

Syllabi (Suggestive)

Secondary Stage

Integrated Teacher Education Programme (ITEP)



राष्ट्रीय अध्यापक शिक्षा परिषद

(भारत सरकार का एक सांविधिक निकाय)

National Council for Teacher Education
(A Statutory Body of the Government of India)

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1.0 STUDENT INDUCTION PROGRAMME

(Two -Weeks Student Induction Programme)

To be evolved by the Institution concerned

2.0 FOUNDATIONS OF EDUCATION

2.1 Evolution of Indian Education

Credits: 4
Semester: S-1

2.1.1 About the Course

The course seeks to develop an understanding among student teachers of the evolution of education in India that would allow student teachers to locate themselves within the larger system of education. The course aims at orienting student teachers to the historical perspective of Indian education including the development and features of education in ancient India such as the Gurukuls, post-Vedic period, during Mauryan and Gupta empires, during colonial era and post-independence period, and future perspectives about education development in India, and progression from Education 1.0 to Education 4.0 etc. This course also provides an overview of the contribution of Indian thinkers to evolve Indian Education system – Savitribai and Jyotiba Phule, Rabindranath Tagore, Swami Vivekananda, Mahatma Gandhi, Sri Aurobindo, Gijubhai Badheka, Pt. Madanmohan Malaviya, Jiddu Krishnamurti, Dr. Bhima Rao Ambedkar and others.

2.1.2 Learning Outcomes

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

- discuss genesis, vision, and evolution of education in ancient India to the contemporary India,
- enable themselves to shape their educational perspective to act as an effective teacher.

UNIT - I

Ancient Indian Education: Vedic Period

- A. Vision, objectives and salient features of Vedic Education System.
- B. Teaching and Learning Process.
- C. Development of educational institutions: Finances and Management.
- D. Famous Educational institutions and Guru-Shishya.
- E. Education at the time of Epics: Ramayana and Mahabharata.

UNIT - II

Ancient Indian Education: Buddhist and Jain Period

- A. Vision, objectives and salient features of Buddhist and Jain Education System.
- B. Teaching and Learning Process.
- C. Finance and Management of Educational Institutions.
- D. Educational Institutions: Nalanda, Taxila, Vikramshila, Vallabhi, Nadia.
- E. Famous Guru-Shishya.

UNIT - III

Post-Gupta Period to Colonial Period

- A. Vision, objectives, brief historical development perspective as well as salient features of Education in India.
- B. Teaching and Learning Process.
- C. Finance and Management of educational institutions.

UNIT - IV

Modern Indian Education

A. Colonial Education in India

- Woods Despatch, Macaulay Minutes and Westernization of Indian Education

B. Shiksha ka Bhartiyakaran (Indigenous Interventions in Education)

(Bird's eye view of their contribution)

- Swadeshi and Nationalist attempts of educational reforms with special reference to general contribution of Indian thinkers – Savitribai and Jyotiba Phule, Rabindranath Tagore, Swami Vivekananda, Mahatma Gandhi, Sri Aurobindo, Gijubhai Badheka, Pt. Madanmohan Malaviya, Jiddu Krishnamurti and Dr. Bhima Rao Ambedkar others – to the education systems of India.

C. Education in Independent India

- Overview of Constitutional values and educational provisions.
- Citizenship Education:
 - Qualities of a good citizen.
 - Education for fundamental rights and duties.
- Overview of 20th Century Committees, Commissions and Policies.
- UEE, RMSA, RTE Act 2009: Overview and impact.
- NEP 2020: vision and implementation for a vibrant India.

2.1.3 Suggestive Practicum

1. Prepare a report highlighting educational reforms with special reference to school education in the light of NEP 2020.
2. Critically analyze the concept of good citizen from the perspective of education for democratic citizenship.
3. Compare vision, objectives, and salient features of education during different periods.
4. Working out a plan to develop awareness, attitude and practices related to Fundamental Rights or fundamental duties or democratic citizenship qualities, execute it in the class and write the details in form of a report.
5. Sharing of student experiences (in groups) related to Indian constitutional values, help them to reshape their concept and enable them to develop vision, mission and objectives for a school and their plan to accomplish the objectives in form of a group report.
6. Analyses of current educational strengths and weaknesses of one's own locality and work out a critical report.
7. Visit to places of educational significance and value centers and develop a project report.
8. Observation of unity and diversity in a social locality and matching it with unity and diversity in the class and work out a plan for awareness for national-emotional integration for class to develop awareness, attitudes, skills, and participatory values, execute it in the class and report the details.

2.1.4 Suggestive Mode of Transaction

The course content transaction will include the following:

- Planned lectures infused with multimedia /power-point presentations.
- Small group discussion, panel interactions, small theme-based seminars, group discussions, cooperative teaching and team teaching, selections from theoretical readings, case studies, analyses of educational statistics and personal field engagement with

educationally marginalized communities and groups, through focus group discussion, surveys, short term project work etc.

- Hands on experience of engaging with diverse communities, children, and schools.

2.1.5 Suggestive Mode of Assessment

The assessment will be based on the tests and assignments.

2.1.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

2.2 Child Development & Educational Psychology

Credits: 4
Semester: S-3

2.2.1 About the Course

To enable student teachers to understand the interplay of three different processes namely biological processes, cognitive processes, and socio-emotional processes that influence development of a child. Biological, cognitive, and socio-emotional processes are intricately interwoven with each other. Each of these processes plays a role in the development of a child whose body and mind are interdependent.

The course seeks to provide an understanding of the developmental characteristics of a child:

- during infancy that ranges from birth to 24 months of age,
- during Early Childhood stage which begins around age 3 and usually extends up to 6-7 years of age,
- Middle to Late Childhood stage which begins around 6-7 years to 10-11 years of age, and
- Adolescence stage which begins at approximately the age of 12 years, and which is a period of transition from childhood to early adulthood.

The course will introduce development across domains – physical development, cognitive development, language development, socio-emotional development, aesthetic development, moral development – during each of the above-mentioned developmental stages of a child.

Educational Psychology component of the course:

Informs student teachers about the various theories of learning and motivational states for learning and their implications for pedagogy. It includes the study of how people learn, pedagogical approaches that are required to improve student learning, teaching-learning processes that enable learners to attain the defined learning outcomes, and individual differences in learning. It provides opportunities to student teachers to explore the behavioral, cognitive and constructivist approach to facilitating student learning, and the emotional and social factors that influence the learning process.

2.2.2 Learning Outcomes

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

- describe the meaning, concept, characteristics, and factors affecting growth and development,
- use the knowledge of Indian concept of self,
- apply various problem solving and learning strategies in real classroom settings,
- identify the various approaches of the process of learning,
- explain group dynamics and apply strategies to facilitate group learning.

UNIT - I

Child Development

A. Meaning and significance of understanding the process of Child Development

- Biological, cognitive, socio-emotional, and moral.

B. Developmental characteristics of a child during:

- Infancy stage
- Early Childhood stage
- Middle to Late Childhood stage

- Adolescence stage
- C. The Indian concept of self: Mind (मनस्), Intellect (बुद्धि), Memory (चित्त). Panch-koshiya Vikas (पञ्चकोशीय विकास).
- D. Educational Implications.

UNIT - II

Developmental Process

- A. Development across domains:
- Physical Development
 - Cognitive Development
 - Language Development
 - Socio-Emotional Development
 - Aesthetic Development
 - Moral Development
- During each of the above-mentioned developmental stages of a child.
- B. Factors affecting development.
- C. Individual differences:
- Children with special needs including developmental disorders.
 - Tools and Techniques for Identifying Learner with different abilities.
- D. Teachers' role and strategies to address the needs of learners with different learning abilities.

UNIT - III

Process of Learning

- A. Conceptual Clarity and significance.
- B. Approaches:
- Behaviorist
 - Cognitivist
 - Constructivist
 - Developmental
 - Information processing Model of learning
 - Shri Aurobindo's Integral approach
- C. Problem Solving and Learning Strategies: Inquiry and problem-based learning, Steps and Strategies in problem solving, Factors hindering problem solving.
- D. How to Learn: Significance and Strategies

UNIT - IV

Motivation and Classroom Management

- A. Motivation
- Conceptual clarity, nature, and significance
 - Intrinsic and Extrinsic Motivation
 - Strategies for Motivation
- B. Classroom management
- Creating a positive learning environment
 - Planning space for learning

- Managing behavioral problems
- C. Group dynamics:
 - Classroom as a social group
 - Characteristics of group
 - Understanding group interaction-sociometry
 - Strategies to facilitate group learning.

2.2.3 Suggestive Practicum

1. Spending day with a child and preparing a report based on our observations of children for:
 - A day from different economic status (low and affluent)
 - Focus on various factors: Physical, emotional, social, language, cultural and religious influencing the child on daily basis.
2. Observing children to understand the styles of children learning process.
3. Identifying the Learning Difficulties of Students in Different learning areas and the Possible Reason for them- Case Study Report.
4. Preparing Personalized Intervention plan for Students with Learning Difficulties.
5. Plan to use advanced technology to encourage talented / gifted children.
6. Encouraging gifted / talented students beyond the general school curriculum.
7. Familiarization and Reporting of Individual Psychological Tests.

2.2.4 Suggestive Mode of Transaction

The course content transaction will include the following:

- Planned lectures infused with multimedia /power-point presentations.
- Small group discussion, panel interactions, small theme-based seminars, group discussions, cooperative teaching and team teaching, selections from theoretical readings, case studies, analyses of educational statistics and personal field engagement with educationally marginalized communities and groups, through focus group discussion, surveys, short term project work etc.
- Hands on experience of engaging with diverse communities, children, and schools.

2.2.5 Suggestive Mode of Assessment

The assessment will be based on the tests and assignments.

