiction, Sangam literature, Kannada, Malayalam, Bengali literature, etc.)
5.2 Ancient Epics & Early Narratives: Exploration of disability representation in ancient Indian society by the intersection of disability, morality, and social status.
5.3 Disability & Devotion in Bhakti Literature: Disability as a Metaphor of Spiritual Enlightenment (Surdas: The Blind Poet of Braj, Kabir: Mysticism and Social Commentary)
5.4 Modern Perspectives: Discussion on oppression and disability discrimination in colonial India
5.5 Contemporary Voices: Discussion on disability as both a source of strength and vulnerability, social transformation, and the intersection of Gender, Class, and Disability

Suggested Coursework/Practicum

- Exploration of relevant literature focusing on primary sources of information.
- Creating a student library to organize group studies.
- Volunteering as a literary secretary to organize and manage groups on IKS on social networking platforms.
- Critically analyzing, listing, and reporting the primary sources of information with changing times.
- Understanding and referring to secondary sources of information with context and concerns, not just as factual information.
- Providing Explanations regarding Figurine of *Ardhnarishvar*
- Interpretation of *Swayamvar* and a *Varmaala* only in Sitaji's Hand in Madhubani paintings
- The portrayal of Lord Krishna in *Madhuban* along with Birds and animals
- Philosophical Interpretations of *Khajuraho* carvings.
- Explanations regarding the traditional *Gotipua* dance of Orissa specially performed by boys only.
- Practicum components will involve organizing educational exertions for student teachers to observe visual and performing arts events, and activities aimed at identifying and documenting elements of ancient architecture present in the country.
- Organizing 'Knowledge of India' day within the institution to celebrate cultural aspects discussed in lectures and tutorials, including food and clothing.
- Interacting with family members, elders, neighbours, and other community members to enrich their understanding of local systems and the economy.

Suggested Modes of Transaction

- The curriculum will be delivered through various modes of instruction, including lectures, tutorials, and practicum experiences.
- Lecture sessions will incorporate participatory formats driven by learners, featuring guest speakers, experts, and practitioners in fields like fine arts, performing arts, poets, writers from Indian literature, etc.
- Tutorials will incorporate the screening of documentaries and films, followed by interactive discussions. These discussions will be learner-driven and may take the form of focus group discussions (FGDs) or dialogues.
- Debates, discussions, and seminars can be arranged to explore Indian Knowledge and disability education.

Suggested modes of assessment

- Fostering curiosity and engagement of student teachers with the chosen themes through diverse instructional methods, including regular assessments and constructive feedback.
- Group discussions, presentations, research projects, peer evaluations, simulations, and role plays can also be done for assessment.

Suggested Readings

शर्मा स., राव ब. एवं कथूरिया स. (2023) भारतीय ज्ञान परंपरा विविध आयाम। शिप्रा पब्लिकेशन्स। ISBN 978-9391978334।

शर्मा, स. कु. (2023) भारतीय प्रज्ञा परंपरा का पुण्य प्रवाह। नेशनल बुक ट्रस्ट भारत। ISBN 978-9354917967 ।
राठोड, अ. (2023) भारतीय ज्ञान परंपरा. नवीन शैक्षणिक धोरणानुसार महागातील सर्व विद्यापीठांसाठी। श्री साईनाथ प्रकाशन: नागपूर। ISBN 978-93-84642-99-0 ।
पाण्डेय, ह. (2023) भारतीय ज्ञान परम्परा विमर्श। भारत-भारती प्रकाशक एवं पुस्तक विक्रेता।
पांडेय, न. कु, (2023) भारत की ज्ञान प्रणाली। सत्यम पब्लिशिंग हाउस।
शुक्ला, र. कु. (2021) भारतीय ज्ञान परंपरा और विचारक। प्रभात प्रकाशन। ISBN 978-9390378142 ।
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पोळ, प्र. (2020) भारतीय ज्ञान का खजाना. प्रभात प्रकाशन। ISBN 978-9390378159।
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पाण्डेय, ह.भारतीय ज्ञानपरम्परा विमर्श. भारत-भारतीप्रकाशक एवं पुस्तक विक्रेता. 2023
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गुप्ता, एस. एन. दास. (2012). भारतीय दर्शन का इतिहास भाग ३, राजस्थान हिंदी ग्रन्थ अकादमी.
गुप्ता, एस. एन. दास. (2012). भारतीय दर्शन का इतिहास भाग-4 व 5 (तृतीय सं.), राजस्थान हिंदी ग्रन्थ अकादमी.
गुप्ता, एस. एन. दास. (2023). भारतीय दर्शन का इतिहास भाग। (५ वां संस्करण), राजस्थान हिंदी ग्रन्थ अकादमी.
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झा, आ.आ. (2023). चार्वाक दर्शन. उत्तर प्रदेश हिंदी संस्थान. ISBN-10 9382175199
देवराज, एन. के. एवं तिवारी, र. (1950). भारतीय दर्शन का इतिहास. हिन्दुस्तानी एकेडेमी.
धर्मपाल. (२०१०). भारत की परंपरा, पुनुर्थान ट्रस्ट.
पाठक, वि. (२०२०). दक्षिण भारत का इतिहास वैज्ञानिक तकनिकी शब्दावली आयोग, मानव संसाधन विकास मंत्रालय एवं उत्तर प्रदेश हिंदी संस्थान.
पाण्डेय, गो. च. (2018). बौद्ध धर्म के विकास का इतिहास. उत्तर प्रदेश हिंदी संस्थान.
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योग : स्वस्थ जीने का तरीका. (2018), एनसीईआरटी.
राधाकृष्णन. (1916). भारतीय दर्शन. राजपाल एंड संस.
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विवेकानंद. (2003). व्यावहारिक जीवन में वेदान्त. रामकृष्ण मठ, ISBN : 9789353180546
विवेकानंद साहित्य खंड 4 (1963), अद्वैत आश्रम, मायावती, अल्मोड़ा, हिमालय.
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Rangarajan, L. N. (1987). The Artha shastra. Penguin Books.
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Subbarayapa, B. V. (1982). Glimpses of science and technology in ancient and mediaeval India. Endeavour, 6(4), 177-182. https://doi.org/10.1016/0160-9327(82)90073-4
Tschurenev, J. (2019). Empire, Civil Society, and the Beginnings of Colonial Education in India, Cambridge University Press DOI: https://doi.org/10.1017/9781108653374

Online links

- Indian Knowledge Systems, AICTE: https://www.iksindia.org/ accessed on dated 09/06/2024
- Ministry of Culture, Government of India: https://www.indiaculture.nic.in/
- Indian Council of Historical Research (ICHR): https://ichr.ac.in/
- Sahitya Akademi: https://sahitya-akademi.gov.in/
- National Archives of India: https://nationalarchives.nic.in/
- National Digital Library of India (NDLI): https://ndl.iitkgp.ac.in/
- Digital Library of India: http://www.dli.ernet.in/
- Project Madurai (Sangam Literature): https://www.projectmadurai.org/
- Indian Knowledge Systems (IKS) Division: https://iks.iitgn.ac.in/
- Indira Gandhi National Centre for the Arts (IGNCA): https://ignca.gov.in/

Teacher and Society

Course code: 5.5 **Credits: 2** **Semester: 2**

About the course

Teacher in general and special as well as inclusive education teacher have the key role in nurturing young lives and shaping positive and inspired future generations. NEP 2020 says 'do everything to empower teachers and help them to do their job as effectively as possible' as teachers are second to mothers in having opportunity to work with children during the most impressionable years in their life and contributing so much to the development of both individual and society. The focus of the course is on developing an understanding among student teachers of the roles of teachers in the emerging Indian society in the context of globalization with efforts to promote national spirit and characteristics in our education system.

Learning outcomes

After completion of this course, the student teacher will be able to:

- Discuss the relationship between teacher beliefs, values, character, life history, social and cultural context.
- Explain the teacher role and characteristics- the personal and professional self.
- Demonstrate an ability to develop positive classrooms through engaging in the ethic of care and inclusion.
- Demonstrate an ability to critically reflect on personal and collective practice so as to improve learning and teaching.

Course content

Unit 1: Understanding the Personal and Professional Aspects of Teacher

1.1 Exploring the personal and general context of teacher: Teacher beliefs, values and aspirations, diverse identities and life history
1.2 Exploring the social context of teacher: Social contexts and commitment to learning and education
1.3 Exploring the professional context of teacher: Qualifications, attitude, aptitude, experience and exposure
1.4 The Charismatic Teacher, the Communicator Teacher, the Missionary Teacher, the Competent Teacher, the Learning Teacher and the Reflective Practitioner
1.5 The Reflexive Practitioner: Nurturing the professional capital through collaborative and/or collective engagement with self, others, social context.

Unit 2: Nurturing the Teacher: A Dialogue beyond the Curricular Goals

2.1 Teaching: One profession, many roles
2.2 Teaching Character: Nurturing Teachers for joy, life-fulfilment, peace of mind and personal growth of every individual
2.3 Holistic Teacher Development: Nurturing the Panchakoshas
2.4 Teacher Values and Belief in the context of current Philosophies of Education and Teaching

2.5 Developing an Ethic of Care in Teacher Education: Nurturing the teacher towards a pedagogy of care and inclusion

Unit 3: Understanding and Fostering Teacher Agency

3.1 Teacher Agency: The concept and role in shaping education system of tomorrow
3.2 Individual, Cultural and Structural Dimensions of Teacher Agency
3.3 Role of Teacher Discourses, Philosophy, Relationships, Networks and Professional Development in shaping Teacher Agency
3.4 Challenges and Issues in fostering Teacher Agency- non-performance, non-academic engagement, systemic apathy, policy and practice gaps
3.5 Role of Teacher in shaping the education policy, practice and reform

Unit 4: Teacher as an Architect of the new India

4.1 Engaging in Cortical Education: Dialogue on power relations associated with Gender, Ethnicity, Culture, Disability, Poverty, Social Class for realizing the true human potential
4.2 Being a Critical Teacher: Raising debates around rapid technological advancement and impact on individual, family and social life
4.3 Being a Critical Teacher: Preventing the growing isolation and impact on psycho-social health and well-being
4.4 Being a Critical Teacher: Protecting the interest of students in the changing relationship between the 'state' and the 'market' and minimising their impact on formal education
4.5 Being a Critical Teacher: Conceptualizing 'teacher' , teaching and teacher roles towards 'globalization' and reconstructing nationalism shaping the socio-political milieu

Unit 5: Special and Inclusive Education Teacher – The Power house for Social Justice and Student Empowerment

5.1 Special and Inclusive Education Teacher**:** The charismatic teacher with belief, values and aspiration to make education as right for students with disabilities and empower them along with their families
5.2 Special and Inclusive Education Teacher: The true professionalism with positive attitude, qualifications, experience with a mind and heart of learning teacher for continuous professional development and capacity building
5.3 Special and Inclusive Education Teacher: A nurturing teacher for human flourishing with emphasis on students' socio-emotional learning (SEL)
5.4 Special and Inclusive Education Teacher: As Fostering Teacher Agency in shaping education policy, practice and reform for social justice, inclusion and student empowerment
5.5 Special and Inclusive Education Teacher: Being a critical teacher as an architect of new India's inclusive and right based education.

Suggested Coursework/Practicum

- Undertake a case study of any teacher education institution on student teachers' response to needs of students, their beliefs, attitudes and values.
- Write a biography on any of your favourite special or inclusive educator.

Suggested modes of transaction

Being a reformatory course, the transaction should be carefully planned so that it invites student teachers to rethink teachers and teaching with group discussions for critical reflections. Group work, Lecture cum presentation, Self-reading, assignments and field works must be planned.

Suggested modes of assessment

Assessment of students' engagement in group work, debates, group discussions, assignment, quizzes, class tests and term end examination

Suggested readings

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Boy, A. V. & Pine, G.J. (1971). Expanding the self: Personal Growth for teachers. Dubuque, Iowa, W.C. Brown Co

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ICT and Assistive Technology in Special & Inclusive Education

Course Code: 5.6 Credits: 2 Semester: 5

About the course

This course equips future educators with the knowledge and skills to leverage Information and Communication Technology (ICT) and Assistive Technology (AT) in creating inclusive learning environments for students with diverse needs. With a focus on the Indian context, the course explores various disabilities, including autism spectrum disorder (ASD), Hearing Impairment (HI), Intellectual Disability (ID), Multiple Disabilities (MD), Specific Learning Disabilities (SLD), and Visual Impairment (VI). Through hands-on activities and practical applications, educators will gain expertise in integrating these technologies to enhance learning outcomes for all students.

Learning outcomes

After completion of this course, the student teacher will be able to:

- Identify and describe various assistive technologies for different disabilities.
- Implement ICT tools to create inclusive and supportive learning environments.
- Design individualized educational plans incorporating appropriate assistive technologies.
- Evaluate the effectiveness of different assistive technologies in enhancing learning outcomes for students with disabilities.
- Advocate for the use of ICT and assistive technology in inclusive educational settings.

Course content

Unit 1: Introduction to ICT and Assistive Technology

1.1. Overview of ICT and Assistive Technology: Scope of ICT in Teaching Learning Process, Assessment, Administration and Research
1.2. Introduction to Universal Design for Learning (UDL) principles and their application in creating accessible learning environments.
1.3. Types of Assistive Technology and the difference between Assistive Devices and Adaptive Devices
1.4. International, National Policy and schemes on use of ICT in education
1.5. Emerging trends and issues in using ICT and Assistive Technology such as Artificial Intelligence, Virtual Reality, Augmentative Reality, Mixed Reality, MOOC's etc.

Unit 2: Assistive Technologies for Hearing Impairment (HI)

2.1 Understanding the Need for Assistive Technologies for Hearing Impairment
2.2 Sign Language-Based Technologies (e.g., Video Relay Services, ISL Interpretation Window for Videos), Live Captioning Services
2.3 Electronic and web-based technology applications- AAC, TV, Digital recorders, downloaded AV films, search engines, online learning material, Language Apps, Artificial Intelligence (AI) for language support, Safety and Alerting Devices (e.g., Flashing Alarms for Disasters)
2.4 Hearing Devices: Hearing Aids, Cochlear Implants, etc.
2.5 Case Studies and Best Practices/ Emerging trends and issues

Unit 3: Assistive Technologies for Visual Impairment (VI)

3.1 Assistive Technologies for Facilitating Mathematics Learning (Manual e.g. Measuring tape, Taylor Frame, & ICT based e.g. Math Cat, Math Type, special software)
3.2 Assistive Technologies for Learning Science Concepts (e.g. Thermometers, Colour Probes, Scientific and Maths Talking Calculators, Light Probes, and Weighing scales and Software like Lab Quest)
3.3 Social Science (e.g. Tactile/Embossed Maps, Charts, Diagrams, Models of Different Types, Auditory Maps, Talking compass etc.)
3.4 Low vision devices: Optical, Non-Optical and Projective
3.5 Production of Accessible Learning Materials (eg. Braille, Large-Print Materials, Tactile Diagrams- Thermoform/Swell Paper, E-pub): Taking Books, Daisy Books, Screen Readers, OCR software, Concept, Methods and Schemes.

Unit 4: Assistive Technologies for Intellectual Disability and Autism Spectrum Disorder (ASD)

4.1 Communication Aids (e.g., Augmentative and Alternative Communication (AAC), Avaz etc.)
4.2 Behavioural and Social Skills Tools (e.g., visual schedules, social stories; use of social media, electronic musical instruments, Smart Tutoring System (STS)
4.3 Educational Software and Apps (e.g., CAI, Punarjjani, Visual Schedules, Learning Apps)
4.4 Application of Technology in Lesson Planning, Worksheet Preparation, Report writing, Evaluation and Instruction
4.5 Case Studies and Best Practices/ Emerging Trends and Issues

Unit 5: Assistive Technologies for Specific Learning Disabilities (SLD) and Multiple Disabilities (MD)

5.1 Understanding the Need for Assistive Technologies for Specific Learning Disabilities and Multiple Disabilities
5.2 Assistive Technologies for Reading, Writing & Mathematics - Talking books, recorder, optical character recognition, speech recognition software, alternative writing surfaces, pencil grips, podcast, proof reading, software, talking calculators, electronic math worksheets, fluidity software, Virtual Manipulatives etc.
5.3 AAC, O&M (maintenance of listening aids, visual aids, mobility cane, use of wheelchair, motorized wheelchair, crutches, callipers, artificial limbs, tri-cycles, cars and other mobility equipment)
5.4 Multi-sensory Learning Tools for MD
5.5 Case Studies and Best Practices/Emerging Trends and Issues

Suggested Coursework/Practicum

- Hands-on workshops on using various assistive technologies.
- Development of a mock IEP incorporating ICT and assistive technology.

- Case study analysis of successful implementation of assistive technologies.
- Field visits to schools utilizing ICT and assistive technology.
- Presentations on emerging trends and future directions in assistive technology.
- -Use mass media/multimedia for creating awareness on disability in rural areas and submit your observation

Suggested modes of transaction

- Interactive lectures and discussions (25%)
- Demonstrations and hands-on activities (75%)
- Group work and collaborative projects
- Case studies and real-world examples
- Guest lectures from experts in the field
- Use of multimedia resources

Suggested modes of assessment

- Written assignments and reports
- Practical demonstrations and project work
- Presentations and seminars
- Quizzes and examinations
- Participation in class activities and discussions

Suggested readings

Books

CBM-MSJE Directory of Assistive Devices by CBM.

Hersh, M., & Johnson, M. (2014). Assistive Technology for Visually Impaired and Blind People. Springer Publications.

Lancioni, G. E., Sigafoos, J., O'Reilly, M. F., & Singh, N. N. (2012). Assistive Technology: Interventions for Individuals with Severe/Profound and Multiple Disabilities. New York: Springer.

Lancioni, G. E., & Singh, N. N. (2014). Assistive Technologies for People with Diverse Abilities. New York: Springer.

Senjam, S. S. (Ed.) (2021). An Introduction to Assistive Technology. United Kingdom: Nova Science Publishers.

Sharma A., & Singh, N. (2021). Trends in Inclusive Education.ISBN:978-93-93873-00-2, Renova International Publication.

Online Links

CWSN E-Content Guidelines

Assistive Technology Industry Association (ATIA)

World Health Organization (WHO): Disability and Rehabilitation

Assistech Foundation, India

Educational Research and Statistics

Course code: 5.7 Credits: 2 Semester : 6

About the Course:

Developing holistic and capable learners in the ever-changing educational world requires incorporating basic research and statistics. As the foundation of academic study, basic research introduces students to explore theories and methods and helps them get a deep understanding of the subjects they have chosen. Their intellectual curiosity is stimulated by this core knowledge, which also develops critical thinking abilities in youths, allowing them to evaluate data and identify gaps in their understanding.

Learning Outcomes:

After completing the course, the learner will be able to:

- Describe the concept, meaning and methods of research in education and special education.
- Develop an understanding of the research process and acquire competencies for conducting research.
- Apply suitable measures for data organization and analysis.
- Able to interpret the results and present research report
- Understanding the principles of structuring and organizing research reports, including the introduction, literature review, methodology, results, discussion, and conclusion.

Unit 1: Introduction to Research

1.1 Research: Concept, Meaning, and importance of research
1.2 Characteristics of Research
1.3 Purpose of research
1.4 Methods of Research
Descriptive/Analytical, Applied/Fundamental, Quantitative/Qualitative, Conceptual/ Empirical
1.5 Research in Education and Special Education

Unit 2: Process of Research and Action Research

2.1 Process of Research
- Selection of Problem
- Formulation of Hypothesis
- Review of Literature
- Collection of Data
- Analysis of Data & Conclusion

2.2 Research Proposal Writing. Theoretical and Conceptual Constructs.
2.3 Action Research in Teaching Learning process
2.4 Steps in Action Research
2.5 Professional Competencies for Action Research

Unit 3: Fundamentals of Research

3.1 Research Design – concept, types and its uses
3.2 Tools of Research: Tests, Questionnaire, Checklist and Rating Scale

3.3 Standardization of Tool- Reliability and Validity
3.4 Sample and Sampling Techniques
3.5 Data Collection and Organization of data: Array, Grouped distribution, Normal Distribution Curve

Unit 4: Measurement and Analysis of Data

4.1 Scale for measurement: Nominal, Ordinal, Interval and Ratio
4.2 Measures of central tendency and Dispersion: Mean, Median and Mode, Standard deviation and Quartile deviation,
4.3 Correlation: Product Moment and Rank Order Correlation
4.4 Graphical representation of data – Bar Diagram, Pie Chart, Scatter diagram, line Diagram, Doughnut, Bubble, radar
4.5 Computer assisted statistical analysis software

Unit 5: Research Report Writing

5.1 Interpretation of Data
5.2 Report Writing
5.3 Publication of Research Articles
5.4 Ethics in Research
5.5 Recent trends in research in special education

Suggested Coursework/Practicum:

- Assignment(s) (Group/Small Group/Individual)
- Project(s) (Group/Small Group/Individual)
- Review of Literature in the given disability on a special education related topic (last 10 years)
- Workshops and Training Sessions
- Professional Development Opportunities in Research
- Reflective Journals and Reports

Suggestive mode of transaction:

- Lecture-based instruction, technology-based learning, group learning, individual learning, and inquiry-based learning
- Gap Analysis
- Develop a questionnaire/checklist
- Develop an outline for conducting action research
- Developing tools and questionaires

Suggestive assessment:

Competence/Artifact	Method of Assessment	Assessed By
Involvement and active participation during visits	Observations	Teacher Educator

Competence/Artifact	Method of Assessment	Assessed By
Comprehensive reports	Presentation & reflection	Teacher Educator

Suggested Readings:

Books

Abahumna, A. (2017). *A handbook for beginners on basic research concepts*. Educreation Publishing.

DePoy, E., & Gitlin, L. N. (2019). *Introduction to research E-book: understanding and applying multiple strategies*. Elsevier Health Sciences.

Donald Ary, Lucy Cheser Jacobs, Chris Sorensen, and Asghar Razavieh. Introduction to Research in Education. Wadsworh, Cengage Learning, 8th edition, 2010.

Karaali, G. (2016). What is in a name? A critical review of definitions of quantitative literacy, numeracy, and quantitative reasoning.

Loseke, D. R. (2012). *Methodological thinking: Basic principles of social research design*. Sage.

Maclellan, E. (2012). Number sense: The underpinning understanding for early quantitative literacy. *Numeracy*, *5*(2), 3.

Nelson, W. B. (2005). *Applied life data analysis*. John Wiley & Sons.

Nelson, W. B. (2009). *Accelerated testing: statistical models, test plans, and data analysis*. John Wiley & Sons.

Wickham, H., & Wickham, H. (2016). *Data analysis* (pp. 189-201). Springer International Publishing.

Journals

Heuvel-Panhuizen, M. V. D., & Boogaard, S. V. D. (2008). Picture books as an impetus for kindergartners' mathematical thinking. *Mathematical Thinking and Learning*, *10*(4), 341-373.

Hogan, T. P., & Brezinski, K. L. (2003). Quantitative estimation: One, two, or three abilities? *Mathematical Thinking and Learning*, *5*(4), 259-280.

Huntsinger, C. S., Jose, P. E., & Luo, Z. (2016). Parental facilitation of early mathematics and reading skills and knowledge through encouragement of home-based activities. *Early Childhood Research Quarterly*, *37*, 1-15.

Reehm, S. P., & Long, S. A. (1996). Reading in the mathematics classroom. *Middle School Journal*, *27*(5), 35-41.

Scheffler, I. (1976). Basic mathematical skills: Some philosophical and practical remarks. *Teachers College Record*, *78*(2), 1-6.

Online links

- https://www.indeed.com/career-advice/career-development/basic-research-vs-applied-research
- https://in.indeed.com/career-advice/career-development/quantitative-skills
- https://ebooks.inflibnet.ac.in/hsp16/chapter/interpretation/
- https://www.london.ac.uk/study/courses/moocs/understanding-research-methods
- https://www.jite.org/documents/Vol17/JITEv17IIPp163-179Rodafinos4907.pdf

Adapted Sports, Nutrition, Yoga and Understanding Self

Course code: 5.8 **Credits: 2** **Semester: 7**

About the Course

This course focuses on the benefits of Yoga for healthy living and the importance of the practice of yoga for promoting the optimal state of physical, emotional, intellectual, social, and spiritual wellbeing of a person including persons with different disabilities. Yoga as a way of life is characterized by peace and tranquility, harmony and health, love and happiness, precision, and efficiency. The course seeks to engage special and inclusive student teachers with these ideas. The focus of the course is on being mindful of self (body, mind, emotions, thoughts, and actions). Course components will include brief history of yoga, principles and different types and streams of yoga, practices (Kriyas, Āsana, Pranayama, Bandha & mudra, Dhāraṇa & Dhyāna, etc), meditation and reflective practices, and the importance of these aspects in becoming an effective teacher with equal weightage to the theory and practicum. The course is also having focus on understating various adaptation in sports and physical education as per the need of persons with various disabilities.

Learning outcomes

After completion of this course, the student teacher will be able to:

- Understand the basic principles and practices of Sports, Physical Education and Yoga.
- Instruct the Physical Activities, Sports and Yoga practices for Healthy Living.
- Develop professionalism among students to conduct, organize Adapted Physical Education, Sports and Yoga events at school and community.
- Explain the importance of Yoga and how it helps an individual in understanding self for persons with various disabilities.
- Describe the importance of practicing Yoga Asana for individuals including persons with disabilities.
- Practice basic Yoga Asanas/ Kriyas for persons with and without disabilities.

Course content

Unit 1: Introduction to Sports and Physical Education

1.1 Meaning, definition aims and objectives of Physical Education, Sports

1.2 History of Sports and Physical Education (Ancient Greece, Ancient and Modern Olympics, Asian & Commonwealth Games), Post-Independence Period – Various Policies, Institutions, SAI, Khelo India, Fit India Movement

1.3 Characteristics and Measurements of Standard Track and Field for various games

1.4 Principles of Officiating and duties of Officials: Athletics, Sports and Games

1.5 Brief concept of Education in relation to Sports and Physical Education: Applications in Education and their Pedagogy

Unit 2: Adapted Sports and Physical Education for Persons with Disabilities

2.1 Individualization and adaptations in Sports and Physical Education
2.2 Planning sports and Physical education Programs, Inclusive Practices and Disability Specific Adaptations Therapeutic, Recreation related
2.3 Sports for Athletes with Sensory Disabilities: Types and Nature of Blind Sports and Deaf Sports; and related Organizations: International Blind Sports Federation and Indian Blind Sports Association; International Committee of Sports for the Deaf and All India Sports Council for the Deaf
2.4 Sports for Athletes with Intellectual and Disabilities: Types and Nature; and related Organizations: Special Olympics International and Special Olympics Bharat
2.5 Inclusive Sports Programs: Unified Sports and related adaptive and inclusive physical education activities

Unit 3: Nutrition and Physical Fitness

3.1 Introduction to human nutrition: definition; classification of nutrients
3.2 Concept and nature of carbohydrates, dietary fiber, protein and micro-nutrients-vitamins and minerals
3.3 Need of water and electrolytes for human body; energy (calorie) intake and energy expenditure (calorie burning)
3.4 Basic concept of physiology, metabolism and exercise/sports nutrition
3.5 Assessment of health and fitness of athlete without and with disabilities; plan for improving fitness of persons with disabilities

Unit 4: Yoga and Fitness

4.1 Concept of Yoga, Yoga and meditation, role of Yoga in well-being and positive health
4.2 Fundamentals and Principles of Yoga
4.3 Yoga Practices: Asanas, Pranayama, Meditation and Mudras
4.4 Concept of fitness; Endurance, Strength, Balance and Flexibility Exercises to improve fitness
4.5 Planning and implementing yoga practices for persons with various types of disabilities

Unit 5: Understanding Self

5.1 Concept of self and identity, development of self
5.2 Connecting with others: listening to others, expressing clearly and pleasantly, being attentive and refraining from judgement
5.3 Conflict and stress management; holistic living and building resilience
5.4 Social self: concept of social identity; social grouping, prejudices and stereotypes; impact of culture in identity

5.5 Revisiting the self: revisiting one's childhood, empathizing with other childhood, learning from childhood experience of the peers

Suggested Coursework/Practicum

- Assess the agility, balance, speed, co-ordination, power, reaction time of at least two students with disability.
- Plan yoga stretching, surya-namaskar, standing asanas, sitting asanas, prone position asanas, supine position asanas, meditative asanas, relaxation asanas for students with disabilities as per their abilities.
- Prepare a scrapbook showing various adapted sports events and achievements including Para Olympics, Special Olympics, sports event organized by various Federation and organization for persons with disabilities.

Suggested modes of transaction

Lectures, demonstrations, hands-on experience, projects, practicals, interactive sessions, assignments, seminars, intramural & extramural.

Suggested modes of assessment

Assessment based on practical activities as suggested above, organizing and participating any event of sports, nutrition or Yoga of persons with disabilities, assignments, group discussion, internal tests and term end evaluation.

Suggested readings

- Bucher, C. A. (n.d.) Foundation of physical education. St. Louis: The C.V. Mosby Co.
- Budhe, A.A. (2015) Career aspects and Management in Physical Education, Sports Publication, New Delhi.
- Coalter, R. F. (2013). Sport for Development: What game we playing. Routledge.
- Deshpande, S. H. (2014). Physical Education in Ancient India. Amravati: Degree college of Physical education.
- Gharote, M. L. & Ganguly, H. (1988). Teaching methods for yogic practices. Lonawala: Kaivalyadhama.
- IAAF (2008). IAAF Track and Field Facilities Manual. https://athleticssa.org.za/SportsInfo/IAAF-Track-and-Field-Facilities-Manual-2008-Edition-Chapters.pdf
- Jagirdar, M.A. (2015). Officiating, Coaching, Training Methods and Recreation in Physical Education. New Delhi: Khel Sahitya Kendra
- Kumar, Ajith. (1984) Yoga Pravesha. Bengaluru: Rashtrothanna Prakashana.
- Mohan, V. M. (1969). Principles of physical education. Delhi: Metropolitan Book Dep. Nixon, E. E. & Cozen, F.W. (1969). An introduction to physical education. Philadelphia: W.B. Saunders Co
- Muller, J. P. (2000). Health, Exercise and Fitness. Delhi: Sports.

- Nagendra, H. R. & Nagarathna, R. (2002). Samagra Yoga Chikitse. Bengaluru: Swami Vivekananda Yoga Prakasana
- Pinto, J. and Shetty, R.K. (2021). Introduction to Physical Education. Mangalore: Louis Publications
- Russell, R.P. (1994). Health and Fitness Through Physical Education. USA: Human Kinetics.
- Shekar, K. C. (2003). Yoga for health. Delhi: Khel Sahitya Kendra.
- Singh, H. (1991), Science of Sports Training, DVS Publication, New Delhi.
- Uppal, A.K. (1992). Physical Fitness. New Delhi: Friends Publication.
- Vanik, A.K. (2017). Officiating and Coaching. 1st Edition, New Delhi: Friends Publications (India)
- William, J. F. (1964). The principles of physical education. Philadelphia: W.B. Saunders Co.

Online links

https://egyankosh.ac.in/bitstream/123456789/46355/3/Block-1.pdf

http://egyankosh.ac.in//handle/123456789/46354

Positive Behavioural Interventions and Supports

Course Code: 5.9 a **Credits: 2** **Semester: 2**

About the Course

Positive Behaviour Interventions and Support (PBIS) is the current trend in helping students to learn and exhibit the appropriate behaviour contextually. The PBIS strategies are not just directed towards students with disabilities but planned in such a way that all students in the school benefit from it. If planned and implemented in the right manner, PBIS is one of the best ways to help students in special as well as inclusive educational settings. The techniques involve the students in planning the behavioural expectations and the consequences if not followed thus making the whole process a participatory technique. This unit will elaborate on the planning and implementation of PBIS in schools.

Learning outcomes

After completion of this course, the student teacher will be able to:

- Explain the concept and historical perspectives of behaviour.
- Narrate the need for implementing schoolwide positive behavioural strategies.
- Plan positive behavioural intervention and support (PBIS) for the class.
- Demonstrate competency in implementing the three-tier system of PBIS.
- Illustrate the role of teachers and other stakeholders in implementing schoolwide PBIS.

Course content

Unit 1. Understanding Behaviour

1.1 Behaviour – Historic perspective, classical conditioning, operant conditioning, and other methods used in promoting appropriate behaviour
1.2 Understanding behaviours – Definition, features, topography, and functions of behaviour
1.3 Understanding the communicative and non-communicative functions of behaviours
1.4 Role of internal factors (pain, hormones, sleep, physical and mental health, and medication)
1.5 Role of external factors (unpredictability, lack of clarity, sudden changes)

Unit 2: Positive Behavioural Intervention and Support

2.1 Concept and focus: Promoting academic success and facilitating positive behaviour
2.2 Basic elements of the practice of PBIS: expected outcome, evidence-based practices, collection of data
2.3 Basis of PBIS: Fostering safe and positive relationships, fair and predictable consequences, and review of environmental modifications
2.4 Extent of support based on the nature of the behaviour being addressed
2.5 Overall classroom environment and management

Unit 3: Implementing PBIS

3.1 The three-tier system of implementing PBIS – Tier 1 Primary Prevention, Tier 2 Secondary Prevention and Intervention, Tier 3 Tertiary Prevention,, and Intervention
3.2 Involvement of students in planning and implementing
3.3 Developing PBIS matrix
3.4 Monitoring implementation
3.5 Points to consider for successful implementation of PBIS

Unit 4: Positive Strategies for Behaviour Support

4.1 Proactive, active, and reactive strategies
4.2 Using Interests, structure, and visual strategies to Promote positive behaviours
4.3 Providing choices, agency, and control
4.4 Focus on emotional regulation
4.5 Limitations and negative impact of the use of aversive techniques and punishment procedures

Unit 5: Promoting Positive Support

5.1 Functional Analysis of Behaviour and Intervention
5.2 Differentiating between shutdowns, meltdowns, and tantrums
5.3 Understanding focused interests and motivations
5.4 Importance of self-stimulatory behaviours
5.5 Understanding sensory processing

Suggested Coursework/Practicum

- Observe an individual, identify behaviours that interfere with learning and carry out a functional analysis.
- Critically review the behaviours that interfere with the learning of persons with disabilities and provide their perspective of why might that behaviour be important for them.
- Prepare a matrix for a class of your choice to exercise Tier 1.
- Develop an individualised plan for different settings: educational, home, public places

Suggested modes of transaction

- Lecture discussions, video of classrooms in context and discussion.
- Hands-on experiential demonstrations.
- School visits for observations in the classrooms, playground, extracurricular activities and other school events and activities.
- Observations in public outings (e.g., using public transport, going to a restaurant or movie etc.).
- Class activities for developing the PBIS matrix.

Suggested modes of assessment

- Group work on the topic and submission.
- Individual work on working with a class group implementation of PBIS with the class teacher.
- Other relevant class assignments.

Suggested readings

Bradshaw, C. P., Reinke, W. M., Brown, L. D., Bevans, K. B., & Leaf, P.J. (2008). Implementation of school-wide positive behavioural interventions and supports (PBIS) in elementary schools: Observations from a randomized trial. Education and Treatment Children, 31(1), 1– 26. http://www.educationandtreatmentofchildren.net/

Dunsmoor, J.E., Murphy, G.L. (2015). Categories, concepts, and conditioning: how humans generalize fear. Trends Cognitive Science; 19(2):73-7. doi: 10.1016/j.tics.2014.12.003

Polloway, E.A., Patton, R.P, and Serna, L., (2008). Strategies for teaching learners with special needs. Ohio: Pearson

Timothy and William, J (2019) Applied behavioural analysis. Boston: Pearson Publishers.

What is School-Wide Positive Behavioural Intervention and Supports? (2010). Positive Behavioural Intervention and Support. http://pbis.org/school/what_is_swpbs.aspx

Whitman, M.A. (1975) Behaviour Modification: Introduction and Implications, 24 DePaul L. Rev. 949. Available at: https://via.library.depaul.edu/law-review/vol24/iss4/6

Websites

https://www.pbis.org/resource/references-for-the-evidence-base-of-pbis

https://www.researchgate.net/deref/http%3A%2F%2Fpbi.sagepub.com%2F

https://doi.org/10.1002/pits.22209

Culturally responsive practices and PBIS. Annotated bibliography. https://files.eric.ed.gov/fulltext/ED601040.pdf

https://cdn.ymaws.com/member.tash.org/resource/resmgr/Webinars/2016/2016-PBIS-Webinar/1990_JASH_Toward_Nonaversive.pdf

https://mn.gov/mnddc/positive_behavior_supports/pdf/From-Behavior-Management-to-Positive-Behavioral-Supports.pdf

https://www.unicef.org/easterncaribbean/media/1191/file/7-Key-Steps-to-Implementing-Positive-Behavioural-Systems-at-You-School-2017.pdf

Guidance and Counselling

Course Code: 5.9 b **Credits: 2** **Semester: 7**

About the Course

Guidance and counselling are vital in supporting individuals with disabilities and their families to deal with stressful situations in their daily environment, explore opportunities and plan for education and the future. This course will empower the learners to understand guidance and counselling, the types and context of counselling and apply the counselling and guidance skills to help individuals with disabilities and their families as well as to create a supportive environment around them.

Learning outcomes

After completion of this course, the student teacher will be able to:

- Differentiate the concepts of counselling and guidance.
- Narrate the skills required for counselling and guidance.
- Critically evaluate the importance and scope of educational, vocational, personal, and family counselling.
- Apply the skills of guidance and counselling for persons with disability and their families in different settings.
- Analyze the concerns such as abuse and harassment faced by individuals with disabilities and their families in the contemporary world.

Course content

Unit 1: Introduction to Guidance and Counselling

1.1 Guidance and counselling: definition, aims and importance
1.2 Competency and scope of work
1.3 Role of an educator in working with families of individuals with disabilities
1.4 Role of an educator in working with individuals with disabilities
1.5 Ethical and legal considerations e.g. confidentiality, anonymity, respect, empathy

Unit 2: Techniques and Skills in Counselling

2.1 Creating a barrier-free, positive, safe space and relationship
2.2 Non-judgemental and unconditional acceptance
2.3 Active listening (Verbal and Nonverbal), non-directive counselling
2.4 Empathetic responding, paraphrasing, and reflecting skills
2.5 Building cultural and contextual sensitivity

Unit 3: Building Competency and Enhancing Skills

3.1 Promoting autonomy, choices, and advocacy skills
3.2 Building self-esteem and self-confidence
3.3 Promoting positive mental health and wellbeing

3.4 Understanding intersectionality (e.g. gender and sexuality, region, religion and caste, socioeconomics, age)
3.5 Need and means for referrals, collaboration, and community engagement

Unit 4: Role of Guidance and Counselling in Formal and Informal Situations

4.1 Formal school and informal educational setups
4.2 Vocational and Employment Setups
4.3 Residential care in assisted living centres
4.4 Career Guidance and Legal Rights
4.5 Addressing family as a unit: Parent, siblings, and extended family members

Unit 5: Addressing Abuse and Harassment

5.1 Types of abuse (verbal, physical, psychological, sexual, emotional)
5.2 Abusive punishment procedures and their repercussions
5.3 Recognising signs of abuse and trauma
5.4 Counselling and guidance for peers and staff,
5.5 Accessibility to mental health, legal and allied services

Suggested Coursework/Practicum

- Observation of counselling sessions with persons with disabilities and their families.
- Role plays of parent counselling sessions.
- Counselling and report writing on an individual/family.
- Report of critical observation of a given counselling session.
- List the resources required and their optimum use in managing a school guidance programme
- Review documents on vocational guidance and write an essay.

Suggested modes of transaction

- Refer to the NEP 2020 Framework to understand the role of a counsellor
- The transaction for this course should be done with a perspective to enhance the sensitivity and skills of the educator. They should be able to appreciate the role of a guide and counsellor in the school setting.
- Lecture discussions, role-play and case discussions should be adopted to facilitate understanding among the learners.

Suggested modes of assessment

- Evaluation of a written report on a selected family.
- Evaluation of a simulated parent counselling session.

Suggested readings

Books

Kapunan, R.R. (2004). Fundamentals of Guidance and Counselling. Rex Printing Company, Philippines.

Mehrotra, N (2016). A resource book on disability studies in India. https://www.jnu.ac.in/Faculty/nilika/A%20READER%20ON%20DISABILITY%20STUDIES%20IN%20INDIA.pdf
Naik, P.S. (2013). Counselling Skills for Educationists. New Delhi: Soujanya Books.
Nayak, A.K. (1997). Guidance and Counselling. New Delhi: APH Publishing.
Pal, O.B. (2011). Educational and Vocational Guidance and Counselling. Soujanya Books, New Delhi.
Rao, V. K., & Reddy, R.S. (2003). Academic Environment: Advice, Counsel and Activities. New Delhi: Soujanya Books.
Shah, A. (2008). Basics in Guidance and Counselling. New Delhi: Global Vision Publishing House.
Sharma, V.K. (2022). Administration and Training of Educational and Vocational Guidance. New Delhi: Soujanya Books.

Online links

https://egyankosh.ac.in/bitstream/123456789/46291/1/BESE-132B4E.pdf
https://www.niepid.nic.in/Protocol_Psy.pdf
https://www.mheducation.co.in/counselling-and-guidance-9781259005077-india

Portals

https://services.india.gov.in/service/listing?cat_id=50&ln=en
https://www.india.gov.in/content/national-tele-mental-health-program-india
https://nhm.gov.in/index1.php?lang=1&level=2&sublinkid=1043&lid=359

Life Skills Across Life Span

Course Code: 5.9 c **Credits: 2** **Semester: 8**

About the Course

Teaching life skills is essential for fostering independence, social integration, employability, and overall well-being throughout the lifespan of individuals with disabilities. The skills evolve over a period of time along with the individual with a disability and their environment. Keeping a life span perspective is crucial as it plays a significant role in the holistic development and independence of individuals with special needs throughout their lifespan. It empowers them to lead fulfilling lives and actively participate in their communities.

Learning outcomes

After completion of this course, the student teacher will be able to:

- Critically evaluate the necessity and relevance of appropriate life skills development.
- Make individualized adaptations to teach skills to diverse learners.
- Plan for transitions at various life stages.
- Understand and implement strategies to promote Socio- Emotional Learning (SEL) and other critical life skills in individuals with disabilities.
- Explain the collaborative approaches in life skill education

Course content

Unit 1. Foundations of Life Skills Education

1.1 Introduction to life skills
1.2 Theoretical frameworks supporting life skills development
1.3 Developmentally appropriate life skills across different life stages
1.4 Relevance of life skills for children with disabilities
1.5 Ethical, inclusive and experiential practices

Unit 2. Adapting Life Skills for Diverse Learners

2.1 Adaptive and differentiated instruction in life skills
2.2 Assistive technology, AACs in teaching life skills
2.3 Individualized Education Plans (IEPs) for life skills
2.4 Addressing challenges
2.5 Transition planning for life after school

Unit 3. Promoting Socio-Emotional Learning (SEL) and Personal Competencies

3.1 Understanding emotions and emotional regulation
3.2 Strategies for emotional regulation and self-management
3.3 Social awareness and empathy
3.4 Parent, caregiver and professional's role in supporting social and emotional learning
3.5 Methods for influencing the socio-emotional development of individuals with special needs: insights from current research

Unit 4. Teaching Critical Life Skills

4.1 Perspective taking, critical thinking and problem-solving, executive functioning
4.2 Social (interpersonal skills and conflict resolution), Communication skills (Verbal, non-verbal, AACs) and Emotional Regulation (identification, expression and stress management)
4.3 Self-care, personal hygiene, privacy and sexuality, and independent living
4.4 Financial literacy and functional life skills (home, educational, training and employment setup)
4.5 Leadership and self-advocacy, community participation, rights, leisure and recreation

Unit 5. Collaborative Approaches in Life Skills Education

5.1 Interdisciplinary collaboration
5.2 Family-professional partnerships
5.3 Community engagement for life skills
5.4 Peer-mediated instruction
5.5 Real-life education through life skills: innovations and best practices in special education

Suggested Coursework/Practicum

- Develop worksheets and TLMs to teach essential life skills.
- Develop and execute lesson plans to group teach selected life skills to individuals under 10 years of age essential in inclusive classrooms.
- Develop and execute lesson plans to group teach selected life skills to individuals over 10 years of age essential in educational settings.
- Develop and execute lesson plans to individually teach selected life skills essential in a workplace.

Suggested modes of transaction

The concepts may be explained through real-life examples and selected case studies. Learners may be encouraged to conduct hands-on observations and critically review the materials.

- Lectures and discussions
- Field visits
- Hands-on experiential demonstrations
- Workshops and seminars
- Self-study and use of online resources
- Presentations and projects

Suggested modes of assessment

- Evaluation of worksheets and TLMs to teach essential life skills.
- Evaluation of 3 lesson plans to teach life skills to individuals under 10 years of age.
- Evaluation of 3 lesson plans to teach life skills to individuals over 10 years of age.

Suggested readings

Books

Chung, C. K., Talreja, V., & a Dream, D. (2022). When We Thrive, Our World Thrives: Stories of Young People Growing Up with Adversity. Notion Press.
Ciarrochi, J., Forgas, J. P., & Mayer, J. D. (Eds.). (2013). Emotional intelligence in everyday life. Psychology press.
Elias, M. J. (2003). Academic and social-emotional learning (Vol. 11). Brussels, Belgium: International Academy of Education.
Humphrey, N., Lendrum, A., Wigelsworth, M., & Greenberg, M. T. (Eds.). (2020). Social and emotional learning. Routledge.
Mannix, D. (2009). Life skills activities for secondary students with special needs. John Wiley & Sons.
Ramaswamy, B., Pushpa, R. S., & Gururaj, M. B. (2018). Skill Development In India (Prabhat Prakashan): Sone ka Nevla: A Treasure Trove of Stories by Sudha Murty. Prabhat Prakashan.
Zins, J. E. (Ed.). (2004). Building academic success on social and emotional learning: What does the research say?. Teachers College Press.

Journals

Espelage, D. L., Rose, C. A., & Polanin, J. R. (2016). Social-emotional learning program to promote prosocial and academic skills among middle school students with disabilities. Remedial and Special Education, 37(6), 323-332.
Keenan, S., King, G., Curran, C. J., & McPherson, A. (2014). Effectiveness of experiential life skills coaching for youth with a disability. Physical & occupational therapy in pediatrics, 34(2), 119-131.
Kennedy, F., Pearson, D., Brett-Taylor, L., & Talreja, V. (2014). The life skills assessment scale: measuring life skills of disadvantaged children in the developing world. Social Behavior and Personality: an international journal, 42(2), 197-209.
Pearson, D., Kennedy, F. C., Bhat, S., Talreja, V., & Newman-Taylor, K. (2021). Thriving in adversity: Do brief milieu interventions work for young adults in the developing world? A pragmatic randomized controlled trial. Social Behavior and Personality: an international journal, 49(9), 1-8.
Pearson, D., Kennedy, F. C., Talreja, V., Bhat, S., & Newman-Taylor, K. (2021). Thriving in adversity: Do life skills programs work for developing world children? A pragmatic randomized controlled trial. Social Behavior and Personality: an international journal, 49(9), 1-13.
Pearson, D., Kennedy, F., Talreja, V., Bhat, S., & Newman-Taylor, K. (2020). The Life Skills Assessment Scale: Norms for young people aged 17–19 and 20–22 years. Social Behavior and Personality: an international journal, 48(4), 1-15.
Rani, K. N., Mohanraj, J., Indira, B., & Lakshmi, B. S. (2012). Step by Step: Learning Language and Life Skills. Pearson Education India.
Subasree, R., Nair, A. R., & Ranjan, R. (2014). The Life Skills Assessment Scale: the construction and validation of a new comprehensive scale for measuring Life Skills. IOSR Journal of Humanities and Social Science (IOSR-JHSS), 19(1), 50-58.
https://dreamadream.org/life-skills-assessment-scale/

Online links

Life Skills Curriculum in India and research (https://dreamadream.org/life-skills-curriculum/ & https://dreamadream.org/financialstype/research-papers/)
Singhal N. (2022). Independence in Self-Care Routines: A Curriculum for Professionals and Parents of Children with Autism and Developmental Conditions. Developed with

support from DST, GOI.