2.2.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

2.2 Philosophical & Sociological Perspectives of Education – I

Credits: 4
Semester: S-4

2.3.1 About the Course

The course aims at enabling student teachers to explore educational philosophy, including the concept, nature and scope; the aims of educational philosophy; relationship between philosophy and education; Indian philosophical traditions and their implications for education; some of the key philosophical schools of thought such as idealism, naturalism, pragmatism, progressivism and existentialism and their implication for educational practices. The course also would provide an analysis of the Western schools of philosophy and their approaches etc.

2.3.2 Learning Outcomes

- To encourage students to explore the nature of knowledge, the nature of human beings, the nature of society and its aims and the educational implications of these understandings.
- To engage the prospective teachers to read and acquaint themselves with the meaning of terms like Vidya, Avidya, Shiksha, Education etc. and to facilitate them to understand and differentiate them through reflections on these terms on the basis of ancient Indian texts.
- To facilitate prospective teachers to engage themselves in peer groups for sharing of their real-life reflective experiences regarding socio-cultural and philosophical living and facilitate them to conceptualize the meaning of terms like philosophical, social and cultural traditions in Indian educational context.
- To orient and engage prospective teachers to read, observe and understand the vision of some great Indian and global educators and categorically reflect on vision/aim, process of education and the contemporary relevance.

UNIT - I

Education and Philosophy

- A. Conceptual clarity, nature and relationships.
- B. Aims of studying philosophical perspective of education.
- C. Branches of Philosophy and their educational implications: Metaphysics (तत्त्वमीमांसा), Epistemology (ज्ञानमीमांसा), Axiology (मूल्यमीमांसा)
- D. Understanding Indian Perspective of Education
 - Meaning, nature and aims of education with special reference to Vedic, Buddhist, Jain, Sikh and Islamic traditions.
 - Understanding the terms Darshana, Para and Apra Vidya, Avidya, Shiksha, Samvaad, Panchkosha, Gurukulam, Acharya, Guru, Shishya, Upadhyaya, Jigyasa, Swadhyaya.
- E. Understanding Western Perspective of Education
 - Meaning, Nature and aims of education with reference to Cognitive, Behaviorist and Developmental theories of Education.

UNIT - II

Philosophical Schools and Education

- A. Conceptual Clarity of the following schools of thoughts with their implications for educational practices:
- **Bharatiya:** Samakhya, Yoga, Nyaya, Vaisheshika, Mimansa, Vedanta
 - **Western:** Idealism, Naturalism, Pragmatism, Progressivism.

UNIT - III

Educational Thinkers

- A. Deliberations on aims, process and educational institutions developed on thoughts of following thinkers and practitioners:
- **Bharatiya:** Swami Vivekananda, Sri Aurobindo Ghosh, Gurudev Rabindra Nath Tagore, J. Krishnamurti, Mahamana Madan Mohan Malaviya, Mahatma Gandhi, Gijubhai Badheka.
 - **Western:** J. Rousse, Maria Montessori, Friedrich Froebel, John Dewey.

UNIT - IV

Value Education

- A. Conceptual Clarity, Significance and Types of Values.
B. Indian Traditional Values.
C. Guru-Shishya-Parampara and Educational Values.
D. Convocation message in Taittiriya Upanishad.
E. Values enshrined in Indian Constitution.
F. NEP, 2020 and Values with special reference to 21st Century.
G. Pedagogical Issues.

2.3.3 Suggestive Practicum

1. Individual/group assignments/tasks in various forms like writing small paragraphs/brief notes, conceptualizations on specific terms etc.
2. Institutional visits in small groups in coordination to institutions related to different thinker/s and preparation of a report followed by individual/group presentation.
3. Sharing of student experiences (in groups) related to readings on great thinkers help them to reshape their concept and enable them to develop vision, mission and objectives for a school and their plan to accomplish the objectives in form of a group report.
4. Identification and reporting of Indian perspective related to educational aims, student-teacher characteristics, methods, evaluation procedure, convocation etc. based on critical study of life and thoughts of thinkers.

2.3.4 Suggestive Mode of Transaction

The course content transaction will include the following:

- Organized lectures using variety of media.
- Small group discussion, panel interactions, small theme based seminars, group discussions, cooperative teaching and team teaching, engagement of in reading of primary or secondary sources of literature (Original texts, reference books etc.) related to different aspects of life and education of Great Educators, case studies, short term project work etc.

- Critically examining their experiences to carve out their world and life view and further analyze them from philosophical point of view to reshape their perspective. They will engage prospective teachers in the development of comparative educational charts related to vision, aims, process, institution etc. They will also lead to reading-based interactions and critical reflections related to process and significance of entry/admission rituals, convocation system etc.

2.3.5 Suggestive Mode of Assessment

The assessment will be based on the tests and assignments.

2.3.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

2.4 Assessment and Evaluation

Credits: 2
Semester: S-6

2.4.1 About the Course

The main thrust of this course on assessment and evaluation is to equip student teachers with the knowledge and capacities required to develop and implement approaches to assessment that is more regular and formative, is more competency-based, is appropriate for assessing learning outcomes relating to all domains of learning, is appropriate for testing not only subject-related learning but also generic learning outcomes such as problem solving, critical thinking, creative thinking, communication skills, judgement and decision making, ethical and moral reasoning etc.

2.4.2 Learning Outcomes

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

- use different approaches to assess and evaluate of student performance such as time-constrained examinations; closed/open-book tests; problem-based assignments; practical assignment reports; observation of practical skills; individual and group project reports; oral presentations; viva voce interviews; computerized adaptive testing; peer and self-assessment etc.,
- develop and use informal and formal diagnostic, formative, and summative assessment strategies to monitor student learning levels and help the teacher continuously revise teaching-learning processes to optimize learning and development for all students,
- develop an understanding among student teachers of the approaches to provide timely, effective, and appropriate feedback to students about their performance relative to the expected learning outcomes and organizing learning enhancement initiatives that are required to bridge the gap in student learning levels,
- present report on student achievement, making use of accurate and reliable records etc.
- develop assessment “as”, “of”, and “for” learning that are aligned to the expected learning outcomes,
- design the progress card of students based on school-based assessment to make it a holistic, 360-degree, multidimensional report that reflects the progress as well as the performance of learners assessed through self-assessment and peer assessment, project-based and inquiry-based learning, quizzes, role plays, group work, portfolios, etc., along with teacher assessment that would provide students with valuable information on their strengths, areas of interest, and needed areas of improvement.

UNIT - I

Assessment and Education

A. Assessment and Evaluation

- Meaning and significance of assessment and evaluation in educational field.
- Conceptual Clarity and purpose of Measurement, Assessment, Examination, Appraisal and Evaluation in Education.
- Learning outcomes across the stages and assessment.
- Taxonomy of Objectives (Revised in 2001) and Implications.

B. Forms of Assessment

- Formative, Summative, diagnostic, prognostic.

- Internal and External assessment.
 - Assessment For learning, of learning and as learning.
 - Authentic Assessment; Online Assessment.
- C. Improving Assessment and Evaluation in Schools: Brief Historical Review (1975, 1988, 2000, 2005, 2020)

UNIT - II

Process of Assessment and Evaluation

- A. Formative and Summative Assessment: Concept and Characteristics.
- B. Approaches to assess and evaluate student performance such as time-constrained examinations; closed/open-book tests; problem-based assignments; practical assignment reports; observation of practical skills; individual and group project reports; oral presentations; viva-voce interviews; computerized adaptive testing; peer and self-assessment etc.
- C. Assessing Higher Order Thinking Abilities: Problem solving, critical thinking, creative thinking, communication skills, judgement and decision making, ethical and moral reasoning.
- D. Tools and Techniques
 - Observation, rating scale, check list, anecdotes, interviews.
 - Assessment of attitudes and interests.
 - Socio-metric techniques.
 - Criteria for assessment of social and personal behaviour.
 - Self-assessment and Peer Assessment.

UNIT - III

Analysis and Interpretation

- A. Analysis of students' performance and scores: credit and grading
- B. Graphical representation (Histogram, Frequency Curves)
- C. Interpretation of student's performance based on the analysis and their further uses in improving learner's performance: credit and grading, constructive feedback.
- D. Reporting student's performance: 360-degree progress reports, cumulative records and their uses, portfolios, PTA meetings, qualitative reporting based on the observations, descriptive indicators in report-cards.

2.4.3 Suggestive Practicum

1. Review of various education commission, Policies and reports and NCF 2005 to get a brief view of the recommendations on Assessment and Evaluation.
2. Constructing a unit test using table of specifications.
3. Construction of any one of the tools (rating scale, check list, observation schedule, etc.) and administering it to group of students or using it to observe the school and classroom environment and interpreting it.
4. Analysis of question papers of various Boards.
5. Analysis of report cards - State and Central (CBSE)
6. Preparing format of 360-degree report Card.
7. Review of learning outcomes by NCERT in different subject areas.

8. Interviews with teachers and students to study the assessment practices, issues and problems related to it followed by presentation.
9. Reviewing Assessment Discussions in NPE (2020).

2.4.4 Suggestive Mode of Transaction

The course content transaction will include the following:

- Planned lectures infused with multimedia /power-point presentations.
- Small group discussion, panel interactions, small theme-based seminars, group discussions, cooperative teaching and team teaching, selections from theoretical readings, case studies, analyses of educational statistics and personal field engagement with educationally marginalized communities and groups, through focus group discussion, surveys, short term project work etc.
- Hands on experience of engaging with diverse communities, children, and schools.

2.4.5 Suggestive Mode of Assessment

The assessment will be based on the tests and assignments.