Portals

https://aif.org/wp-content/uploads/2018/10/Lifeskills-2018a_MAST.pdf
https://www.unicef.org/india/media/2571/file/Comprehensive-lifeskills-framework.pdf
https://www.autismspeaks.org/life-skills-and-autism
https://www.autismlevelup.com/
https://www.ugc.gov.in/pdfnews/4874522_Draft-Curriculum-for-Life-SKill-Jeevan-Kaushal.pdf

Citizenship, Sustainability and Environmental Education

Course code: 5.10 **Credits: 2** **Semester**: **8**

About the Course

The paper on “Citizenship, Sustainability, and Environmental Education" is important in promoting inclusive and equitable views when addressing current global challenges This work places importance around the articulation of citizenship and sustainability principals and its focus on the lived experience and needs of people with disabilities. Essential topics include inclusive environmental policies and accessible sustainable practices, and the course highlights the role of individuals with disabilities in civic engagement and environmental stewardship. It raises awareness of the links between disability and environmental issues, and advocates for full and effective participation of all citizens in sustainable development.

Learning Outcomes

After completion of this course, the student teacher will be able to:

- Analyse the intersections between disability, citizenship, and environmental education to develop inclusive educational practices.
- Develop accessible educational tools and activities that are broad-based, catering for a wide range of learning requirements.
- Evaluate current environmental policies and practices from a disability perspective to identify areas for improvement.
- Advocate for inclusive environmental and sustainability initiatives within educational and community settings.
- Implement strategies for promoting active citizenship and environmental stewardship among students with disabilities.

Unit 1: Introduction to Citizenship Education and Disability

1.1 Overview of Citizenship Education, definitions, principles, and importance, discussion and presentation on citizenship education principles applied in real-life scenarios

1.2 Citizenship Education through rights-based lens: Understanding disability, social models vs. medical models and rights-based model with case studies

1.3 Disability Justice and Accessibility: Legal frameworks and policies supporting citizens with disabilities to fulfil their rights and responsibilities as citizens, practical political analysis activity

1.4 Historical Perspectives: The history of disability rights movements and their impact on citizenship education, group project on the impact of disability rights movement

1.5 Global and Local Best Practices: Examples of inclusive citizenship education programs, field visits and or virtual meetings with the organizations

Unit 2: Sustainable Development Goals (SDGs)

2.1 Introduction to Sustainability Development Goals (SDGs)
2.2 Intersection of Disability and SDGs: How disability intersects with each SDG, Group activity to analyze the intersection of disability with SDGs, presentations
2.3 Sustainability Practices Contextualized to India: Focusing on the disability community
2.4 Global and Local Perspectives: Inclusive Sustainability practices around the world
2.5 Success stories and Case Studies: Successful sustainability initiatives involving individuals with disabilities

Unit 3: Inclusive Environmental Policies and Practices

3.1 Environmental Policies: Overview of major environmental policies and their implications
3.2 Intersections between Disability and Environmental Policies: Ensuring environmental policies are inclusive for individuals with disabilities
3.3 Climate Change and Disability: Exploring the specific impacts of climate change on people with disabilities and the importance of inclusive climate action plans, project work along with presentations.
3.4 Role of Accessible Technology: Assistive technologies in promoting sustainability and environmental education.
3.5 Case Studies: Inclusive environmental policies and practices in action

Unit 4: Active Citizenship and Advocacy

4.1 Active Citizenship: Definitions, importance, and how it relates to individuals with disabilities
4.2 Advocacy Skills: Strategies and tools for effective advocacy
4.3 Community Engagement: Encouraging participation and leadership of individuals with disabilities in community initiatives
4.4 Collaborative Efforts: Building partnerships between schools, communities, and organizations including Indian NGOs working at these intersections
4.5 Role Models and Ambassadors: Importance of role models and ambassadors (e.g., Purple Ambassadors during Purple Fest) in promoting disability inclusion

Unit 5: Practical Strategies for Educators

5.1 Curriculum Development: Designing inclusive and accessible curricula for citizenship and environmental education
5.2 Instructional Strategies: Effective teaching methods and techniques for diverse learners, considering the Indian educational context
5.3 Assessment and Evaluation: Inclusive assessment strategies to measure student learning and progress
5.4 Resource Development: Creating and utilizing accessible resources and materials
5.5 Implementation and Reflection: Practical application of course concepts and reflective practices for continuous improvement

Suggested Coursework/Practicum

- **Reflective Journals:** Students keep a weekly reflective journal about their learning experiences, insights and how they would use course concepts in actual world scenarios.
- **Case Study Analysis:** Case-Based Analysis of Inclusive Citizenship Education, Sustainability and Environmental policies. Students will identify strengths, weaknesses, and opportunities for improvement from a disability perspective.
- **Inclusive Curriculum Design Project:** The student will develop an inclusive curriculum or educational program that incorporates citizenship education, sustainability, and environmental education with respect to students with disabilities
- **Advocacy Campaign Plan:** The student trainee will be building an Advocacy Campaign to Promote Inclusive Environmental and Sustainability Practices in a Community or in an educational setting.
- **Field Experience:** The student trainee will participate in a field experience or service-learning project with an organisation that promotes sustainability and/or disability advocacy. This could include things like collaborating with local environmental groups, taking part in accessible green initiatives, or sponsoring inclusive educational programmes**.**
- Developing a mini advocacy campaign by the student trainees with the support of the faculty
- **Group Presentations:** The student trainee will work in small groups to study a specific course-related topic and present their results to the class. Accessible green technologies, inclusive policy analysis, and successful community projects are some of the possible topics.
- **Resource Development:** The student trainee will create accessible educational resources, such as lesson plans, multimedia presentations, or teaching aids, to encourage the integration of citizenship, sustainability, and environmental education via a disability perspective**.**

Suggested modes of transaction

- In-person lectures, online discussion forums, video tutorials, and virtual collaboration tools.
- Group work and peer learning through collaborative projects, group discussions, and peer review sessions.
- Visits to local environmental organizations, participation in community sustainability projects, and practical workshops on resource development.
- Case study analysis, group discussions on case scenarios, and presentation of case solutions.
- Reflective journals, e-portfolios, and reflective discussion forums.
- Integrate technology to support diverse learning styles and provide accessible resources.
- Invite experts in the fields of sustainability, environmental education, and disability advocacy to share their experiences and insights.
- Conduct workshops and training sessions on specific skills such as curriculum design, advocacy, and the use of assistive technologies.

- Role-playing, simulations, and hands-on workshops to cover theoretical concepts in an applied manner.
- Hands-on workshop with assistive technologies; demonstrations and applications.
- Development of inclusive assessment tools; case studies and feedback.

Suggested modes of assessment

Reflective Journals, Case Study Analysis, Inclusive Curriculum Design Project, Advocacy Campaign Plan, Group Presentations, Field Experience, Final Exam.

Suggested readings

Adams, M., Bell, L. A., Goodman, D. J., Shlasko, D., Briggs, R. R., & Pacheco, R. (Eds.). (2023). Teaching for diversity and social justice (4th ed.). Routledge

Chalkley, B., Haigh, M., & Higgitt, D. (Eds.). (2009). Education for sustainable development: Principles, perspectives, and practices. Routledge.

Citizenship Education and Global Migration: Implications for Theory, Research, and Teaching. (2017). United States: American Educational Research Association.

Environmental Education and Advocacy: Changing Perspectives of Ecology and Education. (2005). Spain: Cambridge University Press.

Fien, J. (1993). Education for the Environment: Critical Curriculum Theorising and Environmental Education, Deakin University Press, Geelong, Australia

Gordon, D., Meyer, A., & Rose, D. H. (2016). Universal Design for Learning: Theory and Practice (Paperback). Cast. In

Gupta V. K. (1998). Environmental Education, Jallandhar: New Academic Publishing House

Howley, A., Faiella, C. M., & Kroeger, S. D. (2020). Inclusive education: A systematic perspective. Information Age Publishing.

Mitchell, D. (2018). The ecology of inclusive education: Strategies to tackle the crisis in educating diverse learners. Routledge.

Newman, J. (Ed.). (2011). Green education: An A-to-Z guide. SAGE Publications.

Ship, S A. B. (1996). Education for the Environmental Concerns, Implications and Predices. New Delhi: Radha Publication

Smith, T. E., Polloway, E. A., Patton, J. R., & Dowdy, C. A. (2000). Teaching students with special needs in inclusive settings. Pearson.

Online links

https://risingflame.org/wp-content/uploads/2023/07/DEJ-White-Paper_July-28_RisingFlame.pdf

https://pureadmin.qub.ac.uk/ws/portalfiles/portal/468092551/Citizenship_Education_for_a_Sustainable_Future_Jenny_Wren_River_Banks_2023.pdf

https://repository.library.northeastern.edu/files/neu:cj82pn769/fulltext.pdf

https://www.ugc.gov.in/e-book/GCED%20Book_WEB.pdf

Education _for_Environmental_Citizenship_and_Education.pdf

https://www.researchgate.net/publication/257921015_Foundation_of_Environmental_Education

https://earth.org/environmental-education-how-india-is-integrating-climate-consciousness-into

schools/#:~:text=The%20policy%20enriches%20school%20curricula,environmentally%20conscious%20and%20sustainable%20future.
https://www.researchgate.net/publication/324748328_Environmental_Education_The_Indian_Context
https://www.researchgate.net/publication/378590048_ENVIRONMENTAL_POLICIES_IN_INDIA
https://idronline.org/article/perspectives/active-citizenship-what-it-means-and-what-it-takes/
https://www.worldwiseschools.ie/development-education/
https://www.diverseeducators.co.uk/global-citizenship-toolkit/

6.0 SCHOOL EXPERIENCE & FIELD ENGAGEMENT (DISABILITY SPECIFIC PRACTICAL)

(20 Credits)

This domain will lead to acquiring required skills related to following specific disability specialization. A student of secondary level ISITEP Programme needs to select any one Disability Specialization Area and to complete 20 credits courses as specified below:

A. Autism Spectrum Disorders (ASD)
B. Hearing Impairment (HI)
C. Intellectual Disabilities (ID)
D. Multiple Disabilities (MD)
E. Specific Learning Disabilities (SLD)
F. Visual Impairment (VI)

For each area of disability specialization selected by student, six compulsory courses would be offered under that particular disability specialization area as per table given below:

Code	Course Titles	Credits	Semester
Disability Specialization Practical Courses			
6.4.1	Visits & School Observation / Supportive Skills / Developing Teaching Learning Materials & Assistive Technologies Internship and Practice Teaching / Demonstrations / School based Research Projects	2	5
6.4.2		2	6
6.4.3		2	7
6.4.4		10	7
6.4.5		2	8
6.4.6		2	8
	Total	**20**	

The Courses name and structure may be changed for different disability specialization.

School Experience & Field Engagement (Disability Specialization Practical)

Autism Spectrum Disorders (ASD)

PRACTICALS AND FIELD ENGAGEMENT

SCHOOL EXPERIENCE

Field engagement is a vital component of teacher education programmes in the field of general as well as special and inclusive education. This practical engagement allows pre-service teachers to participate in various activities and tasks related to the teaching profession under guided supervision. Through this immersion, student teachers gain a comprehensive understanding of school processes, actively engage in school activities, and internalize essential school-related ethics, values, and norms

This module is designed to ensure that student teachers specializing in autism spectrum disorder are well-prepared to enter the teaching profession with practical experience, a deep understanding of inclusive practices, and the necessary skills to foster an effective learning environment for all autistic learners. This module bridges the gap between theoretical knowledge and practical application, providing invaluable opportunities for student teachers to immerse themselves in the school environment and specialize in skills essential for quality education delivery to autistic learners.

Outline of the components:

Sl. No	Course	Semester	Credits
1	**6.4.1 ASD: School Observation**	5	2
2	**6.4.2 ASD: Supportive Skill Training**	6	2
3	**6.4.3 ASD: Demonstration Lessons (**Teaching practice**)**	7	10
4	**6.4.4 ASD: Internship**	7	2
5	**6.4.5 ASD: Creating TLM**	8	2
6	**6.4.6 ASD: School-based Research Projects**	8	2
	TOTAL		**20**

School Observation

Course Code: 6.4.1 (ASD) **Credits: 2** **Semester: 5**

About the Course

Visits to different organisations will help learners understand autism and its varied manifestations for children of different ages. This practical will equip the learners with the pivotal skills required for communicating and teaching. This practical is therefore designed to observe and learn the variations in the availability and use of resources, communication, and teaching-learning processes in group and individual settings and various setups.

Learning Outcomes:

After completion of this course, the student teacher will be able to:

- Describe the setting and functioning of different organisations (preschools, inclusive, and special schools, therapy centres)
- Understand classrooms with autistic students with respect to organisation, student-teacher interactions, teaching methods used

Course Content

Settings: The practical will be done in ALL the following settings:

- ASD specific school
- Inclusive school

Suggested Mode of Transaction: At each of the above-mentioned settings, the learner is expected to do the following:

1. Prepare a participatory, observational (not a supervisory) report including:

- Infrastructural facilities, resources available, services offered
- Availability and role of different professionals incl the student: teach ratio
- Daily routines, activities and interventions (type, duration, etc.)
- Curricular and co-curricular content and transaction
- Communication modalities of the students with ASD
- Nature of support provided including child-specific support in each activity
- Documentation maintained for each person
- Quality of education delivery along with justification
- Any other relevant information, learning and impressions

In each setting, identify two children (one autistic and one non-autistic) and document:

- Information collected from initial intake in consultation with teachers and/or parents
- Screening or diagnostic assessment conducted using an appropriate tool

2. Write an **overall essay** based on the overall, consolidated learning from all three settings. The essay should reflect your understanding of -

- Neurotypical and neurodiverse development
- Commonalities and differences in strengths and needs of different autistic people
- Different ways needs may be addressed
- Ways these techniques may be adapted across different settings and individuals
- Summary observations or suggestions about priority areas to consider

Suggested Mode of Assessment: There will be 3 submissions, 1 from each setting and an overall essay. All submissions must include –

- A comprehensive portfolio with all relevant documents of observations, reports, proof of attendance, feedback received etc.
- A certification of completion that is evaluated and endorsed by the teaching institution

All submissions may be graded by the teaching institute using marking schemes/ rating scales/ rubrics.

Please Note:

- The learning and practice opportunities must be provided in all semesters. Evaluation of this practical will be made in the above-mentioned semester.
- Observations mentioned are essential for a minimum of 30 hours or 10 days in each setting. The schedule for respective visits shall be included in the timetable and days may be allocated.
- For a holistic learning experience, the learner will benefit from working with variability in the profiles of autistic individuals e.g., different ages, genders, grades, learning styles, sensory profiles and skill sets.
- The tasks mentioned are essential. The content/hours may be adapted as per feasibility and accessibility. For instance, if schools for a specific disability are not available in the nearby area, the same may be conducted at education or therapy centres or services being provided in the resource room.
- Access to information and observations and all interactions with autistic individuals must be with consent from and under the supervision of trained educators and/or parents.
- Care must be taken to respect the consent, confidentiality and dignity of the autistic person and their families

Supportive Skill Training

Course Code: 6.4.2 (ASD) **Credits: 2** **Semester: 8**

About the Course:

This practical allows the learners to acquire essential skills that are crucial to support autistic learners. The aim is to empower educators with the fluency and skill development necessary for fostering conducive inclusive learning environments and enhancing the overall educational experience for autistic individuals.

Learning Outcomes: After completion of this course, the student teacher will be able to:

- Acquire supportive skills to effectively communicate and teach learners with ASD using Assistive Technologies, Functional Academic Skills, learner-centred personalised communication systems and AACs (low-tech, mid-tech and high-tech) etc.
- Acquire skills necessary to effectively communicate with and teach autistic individuals.

Course Content

Settings: The practical will be done in ALL these settings:

- ASD specific school
- Inclusive school

Suggested Mode of Transaction: At each of the above-mentioned settings, the learner is expected to identify one autistic learner and document the following:

1. Information from initial intake

2. Observation and understanding sensory needs of the student in consultation with the OT and/or parents

3. A plan developed in consultation with the teacher and/or parents, to facilitate –
   - Development of a leisure skill
   - Participation in a community activity (e.g., tuition centre, hobby class, going to a restaurant or for a movie, an upcoming wedding or vacation)

4. Relevant communication strategies including AACs and visual supports

5. Prepare the necessary TLMs and the assistive technology identified

Suggested Mode of Assessment: There will be 2 submissions, one from each setting. All submissions must include –

- A comprehensive portfolio with all relevant documents of observations, reports, TLMs, proof of attendance, feedback received etc.
- A certification of completion that is evaluated and endorsed by the teaching institution

All submissions may be graded by the teaching institute using marking schemes/ rating scales/ rubrics.

Please Note:

- The learning and practice opportunities must be provided in all semesters. Evaluation of this practical will be made in the above-mentioned semester.
- Observations mentioned are essential for a minimum of 30 hours or 10 days in each setting. The schedule for respective visits shall be included in the timetable and days may be allocated.
- For a holistic learning experience, the learner will benefit from working with variability in the profiles of autistic individuals e.g., different ages, genders, grades, learning styles, sensory profiles and skill sets.
- The tasks mentioned are essential. The content/hours may be adapted as per feasibility and accessibility. For instance, if schools for a specific disability are not available in the nearby area, the same may be conducted at education or therapy centres or services being provided in the resource room.
- Access to information and observations and all interactions with autistic individuals must be with consent from and under the supervision of trained educators and/or parents.
- Care must be taken to respect the consent, confidentiality and dignity of the autistic person.

Demonstration Lessons (Teaching Practice)

Course Code: 6.4.3 (ASD) **Credits: 2** **Semester: 6**

About the Course

Teaching practice allows student teachers to practice the art and science of teaching, under the supervision and support of experienced teachers. This particular practical is an opportunity for aspiring teachers to understand and practice instructional strategies, and classroom management in school. This field experience provides a challenging nonetheless rewarding experience of working with students in actual classrooms and acquiring professional identity and competence.

Learning Outcomes

After completion of this course, the student teacher will be able to:

- Develop teaching skills through practical engagement in special schools and inclusive schools
- Demonstrate the use of the various skills with their peers
- Write lesson plans using the appropriate format
- Demonstrate the application of various teaching strategies in simulated settings

Course Content

Settings: The practical will be done in ALL the following settings:

- ASD specific school
- Inclusive school

Suggested Mode of Transaction: At each of the above-mentioned settings, the learner is expected to do the following:

1. Assist educators in the implementation of classroom activities and management

2. Identify one autistic child and document a comprehensive report including –
   - Observations from the initial intake, assessments, review of documents and services received and interactions with teachers and/or parents
   - In consultation with the educators, develop a total of 10 Lesson Plans in -
     - Academic concepts (from three different subjects/activities)
     - Non-academic activity (e. g. arts, sports, or other age-appropriate life skills)
     - ADL / self-care /vocational
     - Communication

Suggested Mode of Assessment: There will be 2 submissions, one for each child. All submissions must include –

- A comprehensive portfolio with all relevant documents of observations, reports, TLMs, proof of attendance, feedback received etc.
- A certification of completion that is evaluated and endorsed by the teaching institution

All submissions may be graded by the teaching institute using marking schemes/ rating scales/ rubrics.

Please Note:

- The learning and practice opportunities must be provided in all semesters. Evaluation of this practical will be made in the above-mentioned semester.
- Observations mentioned are essential for a minimum of 20 hours or 7 days in each setting. The schedule for respective visits shall be included in the timetable and days may be allocated.
- For a holistic learning experience, the learner will benefit from working with variability in the profiles of autistic individuals e.g., different ages, genders, grades, learning styles, sensory profiles and skill sets.
- The tasks mentioned are essential. The content/hours may be adapted as per feasibility and accessibility. For instance, if schools for a specific disability are not available in the nearby area, the same may be conducted at education or therapy centres or services being provided in the resource room.
- Access to information and observations and all interactions with autistic individuals must be with consent from and under the supervision of trained educators and/or parents.
- Care must be taken to respect the consent, confidentiality and dignity of the autistic person.

Internship in Disability Specialization

Course Code: 6.4.4 (ASD) **Credits: 10** **Semester: 7**

About the Course:
This is a comprehensive practicum focused on autism spectrum disorders within special school settings. This immersive program provides hands-on experience supporting special educators, honing teaching skills, and contributing to holistic development. Learners will gain exposure to diverse setups, including classrooms and extracurricular activities while collaborating closely with experienced teachers as well as autistic teachers/mentors to get an in-depth understanding of the challenges as well as insights into the domain of special education, and the direct perspective from the autistic community. The internship emphasizes individualized mentorship, cultural sensitivity, inclusivity, and the integration of technology into teaching strategies. Upon completion, participants will possess a strong foundation to apply theoretical knowledge in real-world teaching scenarios and develop professional competencies in adaptation, collaboration, problem-solving, and participative decision-making.

Learning Outcomes:
After completion of this course, the student teacher will be able to:

- Demonstrate teaching skills and collaboration skills in the classroom/school
- Conduct assessment of students with ASD
- Develop IEPs
- Implement IEPs
- Adapt curriculum and lessons for students with ASD
- Identify the ICT and AT needs of students with ASD

Course Content

Settings: The internship will be done in ALL the following settings:

- ASD special school

Suggested Mode of Transaction: At each of the above-mentioned settings, the learner is expected to do the following:

1. Identify two autistic children and document the following for each student:
    - A formal assessment conducted by the learner to identify the specific learning concerns and profile of strengths of the student in consultation with the respective educators and/or parents
    - Appropriate IEP with accommodations and modifications developed by the learner in consultation with the class teachers
    - The necessary TLMs and the assistive technology identified
    - Planning and implementation (in collaboration with the teachers) of a total of 15 group teaching lessons and a total of 15 individual (1:1) teaching lessons on the following:

- Academic concepts from three different subjects
- Non-academic activity (e. g. arts, sports, or other age-appropriate life skills)
- ADL / self-care
- Communication

2. In consultation with the management and/or teachers, do the following –
    - Assist special educators as per the timetable in everyday group and 1:1 activities and management e.g., preparing TLMs, adapted books, checking schedules, taking classes, implementing lesson plans etc.
    - Organise a parent training/sensitisation program conducted by speaking and non-speaking autistic advocates and mentors
    - Facilitate participation of autistic persons in cultural programs (e.g., sports day, festival celebration, picnics, melas, field trips, camps etc.) designed and executed to
    - Liaison with the necessary government authorities to facilitate access to necessary certificates, exemptions and concessions for the families
    - Prepare a list of neurodiversity-affirming and non-ableist vocabulary

Suggested Mode of Assessment: There will be a total of 3 submissions, one for each child and one for participation in other school activities. All submissions must include:

- A comprehensive portfolio with all relevant documents of observations, reports, TLMs, proof of attendance, feedback received etc.
- A certification of completion that is evaluated and endorsed by the teaching institution

All submissions may be graded by the teaching institute using marking schemes/ rating scales/ rubrics.

Please Note:
- Observations mentioned are essential for a minimum of 300 hours.
- The schedule for respective visits shall be included in the timetable and days may be allocated.
- For a holistic learning experience, the learner will benefit from working with variability in the profiles of autistic individuals e.g., different ages, genders, grades, learning styles, sensory profiles and skill sets.
- The tasks mentioned are essential. The content/hours may be adapted as per feasibility and accessibility. For instance, if schools for a specific disability are not available in the nearby area, the same may be conducted at education or therapy centres or services being provided in the resource room.
- Access to information and observations and all interactions with autistic individuals must be with consent from and under the supervision of trained educators and/or parents.
- Care must be taken to respect the consent, confidentiality and dignity of the autistic person.

Development of TLM

Course Code: 6.4.5.(ASD) **Credits: 2** **Semester: 8**

About the Course

Lesson plans are essential tools for educators, that aid in imparting knowledge, skills, and competencies. It assists in guiding content delivery, organization, communication, and assessment. Through careful planning, educators engage students with accessible content, align activities with objectives, and ensure relevance. This practical component is focused on training learners in making effective lesson planning and preparing Teaching Learning Materials (TLMs) under the guidance of supervisors.

Learning Outcomes: After completion of this course, the student teacher will be able to:

- Develop teaching-learning materials tailored for special schools and inclusive schools.
- Use TLMs creatively, appropriately and effectively in teaching autistic learners.

Settings: The internship will be done in ALL the following settings:

- ASD specific school
- Inclusive school

Course Content

Suggested Mode of Transaction: At each of the above-mentioned settings, the learner is expected to identify one autistic learner and document the following:

1. Information from initial intake, assessment, IEPs and Lesson Plans

2. In consultation with the teacher and/or parents, develop individualised TLMs. The TLMs may incorporate principles of Universal Design of Learning (UDL) and are appropriate for various learning styles (Visual / Auditory / Kinaesthetic / Reading / Tactile / combination of all). Appropriate TLMs must be developed for the following:
   - Academic concepts being learnt in three different subjects
   - Non-academic activity (e.g., arts, sports, or other co-curricular activity)
   - ADL / self-care
   - Communication

Suggested Mode of Assessment: There will be 2 submissions, one for each child. All submissions must include –

- A comprehensive portfolio with all relevant documents of observations, reports, TLMs, proof of attendance, feedback received etc.
- A certification of completion that is evaluated and endorsed by the teaching institution

All submissions may be graded by the teaching institute using marking schemes/ rating scales/ rubrics.

Please Note:

- The learning and practice opportunities must be provided in all semesters. Evaluation of this practical will be made in the above-mentioned semester.
- Observations mentioned are essential for a minimum of 30 hours or 10 days in each setting. The schedule for respective visits shall be included in the timetable and days may be allocated.
- For a holistic learning experience, the learner will benefit from working with variability in the profiles of autistic individuals e.g., different ages, genders, grades, learning styles, sensory profiles and skill sets.
- The tasks mentioned are essential. The content/hours may be adapted as per feasibility and accessibility. For instance, if schools for a specific disability are not available in the nearby area, the same may be conducted at education or therapy centres or services being provided in the resource room.
- Access to information and observations and all interactions with autistic individuals must be with consent from and under the supervision of trained educators and/or parents.
- Care must be taken to respect the consent, confidentiality and dignity of the autistic person.

School-Based Research Projects

Course Code: 6.4.6 (ASD) **Credits: 2** **Semester: 8**

About the Course:

This module is designed to develop skills, knowledge, and attitudes necessary to meet the diverse needs of students in real-world educational settings, gain insights from the day-to-day dynamics of classrooms, critically reflect and review the application of theoretical concepts and hone creativity and problem-solving abilities essential for adapting to the diverse and dynamic needs of students with disabilities. This practical provides the opportunity to foster collaboration and work with other educators, administrators, and parents vital for creating a supportive educational environment.

Learning Outcomes

After completion of this course, the student teacher will be able to:

- Identify issues relevant to autistic learners in a school environment that promotes effective and inclusive learning opportunities
- Understand and recognise indicators and parameters of good service providers

Course Content

Settings: The practical will be done in ALL the following settings:

- Inclusive school

Suggested Mode of Transaction: At each of the above-mentioned settings, the learner is expected to do the following:

1. Design/select a proforma to conduct an independent audit

2. Spend time in different classes in different grades

3. Concerning the guidelines for PwDs, observe and evaluate preparedness for the inclusion of children with autism:
    1. Identify activities carried out within and outside the classrooms and schools that promote inclusion
    2. Identify the facilitators of the inclusion of autistic learners.
    3. Similarly, identify barriers to the inclusion of autistic learners.
    4. In addition to infrastructure, also consider other factors such as
        - Participation (academic and non-academic activities)
        - Activities design, execution and adaptations
        - Communication (means, style and appropriateness)

- TLMs (creativity, and appropriateness)
- Peer interactions
- Educators (ratios, training, attitude and interactions)
- Parent involvement

4. Reflect and comment on the implicit, hidden or unspoken rules and expectations that exist within each setting/activity, its impact on the autistic learner and your suggestions to openly communicate them.

5. Critically review the different components. It is likely that the same actions/activities facilitate the inclusion of some and create barriers for others. Provide the rationale for consideration and suggestions, if any, for improvement.

Suggested Mode of Assessment: There will be 2 submissions, one from each setting.

All submissions must include -

- A comprehensive portfolio with all relevant documents of observations, reports, proof of attendance, feedback received etc.
- A certification of completion that is evaluated and endorsed by the teaching institution

All submissions may be graded by the teaching institute using marking schemes/ rating scales/ rubrics.

Please Note:

- Observations mentioned are essential for a minimum of 30 hours or 10 days in each setting. The schedule for respective visits shall be included in the timetable and days may be allocated.
- For a holistic learning experience, the learner will benefit from working with variability in the profiles of autistic individuals e.g., different ages, genders, grades, learning styles, sensory profiles and skill sets.
- The tasks mentioned are essential. The content/hours may be adapted as per feasibility and accessibility. For instance, if schools for a specific disability are not available in the nearby area, the same may be conducted at education or therapy centres or services being provided in the resource room.
- Access to information and observations and all interactions with autistic individuals must be with consent from and under the supervision of trained educators and/or parents.
- Care must be taken to respect the consent, confidentiality and dignity of the autistic person.

School Experience & Field Engagement (Disability Specialization Practical)

Hearing Impairment (HI)

SCHOOL EXPERIENCE
AND FIELD ENGAGEMENT (PRACTICALS)

School experience provides knowledge on professional competencies essential for teachers to handle students with and without hearing impairment at the secondary school level. The components of school observation, demonstration of lessons, school-based research projects, Internship in schools, preparation of TLM, use of assistive technologies, and teaching supportive skills are essential components under school experience to develop the required professional skills more comprehensively in the teachers.

Field engagement is a vital component of teacher education programme in the field of special and inclusive education. This practical engagement allows pre-service teachers to participate in various activities and tasks related to the teaching profession under guided supervision. Through this immersion, student teachers gain a comprehensive understanding of school processes, actively engage in school activities, and internalize essential school-related ethics, values, and norms. The School Experience module, of the Integrated Special and Inclusive Teacher Education Programme (ISITEP) bridges the gap between theoretical knowledge and practical application, providing invaluable opportunities for student teachers to immerse themselves in the school environment and specialize in skills essential for quality education delivery to deaf learners.

The module is designed to ensure that student teachers specializing in hearing impairment get well-prepared to enter the teaching profession with practical experience, a deep understanding of inclusive practices, and the necessary skills. To foster an effective learning environment for all learners with hearing impairment and other disability conditions, this module bridges the gap between theoretical knowledge and practical application, providing invaluable opportunities for student teachers to immerse themselves in the school environment and specialize in skills essential for quality education delivery to learners with and without disabilities in special and inclusive education.

Outline of the components

Sr. No.	Course	Semester	Credits
1	6.4.1 (HI) Visits & School Observation	5	**2**
2	6.4.2 (HI) Supportive Skill Training	6	**2**
3	6.4.3 (HI) Developing TLM and Assistive Technology	7	**2**
4	6.4.4 (HI) Internship and Practice Teaching	7	**10**
5	6.4.5 (HI) Demonstrations	8	**2**
6	6.4.6 (HI) School-Based Research Projects	8	**2**
	TOTAL		**20**

Visits & School Observation

Course Code: 6.4.1 (HI) **Credits: 2** **Semester: 5**

About the course

Visits to different organizations will facilitate learners' comprehension of disabilities and their implications. This practical course is structured to offer exposure to educational pedagogies such as group and individual one-to-one teaching-learning processes for different disabilities. The student teachers will also be exposed to diverse modes of communication including ISL and infrastructure across various educational settings, with a specific emphasis on Deaf and Hard of Hearing (DHH) learners.

Learning Outcomes

After completing this course, student teachers will be able to:

- Understand which kind of communication methods be used in educating DHH learners and other special needs children.
- Understand the infrastructure and resources available in special and inclusive schools for children with special needs (CwSN).
- Observe and reflect on the teaching-learning processes for children with special needs.
- Observe and analyze the functioning of various types of special schools and organizations for the CwSN.
- Identify best practices and suggest improvements for the quality of education delivery in special schools and inclusive schools for CwSN.
- Observe classroom lessons in various settings for DHH and other disabilities.

Course Content

The course content includes

- Observing various schooling systems for children with special needs including hearing impairment.
- Describe the processes, practices, and overall environment of special schools.
- Establish rapport with stakeholders in special schools and related organizations.
- Understand and describe the processes of conducting various activities in special schools.
- Describe the available infrastructure and its utility in special schools.
- Reflect on and summarize relationships among stakeholders in special schools.
- Analyze various assessment processes in special schools.
- Prepare and present comprehensive profiles and reports on the schools and organizations observed.

Educational Settings

Special schools, Inclusive schools, Cross Disability Schools, Community Based Education, speech and hearing clinics or centers.

Suggested Activities to be conducted

Sl. No.	Tasks	Specific activities
1	Visits to special schools, Inclusive Schools, Associations, Training Centre for DHH and other	• Study the infrastructure, and resources available in special schools/cross-disability special schools/ inclusive schools/

	disabilities following specific disability and cross disability approaches in teaching and learning	community based educational settings and observe the various services being offered. • Identify communication modes /methods being used by the schools. • List the best practices offered by the schools/organizations visited. • Write a report on the quality of educational delivery in the schools/ organizations visited based on the feedback from teachers/paraprofessionals/ administrators/ learners with DHH and other disabilities. • Include suggestions on what can be done to make it better.
2	Visit to speech and hearing centre/ clinic	• Observe hearing assessment in children of various age groups • Observe hearing aid trials and fitting in children of various age groups • Listen to the speech of minimum 5 children with and without hearing loss and identify parameters (non-segmental, segmental & supra-segmental) of 3 DHH students. • Observe minimum 3 DHH students during speech assessment (screening). • Observe minimum 5 DHH students during speech assessment using standardized tools. • Observe assessment of the working condition of minimum 5 students' hearing devices. • Observe minimum 5 individual and group speech teaching sessions each. • Observe minimum 3 individual and group speech correction sessions each. • Analyse session plans for speech teaching and speech correction and understand the rationale for specific goals in minimum 2 children.
3	Classroom teaching observation at the secondary stage level for different subjects in various settings such as special schools/ cross disability schools and centres/ inclusive schools and home-based educational settings using: **a.** Oral-aural approach **b.** Total Communication **c.** Educational Bilingualism **d.** Other methods	• Observe the teaching of DHH learners using: Oral-aural approach, Total Communication, Educational Bilingualism and other methods • Observe various language-based activities such as conversation, visits, directed activity, news, sensory training, storytelling, poems, rhymes, and picture description and ensure observation for teaching various class subjects.

		• Write observation reports for different subjects. • Include the learnings & insights, feedback, and areas of improvement in the observation report. • It is desirable that observation of classroom activities is spread across the semesters i.e. observations in each semester.

NOTE: Activity may be conducted in the specific semester and during internship. It is desirable that exposure to all approaches may be provided and should be spread across all semesters.

Submissions

- Writing reports including reflections on infrastructure, facilities, and the teaching-learning process. Reports can be written and in the form of ISL video submission
- Writing reports on observation of the teaching-learning process. Reports can be written or in the form of ISL videos.
- Presentation by the candidate sharing the summary of their observations & reflections.

Suggested modes of transaction

Observation, Interactions, Discussions, Reviewing available literature on special education and hearing impairment, Collection of relevant documents and data.

Suggested Assessment

Peer Assessment, Self-Reflection, Comprehensive Assessment (Journal) Semester End Assessment (All submissions may be graded by the teaching institute using marking schemes/ rating scales/ rubrics.)

Suggested readings

Alper, S. 1996. The relationship between full inclusion and other trends in inclusion. In Ryndak, D.L. & Alper, S. (eds.). Curriculum content for students with moderate and severe disabilities in inclusive settings. Boston: Allyn & Bacon.

Avramidis, E. & Norwich, B. 2002. Teachers' attitudes towards integration/inclusion: a review of the literature. European Journal of Special Needs Education, 17(2).

Avramidis, E.; Bayliss, P. & Burden, R. 2000b. Student teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school. Teacher and Teacher Education, 16.

Berry, V. 1992. Communication priorities and strategies for the mainstreamed child with hearing loss. The Volta Review, 94, 29-34.

Brackett, D. 1997. Intervention for children with hearing impairment in general education settings. Language, Speech, and Hearing Services in Schools, 28(4).

Cambra, C. 2002. Acceptance of deaf students by hearing students in regular classrooms. American Annals of the Deaf, 147 (1), 38-43.

Weiner, H.M. 2003. Effective inclusion – Professional development in the context of the classroom. Teaching Exceptional Children, 25(6).

Useful Links

https://www.youtube.com/watch?v=XajHqrzOs0o
https://www.youtube.com/watch?v=PetBRqetrwM

https://successforkidswithhearingloss.com/the-necessity-of-classroom-observation/
https://www.nationwidechildrens.org/family-resources-education/health-wellness-and-safety-resources/helping-hands/children-with-hearing-loss-guidelines-for-schools

Supportive Skill Training

Course Code: 6.4.2 (HI) **Credits: 2** **Semester: 6**

About the course

The supportive skill training in ISL & Bilingualism gives the learners an opportunity to acquire essential skills that are crucial for effective communication and accessibility in the context of hearing impairment. This combines comprehensive training in Indian Sign Language (ISL) and Bilingualism. The aim is to empower educators with the fluency and skill development necessary for fostering conducive inclusive learning environments and enhancing the overall educational experience for individuals with hearing impairment. The training in developing skills for listening and spoken language development, speech correction, and social skill training will support the student teachers to gain knowledge and support parents of DHH.

Learning Outcomes

Upon completion of the course, student teachers will be able to:

- Compile resources for educational content accessible through ISL.
- Demonstrate proficiency in ISL communication for teaching purposes.
- Expand ISL vocabulary for teaching various subjects.
- Apply ISL grammar principles in bilingual educational contexts.
- Deliver abstract educational concepts and creative expressions in ISL.
- Recognize and adapt to regional variations in ISL for effective teaching
- Describe the requirements for the government scheme of cochlear implants and listening and spoken language therapy.
- Understand the rationale, principles, strategies, techniques, and procedures in listening and spoken language development and correction.
- Identify challenges and impart social skills training to learners with DHH.
- Describe the impact of additional difficulties (sensory integration/attention difficulties) on the rate of progress in children who are DHH.
- Support and counsel the parents in preparation for vocational education and higher education.

Course content

The course content includes:

- Compilation of educational resources accessible through ISL
- Basic and advanced ISL communication techniques
- Expansion of ISL vocabulary for teaching various subjects
- Application of ISL in bilingual educational settings
- Delivery of abstract concepts and creative expressions in ISL
- Understanding regional variations in ISL and their implications for teaching
- Skills for listening development
- Skills for speech, language and social skill development
- Skills for speech correction

Educational settings

Training Centers, Bilingual Centers, Special Schools, Deaf Associations, Inclusive schools

Suggested Activities to be conducted

Sl.	Tasks	Specific activities
1.	Compilation of resources available for educational content through ISL	Create a list of at least 10 different resources (Websites / YouTube channels / Apps / online courses etc.) available for learning educational content through ISL, along with links and topics.
2.	Teaching Concepts using ISL in various subjects	• Observe subject-wise e-content available in ISL (SIGN LIBRARY, ISLRTC, NIOS, etc.) • Observe lessons in ISL given by deaf instructors. • Deliver lessons using educational bilingualism in ISL and take feedback from deaf instructors on the ISL quality and grammar.
3.	ISL Communication	• Learn and practice ISL Communication during classes through basic vocabulary, sentences & questions. • Practice dialogues in ISL about various topics.
4.	ISL Vocabulary for teaching subjects/ papers	Learn and practice the expansion of ISL vocabulary for teaching various subjects/papers. (Refer to the ISLRTC dictionary of 10,000 words and other existing resources)
5.	Use of ISL Grammar in Bilingualism	ISL Parameters, Signing Space, Sign Families, Word Order, Size/Shapes in ISL, Different types of ISL sentence Questions in ISL, Negation in ISL, Tenses in ISL, Different Verbs in ISL, Classifiers, Indexing, and Localization
6.	Abstract Concepts in ISL	Understand and deliver abstract educational concepts in ISL
7.	Listening and Spoken Language Training (LSLT)	• Observe and practice listening strategies used in one-to-one and group sessions of LSLT and speech correction. • A case study: to track and analyze the progress of a child with hearing impairment.
8.	Speech, language, social skill development	• Observe and write speech & language teaching sessions of 2 learners with DHH. • Assess the social skills of 2 learners with DHH through VSMS (Indian Adapted Version). • Plan for developing social skills and prepare and practice 5 lessons for social skill development with activities.
9.	Regional variation in ISL	• Observe the regional variations in ISL and note the importance of knowing this variation while teaching. • Record regional variations in ISL (at least 5 examples). Discuss the importance of regional variations with deaf students.
10.	Preparation for Vocational Education (VE) and Higher Education (HE)	• Observe counselling sessions • Aptitude test and preparation of DHH for that • Survey the opportunities for VE and HE • Familiarize with Government and Non-Government

		Schemes for VE and HE
11.	Care and maintenance of Hearing and Assistive Devices	• Guide the students at the secondary stage for care and maintenance of hearing and assistive devices. • Prepare materials for awareness about the care and maintenance of various devices.

Submissions

- Materials for awareness raising
- Materials for speech correction
- Videos in ISL
- Journal on Bilingual Teaching

Suggested modes of transaction

- Interactive workshops
- Practical sessions for ISL communication and vocabulary expansion
- Observational learning through ISL videos and deaf instructors' lessons
- Hands-on practice of ISL grammar and creative expressions
- Reflection and discussion on regional variations in ISL

Suggested Assessment

Competence/Artefacts	Method of Assessment	Assessed By
ISL Communication Skills	Practical demonstration	Teacher Educators (panel of experts)
Adaptation to Regional Variations	Reflective report and discussion	Teacher Educators
Information on ADIP scheme for CI and HA	Preparing a pamphlet, booklet in simple and any regional language highlighting information on ADIP scheme for CI and HA for parents.	Teacher Educators (panel of experts)

Suggested readings

30-hour module on Basic ISL Communication by ISLRTC - https://www.youtube.com/@islrtcnewdelhi4069

Apps – ISL Journey, SIGN LEARN, and DEF-ISL

Deaf Enabled Foundation (DEF) https://www.youtube.com/@deafenabledfoundation1117

E. Cole., & C. Flexer. (2007). Children with Hearing Loss: Developing Listening and Talking Birth to Six, Plural Publishing

Early Intervention Project by HWSPSHI (https://www.youtube.com/channel/UColL3HfeuN35coxYH8HQaog)

Estabrooks, W. (2006). Auditory Verbal Therapy and Practice, AG Bell Association for the Deaf and Hard of Hearing, Inc.

Haynes, W. O. (2008). Diagnosis in Speech-Language Pathology. Pearson Education, Inc. https://depwd.gov.in/adip/

https://www.adipcochlearimplant.in/

ISH Shiksha - https://www.youtube.com/channel/UCx6PDGJYiE3PXuExsjmZudA

Madell, J.R. (1998). Behavioural Evaluation of Hearing in Infants and Young Children Thieme Medical Publishers, Inc. New York, N.Y.

Michael J. R. (2012). Cochlear Implants and Other Implantable Hearing Devices. Plural Publishers, California

Developing Teaching Learning Material (TLM) & Assistive Technology

Course Code: 6.4.3 (HI) **Credits: 2** **Semester: 7**

About the course

This course focuses on equipping student teachers with the essential skills to create effective Teaching Learning Materials (TLM) using principles of Universal Design for Learning (UDL) for deaf children. Additionally, how technology can be integrated in teaching-learning practices is explored through Information and Communication Technology (ICT), and Artificial Intelligence (AI). Through practical training and guided supervision, learners will develop diverse TLMs tailored to various learning styles and educational needs (such as educational videos, flashcards, story books, toys, games, posters, collages, and innovative lesson plans using different pedagogies, to mention a few). Emphasis will be placed on enhancing engagement, accessibility, and educational outcomes through innovative lesson planning and resource development. Teaching Learning Materials of good quality with (i) innovations, (ii) low-cost materials, (iii) local context, and (iv) modern technology (for digital learning materials) which will enhance students' engagement, interest, and practical learning.

Learning Outcomes

Upon completion of the course, student teachers will be able to:

- Develop TLMs based on Universal Design for Learning (UDL) principles, incorporating Information and Communication Technology (ICT) and Artificial Intelligence (AI).
- Compile a repository of UDL resources suitable for various subjects and learning levels.
- Create TLMs catering to different learning styles (Visual, Auditory, Kinaesthetic, Reading, Tactile, and combinations thereof).
- Design TLMs such as ISL videos, PPTs, and ICT-based materials for teaching practice across curriculum topics.
- Develop TLMs specifically for pre-reading, pre-writing skills, and literacy development in deaf students, including ISL components.
- Demonstrate proficiency in creating TLMs aligned with UDL principles.
- Utilize ICT and AI tools effectively in educational resource development.
- Develop TLMs catering to diverse learning styles and specific educational needs.
- Understand the significance of TLMs in enhancing teaching and learning outcomes.
- Reflect on the role of TLMs in promoting quality special or inclusive education practices.

Course content

The course content includes:

- Principles of Universal Design for Learning (UDL)
- Information and Communication Technology (ICT) tools in education
- Artificial Intelligence (AI) in educational resources
- Development of TLMs for diverse learning needs

Educational settings

A. Special schools/ Deaf Associations/Training Centers which use

a) Educational Bilingualism

b) Total Communication
c) Oral-aural approach
B. Inclusive Schools

Activities to be conducted

Sr. No.	Tasks	Specific activities
1	Development of Teaching Learning Material (TLM) based on principles of Universal Design of Learning (UDL) including Information and Communication Technology (ICT), and use of Artificial Intelligence (AI)	• Collect a list of resources in UDL for different lessons at different levels. (Including a list of existing e-content in ISL, ICT tools, web resources, etc.) • Development of TLMs for various lessons appropriate for various learning styles in the classroom (Visual / Auditory / Kinesthetic / Reading / Tactile / combination of all) • Preparing TLMs such as Videos in ISL / PPTs or TLM using ICT for the teaching practice lessons related to curriculum (5 topics of any subjects) • Prepare TLMs for literacy development (At least 3 each, including one in ISL) • Development of at least two low-cost learning resources as per the local contexts for the Secondary stage followed by presentation/exhibition

Submissions

- TLMs
- List of Existing Resources
- TLM Manual highlighting the material used, the process of its development and its use during classroom transaction

Suggested modes of transaction

- Workshop sessions
- Practical demonstrations
- Hands-on creation of TLMs
- Use of ICT tools and AI in TLM development

Suggested Assessment

Competence/ Artifact	Method of assessment	Assessed By
TLM developed	Presentation /Exhibition	Teacher Educators (panel of three expertsincluding an external expert)
Manual	Presentation	Teacher Educator

Suggested Readings

suniye.in/teaching-and-learning-materials-for-hearing-impaired-students
https://www.youtube.com/watch?v=cqjsywgIrgA
https://www.youtube.com/watch?v=xCAnHgLE8WQ
https://www.youtube.com/watch?v=d0GqPzd7TYU&list=PLpHuVIIyGlDLLUfedVkEKbK1 SKf9noL3i&index=1
https://www.youtube.com/watch?v=HflPAAK5ad4&list=PLpHuVIIyGlDLLUfedVkEKbK1 SKf9noL3i&index=2

Internship & Practice Teaching

Course Code: 6.4.4 (HI) **Credits: 10** **Semester: 7**

About the course

The Internship in Disability Specialization is a comprehensive 300-hour practicum focusing on hearing impairment within special school settings. This immersive program provides hands-on experience supporting Special Educators, honing teaching skills, and contributing to holistic development. Learners gain exposure to diverse setups, including classrooms and extracurricular activities, collaborating closely with experienced teachers and Deaf Teachers/Mentors. This interaction offers an in-depth understanding of the challenges and insights into special education, with direct perspectives from the deaf community. The internship emphasizes individualized mentorship, cultural sensitivity, inclusivity, and the integration of technology into teaching strategies. Upon completion, participants will possess a competitive edge in the job market, a network of professional connections, and a strong foundation for continued professional growth in disability specialization.

Learning Outcomes

Upon completion of the internship, student teachers will:

- Explain the overall functioning of special and inclusive schools for students who are DHH.
- Describe and appreciate the different roles played by a special educator in these settings.
- Experience the importance of teacher-student relationships for effective teaching in special education.
- Develop age-appropriate and disability-sensitive pedagogic skills.
- Apply different pedagogies and teaching strategies in real-life classrooms for DHH.
- Create and utilize appropriate teaching-learning materials (TLM) and technology.
- Develop necessary planning and execution skills to conduct school activities.
- Foster school-community relationships for the benefit of DHH learners.
- Create student portfolios and comprehensive progress reports for DHH learners.
- Understand the importance of maintaining different types of records in special education settings.
- Develop a research aptitude to conduct action research for issues faced during the internship.