2.4.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

2.5 Inclusive Education

Credits: 2
Semester: S-6

2.5.1 About the Course

This course seeks to orient student teachers to the approaches to bridging gender and social category gaps in terms of participation rates and student learning levels at all levels of school education. The course will provide orientation to the strategies pursued and required to improve participation and learning levels of children from Socio-Economically Disadvantaged Groups (SEDGs) that can be broadly categorized based on gender identities, particularly female and transgender individuals, socio-cultural identities (such as Scheduled Castes, Scheduled Tribes, OBCs, and minorities), geographical identities (such as students from remote locations, villages, small towns, and aspirational districts), disabilities (including learning disabilities), linguistic identities, and socio-economic conditions (such as migrant communities, low income households, children in vulnerable situations, including orphans and the urban poor).

2.5.2 Learning Outcomes

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

- ensure inclusion and equal participation in education of children with disabilities in the regular schooling process that allows students with and without disabilities learn together, ensuring their retention in the school system, and enabling them to achieve the defined learning outcomes,
- adapt teaching and learning process to meet the learning needs of different students with disabilities, including providing education and opportunities for participating in arts, sports, and vocation-related activities, making school buildings and compounds as well as other facilities barrier free and accessible for children with disabilities, supporting activities that help the provision of individualized learning environment and learning activities/resources, making available assistive devices and appropriate technology-based tools, as well as adequate and language-appropriate teaching-learning materials (e.g., textbooks in accessible formats such as large print and Braille) to help children with disabilities integrate more easily into classrooms and engage with teachers and their peers, using appropriate modes and means of communication, detecting specific learning disabilities in children at the earliest and taking appropriate measures to overcome them, monitoring completion of education and learning levels of students with disabilities etc.

UNIT - I

Inclusion and Education

A. Conceptual Clarity, relation, and significance with special reference to:

- UNCRPD, 2006,
- RPWD Act, 2016,

With special reference to Indian Context.

B. Clarity of various terms and phrases associated with Inclusive Education:

Integrated Education, Special Education, Impairment and Disability, Assessment and Evaluation, Curriculum, adaptation, modification and differentiation, universal design of learning

C. Shifting from Disability to the Inclusive view.

- D. Shifting Paradigms from Bio centric to Human Rights.
- E. Introductory reference of Policies/Acts with reference to educational implications for Children with Disabilities: Right to Education Act, 2009/ 2012, RPWD Act, 2016, UNCRPD, National Trust Act, 1999, National Educational Policy, 2020.

UNIT - II

Children with Disabilities and Marginalized Groups

- A. Nature and needs of children with sensory impairments: cognitive impairments and intellectual disability, physical disabilities, cerebral palsy, multiple disabilities.
- B. Specific needs of children with behavioral, emotional learning disabilities
- C. Health Problems.
- D. Educational needs of children belonging to Marginalized Groups.

UNIT - III

Pedagogical Issues

- A. Conceptual clarity and significance.
- B. Meeting the specific needs of Children with Disabilities with special reference to:
 - education and opportunities for participating in arts, sports, and vocation-related activities,
 - making school buildings and compounds as well as other facilities barrier free and accessible
 - supporting the learning activities and resources for individualized learning environment
 - making available assistive devices and appropriate technology-based tools,
 - language-appropriate teaching-learning materials (e.g., textbooks in accessible formats such as large print and Braille)
 - assessing strategies
- C. Designing strategies assessment for inclusive classrooms.

2.5.3 Suggestive Practicum

1. Developing a checklist for identifying the various needs of children with disabilities.
2. Visiting schools of different categories and talking to parents, teachers, and Children with and without disabilities and listing the problems faced by these children and the families at the local level in gaining access to education.
3. Analyzing RPWD Act 2016 and list its implications for CWD in inclusive settings.
4. Outlining the problems faced by children with Visual Disabilities while learning mathematics and EVS.
5. Giving a few exemplary adaptations based on the Preparatory Level textbooks.
6. Outlining the problems faced by children with hearing impairments while learning language. Give a few exemplar adaptations based on the primary level textbooks.
7. Students work in small groups of 10 or so to prepare a street play highlighting the meaning and provisions of inclusive education.
8. Analyzing the Context of NPE 2020 in the light of Inclusive Education.

2.5.4 Suggestive Mode of Transaction

The course content transaction will include the following:

- Planned lectures infused with multimedia /power-point presentations.
- Small group discussion, panel interactions, small theme-based seminars, group discussions, cooperative teaching and team teaching, selections from theoretical readings, case studies, analyses of educational statistics and personal field engagement with educationally marginalized communities and groups, through focus group discussion, surveys, short term project work etc.
- Hands on experience of engaging with diverse communities, children, and schools.

2.5.5 Suggestive Mode of Assessment

The assessment will be based on the tests and assignments.

2.5.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

2.6 Perspectives on School Leadership and Management

Credit: 2
Semester: S-7

2.6.1 About the Course

Amidst the changing policy landscape, the new curriculum framework, the challenge of accommodating and adapting to the changing demands and the increasing expectations that come with the culture of performativity. The role of the school leader has never been more complex. School leaders are key change agents and as instructional leaders are responsible for improving practice while navigating an increasingly challenging school environment. Understanding the school system, its nuances, the social, cultural, and political contexts and leading schools requires a strong foundation of knowledge and skills to effectively manage improvement and lead successful schools. The course on 'Perspectives on School Leadership and Management' is designed to equip student teachers with the competencies they need to drive school transformation and help diverse stakeholders establish priorities and improve practice.

2.6.2 Learning Outcomes

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

- describe the diversity of schools in India, its structure, its governance, issues, challenges and school leadership needs,
- critically examine the different leadership theories and practices and its relationship with the governance structures, the autonomy and accountability mechanisms and the larger educational policy context,
- critically think in relation to education leadership and its potential application to different contexts,
- reflect critically on school-based data for reflection and improvement,
- develop a culture of cooperation collaboration and teamwork,
- synthesise effectively to develop coherent and compelling arguments in the area of study,
- develop school vision, mission, goals, and School Development Plans.

UNIT - I

Understanding Indian School System

- A. School as a normative organization vis-a-vis school as a socio-emotional-cultural space for learning.
- B. Studying the diversity of schools in India; their structure, governance, socio-political and cultural context, funding, management, autonomy and accountability mechanisms, support systems.
- C. Relationship between school leadership and school diversity issues, challenges, and needs.
- D. Engagement with diversity discourses, educational policies, reforms and practices and role in developing inclusive schools.

UNIT - II

Understanding School Leadership

- A. School Leadership: concept as defined, and concept as practiced.

- B. Being a School Leader: exploring the multiple roles and responsibilities, issues and challenges of school leadership in the Indian context.
- C. What works in schools: sharing National and International best practices on School leadership.

UNIT - III

Schools as Learning Organizations: Role of School Leadership

- A. Schools as motivating learning spaces: Developing inspiring school ethos.
- B. Schools as learning organization: promoting personal mastery, examining mental models, and developing a shared vision, team learning and a system's thinking perspective.
- C. Development of a shared vision and shaping of the school culture.
- D. Use of data for school improvement focused on students' learning, addressing equity challenges, and building an equitable school culture that promotes excellence for all.
- E. Nurturing school belongingness: engaging students, teachers, staff, parents, SMC, and community in the formulation of a whole school development plan.
- F. Designing professional and collaborative learning opportunities for self and others (teachers, parents, and SMC members) and improving teaching and learning.

2.6.3 Suggestive Mode of Transaction

Perspectives on school leadership and management is a practitioner-centric course and aims to enable future teachers to be efficient school leaders. The approach to curriculum transaction therefore would include a blend of lectures, tutorials, group-work, case-based approaches, and enquiry-based learning.

- Student teachers would engage in case-based learning on topics like improving student learning, classroom observation and feedback, planning and budgeting for school improvement, leadership in diversified school contexts and such others.
- Exposure of student teachers to virtual case studies featuring leaders from a representative cross-section of Schools in India and analyze their experiences, insights, and best practices.
- Learning activities that help student teachers to understand the entire structure and functioning of school organization through interactive lectures and panel discussion with education officers who hold leadership positions at different levels from schools to cluster, block, and district and state levels and understand their leadership issues, challenges and needs and thus get a perspective of the school ecosystem.
- Learners would reflect on their practice as pre-service interns, knowledge, skills, and understandings—and identify opportunities to apply course learnings to their school context.

2.6.4 Suggestive Mode of Assessment

Being a practitioner centric course, the assessment would largely include application-based tasks. This includes exploring the work and life of a school principal and writing a detailed report on the observations and the learning. The following are some exemplars. The institutes may choose either of these or think of other innovative assignment that would enhance the leadership learning experience:

- Preparing school vision, mission, goals, and school development plan.
- Shadowing school principals: a critical observation of the principal's daily work life.

- A critical examination of the diversity of schools; their governance structure, leadership, autonomy and accountability mechanisms, issues and challenges and work life of the school principal

2.6.5 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

2.7 Curriculum Planning and Development

Credits: 2
Semester: S-7

2.7.1 About the Course

The course on curriculum planning and development will introduce to student teachers to the process of designing and organizing the curriculum i.e., the totality of learning experience provided to learners through a deliberate and organized set of arrangements (the selection of subjects that are to be taught, the pedagogical approaches and practices to be pursued, books and other teaching-learning-material to be used, examinations and other forms of learning assessment, school culture and processes etc.) that contribute to the development of the knowledge, capacities, and values and dispositions that help fulfill the aims of school education derived from the purposes and goals articulated in NEP 2020.

2.7.2 Learning Outcomes

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

- discuss aims of education,
- identify and formulate of desirable values and dispositions,
- explain capacities and knowledge,
- outline curricular areas,
- demonstrate teaching-learning assessment processes and
- practice the relevance in terms of achieving the aims of school education.