Course content

- Functioning of special and inclusive schools for students with hearing impairment (DHH)
- Different roles played by a Special Educator in these settings.
- Importance of teacher-student relationships for effective teaching in special education.
- Age-appropriate and disability-sensitive pedagogic skills.
- Application of different pedagogies and teaching strategies in real-life classrooms for DHH.
- Appropriate teaching-learning materials (TLM) and technology.
- Planning and execution skills to conduct school activities.
- Fostering school-community relationships for the benefit of DHH.
- Creation of student portfolios and comprehensive progress reports for DHH learners.
- Importance of maintaining different types of records in special education settings.
- Development of a research aptitude to conduct action research for issues faced during the internship.

Educational settings

A. Special schools/ Deaf Associations/Training Centers which use
a) Educational Bilingualism
b) Total Communication
c) Oral-aural approach
B. Inclusive Schools

Activities to be conducted

Sr. No.	Tasks	Specific activities
1	Practicing functioning as a Special Educator - Intern / Assistant Teacher for the CWHI	Undertake teaching lessons as per the assigned timetable by the organization using a daily diary system for planning and recording. Maintain records and reports Request feedback from the stakeholders (students/mentors / other teachers) and reflecting on how to make the teaching-learning process better.
2	Assisting Special educators in classroom activities and management	Assist special educators in classroom activities and management such as prayers, sharing news in the assembly, checking devices, attendance, homework/class work, and writing diaries for the students. preparing TLM, teaching practice sessions recapitulation, and break times, conducting/organizing cultural activities
3	Assisting in the school examinations	Assist in exam-related planning, setting question papers, assessing, entering outcomes in records, writing progress reports, feedback to students and parents, and drawing pedagogic decisions.
4	Understanding beyond classrooms	Participate in school committee meetings, planning different activities, sports, picnics, trips, visits, Parent Teacher Association (PTA) meetings, competitions, celebrations, annual gatherings, medical camp/checkups
5	Development of (TLM), Worksheet	Develop 3 Teaching Learning Materials (TLM) and 10 worksheets for the assigned class
6	Document study	Read and report on academic calendars, timetables, diaries, workbooks, progress reports, case files, parent meeting reports, certificates, forms to avail exemptions and concessions, and assessment formats for preschool
7	Use of the Internet and modern technology to improve the class Processes	Use technology for classroom teaching, art education, record keeping, communication, downloading power points, and AVs for concept development involving students

8	Compilations of language teaching material news, conversation, stories, and unseen pictures	Compile language material news, conversations, stories, and unseen pictures, directed activities
9	Compiling a list of deaf associations, deaf schools, and other supporting agencies in the area.	Make a list of deaf associations, deaf schools, and other supporting agencies in the area and their contact information. Create a chart of deaf role models in India, including successful deaf adults from that area.
10	Assisting Deaf Teachers / Mentor in organizing and conducting awareness about the importance of ISL, the Deaf Community, and Deaf Culture	Assist a deaf teacher/mentor in designing an ISL course on teaching ISL vocabulary to family members using the local language. Assist Deaf Teachers / Mentor in organizing and conducting awareness about the importance of ISL, Deaf Community, and Deaf Culture at the early intervention centers/ hospitals/ police stations/schools/govt. agencies/employers etc. (At least four) Write the report of these awareness sessions, including feedback from the stakeholders and recommendations for the follow-ups.
11	Assisting Deaf Teacher/Mentor in Teaching ISL	Assist Deaf Teachers/Mentor in designing specific curricula and teaching ISL to various stakeholders
12	Assisting Deaf Teacher/Mentor in Communication Support	Assist Deaf Teacher/Mentor in Communication Support in academic settings by assisting / accessing through ISL, verbal or written communication, wherever needed.
13	Assisting Deaf Teachers/Mentor in Educational Bilingualism	Assist Deaf Teacher/Mentor in creating educational content videos in ISL. Assisting Deaf Teachers/Mentors in lesson planning for live sessions on academic topics.
14	Assisting Deaf Teacher/Mentor in Assessment for ISL	Assist Deaf Teacher/Mentor in Designing and Delivering Formative Assessments for ISL specialized for the age groups and planning language intervention strategies accordingly.
15	Program end presentation	PowerPoint presentation on consolidations, reflections and takeaway points from field engagement to be able to become a teacher/ Special Educator

Submissions

Journal with reports & reflections, in written mode or video report in ISL

Suggested modes of transaction

- Practice as a special educator - intern/assistant teacher for DHH learners at secondary level.
- Assist in classroom activities and management.
- Assist in school examinations and other beyond-classroom activities.
- Develop and use TLM and worksheets, with a focus on technological integration.
- Conduct document studies and compile language teaching materials.
- Compile a list of deaf associations, schools, and supporting agencies.
- Assist Deaf Teachers/Mentors in ISL awareness, teaching ISL, communication support, educational bilingualism, and ISL assessment.
- Program end presentation on consolidations, reflections, and takeaways from field engagement.

Suggested Assessment

Competence/Artifact	Method of Assessment	Assessed By
Observation of classroom practices	Minimum of 6 lessons of School Teachers and 10 lessons of Peers	Teacher-Educator
Unit planning, Lesson Planning & Transaction	40 lessons transaction for each pedagogical subject, including 2 innovative lesson plans in each subject	Teacher-Educator, School Mentor
Assessment Planning and execution	Report on assessment plan, preparation of Blue Print and assessment tools, conduct of Unit Test & analysis of results, learning enhancement plan	Teacher-Educator, School-Mentor
Participation/Organization of assembly and other school-level activities, PTM & SMC Meetings	Observation & Interaction	School Mentor
Preparation of Logbook/Teachers diary	Minimum 5 lessons for each pedagogical method	Teacher-Educator, School Mentor
Overall feedback on student-teacher performance	Observation and Interaction	School Head
End-of-Program Presentation	Presentation	Teacher-Educator

*Certificate from school head grading the performance on 5-point scale. Candidates below the score 3 repeat the internship. Each teacher trainee will be assigned a class, and the class teacher is expected to provide support for the students placed in her / his class.

Suggested readings

Adams, J. (2017). You and your deaf child. Gallaudet University Press. https://gupress.gallaudet.edu/Books/Y/You-and-Your-Deaf-Child

Glickman, N. S., & Hall, W. C. (Eds.). (2014). Language deprivation and deaf mental health. Routledge. https://www.routledge.com/Language-Deprivation-and-Deaf-Mental- Health/Glickman-Hall/p/book/9781138735392

Beazley, S. (2018). Deaf children and their families. Routledge. https://www.routledge.com/Deaf- Children-and-Their-Families/Beazley-

Moore/p/book/9781853463549
Hamilton, B., & Clark, M. D. M. (2020). The deaf mentor program: Benefits to families. Psychology, 11(5), 713-736.
Clark, M. D., Hauser, P. C., Miller, P., Kargin, T., Rathmann, C., Guldenoglu, B., ... & Israel, E. (2016). The importance of early sign language acquisition for deaf readers. Reading & Writing Quarterly, 32(2), 127-151.
ISL Textbooks developed by HWSPSHI for Foundation Stage

Online Links and Portals

Research Briefs by Gallaudet University (https://vl2.gallaudet.edu/research-briefs)
ISLRTC, New Delhi (https://www.youtube.com/channel/UC3AcGIlqVI4nJWCwHgHFXtg)
Early Intervention Project by HWSPSHI (https://www.youtube.com/channel/UColL3HfeuN35coxYH8HQaog)
Language 1st https://language1st.org/ LEAD- K https://lead-k.org/
World Federation of Deaf (https://wfdeaf.org/rightsdeafchildren/)
Hear A Million project by Enable India (https://www.youtube.com/channel/UClo584yrqR1GRPsS5Zqlr7Q

Demonstrations

Course Code: 6.4.5 (HI) **Credits: 2** **Semester: 8**

About the course

Teaching practice allows student teachers to practice the art and science of teaching under the supervision and support of experienced teachers. This practicum provides a challenging yet rewarding experience of working with students in actual classrooms, particularly focusing on children with hearing impairments (DHH). Aspiring teachers will gain professional competence through this practical experience, covering areas such as lesson planning, teaching practice, cross-curricular teaching, and individualized educational planning. This course will provide the student teachers with hands-on experiences in preparing lesson plans which are essential tools for educators, that aid in imparting knowledge, skills, and competencies. It assists in guiding content delivery, organization, communication, and assessment.

Learning Outcomes

After completing this course, student teachers will:

- Develop and execute lesson plans for various educational levels at the foundational stage and various skills.
- Implement different modes of communication (Educational Bilingualism, Total Communication, Oral-Aural Approach) in teaching.
- Integrate experiential learning, social-emotional learning, and life skills into their teaching practices.
- Create and utilize relevant Teaching Learning Materials (TLMs) and bilingual videos.
- Assess and implement Individualized Educational Plans (IEPs) for DHH.
- Gain practical experience in teaching both special and inclusive school settings.
- Preparation of lesson plans for cross-curricular activities

Course content

- Lesson Plans for different educational levels
- Advantages and methods of using different modes of communication (Educational Bilingualism, Total Communication, Oral-Aural Approach) in teaching
- Integration of experiential learning, social-emotional learning, and life skills in teaching.
- Development of TLMs and bilingual videos for diverse learning needs
- Individualized Educational Plans (IEPs) for DHH
- Preparation of lesson plan for cross- curricular activities

Educational settings

Special School for DHH children, inclusive schools

Activities to be conducted

Sr. No.	Tasks	Specific activities
	Teacher Educators	**Demonstration**

1	Lesson Plans at the secondary stage and for different subjects using the different modes of communication (EB, TC, oral)	**a)** Exploring the latest practices & formats in lesson planning. **b)** Lesson planning for different school subjects. **c)** Minimum 8 Lessons in the secondary stage. **d)** Integrating hands-on/ experiential learning, aspects of social-emotional learning, and relevant life skills while planning the lessons. **e)** Designing relevant TLMs appropriate to the lessons.
2.	Lesson planning for cross-curricular activities	Lesson Planning for various cross-curricular activities such as theatre, arts, sports, activities, social-emotional learning, and other life skills-related areas.
	Teacher Trainees	**Teaching Practice**
2	Undertaking teaching practice lessons at the secondary stage of different subjects using the different modes of communication (EB, TC, Oral)	Undertaking teaching practice lessons for the CWHI related to the curriculum at different levels. Minimum 30 Lessons (that is 15 in special school and 15 in inclusive school) at Secondary Integrating hands-on/ experiential learning, aspects of social-emotional learning, and relevant life skills in teaching practice.
3	Undertaking cross-curricular teaching	Teaching practice in various cross-curricular activities such as theatre, arts, sports, activities, social-emotional learning, and other life skills-related areas. (Minimum 4 lessons)
4	Assessment and implementation of Individualized Educational Plan (IEP) for school readiness	Preparing IEP for two CWHI (10 IEP for each student) a) Assessment of the students b) Preparing IEPs based on the result of the assessment c)Implementation of IEP
5	Creating bilingual videos for teaching topics at different levels and of different subjects	Creating bilingual videos (ISL & English/Hindi/another language) for teaching topics at different levels and of different subjects. (At least 10)

Submissions

- Lesson Plans
- Journal with reports & reflections

Suggested modes of transaction

- Lesson planning and preparation
- Direct teaching practice in special and inclusive school settings
- Observation and reflection
- Creation and usage of bilingual educational videos
- Hands-on activities and experiential learning
- Peer teaching and feedback sessions

Suggested assessment

Competence/Artefacts	Method of assessment	Assessed By
Classroom teaching skills and assessment tools (including learning standards)	Simulated Presentation	Teacher- Educator
Reflective group discussions/ workshop	Observations	Teacher- Educator
Artefacts (Lesson Plans, TLM, Curated Videos) and action research procedures.	Evaluation	Teacher- Educator

Suggested readings

Adams, J. (2017). You and your deaf child. Gallaudet University Press. https://gupress.gallaudet.edu/Books/Y/You-and-Your-Deaf-Child

Glickman, N. S., & Hall, W. C. (Eds.). (2014). Language deprivation and deaf mental health. Routledge. https://www.routledge.com/Language-Deprivation-and-Deaf-Mental- Health/Glickman-Hall/p/book/9781138735392

Beazley, S. (2018). Deaf children and their families. Routledge. https://www.routledge.com/Deaf- Children-and-Their-Families/Beazley-Moore/p/book/9781853463549

Hamilton, B., & Clark, M. D. M. (2020). The deaf mentor program: Benefits to families. Psychology, 11(5), 713-736.

Clark, M. D., Hauser, P. C., Miller, P., Kargin, T., Rathmann, C., Guldenoglu, B., ... & Israel, E. (2016). The importance of early sign language acquisition for deaf readers. Reading & Writing Quarterly, 32(2), 127-151.

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Online Links and Portals

Research Briefs by Gallaudet University (https://vl2.gallaudet.edu/research-briefs)

ISLRTC, New Delhi (https://www.youtube.com/channel/UC3AcGIlqVI4nJWCwHgHFXtg)

Early Intervention Project by HWSPSHI (https://www.youtube.com/channel/UColL3HfeuN35coxYH8HQaog)

Language 1st https://language1st.org/

LEAD- K https://lead-k.org/

World Federation of Deaf (https://wfdeaf.org/rightsdeafchildren/)

Hear A Million project by Enable India (https://www.youtube.com/channel/UClo584yrqR1GRPsS5Zqlr7Q

School-Based Research Projects

Course code: 6.4.6 (HI) **Credits: 2** **Semester: 7**

About the course

Action research enables teachers to reflect on their wisdom to bring the desired changeover and explore the system when necessary. Learning about classroom research in action research and case studies practices promotes opportunities to improve the student-teacher learning environment in teacher education institutions. Their involvement in the learning processes during their stay in teacher education institutions becomes more fruitful. It could be individual or collaborative research among the student teachers. Action research and case studies are school-based research, which is acted upon as collective, self-reflective inquiry undertaken in social situations to improve the rationality and justice of their own contextual and educational practices. It enables them to gain intensive experience in teaching, planning, preparing support materials, and performing other school activities that a regular teacher is expected to do. The student teachers will systematically undertake school-based research to find solutions to contextual problems/challenges.

During the school internship, the student teachers will identify school practices and challenges through involvement in different activities, design relevant interventions, analyze data, and prepare reports. School-Based Research Projects provide an opportunity for student teachers to engage in action research, reflecting on and improving their teaching practices in real educational settings. This course aims to enhance the student teachers' abilities to identify, investigate, and address contextual challenges through systematic research. The research projects focus on improving educational practices for learners with DHH and other disabilities and fostering a deeper understanding of inclusive education.

Learning outcomes

After completing this course, student teachers will be able to:

- Identify contextual problems and formulate appropriate research designs.
- Prepare plans of action for undertaking school-based research.
- Develop and use tools and techniques for collecting relevant data.
- Collect and analyse data to identify causes and effects.
- Develop and implement need-based interventions to address identified problems.
- Study the effectiveness of interventions.
- Reflect on and share school-based research experiences through reports and presentations.
- Present contextual problems, research designs, and plans of action for school-based research.
- Demonstrate the use of tools and techniques for collecting relevant data.
- Summarize and analyze data to identify causes and effects.
- Implement and evaluate interventions to address identified problems.
- Reflect on and share research experiences through reports and presentations.

Course content

- Concepts and importance of action research and case studies.
- Steps of conducting action research/case studies: objectives, methods, research design, tools, data collection, and data analysis.

- Report writing and presentation.
- Topics/ Problems may include:
- Behavioural challenges of Learners
- Causes of Dropouts (socio-economic, family-related issues, school-related issues, etc.)
- Learning progress and outcomes in different subjects.
- School-based assessments.
- Learners' diversity and inclusion.
- Participation in arts, games, and sports.

Educational settings

Special schools and Inclusive schools

Activities to be conducted

Sr. No.	Tasks	Specific activities
1	Development of Accessible Research Tools	Development of Research Tools such as Bilingual Surveys (ISL and English / local language) for accessible research practices
2	Systematic Review of Literature on deaf education from the last decade	Systematic Review of Literature on deaf education from the last decade Identification of the best practices and the way forward
3	Undertaking a school-based research project	Undertaking a school-based research project on areas such as: - Impact of language deprivation on academic, social, and emotional development - Current state of literacy and educational standards in special & inclusive schools - Perspectives of DHH learners on their preferred mode of communication - Perspectives of caregivers about the impact of communication barriers
4	Best practices while conducting research with deaf learners	Summarizing the best practices while conducting research with DHH learners

Submissions

Research reports and reflections

Suggested modes of transaction

- Discussions with teacher educators, school heads, mentors, and peers for problem identification and intervention development.
- Finalization of research project proposals through discussions.
- Document analysis, stakeholder interactions, and field visits.
- Sharing and presenting research outcomes.

Suggested assessment

Competence/Artifact	Method of Assessment	Assessed By
Observation during the execution of action research	Observation	Teacher-Educator
Research Report	Presentation of Report	Teacher-Educators (panel of three experts)

Suggested readings

Canziani, B., & Tullar, W. L. (2017). Developing critical thinking through student consulting projects. *Journal of Education for Business, 92*(6), 271-279.

Creswell, J. W., & Creswell, J. D. (2020). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (6th ed.). Pearson.

Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.

John W. Best, James V. Kahn.(2016).Research in Education. Pearson Education India, ISBN 9332585806, 9789332585805

Parsons, R. D., & Brown, K. S. (2020). *Classroom action research: A guide for K-12 teachers* (3rd ed.). Waveland Press.

Mertler, C. A. (2017). *The action research guidebook: A four-stage process for educators and school teams* (4th ed.). SAGE.

Parsons, R. D., & Brown, K. S. (2020). *Classroom action research: A guide for K-12 teachers* (3rd ed.). Waveland Press.

Wyse, D., Selwyn, N., Smith, E., & Suter, L. E. (Eds.). (2017). *The SAGE handbook of educational research*. SAGE.

School Experience & Field Engagement (Disability Specialization Practical)

Intellectual Disabilities (ID)

Practical: Intellectual Disability

Sr. No.	Course	Semester	Credits
1	**6.4.1 (ID) School Observation**	5	**2**
2	**6.4.2 (ID) Individualized Educational Programme**	6	**2**
3	**6.4.3 (ID) Lesson planning and Group Teaching in Special School**	7	**2**
4	**6.4.4 (ID) Internship and Practice Teaching**	7	**10**
5	**6.4.5 (ID) Development of TLM and Assistive Devices**	8	**2**
6	**6.4.6 (ID) School-Based Research Projects**	8	**2**
	TOTAL		**20**

School Observation

Course Code 6.4.1 (ID) **Semester :5** **Credits: 2**

About the course :

The student teachers need to gain hands-on experiences from various activities organized by the school at an entry level to relate their knowledge to the critical concept. School observation offers an opportunity to learn the processes and practices in a school setup. To expose the pre-service teachers to various settings (special and inclusive), different levels of educational intervention levels. School observation will also prepare the student teachers to build relationships with various stakeholders. The school observation by the student teachers is aimed at helping them build perspective in the schooling system, student needs, pedagogies, and assessment.

Learning Outcome: After completion of this course, the student teacher will be able to**:**

- get acquainted with various schooling systems and experience the processes, practices, and overall environment of the school.
- establish a rapport with all the stakeholders of the school system.
- observe the process of conducting different activities in the school.
- observe the existing infrastructure available in the schools (classrooms, libraries, laboratories, playground, sanitation, drinking water facility, mid-day meal facility, inclusive facilities, safety and security, rainwater harvesting).
- observe and document the availability and usage of TLM, including ICT.
- study various assessment processes adopted in different types of schools for holistic development of children.
- prepare and present a comprehensive profile of the schools observed (including classroom processes)
- study the engagement of parents and other community members in school activities.

Course content:

1. Visits to organizations working in disabilities (e.g. SpecialSchools, Therapy centers, Rehabilitation organizations, and Inclusive Schools).
2. Classroom observation.

The detail descriptions are as follows:

Disability Focus	Education alSetting	Tasks for the Student-teachers	Description
ID	Special school of PwID	Observation of groups from early intervention, /Preparatory level to secondary/prevocational levels.	Minimum 10 school Periods. Write a report and submit.
Cross Disability	Inclusive School available in the neighborhood	Classroom observation and report	Minimum 10 school periods Write a Report and Submit

Activities to be conducted

- Visit three different schools where secondary levels are there in schools with observation formats developed in the institute and get acquainted with various schooling systems. Establish rapport with all stakeholders.
- Collect information about the demography of students in classes in secondary group or (IX to XII) and understand the linkage of the secondary stage with the middle stage and higher education through interaction with teachers, students and staff.
- Observe school processes and transactions of the curriculum through experiential learning and prepare a report.
- Study the available opportunities for learning interdisciplinary subjects.
- Observe the organization of various activities like classroom teaching-learning processes, laboratory activities, library activities, sports and games, debate/elocution/essay writing and other competitions
- Interact with School heads and subject teachers to understand how students are evaluated by following different tools and techniques of evaluation, how examinations are conducted, how answers are assessed, and how the result is communicated to parents in at least two different types of schools.

Suggestive mode of transaction

- Observation
- Interaction
- Discussion
- Reviewing the available literature on the different settings
- Collection of relevant documents and data (primary and secondary data)

Suggestive mode of assessment

- Report writing using developed formats/tools
- Case study
- Analysis of the collected data
- Preparing a comprehensive report of the schools observed

Individualized Educational Programme

Course Code: 6.4.2 (ID) Semester :6 Credits: 2

About the course : An Individualized Education Program (IEP) is a customized educational plan designed to meet the unique needs of Students with Disabilities. The IEP outlines specific goals, accommodations, and services that the student requires to succeed academically. Understanding and implementing IEPs is crucial for the student teachers as it ensures that they can provide appropriate support and instruction tailored to each student's needs. It is crucial for students teachers to receive training on how to develop and execute IEPs, strategies for differentiating instruction, methods for effective collaboration with special education professionals, and techniques for engaging families in the IEP development and implementation process. This comprehensive approach ensures that teacher educators are well-equipped to foster an inclusive learning environment that promotes the academic and social growth of all students.

Learning Outcome :

After completion of this course, the student teacher will be able to:

- Identify the academic, personal and social needs of the students with Intellectual Disabilities.
- Develop an educational plan depending upon the current level of functioning of the students,
- Enable the student to be involved in the curriculum transaction.
- Appraise the outcome of the educational program that the students have acquired.
- Articulate the future management plan/transaction plan for the students.

Course Content: Individualized Educational Programme (IEP).

Sl. No.	Tasks for the Student-teachers	Disability Focus	Educational Setting	Description
1	Explore and understand the meaning, scope, importance of IEP. Understand the developed formats used for developing an IEP for CWDs.	ID	Special School,	Read the developed IEP formats used for special school settings. Practice filling a demo IEP. Frame learning goals-short term/long term.
2	IEP in special school/ home based	ID	Special school,	Assess two students with intellectual disability functioning at different levels and attending different classes in a special school. One of them can be home based education.. Develop an IEP and implement at least 10 lessons each.
3	Observation of Support services	ID	Institute /Clinical services	Report submission

Suggestive mode of transaction:

- Conduct comprehensive evaluations to identify students' strengths, weaknesses, and specific needs.
- Use standardized tests, observations, and input from parents and teachers to gather relevant data.

- Outline measurable goals and objectives based on the assessment data.
- Specify the services and supports the student will receive, including accommodations, modifications, and related services (e.g., speech therapy, occupational therapy).
- Detail the student's current performance levels and how progress will be monitored.

Suggestive mode of assessment

- Detailed IEP record file/case study of each individualized case handled.
- Record of assessment conducted using standardized assessment tool.
- Details of long term and short term framed for child with justification.
- Worksheets
- Oral viva

Lesson planning and Group Teaching in Special School

Course code 6.4.3 (ID) **Semester:7** **Credits: 2**

About the course :
The course is designed to equip student teachers with the skills and knowledge necessary to effectively design and develop lesson Plans for group teaching and teach groups of students with diverse learning needs in special education settings. This course emphasizes the importance of lesson planning that considers previous knowledge, current understanding, pedagogical knowledge and at the same time considers the pupil's learning styles. Educators will learn to create and implement engaging, differentiated instruction that fosters inclusion and helps to maximize student participation and progress. The course covers development of appropriate low-cost, innovative, content specific TLM and teaching aids, strategies for managing group dynamics, framing appropriate general and specific objectives, incorporating specific teaching skills, adapting curriculum materials, and utilizing assistive technologies to support learning. Through practical exercises, educators will develop the competence and confidence to deliver high-quality group instruction within special school settings.