UNIT - I

Education and Curriculum

- A. Meaning, need, relationship and significance.
- B. Types of Curriculums: subject-centered, activity-centered, environmental centered, community-centered
- C. Relationship and difference between curriculum, curriculum framework, syllabus and textbooks.

UNIT - II

Developing the Curriculum

- A. Basic principles of Curriculum Development
- B. Concerns for developing the Curriculum - aims to be achieved, structure and nature of discipline, different perspectives on learning and their implications to curriculum development, socio-cultural aspects and aspirations of society, value transitions, social efficiency and needs, environmental concerns, gender concerns, inclusiveness, technological advancement.
- C. Impact of Globalization.

UNIT - III

Approaches, Planning, and Implementation

- A. Approaches to Curriculum Development: Learner and activity centered, Constructivist, Knowledge Construction
- B. Curriculum planning as a cyclic process.

- C. Curriculum Implementation: Operationalizing curriculum into learning situations, Converting curriculum into syllabus, Curriculum engagement activities, Role of school at Regional, State and National level for implementation.
- D. Role of teachers in operationalizing and evaluating the curriculum with special reference to: textbooks and teachers handbooks, source books, workbooks and manuals, other learning material such as kits, AV and software materials, library, laboratory, playground, neighborhood etc.

2.7.3 Suggestive Practicum

1. Arranging discussion on:
 - Basis of National curriculum frame works (1975, 1988, 2000, and 2005).
 - Document: Learning without burden” by Prof. Yashpal
2. Preparing of Report based on observation of:
 - Facilities and infrastructure to implement the present curriculum.
3. Interviewing teachers to understand their role in:
 - Implementing and assessment of the curriculum.
4. Analysis of the following in the context of principles of developing the Curriculum:
 - Guidelines of NEP, 2020.
 - Curriculum of 4 Years B.Ed. Integrated Programme
 - Learning without Burden, MHRD, and India.
 - Position paper (2006). National Focus Group on ‘Curriculum, Syllabus, Textbooks’, NCERT.
 - NCERT (1988) National Curriculum for Elementary and Secondary Education: A framework.
 - NCERT (2000) National Curriculum Framework for school Education.
 - NCERT (2005) National Curriculum Framework. NCERT publications.

2.7.4 Suggestive Mode of Transaction

The course content transaction will include the following:

- Planned lectures infused with multimedia /power-point presentations.
- Small group discussion, panel interactions, small theme-based seminars, group discussions, cooperative teaching and team teaching, selections from theoretical readings, case studies, analyses of educational statistics and personal field engagement with educationally marginalized communities and groups, through focus group discussion, surveys, short term project work etc.
- Hands on experience of engaging with diverse communities, children, and schools.

2.7.5 Suggestive Mode of Assessment

The assessment will be based on the tests and assignments.

2.7.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

2.8 Philosophical and Sociological Perspectives of Education – II

Credits: 4
Semester: S-8

2.8.1 About the Course

Sociological Perspectives of Education seek to encourage students to explore the relationship between social structures and educational provision. The course focuses on the study of the social behavior of individuals, groups, and societies. It provides opportunities for student teachers to examine relationships among individuals, as well as relationships between people and their societies.

2.8.2 Learning Outcomes

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

- recognize the social context of education,
- outline the meaning, nature, and scope of educational sociology,
- establish the link between education and socialization,
- analyze the main agents of socialization, such as family, school, community and peer groups,
- analyze the impact of culture on education through a study of dimensions of culture and their importance to education practices,
- recognize the different aspects of social stratification,
- identify the close relationship between education and modernization, the role of education in Modernization, and factors and constraints to social change.

UNIT - I

Education and Society

- A. Conceptual clarity, relationship, significance and aims of studying relationship between these two.
- B. Educational sociology and social perspective of education: meaning and functions.
- C. Education as a Social System.
- D. Conceptual clarity of the following terms: society, social behavior, status, institution, ideology, system, sub-system, socialization, social system, social values and norms, conflict, modernization.
- E. Understanding the relation between individual and group behavior with special reference to purpose of education.

UNIT - II

Education and Social Change

- A. Meaning, relation, and dimensions of Social Change.
- B. Factors affecting Education and Social Change: technology, social and educational movements, curricular innovations, value conflict, legal provisions.
- C. Constitution of India and Education.
- D. Education and Modernity.
- E. Role of education with reference to social change.

UNIT - III
Education, Culture and Socialization

- A. Relationship between Education and Culture.
- B. Education as a process of Socialization.
- C. Impact of following on Culture and Educational Process: Social Welfare, Social Reform Movements, Legal interventions on Child Marriage and child labor Act, Educational Policies and Acts, Adult Literacy, New Technology of communication, Equality.
- D. Constitutional Provisions and Education with special reference to Social Equality and Equity.

UNIT - IV
Education and Values

- A. Conceptual Clarity, Relationship and Significance.
- B. Types of Values.
- C. Constitutional Values and its impact on our Education.
- D. Human Rights and Values.
- E. Environment and Education.
- F. Pedagogical issues.

2.8.3 Suggestive Practicum

- 1. Critical/Reflective study of contemporary aims of education and their social determinants.
- 2. Observation and critical study on how textbooks determine every activity of teacher and learner in the school.
- 3. A critique of textbook culture in school.
- 4. Observing the process of knowledge construction by children in structured and unstructured environments to appreciate their learning processes and nature.
- 5. A critical analysis of Constitution of India in the context of process of Education in India / Educational Policies / Educational Commissions)
- 6. Critically observing nearby society/ locality in groups of 4-5 students and sharing observations related to cultural/ social influences on educational practice.
- 7. Analyzing social purpose of NEP, 2020.

2.8.4 Suggestive Mode of Transaction

The course content transaction will include the following:

- Planned lectures infused with multimedia /power-point presentations.
- Small group discussion, panel interactions, small theme-based seminars, group discussions, cooperative teaching and team teaching, selections from theoretical readings, case studies, analyses of educational statistics and personal field engagement with educationally marginalized communities and groups, through focus group discussion, surveys, short term project work etc.
- Hands on experience of engaging with diverse communities, children, and schools.

2.8.5 Suggestive Mode of Assessment

The assessment will be based on the tests and assignments.

2.8.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

2.9 Education Policy Analysis

Credits: 2
Semester: S-8

2.9.1 About the Course

This course on Education Policy Analysis aims at orienting student teachers to the theoretical frameworks and methodology that will help assess and evaluate the effectiveness of policies at the national, state and programme levels.

2.9.2 Learning Outcomes

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

- discuss knowledge and capacity to engage in education policy analysis and evaluate their effectiveness,
- explain processes involved in policy analysis including undertaking situation analysis and research.
 - To identify possible policy options,
 - Describing these possible options,
 - Comparing the potential policy options,
 - Ranking the possible policy options and
 - Choosing the most effective option that could address issues and problems confronting school education.

UNIT - I

Planning an Educational Policy

- A. Meaning and significance of 'Policy on Education'.
- B. Purpose and Dimensions of an Educational Policy at local and Global level.
- C. Philosophical and Sociological Perspective of planning an Educational Policy.
- D. Historical development of Educational Policies in India.
- E. Basic steps involved in planning.
- F. Constitutional provision for Policy on Education.
- G. Fundamental principles for analyzing an Educational Policy.

UNIT - II

Educational Policies in India

- Critical analysis of Policies on Education since Independence: 1968, 1986 (Modified in 1992), 2020 in the context of: need and significance, goals and frameworks of educational policies, content of policies, issues raised in policies, constitutional provisions, special stress, modification of policies, implementation strategies.
- Issue of modifying an Educational Policy.

UNIT - III

Implementation of an Educational Policy

- A. Meaning, need and significance.
- B. Mechanism of Policy Implementation.
- C. Strategies to Implement an Educational Policy.

- D. Programme of action and implementation: conceptual clarification and significance.
- E. Role of different Organization / Groups: Legislature/ Judiciary/ Political Will and Parties/ Voluntary Organizations/ Non-governmental organizations (NGOs)/ Pressure Groups/ Public.
- F. Challenges for Implementation.

2.9.3 Suggestive Practicum

1. Reviewing and presenting report on NEP, 2020 in reference to Policy Implementation.
2. To present a critical review of the Programme of Action (1987).
3. Preparing a list of challenges to implement the present new National Education Policy, 2020 in our States.
4. Preparing a list of Measures to be taken or taken to implement National Education Policy, 2020 in our State.

2.9.4 Suggestive Mode of Transaction

The course content transaction will include the following:

- Planned lectures infused with multimedia /power-point presentations.
- Small group discussion, panel interactions, small theme-based seminars, group discussions, cooperative teaching and team teaching, selections from theoretical readings, case studies, analyses of educational statistics and personal field engagement with educationally marginalized communities and groups, through focus group discussion, surveys, short term project work etc.
- Hands on experience of engaging with diverse communities, children and schools.

2.9.5 Suggestive Mode of Assessment

The assessment will be based on the tests and assignments.

2.9.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

2.10 Education for Mental Health

Credits: 4
Semester: S-8

2.10.1 About the Course

This course on Education for Mental Health will give a comprehensive understanding on the concept of meaning and determinants of Mental Health. The course will further enhance the student teacher's ability to know different stress management and adjustment techniques. The course aims to introduce historical and contemporary developments of Mental Health Education programs in Indian and Global perspectives.

2.10.2 Learning Outcome

After studying this course, student teachers will be able to:

- express the meaning and significance of mental health,
- describe social and psychological determinants of mental health,
- analyze the causes of stress and process of stress management,
- analyze the significance of adjustment in life,
- analyze the needs and importance of global mental health education programme,
- explain the special role of teachers and parents to maintain the good mental health of children,
- suggest prevention and promotional measures to maintain good mental health of society,
- express the need for health policies globally.