Learning Outcome :
After completion of this course, the student teacher will be able to :

- Prepare a lesson plan depending on the current level and functioning of students and by using appropriate format.
- Demonstrate teaching skills through practical engagement in special schools .
- Illustrate the use of the various skills for students with their peers
- Demonstrate the application of various teaching strategies in simulated settings

Course content: 1. Lesson planning and development of teaching learning material
2. Group teaching in special schools

The details are as follows:

Sl. No.	Tasks for the Student-teachers	Disability Focus	Educational Setting	Description
1.	Lesson Planning and Teaching	ID	Special School	The student teacher has to develop 10 lessons that includes at least 2 lessons for each level /class ranging from preschool/ preparatory to secondary levels and transition plan from school to work. The lessons should include cocurricular activities, relevant TLM and also use of technology .
2	a. Lesson planning and execution on different levels for all subjects	ID	Resource Room/ Inclusive school	10 lessons with suitable adaptation and modifications, suitable TLM and use the principle of UDL.
3	School Sensitisation on Disabilities for	ID	Regular School	Submit report

	regular staff, Peer group and Parents			

Suggestive mode of transaction:
Lecture cum demonstration, field observations, development of appropriate lo-cost, local and innovative TLM and teaching aids, usage of technology and Assistive technology, framing appropriate objectives (general and specific)

Suggestive mode of assessment:

- Classroom/ group teaching skills
- Lesson Plan record file (having work samples/work sheets)
- TLMs (local, low cost, innovative) developed and used/Teaching aids
- Oral viva

Internship and Practice Teaching

Course Code: 6.4.4 (ID) **Semester: 7** **Credits: 10**

About the Course:
This course offers pre-service teacher educators an invaluable opportunity to gain practical experience and apply theoretical knowledge in real classroom settings. This immersive program is designed to bridge the gap between academic preparation and professional practice, allowing student teachers to work alongside experienced teachers in diverse educational environments. Throughout the internship, educators will engage in planning and developing lesson plans, and delivering lessons, managing classroom dynamics, assessing student progress, and adapting instructional strategies to meet the needs of all learners. The course emphasizes reflective practice, encouraging student trainees to evaluate their teaching methods, receive constructive feedback, and make continuous improvements. Additionally, the internship provides exposure to various aspects of school functioning, including collaboration with teachers, communication with parents, and participation in professional development activities. This course will help student teachers to develop a deeper understanding of the teaching profession, enhance their instructional skills, and gain the confidence needed to succeed as effective educators.

Further, this course also aims to support and prepare educators for effectively teaching specific subjects within a mainstream educational setting. This course focuses on developing pedagogical skills and content knowledge necessary for delivering high-quality instruction in school subjects (Language and Non-languages). Educators will learn to design lesson plans that align with curriculum standards, incorporate diverse instructional strategies, and engage students in meaningful learning experiences. The course emphasizes the importance of educating student teachers on microteaching skills, development and designing of Lesson Plans integrating technology, involving principles of UDL, and development of suitable TLM to suit the learning needs of all learners. Additionally, it covers classroom management techniques and the integration of technology to enhance teaching and learning. The educators will gain the expertise to foster a positive and inclusive classroom environment, thereby promoting critical thinking, and support student achievement across all subject areas in regular schools.

Learning Outcome:
After completion of this course, the student teacher will be able to**:**

- Conduct assessment of students using both formal and informal tools.
- develop and design lesson plan for group teaching in special and inclusive school settings.
- Collaborate with class teachers to conduct lesson plans.
- Develop awareness material regarding disability issues and challenges for parents and community members.
- Understand the core skills of micro teaching for the related subjects for students at secondary stage.
- Prepare a lesson plan incorporating suitable accommodations and by using UDL components.
- Demonstrate teaching skills through practical engagement in inclusive schools.
- Illustrate the use of the various skills for students with their peers
- Demonstrate the application of various teaching strategies and technology in simulated settings

Course Content:

Sl.No	Content	Credit
6.4.4 (a) 1	INTERNSHIP AT SPECIAL SCHOOL	04
6.4.4 (a) 2	INTERNSHIP AT INCLUSIVE SCHOOL	04
6.4.4 (b)	PRACTICE TEACHING	02

Internship at special school

Course Code 6.4.4 (a) 1

Internship involves placement of the B.Ed. student trainee/learner in a special schoolfor students with intellectual disability period of six weeks During the placement thelearner is expected to work in all the classes ranging from early intervention/preschool to vocational training and placement. The internship should be guided by faculty supervisor. The student trainee/ learner is expected to carry out the following activities and submit a report endorsed by the school authority along with the certification of completion of internship.

1. Informal Assessment of students using informal tools (observation of child in the classroom/academic activities/playground behavior/teachers' perceptions and observations/students record, work samples, achievement records, medical history, family history, developmental milestones) and write a case study/report.
2. Formal Assessment of students using formal tools (MDPS/FACP/BASIC-MR/GLAD/WISC/VSMS etc.) to identify the specific learning problems (at least one in each level/class) and write a comprehensive report.
3. Develop an appropriate Individualized Educational Plan (IEP) (current level,annual goals, short term objectives, methods and material and evaluation) and implement using appropriate method and material/TLM (at least 15 sessions for each child).
4. Collaborate with class teachers and plan group teaching lessons for each class in at least two different areas. After getting the lessons plans approvedteach in the respective classes. (At least 15 lessons).
5. Development of awareness material regarding disability issues and challenges for parents and community members.
6. Any other academic/ cultural activity in the school for which the schoolauthorities seek the involvement of the student trainee.

Suggested mode of assessment:

Competence/Artifact	Method of assessment	Assessed by
Observation of pupil and classroom practices	Informal Assessment of students using informal tools	Teacher Educator
Assessment of student/pupil	Formal Assessment of students using formal tools (MDPS/FACP/BASIC-MR/GLAD/WISC/VSMS etc.)	Teacher Educator
Individualized Planning and execution	Develop an appropriate Individualized Educational Plan (IEP)	Teacher/faculty Mentor
Collaboration with stakeholders	Collaborate with class teachers and plan group teaching lessons	Teacher/faculty Mentor
Development of awareness materials	Development of awareness materials regarding issues and challenges	Teacher/faculty Mentor

INTERNSHIP AT INCLUSIVE SCHOOL

Course Code 6.4.4 (a) 2

1. Informal Assessment of students using informal tools (observation of child in the classroom/academic activities/playground behavior/teachers' perceptions and observations/students record, work samples, achievement records, medical history, family

history, developmental milestones) and write a case study/report.

2. Formal Assessment of students using formal tools (MDPS/FACP/BASIC-MR/GLAD/WISC/VSMS etc.) to identify the specific learning problems (at least one in each level/class) and write a comprehensive report.
3. Develop an appropriate educational program with accommodation and modification for one case selected/identified. Collaborate with the class teachers andplan group teaching lessons for each inclusive class where the assessed students are placed. (at least 5 lessons for each student to be taught in inclusive class with all other students.
4. Use technology effectively for all the activities during internship.
5. Collaborate with class teacher and plan group teaching lessons for each class at least in two different areas. After getting the lessons plans approvedteach in the respective classes. (At least 15 lessons).
6. Development of awareness material regarding disability issues and challenges for parents and community members.
7. Any other academic/ cultural activity in the school for which the schoolauthorities seek the involvement of the student trainee.

Suggested mode of assessment:

Competence/Artifact	**Method of assessment**	**Assessed by**
Observation and assessment of pupil	Informal Assessment of students using informal tools and Formal Assessment of students using formal tools	Teacher Educator
Collaboration with stakeholders	Collaborate with class teachers and plan group teaching lessons	Teacher/faculty Mentor
Educational program planning and execution	Develop an appropriate educational program with accommodation and modification for one case selected/identified. Use technology effectively.	Teacher Educator
Development of awareness materials	Development of awareness materials regarding issues and challenges	Teacher/faculty Mentor

PRACTICE TEACHING

Course Code 6.4.4 (b)

Course Content:1. Micro teaching
2. Teaching subjects in regular schools/inclusive schools.

The details are as follows:

Sl. No.	Tasks for the Student-teachers	Disability Focus	Educational Setting	Description
1	a. Micro teaching & simulated teaching on selected skills	General – student teachers	Institute / Respective college	5 lessons (Demonstration of Micro teaching Skills
2	**Macro Teaching** **A.** Lesson planning and Teaching for subjects selected *a.* Languages *b.* Non-Languages	General /Inclusive	General / inclusive	15 lessons Use technology at least in 5 lessons, and suitable TLM In inclusive classroom make suitable accommodations, and use Universal design for learning (UDL)
	B. Lesson planning and Teaching with focus on adaptation, evaluation *a.* Languages *b.* Non-Languages	General/ inclusive	General / inclusive	15 lessons Use technology at least in 5 lessons, and suitable TLM In inclusive classroom make suitable accommodations, and use Universal design for learning (UDL)

Suggestive mode of transaction:

- Demonstration of micro teaching skills
- Preparation of lesson plans
- Use of multimedia presentations, handouts
- Lecture cum discussion method
- Utilize real-life scenarios, case studies, and role-playing exercises
- Foster teamwork and peer learning among students
- Group discussions

Suggestive mode of assessment

- Classroom presentations
- Delivery of lesson plan, content/pedagogical knowledge, content clarity
- Effectiveness, clarity and quality of lesson plan delivery
- Teacher-pupil engagement
- Oral viva
- Practical record of Lesson Plans
- TLMs developed (low cost, local, innovative)

Development of TLM and Assistive Devices

Course Code: 6.4.5 (ID) **Semester:8** **Credits: 2**

About the course:
This course is designed to empower educators with the skills and knowledge needed to create and utilize effective educational resources and tools for delivering quality lesson plans and impart curriculum content effectively within diverse learning environments. This course emphasizes the importance of innovative and adaptive TLM that caters to the varied needs of students, including those with disabilities. Participants will learn to design and develop a wide range of TLMs, including assistive devices such as visual aids, manipulatives, digital resources, and interactive activities, that enhance student engagement and comprehension within the classroom. The course also covers the selection and implementation of assistive devices, such as speech-to-text software, audio books, and specialized input devices, to support students with physical, sensory, or cognitive challenges. Teacher educators will gain the expertise to create inclusive and accessible learning experiences that foster academic success and independence for all students.

Learning Outcome:
After completion of this course, the student teacher will be able to:

- Identify the accessibility, needs of students in given context.
- Recognize the need for assistive devices/assistive technology to be used while transacting the curricular content.
- Able to conduct assessment for the ICT needs.
- Able to develop appropriate TLM by integrating technology.

Course Content
The students are required to conduct internet searches, develop an illustrative record / folder on Assistive Technology for persons with intellectual disability and associated conditions. In addition, any TLM that the student may have developed for classroom transaction that involved technology may also be included and certified by the respective course coordinator/tutor and submitted during the final practical examination.
. The TLMs may incorporate principles of Universal Design of Learning (UDL) and are appropriate for various learning styles (Visual / Auditory / Kinaesthetic / Reading / Tactile / combination of all). Appropriate TLMs must be developed for the following:

- Academic concepts being learnt in three different subjects
- Non-academic activity (e.g., arts, sports, or other co-curricular activity)
- ADL / self-care
- Communication

Suggested mode of Assessment :
There will be 2 submissions, one for each child.
All submissions must include -

- A comprehensive portfolio with all relevant documents of observations, reports, TLMs, proof of attendance, feedback received etc.
- A certification of completion that is evaluated and endorsed by the teaching institution

All submissions may be graded by the teaching institute using marking schemes/ rating scales/ rubrics.

School-Based Research Projects

Course code: 6.4.6 (ID) **Credits: 2** **Semester: 8**

About the course

Educational research provides a vast landscape of knowledge on topics related to teaching and learning, curriculum and assessment, students' cognitive and affective needs, cultural and socio-economic factors of schools, and many other factors considered viable to improving schools. The purpose of educational research is to engage in disciplined inquiry to generate knowledge on topics significant to the students, teachers, administrators, schools, and other educational stakeholders. Just as the topics of educational research vary, so do the approaches to conducting educational research in the classroom. Your approach to research will be shaped by your context, your professional identity, and paradigm (set of beliefs and assumptions that guide your inquiry). These will all be key factors in how you generate knowledge related to your work as a Special educator. Action research is an approach to educational research that is commonly used by educational practitioners and professionals to examine, and ultimately improve, their pedagogy and practice and teaching strategies. When students are actively engaged in learning, the classroom can be dynamic and uncertain, demanding the constant attention of the educator. Action research offers one path to more deliberate, substantial, and critical reflection that can be documented and analysed to improve an educator's practice.

Learning outcomes

After completing this course, student teachers will be able to:

- Identify and formulate appropriate research problem.
- Prepare plans of action for undertaking school-based research.
- Identify research design and prepare data collection tools .
- Collect and analyse data with appropriate statistical measures.
- Implement and evaluate interventions to address identified problems.
- Reflect on and share research experiences through reports and presentations.

Course content

Sr. No.	Tasks	Specific activities
1	Systematic Review of Literature on priority areas of research on Intellectual Disability (ID)	Systematic Review of Literature on Intellectual Disability, Current trends in supporting implications for Inlcusion of PWID. Identification of the best practices and the way forward.
2	Undertaking a school-based research project related to Intellectual Disability.	Undertaking a school-based research project on areas such as: - Innovative teaching techniques for PWID. -Development CRT and Teacher made Test - Accommodations and modifications for students with ID in inclusive settings. - Perspectives of parents, caregivers about various aspects of caregiving for adolescents and adults with ID. -Socio emotional issues -Issues related to success in Higher Education.

3	Best practices while conducting research with Persons with Intellectual Disability (ID)	-Success stories -Innovative technology related teaching learning materials -Reasonable accomodation

Submissions

Research reports with plagiarism check report

Suggested modes of transaction

- Discussions with teacher educators, school heads, mentors, and peers for problem identification and intervention development.
- Finalization of research project proposals through discussions.
- Document analysis, stakeholder interactions, and field visits.
- Sharing and presenting research outcomes.
- Publication and conference presentations

Suggested assessment

Competence/Artifact	Method of Assessment	Assessed By
Progress report (weekly/monthly)	Observation/review	Faculty Guide
Research Report	Presentation and submission of Report	Panel of expert

School Experience & Field Engagement (Disability Specialization Practical)

Multiple Disabilities (MD)

6.4.0 SCHOOL EXPERIENCE (MULTIPLE DISABILITIES)

About the Component

Field engagement is a vital component of teacher education programme in the field of special and inclusive education. This practical engagement allows pre-service teachers to participate in various activities and tasks related to the teaching profession under guided supervision. Through this immersion, student teachers gain a comprehensive understanding of school processes, actively engage in school activities, and internalize essential school-related ethics, values, and norms. The School Experience module, of the Integrated Special and Inclusive Teacher Education Programme (ISITEP) bridges the gap between theoretical knowledge and practical application, providing invaluable opportunities for student teachers to immerse themselves in the school environment and specialize in skills essential for quality education delivery to learners with multiple disabilities.

This module is designed to ensure that student teachers specializing in Multiple Disabilities are well-prepared to enter the teaching profession with practical experience, a deep understanding of their needs to support this unique, diverse and sometimes complex needs of these group of learners and its various combinations in special and inclusive settings to promote effective learning. Student teacher can develop into effective, compassionate, and skilled educators who make a meaningful difference in the lives of students with Multiple Disabilities. The components of school observation, demonstration of lessons, school-based research projects, Internship in schools, preparation of TLM, use of assistive technologies, and teaching supportive skills are essential components under school experience to develop the required professional skills more comprehensively in the teachers.

Outline of the components:

	Course	**Credits**	**Semester**
6.4.1	School Observation MD	2	5
6.4.2	Supportive Skill Training MD	2	6
6.4.3	Demonstration Lessons MD	10	7
6.4.4	Internship in Teaching	2	7
6.4.5	Teaching Learning Materials MD	2	8
6.4.6	School Based Research	2	8
	Total	**20**	

School Observation

Course Code: 6.4.1 (MD) **Credits: 2** **Semester: 5**

About the Course:
School observation is a vital component of the teacher education providing teacher trainees with the opportunity to understand classroom dynamics, teaching strategies, and school culture before they begin their teaching practice. There are key elements and steps for conducting effective school observations that will be guided by mentors. Visits to different organisations will help learners understand Multiple Disabilities and its manifestation across different ages. It will equip them with the pivotal skills required for communicating and teaching. This practical is therefore designed to provide exposure to the teaching-learning processes (group / individual one-to-one), various modes of communication and resources in various setups.

Learning Outcomes
After completing this course, student teachers will be able to:

- Understand which kind of communication methods be used in educating learners with multiple disabilities and other special needs children.
- Understand the infrastructure and resources available in special and inclusive schools for children with special needs.
- Observe and reflect on the teaching-learning processes for children with special needs.
- Observe and analyze the functioning of various types of special schools and organizations that work with students with multiple disabilities.
- Identify best practices and suggest improvements for the quality of education delivery in special schools and inclusive schools for children with special needs.
- Observe classroom lessons in various settings for students with multiple disabilities.

Course Content
The course content includes

- Observing various schooling systems for children with special needs including hearing impairment.
- Describe the processes, practices, and overall environment of special schools.
- Establish rapport with stakeholders in special schools and related organizations.
- Understand and describe the processes of conducting various activities in special schools.
- Describe the available infrastructure and its utility in special schools.
- Reflect on and summarize relationships among stakeholders in special schools.
- Analyze various assessment processes in special schools.

Prepare and present comprehensive profiles and reports on the schools and organizations observed

Settings: Observations will be done in all of the following:

- Special school – learners with Multiple Disabilities or School for CP or School for DB
- Inclusive schools

Tasks: The learners are expected to:

1. Do the following in each setting:

a. Submit a participatory (not a supervisory) observational report including:

- Infrastructural facilities, resources available, range of services offered
- Availability and role of different professionals including the student: teach ratio
- Daily routines, activities and interventions (type, duration, etc.)
- Communication modalities of the students with MD-including those with limited repertoire of facial expressions, movements, vocalizations, startles, eye gaze as part of intentional communication.
- Curricular and co-curricular content and transaction
- Nature of support provided including child-specific support in each activity
- Documentation maintained for each student.
- Quality of education delivery along with justification
- Any other relevant information, learning and impressions

b. Submit separate reports for two children - one with CP and one with MD/Db including:

- Information from initial intake (in consultation with the teachers and/or parents/caregivers)
- A diagnostic/screening assessment using a suitable tool

2. Write an **overall essay** based on the overall, consolidated learning from all three settings. The report should reflect student teachers understanding of -

- Neurotypical and neurodiverse development
- Commonalities and differences in strengths and needs of different people with Multiple Disabilities.
- Different ways the needs of the student may be addressed
- Summary observations or suggestions in regard to priority areas to consider.
- Ways these techniques may be adapted across different settings and individuals

Submissions: There will be a total of 4 submissions. All submissions must include -

- A comprehensive portfolio with all relevant documents of observations, reports, proof of attendance, feedback received etc.
- A certification of completion that is evaluated and endorsed by the teaching institution

Evaluations: All submissions may be graded by the teaching institute on a 10-point scale. A minimum grade of 6 is required for successful completion.

Please Note:

- Observations mentioned are essential for a minimum of 30 hours or 10 days in each setting.
- The schedule for respective visits shall be included in the timetable and days may be allocated.
- For a holistic learning experience, the learner will benefit from working with variability in the profiles of students with Multiple Disabilities e.g., different ages, genders, grades, and skill sets.

- The content/hours may be adapted as per feasibility and accessibility. For instance, if schools for a specific disability are not available in the nearby area, the same may be conducted as observation at education or therapy centres or services being provided in the resource room.

Supportive Skill Training

Course Code: 6.4.2 (MD) **Credits: 2** **Semester: 8**

About the Course

This practical allows the learners to acquire essential skills that are crucial to support learners with Multiple Disabilities. The aim is to empower educators with the fluency and skill development necessary for fostering conducive inclusive learning environments and enhancing the overall educational experience for learnings with Multiple Disabilities.

Learning Outcomes

After completion of this course, the student teacher will be able to:

- Acquire supportive skills to effectively communicate and teach learners with MD using Assistive Technologies, functional academic skills, learner-centred personalised communication systems and AACs (low-tech, mid-tech and high-tech) etc.
- Acquire skills necessary to effectively communicate with and teach students with MD.

Setting:

- Special school for students with MD
- Home – customised home support program
- Community access (school or community neighbourhood, orientation and mobility, public transport system)

Tasks: At each of the above-mentioned settings, the learner has to identify one student with MD the learner is expected to identify one student with multiple disabilities and document the following:

6. Information from initial intake
7. Observation and understanding sensory and motor needs of the student in consultation with the PT/ OT and/or parents
8. A plan developed in consultation with the teacher and/or parents, to facilitate –
   - Focus on functional activities for students with high support needs, eg swallowing, eating, drinking, planning for shopping, making shopping lists, using story boxes.
   - Develop a comprehensive sexuality education for students with MD.
   - Independent travel skills, Orientation & Mobility Skills, Shopping skills
   - Development of a leisure skills
   - Pre-vocational skills focus – Dress & Personal Hygiene, work behaviors, Self-Advocacy skills, budget/financial literacy, Relating with others and Self-Regulation skills.
   - Participation in a community activity (e.g., tuition centre, hobby class, going to the market or shopping centre or for a movie, an upcoming wedding or vacation)
9. Relevant communication strategies including AACs, Calendar systems and visual supports
10. Prepare the necessary TLMs and the assistive technology identified

Submissions:
There will be 2 submissions, one from each setting.
All submissions must include -

- A comprehensive portfolio with all relevant documents of observations, reports, TLMs, proof of attendance, feedback received etc.
- A certification of completion that is evaluated and endorsed by the teaching institution

Evaluations: All submissions may be graded by the teaching institute using marking schemes/ rating scales/ rubrics.

Please Note:

- *The skill may be learnt and practised suitably provided in semesters 5-8. Evaluation of this will be made in the above-mentioned semester.*
- *Observations mentioned are essential for a minimum of 30 hours in each setting.*
- *The schedule for respective visits shall be included in the timetable and days may be allocated.*
- *For a holistic learning experience, the learner will benefit from working with variability in the profiles of students with Multiple Disabilities e.g., different ages, genders, grades, and skill sets.*
- *The tasks mentioned are essential. The content/hours may be adapted as per feasibility and accessibility. For instance, if schools for a specific disability are not available in the nearby area, the same may be conducted at education or therapy centres or services being provided in the resource room.*
- *A comprehensive portfolio with all relevant documents of observations, reports, feedback received etc., must be made available during the practical examinations.*

Demonstration Lessons (Teaching Practice)

Course Code: 6.4.3 (MD) **Credits: 2** **Semester:6**

About the Course

Teaching practice, also known as student teaching or practicum, is a critical component of teacher education programs. It provides teacher trainees with hands-on experience in real classroom settings, allowing them to apply theoretical knowledge, develop practical skills, and gain confidence in their teaching abilities. Teaching practice allows student teachers to practice the art and science of teaching, under the supervision and support of experienced teachers. This particular practical is an opportunity for aspiring teachers to understand the role and operation in regard to instructional strategies, classroom management and nature of school culture. This field experience provides a challenging nonetheless rewarding experience of working with students in actual classrooms and acquiring professional identity and competence.

Settings

Teaching practice will be done in all of these settings:

- Special school – serving students with Multiple Disabilities
- Inclusive schools

Tasks: For each of these settings do the following:

3. Identify one child with Multiple Disabilities.
4. Observe their assessment (including functional visual assessment), review the available documentation, services received and interactions with parents
5. Develop and submit a total of 15 Lesson Plans in -
    - Academic concepts from three different subjects
    - Non-academic activity (e. g. arts, adapted sports, or other age-appropriate life skills)
    - ADL / self-care/ Orientation and Mobility
    - Communication
6. Submit a comprehensive *Teaching Practice Report* including information about the learner obtained from the initial intake, IEP, lesson plans, observations and interactions, and the lesson plans

Submissions: There will be 2 submissions, one for each child.

All submissions must include -

- A comprehensive portfolio with all relevant documents of observations, reports, TLMs, proof of attendance, feedback received etc.
- A certification of completion that is evaluated and endorsed by the teaching institution

Evaluations: All submissions may be graded by the teaching institute using marking schemes/ rating scales/ rubrics.

Please Note:

- *Observations mentioned are essential for a minimum of 30 hours or 10 days in each setting.*
- *The schedule for respective visits shall be included in the timetable and days may be allocated.*
- *For a holistic learning experience, the learner will benefit from working with variability in the profiles of students with Multiple Disabilities e.g., different ages, genders, grades, and skill sets including diverse students with different communication abilities.*
- *The tasks mentioned are essential. The content/hours may be adapted as per feasibility and accessibility. For instance, if schools for a specific disability are not available in the nearby area, the same may be conducted as observation at inclusive schools, education or therapy centres or services being provided in the resource room or home-based education.*
- *A comprehensive portfolio with all relevant documents of observations, reports, proof of attendance, feedback received etc., must be made available during the practical examinations.*
- *The submitted report along with the certification of completion must be evaluated and endorsed by the teaching institution.*

Internship

Course Code: 6.4.4 (MD) **Credits: 10** **Semester: 7**

About the Course

This is a comprehensive practicum focused on students with multiple disabilities within special school settings or inclusive settings. This immersive program provides hands-on experience supporting special educators, honing teaching skills, and contributing to holistic development. Learners will gain exposure to diverse setups, including classrooms, management of students in the classrooms, scheduling, and extracurricular activities while collaborating closely with experienced teachers as well as teachers with disabilities/ mentors to get an in-depth understanding of the challenges as well as insights into the domain of special education, and the direct perspective from the learner or families or teachers. The internship emphasizes individualized mentorship, cultural sensitivity, inclusivity, and the integration of technology in teaching strategies. Upon completion, participants will possess a competitive edge in the job market, a network of professional connections, and a strong foundation for continued professional growth in the field of disability specialization.

Learning Outcomes

Upon completion of this course, student teachers will:

- Develop and execute lesson plans for skills.
- Implement different modes of communication (AAC/Total Communication, Oral-Aural Approach) in teaching.
- Integrate experiential learning, social-emotional learning, and life skills into their teaching practices.
- Assess and implement Individualized Educational Plans (IEPs) for students with multiple disabilities.
- Gain practical experience in teaching both special and inclusive school settings.
- Preparation of lesson plans for cross-curricular activities
- Explain the overall functioning of special and inclusive schools for students with multiple disabilities.
- Describe and appreciate the different roles played by a special educator in these settings.
- Experience the importance of teacher-student relationships for effective teaching in special education.
- Develop age-appropriate and disability-sensitive pedagogic skills.
- Apply different pedagogies and teaching strategies in real-life classrooms that serves students with Multiple disabilities.
- Create and utilize appropriate teaching-learning materials (TLM) and technology.
- Develop necessary planning and execution skills to conduct school activities.
- Foster school-community relationships for the benefit of students with MD.
- Create student portfolios and comprehensive progress reports.
- Understand the importance of maintaining different types of records in special education settings.

Course Content

- Lesson Plans for different subjects
- Use of different modes of communication in teaching (AAC, Total Communication)
- Development of TLMs for diverse learning needs
- Individualized Educational Plans (IEPs) for students with multiple disabilities.
- Preparation of lesson plan for cross- curricular activities
- Functioning of special and inclusive schools for students with multiple disabilities.
- Different roles played by a Special Educator in these settings.
- Importance of teacher-student relationships for effective teaching in special education.
- Age-appropriate and disability-sensitive pedagogic skills.
- Application of different pedagogies and teaching strategies in real-life classrooms working with students with multiple disabilities.
- Appropriate teaching-learning materials (TLM) and technology.
- Planning and execution skills to conduct school activities.
- Fostering school-community relationships for the benefit of students with multiple disabilities.
- Creation of student portfolios and comprehensive progress reports for students with multiple disabilities.
- Importance of maintaining different types of records in special education settings.

Setting: An internship will be done in the following setting:

- MD (CP/Db/MD) specific school

Tasks: The learner is expected to carry out the following –

3. Carry out the following with two students and submit separate reports including -
    a. A formal assessment conducted by the learner to identify the specific learning concerns and profile of strengths of the student in consultation with the respective educators and/or parents
    b. Appropriate educational program with accommodations and modifications developed by the learner in consultation with the class teachers
    c. The necessary TLMs and the assistive technology identified
    d. Planning and implementation (in collaboration with the teachers) of a total of 15 group teaching lessons and a total of 15 individual (1:1) teaching lessons on the following:
        - Academic concepts from three different subjects
        - Non-academic activity (e. g. arts (for example tactile art), adapted sports (for example Frame Football (posterior walking frames) or wheelchair basketball) , or other age-appropriate life practical skills like shopping skills or public transport system)
        - ADL / self-care /orientation and mobility
        - Communication
4. In consultation with the management and/or teachers, do the following –

- Assist special educators as per the timetable in everyday group and 1:1 activities and management e.g., preparing TLMs, story/experience boxes, checking schedules, taking classes etc.
- Organise a parent training/sensitisation program conducted by young advocates with CP/Db/MD.
- Facilitate participation of students with MD in a cultural program (e.g., sports day, festival celebration, picnics, melas, field trips, camps etc.) designed and executed to
- Liaison with the necessary government authorities to facilitate access to necessary certificates, exemptions and concessions for the families
- Prepare a list of neurodiversity-affirming and non-ableist vocabulary
- Carry out assertive skills training to promote self-advocacy.

Submissions: There will be a total of 3 submissions. All submissions must include -

- A comprehensive portfolio with all relevant documents of observations, reports, proof of attendance, feedback received etc.
- A certification of completion that is evaluated and endorsed by the teaching institution

Evaluations: All submissions may be graded by the teaching institute on a 10-point scale. A minimum grade of 6 is required for successful completion.

Please Note:

- *Observations mentioned are essential for a minimum of 300 hours.*
- *The schedule for respective visits shall be included in the timetable and days may be allocated.*
- *For a holistic learning experience, the learner will benefit from working with variability in the profiles of students with Multiple Disabilities e.g., different ages, genders, grades, and skill sets.*
- *The tasks mentioned are essential. The content/hours may be adapted as per feasibility and accessibility. For instance, if schools for a specific disability are not available in the nearby area, the same may be conducted at education or therapy centres or services being provided in the resource room.*

Development of TLM

Course Code: 6.4.5 (MD) **Credits: 2** **Semester:8**

About the Course

This course focuses on equipping student teachers with the essential skills to create effective Teaching Learning Materials (TLM) using principles of Universal Design for Learning (UDL) for students with multiple disabilities. Additionally, how technology can be integrated in teaching-learning practices is explored through Information and Communication Technology (ICT). Lesson plans are essential tools for educators, that aid in imparting knowledge, skills, and competencies. It assists in guiding content delivery, organization, communication, and assessment. Through careful planning, educators engage students with accessible content, align activities with objectives, and ensure relevance. Emphasis will be placed on enhancing engagement, accessibility, and educational outcomes through innovative lesson planning and resource development. Teaching Learning Materials of good quality with (i) innovations, (ii) low-cost materials, (iii) local context, and (iv) modern technology (for digital learning materials) which will enhance students' engagement, interest, and practical learning.

Learning Outcomes

Upon completion of the course, student teachers will be able to:

- Develop TLMs based on Universal Design for Learning (UDL) principles, incorporating Information and Communication Technology (ICT).
- Compile a repository of UDL resources suitable for various subjects and learning levels.
- Create TLMs catering to different learning styles (Visual, Auditory, Kinaesthetic, Reading, Tactile, and combinations thereof).
- Design TLMs such as sign language. (Hand over Hand or Hand under Hand) videos, PPTs, and ICT-based materials for teaching practice across curriculum topics.
- Develop TLMs specifically for reading, writing skills, and literacy development in students, with appropriate accommodations.
- Demonstrate proficiency in creating TLMs aligned with UDL principles.
- Develop TLMs catering to diverse learning styles and specific educational needs.
- Understand the significance of TLMs in enhancing teaching and learning outcomes.
- Reflect on the role of TLMs in promoting quality special or inclusive education practices.

Setting: Visit will be done in the following:

- Schools or Centres serving students with CP/Db/MD
- Inclusive school

Tasks: In each of these settings, the learners are expected to do the following

3. Submit a detailed report for one student with Multiple Disability based on
    - Information from initial intake (in consultation with the teachers and/or parents)
    - Observation/documentation of their assessment, IEPs and Lesson Plans

4. In consultation with the teacher and/or parents, develop TLMs to teach. In addition to being individualised to the learner with MD, the TLMs developed must be based on principles of Universal Design of Learning (UDL) and appropriate for various learning styles (Visual / Auditory / Kinaesthetic / Reading / Tactile / combination of all). Appropriate TLMs must be developed for the following:
    - Academic concepts being learnt in three different subjects
    - Non-academic activity (e.g., arts, sports, or other co-curricular activity)
    - ADL / self-care / orientation and mobility
    - Communication

Submissions: There will be a total of 2 submissions. All submissions must include -

- A comprehensive portfolio with all relevant documents of observations, reports, TLMs, proof of attendance, feedback received etc.
- A certification of completion that is evaluated and endorsed by the teaching institution

Evaluations: All submissions may be graded by the teaching institute on a 10-point scale. A minimum grade of 6 is required for successful completion.

Please Note:

- The learning and practice opportunities must be provided in semesters 5-8. Evaluation of this practical will be made in the above-mentioned semester.
- Observations mentioned are essential for a minimum of 30 hours or 10 days in each setting.
- The schedule for respective visits shall be included in the timetable and days may be allocated.
- For a holistic learning experience, the learner will benefit from working with variability in the profiles of students with variability of co-occurring conditions of MD e.g., different ages, genders, grades, and skill sets.
- The tasks mentioned are essential. The content/hours may be adapted as per feasibility and accessibility. For instance, if schools for a specific disability are not available in the nearby area, the same may be conducted at education or therapy centres or services being provided in the resource room.

School-Based Research Projects

Course Code: 6.4.6 (MD) **Credits: 2** **Semester: 7**

About the Course

Research experience provides the student teacher to stimulate enquiries and find answers to the questions arising in their minds. Having had the experience of working with young students with multiple disabilities throughout the course in different settings, they may have many queries in their mind. This course provides them an opportunity to select an area of their interest and form a research protocol and carry out the research, analyse their findings and gain insight. During the school internship, the student teachers will identify school practices and challenges through involvement in different activities, design relevant interventions, analyze data, and prepare reports. School-Based Research Projects provide an opportunity for student teachers to engage in action research, reflecting on and improving their teaching practices in real educational settings. The intention here is not to expect them to carry out complex research but a simple action research to find answers to the queries in their mind, for instance, regarding the parental stress levels, their expectation from the service providers, peer group interactions, attitude of public, teaching learning strategies, innovative TLM, effectiveness of ICT and such other areas.

This course aims to enhance the student teachers' abilities to identify, investigate, and address contextual challenges through systematic research. The research projects focus on improving educational practices for learners with multiple disabilities fostering a deeper understanding of inclusive education.

Possible indicative (suggestive in nature) areas for school based research which are merely suggestive in nature –

- inclusive teaching strategies,
- impact of AT (low or high) on communication,
- using music to stimulate learning,
- co-teaching models in inclusive classroom,
- behavioral intervention supported by structured teaching
- SEL interventions designed to improve social interactions,
- Investigate the use of mindfulness and self-regulation strategies to support students with special needs in managing their emotions, behaviors, and attention.
- Explore the impact of project-based learning and hands-on activities on student engagement and motivation.
- Explore the impact of peer-to-peer support, peer tutoring, and cooperative learning activities on student outcomes.
- Comprehensive sexuality education
- Explore strategies for effective communication, collaboration, and parental involvement in student education linked to student self-efficacy,
- investigate the implementation of Universal Design for Learning (UDL) principles in secondary education for students with multiple needs

Learning outcomes

After completing this course, student teachers will be able to:

- Identify contextual problems and formulate appropriate research designs.
- Prepare plans of action for undertaking school-based research.
- Develop and use tools and techniques for collecting relevant data.
- Collect and analyse data to identify causes and effects.
- Develop and implement need-based interventions to address identified problems.
- Study the effectiveness of interventions.
- Reflect on and share school-based research experiences through reports and presentations.
- Present contextual problems, research designs, and plans of action for school-based research.
- Demonstrate the use of tools and techniques for collecting relevant data.
- Summarize and analyze data to identify causes and effects.
- Implement and evaluate interventions to address identified problems.
- Reflect on and share research experiences through reports and presentations.

Course content

- Concepts and importance of action research and case studies.
- Steps of conducting action research/case studies: objectives, methods, research design, tools, data collection, and data analysis.
- Report writing and presentation.
- Topics/ Problems may include:
- Behavioural challenges of students with multiple disabilities.
- Causes of Dropouts (socio-economic, family-related issues, school-related issues, etc.)
- Learning progress and outcomes in different subjects.
- School-based assessments.
- Learners' diversity and inclusion.
- Participation in arts, games, and sports.

(**Settings:** The research project will be done in the following:

- Special school – CP/Db/MD
- Inclusive school

Tasks: With respect to the guidelines for the inclusion of PwDs observe schools and submit a detailed report with the following –

6. Design a plan of action to conduct action research in a school setting –
    1. Identify and define a problem area
    2. Literature review and theoretical background
    3. Formulate research question/hypotheses and develop a plan for action research
    4. Select participant and setting
    5. Select tools to get baseline data
    6. Implement action plan
    7. Data collection and triangulation (qualitative or quantitative)

Submissions: There will be a total of 2 submissions. All submissions must include -

- A comprehensive portfolio with all relevant documents of observations, reports, proof of attendance, feedback received etc.
- A certification of completion that is evaluated and endorsed by the teaching institution

Evaluations: All submissions may be graded by the teaching institute on a 10-point scale. A minimum grade of 6 is required for successful completion.

Please Note:

- Observations mentioned are essential for a minimum of 30 hours or 10 days in each setting.
- The schedule for respective visits shall be included in the timetable and days may be allocated.
- For a holistic learning experience, the learner will benefit from working with variability in the profiles of learners with Multiple Disabilities e.g., different ages, genders, grades, and skill sets, levels of support (low to high).

The tasks mentioned are essential. The content/hours may be adapted as per feasibility and accessibility. For instance, if schools for a specific disability are not available in the nearby area, the same may be conducted as observation at education or therapy centres or services being provided in the resource room.

School Experience & Field Engagement (Disability Specialization Practical)

Specific Learning Disabilities (SLD)

6.0 School Experience

Course Code	Course Title	Credit	Semester
6.4.1 SLD	School observation and Visit Reports • Visits (Special Schools, Therapy centres, Rehabilitation organisations, and Inclusive Schools) and report writing • Class room observation/ observation in clinical setups and report writing	2	5
6.4.2 SLD	Supportive Skill Training • Development of Teacher Made Tests • Administration of tests and Report Writing Social Emotional Learning	2	6
6.4.3 SLD	Pre-internship Practice (Demonstration lessons, Peer teaching) • Lesson planning • Simulated teaching	2	7
6.4.4 SLD	Internship • Classroom and school engagement • Screening students for at-risk for SLD/ learning difficulties/ Developmental Disability • Curriculum Adaptation	10	7
6.4.5 SLD	Creating Teaching Learning Material	2	8
6.4.6 SLD	School-based Research Project	2	8
	Total	**20**	-

SCHOOL OBSERVATION AND VISIT REPORTS

Course code: 6.4.1 (SLD) **Credits: 2** **Semester: 5**

About the Course:
The practical course 'school observation and visit reports' is an extremely important practicum component as it provides exposure to the student teachers to the school settings and institutions that work in the area of special education and disability rehabilitation. The students teachers will use the formats / proformas given to them for noting their observations and submitting reports.

Learning outcomes:
After completion of this course, the student teacher will be able to:

- Describe the setting and functioning of the organisation (Special Schools, Therapy centres, Rehabilitation organisations, and Inclusive Schools) visited
- Describe the classrooms with students with learning difficulties (SLD/ Developmental Disability and other disabilities) with respect to the classroom organisation, student – teacher interaction, teaching methods used by the teacher

Course Content:
1. Visits to organisations working in the area of disabilities (e.g. Special Schools, Therapy centres, Rehabilitation organisations, and Inclusive Schools). Write a report on any one organisation special school, rehabilitation organisation, inclusive school, therapy centre)

2. Class room observation / observation in clinical set ups

Disability Focus	Educational Setting	Tasks for the learners	Description
SLD/ Learning Difficulties	Inclusive schools/ alternative schools for students with learning challenges	Observation of the students with SLD/ learning difficulties in the class, the classroom organisation, student – teacher interaction, teaching methods used by the teacher. Observations must be conducted across grades and in different subject periods.	Minimum 15 school periods. Write a report and submit.
HI, VI, CP, ASD , ID, and Multiple Disabilities	Special schools for HI, VI, CP, ASD, ID and Multiple	Classroom Observation and Report	Minimum 8 school Periods. 3 school Periods in each Special

	Disabilities		school. Write a report and submit.

Note:

- *Schedule for practical 6.1 shall be included in the time table.*
- *Observations as mentioned are essential. However, if schools for other disabilities are not available in the nearby area, the same may be conducted as observation at inclusive school, therapy centres or services being provided in the Resource room/ Home based education or vice versa with other disability.*

Course Evaluation:

- The student teacher will submit reports of the visits and observations

SUPPORTIVE SKILL TRAINING

Course code: 6.6 (SLD) **Credits: 2** **Semester: 8**

About the Course:

The course on supportive skill training provides inputs to the student teachers to develop skills that support the education of student with SLD/ learning difficulties. All the three components of this course – development of teacher made tests, administration of tests and report writing, and Social Emotional Learning add on to the skill set of becoming a special educator.

Learning Objectives:

After completion of this course, the student teacher will be able to:

- Develop teacher made tests for assessment of process and skill deficits in students with SLD/ learning difficulties
- Administer the tests following the appropriate assessment protocols
- Write assessment reports to communicate assessment findings
- Develop appropriate activities that support social emotional learning in students with SLD/ learning difficulties

Course Content:

Sr. No.	Content	Description
1	Development of teacher made tests (TMTs)	Develop two TMTs - one each for assessment of process deficits and skill deficit.
2	Administration of tests and report writing	Administer one test to a student with SLD/ learning difficulties. Write an assessment report.
3	Social Emotional Learning	Develop activities in the social-emotional domain to help students with SLD/ learning difficulties

Course Evaluation:

- Evaluation of the submitted TMT using appropriate rubrics/ marking scheme
- Evaluation of the submitted assessment report using appropriate rubrics/ marking scheme
- Evaluation of the submitted activities using appropriate rubrics/ marking scheme

PRE-INTERNSHIP PRACTICE

Course code: 6.4.3 (SLD) **Credits: 2** **Semester: 6**

About the Course:

The practical course on 'pre-internship practice' aims at equipping the student teachers with the skills required for effective teaching. Before attempting to teach the students with disabilities, the student teachers gain experience in the craft of teaching by acquiring the knowledge and skills in microteaching and practicing the same with their peers.

Learning outcomes:

After completion of this course, the student teacher will be able to:

- Describe the various skills in teaching
- Demonstrate the use of the various skills with their peers
- Write lesson plans using the appropriate format
- Demonstrate the application of various teaching strategies in simulated settings

Course Content:

1. Teaching skills for effective teaching
2. Lesson planning
3. Teaching strategies for students with SLD / learning difficulties
4. Demonstration of the use of the teaching strategies in simulated settings

Course Evaluation:

- The student teachers will submit written lesson plans for evaluation
- The students teachers' demonstration of lessons will be evaluated by teacher educators using marking schemes / rubrics

INTERNSHIP

Course code: 6.4.4 (SLD) **Credits: 10** **Semester: 7**

About the Course:
Internship involves placement of the B.Ed. Spl. Ed. student teacher in an inclusive / alternative school for students with SLD/ learning difficulties for a period of 6 weeks. During the placement the learner is expected to work with students with SLD / learning difficulties at the secondary stage. The internship should be guided by faculty supervisor.
The student teacher is expected to carry out the following activities and submit report endorsed by the school authority along with the certification of completion of internship.

Learning Objectives:
After completion of this course, the student teacher will be able to:

- Demonstrate teaching skills and collaboration skills in the classroom / school
- Adapt curriculum and lessons for students with SLD/ learning difficulties

Course Content:

Sr. No.	Content	Description	Credits
1	Classroom and school engagement	1. Conduct individual remedial lessons for students with SLD/ learning difficulties (at least 10 lessons) 2. Conduct small group remedial lessons for students with SLD/ learning difficulties for developing study skills and exam taking skills (at least 10 lessons) 3. Collaborate with the class teachers and plan team teaching lessons for in different subject areas. After getting the lessons plans approved teach in the respective classes (at least 10 lessons). 4. Plan and execute 10 lessons for students in inclusive/ alternative schools using the UDL framework. The lessons must be in different subject. 5. Organise at least one parent training programme, one cultural programme, social events, or sports event in school in consultation with the principal and respective class teacher. 6. Any other academic/ cultural activity in the	8

		school for which the school authorities seek the involvement of the student teacher.	
2	Curriculum Adaptation	Adapt two chapters in two different subjects for students with SLD/ learning difficulties. Submit the curriculum adaptation along with the required aids and TLMs.	2

Course Evaluation:

- Student teachers are required to submit reports (classroom and school engagement, screening, and curriculum adaptation.)
- All lessons that are executed will be observed and graded by a supervisor/ teacher educator

Note:

- Each lesson must be guided by the supervisor to ensure the incorporation of appropriate pedagogy.

- Schedule for the practical shall be included in the timetable and required working days allocated.

- All lesson plans must be approved by the supervisor before execution.

- All execution must be done in the presence of a supervisor.

- Feedback must be received from the supervisor in the format prescribed by the institute.

CREATING TEACHING LEARNING MATERIAL

Course code: 6.4.5 (SLD) **Credits: 2** **Semester: 8**

About the Course:

Teaching Learning Material (TLMs) are materials and aids that are used by teachers to bring in more clarity during their teaching. TLMs support the transaction of the lesson and can serve the purpose of engaging the students during the lessons. TLMs that are created specifically for different purposes, subjects, using different material make the lessons engaging and effective. TLMs of different kinds have different uses; they also need to be used differently to make them effective. This course will provide the student teachers these insights and teach them how to create the various TLMs and use them effectively.

Learning Objectives:

After completion of this course, the student teacher will be able to:

- Explain the meaning of TLMs
- Describe the use of TLMs
- Describe the different types of TLMs and their uses
- Develop appropriate TLMs

Course Content:

- Meaning and use of Teaching Learning Material
- Types of TLMs
- Development of TLMs

Course Evaluation:

The student teachers will submit 5 different types of TLMs for different content areas. The submitted TLMs will be evaluated using rubrics / marking schemes developed for the purpose.

SCHOOL-BASED RESEARCH PROJECT

Course code: 6.4.6 (SLD) **Credits: 2** **Semester: 8**

About the Course:

This course requires the student teachers to undertake action research while they are placed in the school for internship. Action research enables teachers to reflect on their understanding of various school processes to bring the desired change through careful analysis and planning. The project could be an individual or collaborative project. Undertaking school-based research will project foster critical thinking, problem-solving, collaboration. The school-based research project is to be undertaken during the school internship period so that it provides the student teachers with a platform to apply knowledge, understanding, techniques, methods, and approaches in an actual classroom situation. During the school internship, the student teachers will identify school practices and challenges through involvement in different activities, design relevant interventions, analyze data and prepare reports.

Learning Objectives:

After completion of this course, the student teacher will be able to:

• Identify contextual problems and formulate appropriate research design
• Prepare the plan of action for undertaking school-based research
• Develop and use tools and techniques for the collection of relevant data
• Collect and analyze the data to identify the causes
• Develop and implement need-based interventions for addressing the problems
• Study the effectiveness of the intervention(s)
• Reflect and share school-based research experiences through reports and presentations

Content:

- Action research: concept and importance of action research/case study
- Steps of conducting action research/case study
- Data analysis: Techniques
- Report writing

Course Evaluation:

The assessment of the school-based research project will be continuous. The teacher educators,
as well as mentors, will be involved in the assessment of the activities using marking schemes / rating scales/ rubrics.

School Experience & Field Engagement (Disability Specialization Practical)
Visual Impairment (VI)

Outline of the Components

For each area of disability specialization selected by student, six compulsory courses would be offered under that particular disability specialization area as per table given below:

Code	Course Titles	Credits	Semester
Disability Specialization Practical Courses			
6.4.1	Visits & School Observation	2	5
6.4.2	Supportive Skills	2	6
6.4.3	Developing Teaching-Learning Materials & Assistive Technologies	2	7
6.4.4	Internship and Practice Teaching	10	7
6.4.5	Expanded Core Curriculum Skills	2	8
6.4.6	School based Research Projects	2	8
	Total	**20**	

Visits and School Observation

Course Code: 6.4.1 (VI) **Credits: 2** **Semester: 5**

About the Course

Visits to different organizations will facilitate learners' comprehension of disabilities and their implications. This practical course is structured to offer exposure to educational pedagogies such as group and individual one-to-one teaching-learning processes for different disabilities. The student teachers will also be exposed to teaching-learning practices followed for the children with visual impairment and other disabilities.