UNIT - I **Mental Health**

- A. Meaning and determinants of Mental Health.
- B. Mental Health Vs Mental Hygiene.
- C. Mental disorders: Characteristics and Types.
- D. Causes of poor Mental Health.
- E. Myths Vs Facts about Mental Health.
- F. Legal perspectives of Mental Health in India.
- G. Concept of Healthy Personality

Unit-II **Stress, Stress Management and Adjustment**

- A. Stress: meaning, nature and symptoms, types of stress, social and psychological perspectives, remedial measures.
- B. Stress management and adjustment: meaning and significance of stress management and adjustment, prevention and promotion, role of parents, peer group and teachers.

UNIT - III **Mental Health Education Programme**

- A. Meaning and significance of Mental Health Education Programme.
- B. Dimensions of Mental Health Education Programme in India.
- C. Historical development of Mental Health Education Programmes in India.
- D. Local and Global Perspective of Mental Health Education Programme.
- E. Organizations at local and international level.

- F. Characteristics of a good Mental Health Education Programme.
- G. Role of Educational Institutions.

UNIT - IV

Challenges to Pedagogical Issues

- A. Home Vs. school
 - Diverse school and home contexts
 - Lifestyles of teachers and parents
 - Stereo-type roles
 - Mental health concerns of teachers and parents
 - Material availability/ production
- B. Guidance and Counselling Programme:
 - Concept, need and techniques.
 - Teacher as a counselor
- C. Designing and evaluating Mental Health Programmes

2.10.3 Suggestive Practicum

1. Visiting of Mental hospital and preparing list of four cases admitted in Hospital.
2. Preparation of two case histories on causes of abnormal behavior.
3. Critical analysis of laws and Public Health Policies.
4. Critical analysis of National Educational Policy, 2020 in the context of Health of children at school.
5. Critical analysis of Legal perspectives Mental Health Education in India.
6. Preparing comprehensive report on Mental Health Education Programme in India.

2.10.4 Suggestive Mode of Transaction

The course content transaction will include the following:

- Planned lectures infused with multimedia /power-point presentations.
- Small group discussion, panel interactions, small theme-based seminars, group discussions, cooperative teaching and team teaching, selections from theoretical readings, case studies, analyses of educational statistics and personal field engagement with educationally marginalized communities and groups, through focus group discussion, surveys, short term project work etc.
- Hands on experience of engaging with diverse communities, children, and schools.

2.10.5 Suggestive Mode of Assessment

The assessment will be based on the tests and assignments.

2.10.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

2.10 Education for Sustainable Development

Credits: 4
Semester: S-8

2.10.1 About the Course

This course is designed to highlight the meaning, nature and significance of Education and Sustainable Development in the light of 17 sustainable development goals envisaged in United Nations agenda. The course is designed to make student teachers aware and understand SDG 4 goal of Inclusive and Quality Education in the light of NEP 2020. The course also highlights the politics and policies involved in Sustainable Development.

2.10.2 Learning Outcome

After studying this course, student teachers will be able to:

- clarify the meaning and significance of sustainable development,
- explore the relationship among education, development and environment,
- appreciate the relation between education and sustainable development,
- describe the characteristics of ESD,
- explain the role of education in sustainable development,
- critically analyze the meaning and importance of education in the context of sustainable development.,
- explain the role of education to achieve sustainable development,
- analyze the pedagogical issues related to ESD.

UNIT - I

Education and Sustainable Development

- A. Meaning, relationship, goals, and significance.
- B. Characteristics of ESD
- C. Education for Sustainable Development: Historical Perspective
- D. Philosophical, Sociological and Psychological Perspective.
- E. Role of Education for Sustainable Development.
- F. Decolonizing Knowledge for Sustainable Development.
- G. Challenges of Education for Sustainable Development.

UNIT - II

Sustainable Development Goals (SDGs)

- A. Meaning, nature and significance of SDGs.
- B. 17 Sustainable Development Goals (SDGs): UNESCO agenda.
- C. SDGs and Social Transformation as Universal Commitment.
- D. Education as a Human Right to achieve Sustainable Development.
- E. Sustainable Development and Peace.
- F. Role of Educational Institutions and Challenges to achieve SDGs.

UNIT - III

SD Goal-4: Quality Education for All

- A. Meaning, Nature, and Significance.
 - NEP, 2020 on SDG-4: Sustainable lifestyle, Gender equality, Promotion of peace & non-violence, Global citizenship, Good mental health & wellbeing, Justice in society.
- B. Pedagogical issues for SDG-4.

UNIT - IV

Sustainable Development: Politics and Policies

- A. Understanding the Policy-Making Process.
- B. Policy Analysis.
- C. Democratizing Science and Technology.
- D. Globalization and the Environment: Capitalism, Ecology and Power.
- E. Perspectives, Methods, and Skills.
- F. Innovation for Sustainability.
- G. Key Issues from an International perspective.
- H. Critical issues involved in sustainability.

2.10.3 Suggestive Practicum

1. To present critical review on NEP, 2020 in the context of SDGs.
2. Critical study of Delors Commission Report, 1996: **Learning: The Treasure within** with reference to SDGs.
3. To review and present a critical report on legal perspective on SDGs.
4. To prepare Toolkit for Educations for Sustainable Development.
5. To organize discussions/ seminars of Teachers of all streams to present their views on SDGs and to present Action Plan for this.
6. To prepare and present a short Video/film to promote SDGs.

2.10.4 Suggestive Mode of Transaction

The course content transaction will include the following:

- Planned lectures infused with multimedia /power-point presentations.
- Small group discussion, panel interactions, small theme-based seminars, group discussions, cooperative teaching and team teaching, selections from theoretical readings, case studies, analyses of educational statistics and personal field engagement with educationally marginalized communities and groups, through focus group discussion, surveys, short term project work etc.
- Hands on experience of engaging with diverse communities, children, and schools.

2.10.5 Suggestive Mode of Assessment

The assessment will be based on the tests and assignments.

2.10.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

2.10 Emerging Technologies in Education

Credits: 4
Semester: S-8

2.10.1 About the Course

The course is designed to use Information and Communication Technology in a classroom as an important 21st century skill and an important step for ICT enabled education of the country. The course explores various ICT approaches and its integration in Pedagogy, Assessment and Management. The course will help student teachers to know and apply online and offline software applications and it will enhance their understanding related to social, economic, and ethical issues associated with the use of ICT.

2.10.2 Learning Outcome

After studying this course, student teachers will be able to:

- describe the need and uses of technology in the field of education,
- use various digital technologies for creating the resources,
- provide learning experiences for all types of learners including differently abled.
- create learning environment in the class room,
- understand the role of ICT to enhance the creativity of students,
- view the use of massive open online courses (MOOCs),
- explain the role of ICT in authentic and alternative assessment,
- discuss the social, economic, and ethical issues associated with the use of ICT.

UNIT - I

Education and Technology

- A. Relationship between Education and Technology.
- B. Conceptual clarity of Technology of Education and Technology in Education.
- C. Meaning, Nature, and significance of Technology in Education.
- D. Historical Development of use of Technology in Education.
- E. Principles of using Technology in Education.
- F. Emerging trends in Technology in Education.

UNIT - II

Information and Communication Technology

- A. Meaning, nature, and types.
- B. Fundamentals of Information and Communication Technology.
- C. ICT Tools and application.
- D. Hardware and Software: meaning, difference and types.
- E. System software and Application software.
- F. ICT application and multiple intelligence.
- G. Social, Economic, and Ethical issues associated with the use of ICT.

UNIT - III

Technology in Education and Pedagogy

- A. Approaches of integration of Technology in teaching and learning.
- B. Subject specific ICT tools for creating and facilitating learning.
- C. Subject specific online resources and their uses in lesson Planning.
- D. Technology integrated learning experiences and creating learning Environment.
- E. Use of Technology for children with special needs: Tools and processes; Universal Design for Learning.
- F. Massive Open Online Courses (MOOC)-Concept and use.
- G. ICT for Assessment and Management.

UNIT - IV

Online and Offline Software Applications

- A. Application software- meaning and types.
- B. Word processing, spreadsheet, presentation: Features and educational applications.
- C. Drawing tools – diagrams, concept maps, timelines, flow charts. Educational applications of these tools.
- D. Web 2.0 technology and tools: meaning characteristics and types.
- E. Social networking and social book marking: Educational Applications.
- F. Blog and micro blog – reflective journaling and other educational applications.
- G. Wiki, YouTube, TED, Skype – collaborative authoring and projects.
- H. Instant messaging and its educational applications.
- I. Online forums/discussion groups and chats: educational applications.
- J. Social media sharing – video, presentations, audio (podcasts), graphics, and text.
- K. Web 2.0 tools for creating, sharing, collaborating, and networking.

UNIT - V

Instructional Design and E-content

- A. Instructional Design: concept, principles, models, and stages.
- B. E-learning courseware (e-content) design.
- C. Identifying and organizing course content: need analysis (learner, content, and task), learning objectives and course sequence.
- D. Designing instructional media, evaluation, and delivery strategies.
- E. Creating interactive content: story board, courseware outline, interactivity, and interface
- F. Courseware delivery and evaluation.
- G. Multimedia tools: Audio editing, video editing, screen casting, graphic editing, and basics of animation, and creating interactive media.
- H. Reusable learning objects (RLO) – meaning, types and characteristics, RLO repositories, metadata and standards.
- I. E-content authoring tools- open source and proprietary alternatives.
- J. Open Educational Resources – Meaning and importance, various OER initiatives, creative common licensing.

2.10.3 Suggestive Practicum

- 1. Creating an account in wikispace/wikipedia/mediawiki and adding/editing content.
- 2. Developing an educational blog in www.blogger.com, www.wordpress.com.

3. A critical study of some *e-learning* course.
4. Developing a multimedia e-content for a topic.
5. Field visits to the EDUSAT center and take part in teleconferencing.
6. Planning and creating digital rubrics for any topic
7. Organizing web conferencing using Skype/Yahoo/ Messenger/ Google+.
8. Interview of computer hardware engineer/ICT specialist regarding Hardware planning, evaluation, maintenance, and up gradation
9. Review of NEP, National ICT policy and curriculum in the context of Technology in Education.
10. Enrolling and completing some MOOC courses of interest.
11. Developing technology integrated unit/lesson plans and trying them out in schools.

2.10.4 Suggestive Mode of Transaction

The course content transaction will include the following:

- Planned lectures infused with multimedia /power-point presentations.
- Small group discussion, panel interactions, small theme-based seminars, group discussions, cooperative teaching and team teaching, selections from theoretical readings, case studies, analyses of educational statistics and personal field engagement with educationally marginalized communities and groups, through focus group discussion, surveys, short term project work etc.
- Hands on experience of engaging with diverse communities, children, and schools.

2.10.5 Suggestive Mode of Assessment

The assessment will be based on the tests and assignments.

2.10.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

2.10 Gender Education

Credits: 4
Semester: S-8

2.10.1 About the Course

The course Gender Education seeks to develop understanding and interlinkages between gender and education. The course is designed to develop a conceptual understanding of the overall gender discourse with special emphasis on issues such as gender bias, gender stereotypes in school, curriculum and in textual materials. The course also addresses gender sexuality, sexual violence, abuse, and legal perspectives.

2.10.2 Learning Outcomes

After completion of this course the students will be able to:

- clarify key concepts like gender, transgender, gender bias, gender stereotype, empowerment, gender parity, equity and equality and patriarchy,
- explain the shifting from women studies to gender studies,
- clarify gender issues in school, curriculum, and textual materials across disciplines, pedagogical processes and its intersection with class, caste, religion, and region,
- examine school environment, curriculum, and pedagogy with reference to gender related issues,
- address issues related to sexuality, sexual violence, and abuse,
- draw framework for gender sensitized classroom and school environment.

UNIT - I

Gender and Education

- A. Meaning, relationship, and significance of studying.
- B. Conceptual clarity of related terms: Gender, gender perspective, sexuality, patriarchy, masculinity, feminist, gender bias, transgender, gender stereotyping and empowerment.
- C. Gender as the basis in school education.
- D. Constitutional Provisions with special reference to equity and equality, rights of girls.
- E. Education and women's empowerment.
- F. Shifting from women's studies to Gender Studies.

UNIT - II

Learning Gender Roles

- A. Social and Cultural Perspectives of Gender Identity: role of family and school, media, and other formal and informal organizations/ agencies
- B. Socialization and learning gender roles.
- C. Gender stereotyping/Role models.
- D. Preventing Measures: role of school and home

UNIT - III

Gender, Sexuality, Sexual Violence and Abuse

- A. Development of sexuality and its impact on children with reference to gender, body image, role-models.
- B. Sexual violence in formal and informal institutions.

- C. Child sexual abuse from pre-primary stage to secondary stage: providing accurate information on child sexual abuse, helping, and identifying signs of sexual abuse in children.
- D. Providing dos and don'ts about sexual abuse.
- E. Legal perspective: Laws for safety and Security of girls and women, Implementation of the POCSO Act.

UNIT - IV **Pedagogical Issues**

- A. Analyzing classroom practices.
- B. Creating gender friendly classrooms and school environment.
- C. Analyzing Curriculum from gender perspective: learning outcomes, textual material, teaching-learning processes, language used, teaching aids, assessment strategies.
- D. ICT pedagogy for gender sensitive school curriculum.
- E. Challenges for pedagogical issues.

2.10.3 Suggestive Practicum

1. Preparing a Report on National Educational Policies, (1986/1992 and 2020) in the context of gender issues in Education.
2. Preparation of projects on:
 - Analysis of textual materials from the gender perspective for identifying gender bias and gender stereotype in textual materials.
 - Recommendations of commissions and policies on education to empower girls/women.
 - Mahila Samakhya Programme.
 - Women Role Models in various fields with emphasis on women in unconventional roles.
 - Video clipping on portrayal of women.
 - Folklores reflecting socialization process.
 - How students perceive sexuality and their own body images.
3. Field visits to schools to observe the schooling processes from a gender perspective.
4. Preparing Analytical Report on portrayal of men and women in print and electronic media.

2.10.4 Suggestive Mode of Transaction

The course content transaction will include the following:

- Planned lectures infused with multimedia /power-point presentations.
- Small group discussion, panel interactions, small theme-based seminars, group discussions, cooperative teaching and team teaching, selections from theoretical readings, case studies, analyses of educational statistics and personal field engagement with educationally marginalized communities and groups, through focus group discussion, surveys, short term project work etc.
- Hands on experience of engaging with diverse communities, children, and schools.

2.10.5 Suggestive Mode of Assessment

The assessment will be based on the tests and assignments.

2.10.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

2.10 Guidance and Counselling

Credits: 4
Semester: S-8

2.10.1 About the Course

This course comprises of four units aiming to develop the understanding about the concept, need and significance of guidance and counselling. It will give a comprehensive understanding of guidance and counselling principles, techniques, and real-world applications. This course also deals with psychological testing and diagnosis in counselling. It examines the factors affecting guidance and counselling along with ethical considerations. The importance of counselling for individuals with disabilities, visual impairment, and hearing impairment is also emphasized in this course along with challenges related to providing counselling services in schools.

2.10.2 Learning Outcomes

After completion of this course the students will be able to:

- explain the basic meaning, need and significance of Guidance and Counseling in the context of education,
- differentiate between Guidance and Counselling with special reference to the purpose and strategies,
- clarify the general social, psychological, and historical perspective of Guidance and Counselling,
- describe the basic features of Guidance and Counseling with reference to students needs at school level,
- explain the basic principles of Guidance and Counselling,
- organize guidance program,
- analyze the reports of educational commission and educational policies with reference to Guidance and Counselling.

UNIT - I **Guidance**

- A. Meaning, need, nature and scope of Guidance.
- B. Brief historical background of Guidance movement in India.
- C. Individual and Group Guidance.
- D. Basic assumptions and principles of Guidance.
- E. Need to understand the needs of the individual and group in the context of Guidance.
- F. Essential information for Effective Guidance.
- G. Vocational Guidance and Role of teachers.

UNIT - II **Counselling**

- A. Meaning, importance, areas, and types of Counselling.
- B. Approaches to Counseling: directive, non-directive and eclectic, behaviorally, and cognitively oriented.
- C. Process of Counseling: initiating counseling, preparation, and intake procedures, establishing rapport, termination of and response to initial interview.

- D. Establishing Structure: attending behaviour, observation, non-verbal behaviour, listening, verbal patterning and communication responses, silence, use of questions. transference and countertransference. regarding and respect in counseling relationships. involuntary clients, client expectation.
- E. Role of family and community.

UNIT - III

Tools and Techniques to Collect Data

- A. Psychological Testing and Diagnosis: Need and Nature.
- B. Test use and interpretation, appraisal techniques.
- C. Counseling Interview: Essential aspects, basis procedures, problems, and their handling.
- D. Personality Assessment: Historical perspective
- E. Material administration, scoring, interpretation, and evaluation of frequently used personality inventories/ questionnaire and projective tests. Personal Orientation Tests and Rating Scales: Type a behaviour, Locus of Control, Attitude scale, ST AI etc., and other clinical rating scales.
- F. Case Study: Need and Importance.

UNIT - IV

Issues Related to Guidance and Counselling

- A. Factors affecting Guidance and Counselling.
- B. Ethical issues in Guidance and Counseling.
- C. Limitation of diagnosis with special reference to Counselling.
- D. Challenges to organize Guidance and Counselling programmes in schools.
- E. Counselling and Guidance of persons with learning disabilities, visual and hearing impairment.
- F. Challenges related to counselling services in schools.

2.10.2 Suggestive Practicum

1. Prepare a case study on students with learning difficulties.
2. Prepare a report on challenges of organizing guidance and counselling programmes in school.

2.10.4 Suggestive Mode of Transaction

The course content transaction will include the following:

- Planned lectures infused with multimedia /power-point presentations.
- Small group discussion, panel interactions, small theme-based seminars, group discussions, cooperative teaching and team teaching, selections from theoretical readings, case studies, analyses of educational statistics and personal field engagement with educationally marginalized communities and groups, through focus group discussion, surveys, short term project work etc.
- Hands on experience of engaging with diverse communities, children, and schools.

2.10.5 Suggestive Mode of Assessment

The assessment will be based on the tests and assignments.

2.10.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

2.10 Peace Education

Credits: 4
Semester: S-8

2.10.1 About the Course

The course is designed to develop a holistic and critical understanding of the theoretical and practical bases of peace education in National and Global perspectives both. The aim is to inculcate values and attitudes required to become a reflective peace practitioner who promotes peace and harmony in society. The course further enhances the contribution of various leaders or educationists in promoting culture of peace.

2.10.2 Learning Outcomes

After the completion of this course students will be able to:

- acquire a holistic and critical understanding of the theoretical and practical bases of peace education,
- trace the historical development and status of the peace education field,
- searching and identifying the best ways to follow peace in life,
- show ability to select and use appropriate method of resolving conflict,
- become critical learners and reflective peace practitioners,
- appreciate the foundations of just and peaceful societies,
- understand and practice the positive action and non-violent conflict resolution in society,
- enhance students' intellectual flexibility, creativity & problem-solving capacities,
- connect course content to current public events and issues worldwide.