Learning Outcomes

After completing this course, student teachers will be able to:

- Observe the facilities and practices of different organisations offering services for people with disabilities
- Explain educational and other needs of students with different disabilities
- Observe and analyze the infrastructural requirements for organisations offering services for the persons with different disabilities
- Identify best practices and model services provided

Course Content/ Activities to be conducted

Sl.	Tasks	Educational Settings	Specific activities
1	Visits	Special schools, organisations and institutions working for the children with visual impairment	● Study the infrastructure, and resources available and observe various services offered ● Observe innovative teaching learning practices ● Report on Community based services ● Report the use of assistive technologies and ICT ● List the best practices offered by the schools/organizations visited. ● Report Writing based on all observations ● Include suggestions for the improvement of services
2	Visits	Inclusive Schools / centers, organizations, and institutions working for the children with low vision, MDVI (multiple disabilities with visual	● Study the infrastructure, and resources available and observe the various services being offered ● Observe innovative teaching-learning practices ● Report parent involvement, and community-based services ● Report the use of assistive technologies, ICT and communication modes & systems.

		impairment) and other disabilities	● List the best practices offered by the schools/organizations visited. ● Report Writing based on all observations Include suggestions for the improvement of services
3	Visit	Rehabilitation Centre & Special School (Other Disability)/Vocational Unit/Clinic	● Study the infrastructure, and resources available and observe the various services being offered ● Observe innovative vocational practices ● Report Writing based on all observations ● Include suggestions for the improvement of services
4	Observation of Classroom Teaching	Special School at Secondary Stage	●Observe the physical accessibility and safety of the classroom ●Observe lighting and seating arrangements in classroom ●Observe teaching methods and strategies followed in classroom ●Observe the use of technology and assistive devices used in the school ●Observe practices followed by teachers such as sensory training, reinforcements, storytelling, audio description, verbalization ●Report Writing based on all observations including the learnings & insights, feedback, and areas for improvement.

Suggested Modes of Transaction

Observation, interactions, discussions, and reviewing available literature on special education and visual impairment.

Suggested Assessment

All submissions/observations by the mentor to be graded by the teaching institute using their marking system

Suggested Readings

- NIEPVD (2020). *Effective Schools for Students with Visual Disabilities (Quality Indicators and Parameters).* NIVH Dehradun. https://nivh.gov.in/pdfdoc/qualityindicators.pdf
- O'Leary, M. (2020). Classroom Observation: A Guide to the Effective Observation of Teaching and Learning. Taylor & Francis.

Supportive Skills (Braille, Large Print & O&M Skills)

Course Code: 6.4.2 (VI) **Credits: 2** **Semester: 6**

About the Course

Braille supports the development of accessible and efficient reading and writing in students with visual disabilities. Braille supports instruction in correct written language usage, such as structuring sentences, spelling, formatting paragraphs, and editing. It is essential that a teacher improve the Braille proficiency of students with visual impairment. This course aims to develop braille competency among student-teachers to equip them to facilitate teaching-learning of students with visual disabilities. The course will also equip the student trainee in orientation and mobility skills most essential for the independent living of children with visual impairment. The trainees will also be trained in large-print reading writing skills.

Learning Outcomes

Upon completion of the course, student teachers will be able to:

- Demonstrate reading braille competency in standard English braille and Bharti braille (Hindi or regional language)
- Demonstrate writing braille competency in standard English braille and Bharti braille (Hindi or regional language)
- Explain basics of Unified English Braille (UEB) and braille mathematics codes of India and abroad and scientific notations
- Demonstrate orientation and mobility skills
- Demonstrate skills related to facilitating large print reading and writing

Course Content/Suggested Activities to be Conducted

Sl.	Tasks	Educational Settings	Specific Activities
1.	Braille Reading	Training Centre	Reading Grade 1 Braille Reading Grade 2 Braille (Language: English and Hindi or Regional Language)
2.	Braille Writing	Training Centre	Writing with interpoint Braille Slate Writing Grade 1 Braille Writing Grade 2 Braille (Language: English and Hindi or Regional Language)
3.	Improving Braille Writing Proficiency & Use of Advanced Writing Devices	Training Centre	Writing Braille with Brailler Writing Grade 1 Braille Writing Grade 2 Braille (Language: English and Hindi or Regional Language)

4.	Mathematics Code and Orientation to UEB	Training Centre	Use of Mathematics Code adapted for India (Advanced Braille Mathematics Code and Braille Mathematics Code) and scientific notations
5.	Transcribing Short Stories/Poems in Braille	Training Centre	Students are expected to write short stories/poem in Braille (Manual writing)
6.	Large Print Materials	Training Centre	Reading and Writing with Large Print
7	O&M Drill	Training Centre	● Drill of Sighted Guide Techniques ● Protective and orientation skills ● Pre-cane skills and cane Skills

Suggested Modes of Transaction

Demonstration and practice in braille skills

Workshops in mathematics Code adapted for India (Advanced Braille Mathematics Code and Braille Mathematics Code) and scientific notations

Suggested Assessment

All submissions/observations by the mentor to be graded by the teaching institute using their marking system

Suggested Readings

- NIVH (2009). Braille Gyan Kosh Bhag - 1. Dehradun: National Institute for the Empowerment of Persons with Visual Disabilities.
- NIVH (2009). Braille Gyan Kosh Bhag - 1. Dehradun: National Institute for the Empowerment of Persons with Visual Disabilities.
- NIEPVD (2016). Visual Disability: A Resource Book for Teachers. Vo. 1. National Institute for the Empowerment of Persons with Visual Disabilities, Dehradun
- NIEPVD (2016). Visual Disability: A Resource Book for Teachers. Vo. 2. National Institute for the Empowerment of Persons with Visual Disabilities, Dehradun

Developing Teaching Learning Material (TLM) and Assistive Technologies

Course Code: 6.4.3 (VI) **Credits: 2** **Semester: 7**

About the Course

This course focuses on equipping student teachers with the essential skills to create effective Teaching Learning Materials (TLM) using principles of Universal Design for Learning (UDL) for children with visual impairment. Additionally, how technology can be integrated in teaching-learning practices is explored through Information and Communication Technology (ICT), and Artificial Intelligence (AI). Through practical training and guided supervision, learners will develop diverse TLMs tailored to various learning styles and educational needs (such as tactile diagrams, maps, flash cards, sensory stimulation materials, pre-braille learning materials, 3-D/working models, etc.). Through this course student teachers will be able to prepare low cost materials and use assistive technologies for facilitating learning of students with visual impairment.

Learning Outcomes

Upon completion of the course, student teachers will be able to:

- Develop TLMs based on Universal Design for Learning (UDL) principles, incorporating Information and Communication Technology (ICT) and Artificial Intelligence (AI).
- Create TLMs catering to different learning styles (Visual, Auditory, Kinaesthetic, Reading, Tactile, and combinations thereof).
- Design TLMs such as audio books, DAISY, PPTs, and ICT-based materials for teaching practice across curriculum topics.

Course Content/Activities to be Conducted

Sl. No.	Task	Specific activities
1	r Braille skills	Preparing Reading Readiness Materials Reading & Writing Braille: Learning English Braille Grade 1 & 2 ; and Learning Bharti Braille (Hindi or Any one regional Language)
2	Assistive Technologies (Manual, Electronic & Advanced)	Teaching Manual Technologies (Abacus. Taylor Frame, Geometry Kit, etc.) Magnifiers, Non-Optical Devices, DAISY Players Advanced Assistive Technologies (RBD/ Notetakers, Screen Readers, Screen Magnifiers, Braille Translators, Embossers, Smart Cane etc.)
3	Sensory Efficiency	Sensory training for optimal use of remaining senses (including remaining vision)

4	Independent Living Skills	Personal Hygiene, eating skills/Etiquettes, food preparation, time and money management, clothing care, and household tasks.
5	Orientation & Mobility (Learning)	Learning Orientation and Mobility skills including sighted guide techniques, protective techniques, searching techniques, cane techniques,
6	Other ECC Components	Hands on training on special leisure & recreational devices for Children with visual impairment, Exercises on Improving social communication skills, Self-Determination, Facilitating Career Education
7	Hands-On Training for TLM Creation and Use of Open Resources	● Create tangible teaching aids, such as flashcards, tactile materials, or manipulative, ● Digital TLM creation, developing multimedia resources, visual schedules, social stories, or communication boards; ● Development of Teaching Learning Material (TLM) based on principles of Universal Design of Learning (UDL). ● Searching and Using OERs
8	Adaptation of Content	● Content reading of school textbooks of all grades and reflecting on the same. ● Adaptations of selected topics related to different subjects (Language, Maths, Social Science, Science).

Suggested Modes of Transaction

- Workshop sessions
- Practical demonstrations
- Hands-on training on creation of TLMs
- Use of ICT tools and AI in TLM development

Suggested Assessment

- All submissions/observations by the mentor to be graded by the teaching institute using their marking system

Suggested Readings

- NIEPVD (2022). Expanded Core Curriculum (Hindi) Vistarit Mool Pathchariya. Dehradun: National Institute for the Empowerment of Persons with Visual Disabilities. https://nivh.gov.in/?page_id=7391
- NIEPVD (2016). Visual Disability: A Resource Book for Teachers. Vo. 1. National Institute for the Empowerment of Persons with Visual Disabilities, Dehradun
- NIEPVD (2016). Visual Disability: A Resource Book for Teachers. Vo. 2. National Institute for the Empowerment of Persons with Visual Disabilities, Dehradun

Online Resources:
Videos developed by NIEPVD (refer http://nivh.gov.in/)

Internship and Practice Teaching

Course Code: 6.4.4(VI) **Credits: 10** **Semester: 7**

About the Course

The internship places a strong emphasis on tailored mentoring, cultural sensitivity, diversity, and incorporating technology into instructional practices.

This course will help the student trainees to develop teaching competencies such as lesson planning, adapted assignments and prepare teaching learning materials while being placed in an educational institute. This course equips the student trainees in all the necessary skills of being a teacher once out in the field. This will provide them with a deeper understanding of the difficulties and insights into the field of special and inclusive education, as well as first-hand knowledge from the children with visual impairment.

Learning Outcomes

Upon completion of this course, student teachers will:

- Develop and execute lesson plans for skills of children with visual impairments.
- Integrate experiential learning, social-emotional learning, and life skills into their teaching practices
- Gain practical experience in teaching both special and inclusive school settings
- Describe and appreciate the different roles played by a special educator in these settings.
- Develop and apply age-appropriate and disability-sensitive pedagogic skills

Course Content/ Activities

A. Preparation for Internship

- Lesson and unit planning
- Assessment of Children to identify their educational and socio-emotional needs
- Training in group teaching
- Training in working in teams
- Training in preparing log books/ lesson plan records

B. Internship at Special School (Visual impairment)

Sl. No.	Task	Specific activities
1	Practicing as a Special Educator - Intern / Assistant Teacher for t he Children with visual impairment	Undertaking teaching lessons at Special Schools per the assigned time-table by the organization in ECC skills Maintaining Records and Reports including feedback from the stakeholders (mentors / other teachers) and reflection on how to make the teaching-learning process better.
2	Assessment & Remedial Support	Assist the teachers in developing teacher made tests, and in conducting classroom evaluation

3	Supporting Academic Skills	Revision on Braille Braille Reading Drills Braille Writing Drills Use of Large Print Materials
4	Accessible Learning Material creation	Creating Braille Books/Epub/Talking Book Creating Tactile Graphics & Maps, Preparation and Adaptation of Teaching Learning Materials (TLMs)
5	Orientation & Mobility (Training)	Teaching Sighted Guide Techniques & Protective Techniques, Drill on Searching Techniques, Drill on Cane Techniques, Orientation Strategies, Development of Mobility Map
6	Curricular Activities other than academics	Conducting various activities of art, craft, drama, painting, yoga, etc. Adapted sports and physical education for students with Visual Impairment. Managing Recreational & Leisure Activities

C. Internship at Inclusive School

Sl. No.	Task	Specific activities
1	Orientation to the class and students in the placed setting	Studying the background of the children in the allotted class and reading and reporting on Academic Calendars, Time Table, Diaries, Work-Books, Progress Reports, Case files, Parent Meeting Records, different formats of assessment
2	Teacher Assistant/ Team Teaching	Assisting Teachers at Inclusive Schools in Classroom Teaching (should also include 2 hours of training in Basics Braille for other students)
3	Review on Barrier-Free Environment	Studying the extent of a barrier-free environment available at the inclusive school in consultation with the school Principal/Teacher
4	Assessments & Remedial Support	Assist the teachers in developing teacher-made tests, conducting classroom evaluation
5	Undertaking curricular other than academics	Conducting various activities of art, craft, drama, painting, yoga, adapted sports and physical education, celebrations of festivals, etc.

D. Internship in Special School (Other Disability)

Sl.	**Task**	**Specific activities**
1	Orientation to the class and students	Studying the background of the children in the allotted class and reading and reporting on Academic Calendars, Time Table,

	in the placed setting	Diaries, Work-Books, Progress Reports, Case files, Parent Meeting Records, different formats and assessment
2	Teacher Assistant/ Team Teaching	Assisting Teachers at Special Schools in Classroom Teaching
3	Additional Skills (Other Disabilities)	Acquiring the basics of additional skills required for supporting children with other disabilities. Eg. ISL, Behavior Modification Training, etc.preparing TLM; etc.
4	Assessments	Assist the teachers in developing teacher-made tests, conducting classroom evaluation
5	Undertaking Curricular Activities other than academics	Conducting various activities of art, craft, drama, painting, yoga, special or adapted sports and physical education, celebrations of festivals, etc.

Suggested Modes of Transaction

- Modeling and live demonstrations
- Simulation, Role play, Workshops
- Practice Lesson by student teacher (24 at Special school-VI, 08 at Inclusive School and 08 at Special School - Other Disability)

  *Certificate from school/organization on completion of internship

Suggested Assessment

- All submissions/observations by the mentor are to be graded by the teaching institute using their marking system

Suggested Readings

- NIEPVD (2016). Visual Disability: A Resource Book for Teachers. Vo. 1. National Institute for the Empowerment of Persons with Visual Disabilities, Dehradun
- NIEPVD (2016). Visual Disability: A Resource Book for Teachers. Vo. 2. National Institute for the Empowerment of Persons with Visual Disabilities, Dehradun

Expanded Core Curriculum Skills

Course code: 6.4.5 (VI) **Credits: 2** **Semester: 8**

About the Course

This course focuses on practical demonstrations by student teachers on various expanded core curriculum skills. It promotes proficiency in braille reading and writing among student teachers. The student teacher will develop proficiency in preparing ECC skills, independent living skills and career choices for students with visual impairment. This course promotes skills to facilitate assistive technologies and soft skill training to the students with visual impairment. This practical paper will also equip Activities for Daily Living for children with visual impairment. Overall, this course aims to prepare student teachers to effectively communicate with and educate students with visual impairments at secondary stage.

Learning Outcomes

After completing this course, student teachers will be able to:

- Demonstrate proficiency in Braille reading and writing
- Apply counseling and career guidance skills to assist students in areas such as career planning and self-determination
- Demonstrate skill in application of soft skills, physical education and recreational activities to students with visual impairment.
- Apply skills of computer related assistive technologies of students with visual disabilities

Course Content/ Activities to be Conducted

Sr. No.	Tasks	Setting	Specific activities
1.	Lessons on Braille Reading Proficiency by Student teacher	Training Centre	Braille Book (Secondary Stage) Reading English and Hindi/Regional Language – Grade 1 and 2
2.	Lessons on Braille Writing Proficiency by Student teacher	Training Centre	Braille Book Writing English and Hindi/Regional Language – Grade 1 & 2
3	Lessons on ECC skills (ADL) by Student	Special School/ Hostel for VI	Lessons# on teaching ADL activities like cooking, cleaning, personal hygiene, etc.
4	Lessons on ECC skills (Leisure Time Activities) by Student	Special School	Lessons# on teaching leisure time activities like clay modeling, collage making, adapted games, origami, etc.
5	Lessons on ECC skills (O&M) by Student	Special School/ Hostel for VI	Lessons# on teaching orientation and mobility activities like sighted guide

			techniques, searching techniques, cane techniques, protective techniques, etc.
6	Training Students in Soft Skills for Social Inclusion	Special School/ Hostel for VI	Lessons# in personal grooming, communication skills, etc.
7	Guidance on Career Choices	Special School/ Hostel for VI	Present on Career options for students with VI Present concerns for transition to Higher Education
8	Supporting Self-determination	Special School/ Hostel for VI	Conduct surveys on learners with visual impairment and identify challenges in their self determination Suggest ways of improving their confidence
9	Guidance on Physical Education, Yoga and Sports	Special School/ Hostel for VI	Lessons# on teaching yoga/sports

Note: The reports/file will be submitted on the basis of above suggested tasks. The lesson# of the above activities will be submitted at least one in each area.

Suggested Modes of Transaction

- Modeling and live demonstrations
- Simulation/Role play
- Workshops
- Document analysis, stakeholder interactions, and field visits.
- Lesson demonstration

Suggested Assessment

All submissions/observations by the mentor to be graded by the teaching institute using their marking system

Suggested Readings

- NIEPVD (2022). Expanded Core Curriculum (Hindi) Vistarit Mool Pathchariya. Dehradun: National Institute for the Empowerment of Persons with Visual Disabilities. https://nivh.gov.in/?page_id=7391
- NIVH (2009). Braille Gyan Kosh Bhag - 1. Dehradun: National Institute for the Empowerment of Persons with Visual Disabilities.
- NIVH (2009). Braille Gyan Kosh Bhag - 1. Dehradun: National Institute for the Empowerment of Persons with Visual Disabilities.
- NIEPVD (2016). Visual Disability: A Resource Book for Teachers. Vo. 1. National Institute for the Empowerment of Persons with Visual Disabilities, Dehradun
- NIEPVD (2016). Visual Disability: A Resource Book for Teachers. Vo. 2. National Institute for the Empowerment of Persons with Visual Disabilities, Dehradun

School-Based Research Projects

Course Code: 6.4.6 (VI) **Credits: 2** **Semester: 8**

About the Course

School-based research projects support student trainees to gain insight into how to solve problems in learning environments. Students enrolled in this course will learn how to recognise the academic and psychological issues of children with visual impairment and their families. This course will prepare the student trainees to write research proposals and carry out action research. Through action research, student trainees are encouraged to explore the challenges of children with visual impairment as well as to find solutions in their context. It is expected that they will identify challenges in school practices and find solutions. In this course, student trainees will develop skills to analyze data and interpret the results. This will provide an opportunity for the student trainees to explore real educational settings.

Learning outcomes

After completing this course, student teachers will be able to:

- Identify contextual problems faced by children with visual impairment
- Develop skills for reviewing disability related literature
- Prepare research proposals for undertaking school-based research.
- Prepare report on the project/research conducted
- Share research experiences through articles/reports/ presentations

CourseContent/Activities to be Conducted:

Sl.	Tasks	Specific activities
1	Select a research area that needs immediate attention	Select appropriate research area on the basis of observation/reports/internship (Preferably on visual impairment issues)
2	Review of Literature	To conduct a formal and systematic literature review on the area selected for identifying research topic or research problems.
4	Prepare Research Proposal	Write various components of the research proposal
5	Selection/Adaptation of tool	Develop/adapt/use standardized tools Validate tools
5	Data collection	Choose sample and collect data using the existing tools or tools developed
6	Data Analysis	Analyze the results collected quantitatively/qualitatively
7	Report Writing	Write the complete report of the research conducted
8	Sharing Findings	Present or publish result findings

Note: The Comprehensive report will be submitted as the above suggested task.

Suggested Modes of Transaction

- Discussions with faculty members, school heads, mentors, and peers under supervision of the teacher-educator

- Workshops and hands on training on research proposal writing, review of literature, data collection, data analysis, and report writing.
- Document analysis, stakeholder interactions, and field visits.
- Sharing and presenting research outcomes.

Suggested Assessment

All submissions/observations by the mentor to be graded by the teaching institute using their marking system

Suggested 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.
- Guptha, 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, Thiruvananathapuram.
- Bradbury, H. (2015). The SAGE Handbook of Action Research.

7. 0 INCLUSIVE COMMUNITY ENGAGEMENT & CBR

Inclusive Community Engagement and CBR

Course code: 7.1 **Credits: 2** **Semester: 8**

About the Course

People with disabilities belong to the same community as everybody else without any disability. Therefore, the community needs to be sensitized about the rights of persons with disabilities. This course is designed to help the learners understand the importance of inclusion of people with disabilities in the community. It will also help learners develop skills to identify and gather community resources for the benefit of people with disabilities and their families. This course is action oriented and the focus is on placing the learners in the community to understand the local context, create awareness about the inclusion of PwDs, and develop strategies to strengthen the role of community in their rehabilitation.

Learning outcomes

After completion of this course, the student teacher will be able to:

- Observe and describe the factors responsible for a good CBR program.
- Conduct a community awareness programme on issues related to disabilities.
- Learn and demonstrate the strategies for promoting public participation in community-based rehabilitation (CBR).
- Develop an understanding of the role of government and global agencies in CBR.
- Develop strong linkages between people with disabilities and the community.

Course Content

Educational Settings: Community

- Visit an ongoing CBR programme and write a report on its efficacy.
- Identify barriers for participation in the community: attitudinal, architectural, communication, programmatic, transportation, social.
- Organize community awareness programmes related to disabilities: causes and prevention of disabilities, street play on breaking myths and stereotypes related to disabilities.
- Work with Anganwadi's for early identification and early intervention.
- Learn about the various government schemes for the PwDs on health, nutrition, and education and the role of government and global agencies in CBR.
- Volunteer in camps for identification, assessment, fitments of aids, and UDID cards in the community.
- Develop activities where families can volunteer to engage PwDs in community work (for e.g., giving important role to PwDs in the building festival celebrations).
- Identify the health centers and any other organizations catering to the needs of PwDs and share the information with PwDs.
- Identify companies offering jobs to PwDs and create awareness about the job possibilities for PwDs with some adaptations and accommodations at workplace.

Suggested mode of transaction

Placement in the community for experiential learning, Projects, Non-participatory observations, Discussions, Presentations, Seminars.

Suggestive mode of assessment

- Ongoing continuous assessment of the work being done by the learners, project report submission, journal writing, and seminar assessment, etc.
- Developing a CBR project plan using Participatory Rural Appraisal (PRA) techniques
  1. Selection of PRA team members
  2. Objectives
  3. Formation of sub-topics
  4. Selection of methods, designs and respondents
  5. Interview
  6. Sub-team meeting
  7. Whole team meeting and
  8. Report writing

Suggested Readings

Loveday, M. (2006). The HELP Guide for Community Based Rehabilitation Workers: A Training Manual. Global-HELP Publications, California.

McConkey, R. and O'Tool, B (Eds). Innovations in Developing Countries for People with Disabilities, P.H. Brookes, Baltimore.

Neufelt, A. and Albright, A (1998). Disability and Self-Directed Employment: Business Development Model. Campus Press Inc. York University.

Peat, M. (1997). Community Based Rehabilitation, W.B. Saunders Company.

Scheme of Assistance to Disabled for Purposes of Fitting of Aids/Appliances (2014). Ministry of Social Welfare, Govt. of India, New Delhi.

Scheme of Assistance to Organizations for Disabled Persons, Ministry of Social Welfare, Govt. of India, New Delhi.

WHO. (1982). Community Based Rehabilitation — Report of a WHO International Consultation, Colombo, Sri Lanka, 28 June- 3 July. WHO (RHB/IR/82.1)

WHO. (1984). "Rehabilitation For All" in World Health Magazine, WHO, Geneva.

Web links:

https://ugcmoocs.inflibnet.ac.in/assets/uploads/1/27/672/et/P22_M11200218111102024343.pdf
http://nirdpr.org.in/nird_docs/sb/sb080720.pdf
https://rehabcouncil.nic.in/sites/default/files/CBID/An_Overview_English.pdf

Acknowledgement

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