UNIT - I

Peace Education: Nature and Significance

- A. Peace and Peace Education.
- B. Meaning, need, dimensions and goal of Peace Education.
- C. A brief review of Historical Development of Peace Education.
- D. Philosophical, sociological, and psychological perspectives of Peace Education.
- E. Types of Peace: positive, negative, inner, social and with nature.
- F. Conflict-Resolution and Peace Education.
- G. Relationship between Development and Peacebuilding.
- H. Learning from experiences to explore the scope of Peace Education.
- I. Challenges to Peace Education.

UNIT - II

Towards the Global Culture of Peace

- A. Process of Peacebuilding.
- B. Culture of Peace Vs Culture of War.
- C. Approaches to Peace Education.
- D. Conflict Analysis and Resolution.
- E. Role of Social and Religious Foundations in Peacebuilding.
- F. Role of local and International Agencies in the Peacebuilding process.
- G. Contribution of Mahatma Gandhi, Tagore, Shri Aurbindo and Dalai lama to build the Culture of Peace at Global level.

UNIT - III

Thoughts on Peace and Harmony

- A. Ancient Indian views.
- B. UNO role for Global Peace Education.
- C. Constitutional provisions.
- D. Study of following thinkers in context of global Peace and Harmony: J. Krishnamurti, Sri Aurobindo, Rabindra Nath Thakur, Mahatma Gandhi, Montessori, Russell, Dalai Lama.

UNIT - IV

Pedagogical Issues for Peace Education

- A. Assessing curriculum policy for social and civic reconstruction.
- B. Comparative and historical perspective on school knowledge and peace.
- C. Socio-historical processes on curriculum change.
- D. Teachers' perceptions of the effects of young people's war experiences and pandemic.
- E. Critical analysis of school curriculum at school level in the light of peace building process.
- F. Challenges of Pedagogical issues of Peace Education.

2.10.3 Suggestive Practicum

1. Critical analysis of Educational Policies, Curriculum and Text Material for Peace-building Process.
2. Reflection on Human Rights, with special reference to Constitution of India, as a process of Social-cohesion and Peace.
3. Analyzing the Role of UNESCO in the context of Peace at Global level.
4. Collection of statements, shloka or sukti (Good Sayings) from ancient Indian literature related to inner and Social Peace.
5. Study of Yoga-Darshana as a process of Peace and Harmony.

2.10.4 Suggestive Mode of Transaction

The course content transaction will include the following:

- Planned lectures infused with multimedia /power-point presentations.
- Small group discussion, panel interactions, small theme-based seminars, group discussions, cooperative teaching and team teaching, selections from theoretical readings, case studies, analyses of educational statistics and personal field engagement with educationally marginalized communities and groups, through focus group discussion, surveys, short term project work etc.
- Hands on experience of engaging with diverse communities, children, and schools.

2.10.5 Suggestive Mode of Assessment

The assessment will be based on the tests and assignments.

2.10.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

2.10 Sports and Fitness Education

Credits: 4
Semester: S-8

2.10.1 About the Course

The course seeks to develop a comprehensive and holistic understanding about the concept of health, its various dimensions, and determinants. The course traces the evolution of Health and Physical Education, historical development of the discipline with special reference to Indian Education and its relation to other subjects. It further highlights the importance of physical fitness policies, programs and services addressing health initiatives in school context.

2.10.2 Learning Outcomes

After completion of this course the students will be able to:

- understand the concept of holistic health, its various dimensions, and determinants,
- develop positive attitude towards health physical education and yoga as individual,
- sensitize, motivate, and help them to acquire the skills for physical fitness, learn correct postural habits and activities for its development,
- create interest for the practice of yogasana and meditations,
- understand various policies and programmes related to health, physical education and yoga,
- help them to understand the process of assessment of health and physical fitness.

UNIT - I

Evolution of Health and Physical Education

- A. Health and Physical Education: Conceptual Clarity (locally as well as globally), importance and aims.
- B. Place in School Curriculum: Historical Development as a subject, Objectives with special reference to Indian Education and its relationship with other subjects.
- C. Status of Health and Physical Education: From primary to secondary education in a global perspective, ayurvedic and yogic concept of Health Education, legal perspective of Health and Health Education in India.

UNIT - II

Health Education

- A. Concept, dimensions, and determinants of health with special to India.
- B. Psycho-social concerns of children and adolescents including differently able children.
- C. Understanding the body system and its functions
- D. Common health problems and diseases: causes, prevention and cure, immunization and first aid.
- E. Impact of Physical activities, games, sports and yoga on different body systems.
- F. Food and nutrition, nutrients and their functions.

UNIT - III

Games and Fitness

- A. Physical fitness and its components: athletics (general physical fitness exercises), games (lead-up games, relays, and major games), Rhythmic activities, gymnastics, and their impact on health.
- B. Development of physical fitness: Postures and Importance of relaxation, Fitness tests; Resources and services for games and sports and Health.
- C. Fundamentals skills of sports: Sports for recreation and competition, Sports awards and scholarships, sport person ship, Indigenous and self-defense activities.
- D. School and family, health services, policies and major health and physical education-related programmes, blood banks, role of media.
- E. Safety and security.
- F. First Aid: Need and Principles.

UNIT - IV

Policies, Programmes and Assessment

- A. Policies, programmes, and services for addressing health needs.
- B. School Health Programme: school health services, health promoting schools, global school health initiatives.
- C. Yoga: Meaning, initiation, historicity, classification, streams, and schools of yoga, Need and importance and role of yoga for healthy life and living, Yoga as a Psychotherapy.
- D. POCSO (Protection of Children from Sexual Offences Act, 2012), PWD 2016, the Integrated Child Protection Scheme.
- E. Assessment of health performance testing in games and sports, reporting of health condition and performance of child in the sport fields.

2.10.3 Suggestive Practicum

1. Recognizing important indicators of health and wellbeing of children and mental health.
2. Undertaking a survey, understanding local food related matters, and understanding the importance of the right to food.
3. Analyzing NEP, 2020 with reference to Games Oriented Education.
4. Planning activities for development of physical fitness.
5. Organization of games and sports tournaments
6. Learning and performing basic yogic activities, asanas, and pranayama, Kriyas and Meditation. Celebration of yoga day, yoga week.
7. Arranging reflective Dialogues on Serials and related videos.
8. Preparation of inventories on myths on exercises and different types of food.
9. Preparation of First Aid kit.
10. A critical review of YOGA-SUTRA.

2.10.4 Suggestive Mode of Transaction

The course content transaction will include the following:

- Planned lectures infused with multimedia /power-point presentations.
- Small group discussion, panel interactions, small theme-based seminars, group discussions, cooperative teaching and team teaching, selections from theoretical readings, case studies, analyses of educational statistics and personal field engagement with

educationally marginalized communities and groups, through focus group discussion, surveys, short term project work etc.

- Hands on experience of engaging with diverse communities, children, and schools.

2.10.5 Suggestive Mode of Assessment

The assessment will be based on the tests and assignments.

2.10.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

2.10 Adolescence Education

Credits: 4
Semester: S-8

2.10.1 About the Course

The course is designed to develop a comprehensive understanding and knowledge about Adolescence and Adolescence education with special references of Adolescence Education programmes in India at School level. There is an attempt to develop understanding about intellectual, emotional, physiological, socio-cultural, and interpersonal issues related to the processes of growing up and to inculcate healthy attitude towards sex and sexuality, respect for the opposite gender and understanding of responsible social behaviour. The course highlights core life skills and their significance in adolescence life period and try to know about the various Adolescence Education programmes undergoing for Adolescence in India.

2.10.2 Learning Outcomes

After the completion of this course students will be able to:

- develop sensitivity, understanding and knowledge about Adolescence and Adolescence Education,
- know the historical development of Adolescent Educational Programme in India,
- know the role of local as well as international agencies towards Adolescent Educational Programme,
- develop a positive attitude towards the importance of Adolescence Education Programmes at the school level,
- develop knowledge and sensitivity on matters related to reproductive health, sex and sexuality and communicate effectively on these issues,
- develop understanding about intellectual, emotional, physiological, socio-cultural, and interpersonal issues related to the processes of growing-up,
- inculcate a healthy attitude towards sex and sexuality, respect for the opposite gender and an understanding of responsible sexual behavior,
- develop an understanding about the desired life skills,
- acquire pedagogical related skills for Adolescence Education Programmes.

UNIT - I

Adolescence and Adolescence Education

- A. Understanding Adolescence: intellectual, emotional, social, and physiological aspects of Adolescence, issues and challenges during Adolescence, myths and realities.
- B. Adolescence Education: concept, nature, and significance of Adolescence Education in Indian context, aims and objectives of Adolescence Education.
- C. Role of school, family, media, and community as social agencies in Adolescence Education.
- D. Challenges of Adolescence Education.

UNIT - II

Life Skills and Adolescence Education

- A. Concept, nature, and significance of Life Skills for Adolescence Education.
- B. Relationship between Life Skills and Adolescence Education.
- C. Core Life Skills and their significance.
- D. Understanding sexual and reproductive health.
- E. STIs and HIV/AIDS: causes, prevention, cure, and skills of coping.

UNIT - III

Adolescence Education Programme in India (AEP)

- A. Historical Development of Adolescence Education Programme in India.
- B. Goals and Significance of Adolescence Education Programme in India.
- C. Role of Teachers in Adolescence Education in India (AEP).
- D. Challenges to Educational Programmes in India.
- E. Myths / Misconceptions

UNIT - IV

Pedagogical Issues

- A. Meaning, goals and significance.
- B. Challenges of teaching adolescence education: understanding student's behavior, dealing with personal self-constraints, socio- cultural issues, class-room issues and challenges, material production, methodology
- C. Preparation of teachers
- D. Approaches to adolescence education: case studies and critical incidents, brainstorming, role-playing, gaming, value clarifications, question box, discussions and debates, puppet shows, role reversal, video shows.

2.10.3 Suggestive Practicum

- 1. Study of Case studies and Critical Incidents. a) Field visit/s
- 2. Review and analysis of the work done by Government and Non-Government.
- 3. Study of Organizations (NGO) at national and international level.
- 4. A research study or detailed case study: Adolescents' behavior in different socio-economic settings, a study on child abuse victims, adolescents in drug rehabilitation centers, adolescents residing in the precincts of industrial areas and factory establishments, adolescents in the educational regions showing either higher or lower drop-out rate, adolescents belonging to communities in which social evils affecting them are manifested like child marriages, conducting Adolescence Education sessions in School.

2.10.4 Suggestive Mode of Transaction

The course content transaction will include the following:

- Planned lectures infused with multimedia /power-point presentations.
- Small group discussion, panel interactions, small theme-based seminars, group discussions, cooperative teaching and team teaching, selections from theoretical readings, case studies, analyses of educational statistics and personal field engagement with

educationally marginalized communities and groups, through focus group discussion, surveys, short term project work etc.

- Hands on experience of engaging with diverse communities, children, and schools.

2.10.5 Suggestive Mode of Assessment

The assessment will be based on the tests and assignments.

2.10.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

2.10 Art in Education

Credits	4
Semester	S-8

2.10.1 About the Course

The course seeks to develop an understanding of Art with special reference to its relevance in human life in general and Education in particular. It will further develop imagination and sense of appreciation and aesthetic of art. The theoretical considerations of Art Education are highlighted from Indian and western perspectives of art in Life. The course talks about the fundamental principles of Art Education at school level. The pedagogical issues of art education and approaches to teaching-learning process are also discussed.

2.10.2 Learning Outcomes

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

- develop art appreciation with special reference to relevance and place of Art in human life,
- acquaint with conceptual understanding of the key ideas of Art Education,
- discuss critically the value development in Art Education.,
- understand the implications of Art in Education,
- sensitize towards the problems and issues in Art Education,
- sensitize towards pedagogical issues of Art Education,

UNIT - I

Art and Education

- A. Conceptual clarity, relationship, and significance of studying art education with special reference to place of art in Human life.
- B. Historical development of art education in school education.
- C. Goals of studying art education in school curriculum at different stages.
- D. Studying art education across the curriculum.
- E. Perspective of NEP, 2020 on Art Education.

UNIT - II

Theoretical Consideration of Art Education

- A. Philosophical, psychological and sociological perspective of Art Education.
- B. Formal and informal theories of art.
- C. Indian perspective of art in life.
- D. Western perspective of art in life.
- E. Critical analysis of theories of Art Education.

UNIT - III

Fundamentals of Art Education

- A. Literature of Art Education
- B. Conceptual clarity of the following basic concepts of art at school level: aesthetics, criticism and judgement at school level, beauty, reality, idea, truth, taste, sense.

- C. Basic requirements of teaching-learning art at school across stages.
- D. Question of social ethics.

UNIT - IV

Pedagogical Issues of Art Education

- A. Approaches to teaching-learning process of Art Education.
- B. Curriculum of art education with special to challenges of developing curriculum.
- C. Material production and its challenges.
- D. Assessment and Evaluation strategies with special reference to challenges.
- E. Criterion of analyzing: curriculum of Art Education, teaching-learning material, assessment and evaluation strategies, teaching strategies of art at school level.
- F. Values in Art teaching.

2.10.3 Suggestive Practicum

1. Preparing multimedia material for Art Education in senior secondary schools.
2. Preparation of instructional material for education in the arts for secondary school.
3. Organizing the Art Club.
4. Case studies of the children's work of art and their understanding of the concept of Art.

2.10.4 Suggestive Mode of Transaction

The course content transaction will include the following:

- Planned lectures infused with multimedia /power-point presentations.
- Small group discussion, panel interactions, small theme-based seminars, group discussions, cooperative teaching and team teaching, selections from theoretical readings, case studies, analyses of educational statistics and personal field engagement with educationally marginalized communities and groups, through focus group discussion, surveys, short term project work etc.
- Hands on experience of engaging with diverse communities, children, and schools.

2.10.5 Suggestive Mode of Assessment

The assessment will be based on the tests and assignments.

2.10.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

3.0 DISCIPLINARY/ INTER-DISCIPLINARY COURSES

**(To be developed by the University/
Institution concerned in line with regular-
Year Undergraduate Programme – FYUP
within prescribed credits as outlined in
Curriculum Framework)**

STAGE SPECIFIC CONTENT CUM PEDAGOGY COURSES

4.4 Content Cum Pedagogy Courses at Secondary Stage

NEP 2020 envisages that teachers must be grounded in Indian values, languages, knowledge, ethos, and traditions including tribal traditions, while also being well-versed in the latest advances in education and pedagogy. Aligning with this, the four-year Integrated Teacher Education Programme (ITEP) envisions the creation of passionate, motivated, qualified, professionally trained, and well-equipped teachers capable of designing and implementing developmentally appropriate learning experiences for students at different stages of school education and seeks to ensure that the prospective teachers are given the highest quality education in content, pedagogy, values, and practice.

Pedagogy of a school subject can be referred to as a teacher's understanding of how the students learn. Pedagogy demands a variety of quality classroom interactions between the teacher and students which motivates students to learn. The use of appropriate pedagogy manifests in visible student enthusiasm and a desire to engage constructively in the learning process. The involvement of students is the key aspect of teaching learning process and the pedagogical decisions and responses made by the teachers have a significant effect on the student's participation. Consequently, the selection of teachers' learning experiences and implementation will have a significant influence both on student academic performance and motivation. At the Secondary level, the challenge for the teacher intensifies due to the nature of adolescence to understand and employ pedagogies that effectively support all three important dimensions of student's behaviour i.e., emotional, cognitive and conative as NEP 2020 lays emphasis on the holistic development of students.

The secondary stage of school education occupies a crucial position in the entire system of education because it is the terminal stage of school education. The secondary stage of teacher preparation involves four years of multidisciplinary study but with greater depth, greater critical thinking, and greater attention to life aspirations (Curriculum Framework, ITEP, 2023). It covers Grades 9–12 covering ages from 14–18. It emphasizes a pedagogy that is based on a combination of peer-facilitated, expert-led and self-learning processes with an emphasis on promoting conceptual understanding, collaboration, and creativity both in teacher education classrooms and school classrooms. Teachers' pedagogical expertise and subject matter expertise both are critical to successful teaching and student understanding.

Students develop greater disciplinary knowledge and approaches in the secondary stage. By locating the theoretical concepts within the overall conceptual framework of the disciplines, explaining them using the most recent, accepted theories of the discipline, and connecting these concepts to theoretical concepts in other disciplines, would help them understand the deeper meanings.

The Pedagogy courses at the secondary stage extend from semester III to VI covering 16 credits. There are four contents cum pedagogical courses across all subject-specific pedagogies. The first course, offered in the III semester is an introductory course entitled, Basics of Pedagogy, which is 4 credits course common to all subject disciplines such as Languages, Commerce, Sciences, Social Sciences, Home Science, Computer Science, Physical Education, Arts Education, Vocational Education and Agriculture. In Semesters IV, V and VI, subject-specific pedagogy courses are being offered, each with 2 credits. The student teachers of this stage have to choose

two contents cum pedagogical courses in semesters IV, V and VI. The subject-specific pedagogical courses are designed to effectively integrate theory and practice for attaining higher goals of preparing quality teachers as enshrined in NEP 2020.

In addition to being well-versed in the most recent developments in pedagogy and education, a student who completes these courses will have a solid foundation in Indian values, languages, knowledge, ethos, and culture. The requirement for 21st century skills has been addressed by these courses. These courses will be a pre-requisite of the internship of a student teacher and direct linkage to subject-specific school practices.

The following pedagogy courses are designed to realize the curricular objectives of the Secondary Stage:

S.No.	Discipline of the school curricular area	Courses	Semester	Credits
1.	General Pedagogy - For all curricular areas	Basics of Pedagogy at Secondary Stage - <i>This course shall be offered as common compulsory course across all the pedagogy courses.</i>	3	4
2.	Languages L1: Any one Language from Schedule 8 L2: Any one Language other than L1	Content cum Pedagogy of Language 1 at Secondary Stage – Course (I)	4	2
		Content cum Pedagogy of Language 2 at Secondary Stage- Course (I)		2
		Content cum Pedagogy of Language 1 at Secondary Stage- Course (II)	5	2
		Content cum Pedagogy of Language 2 at Secondary Stage- Course (II)		2
3.	Mathematics	Content cum Pedagogy of Language 1 at Secondary Stage- Course (III)	6	2
		Content cum Pedagogy of Language 2 at Secondary Stage- Course (III)		2
4.	Sciences (Physical Sciences)	Content cum Pedagogy of Mathematics at Secondary Stage – Course (I)	4	2
		Content cum Pedagogy of Mathematics at Secondary Stage – Course (II)	5	2
		Content cum Pedagogy of Mathematics at Secondary Stage - Course (III)	6	2
5.	Sciences (Biological Sciences)	Content cum Pedagogy of Physical Sciences at Secondary Stage - Course (I)	4	2
		Content cum Pedagogy of Physical Sciences at Secondary Stage - Course (II)	5	2
		Content cum Pedagogy of Physical Sciences at Secondary Stage - Course (III)	6	2
5.	Sciences (Biological Sciences)	Content cum Pedagogy of Biological Sciences at Secondary Stage - Course (I)	4	2
		Content cum Pedagogy of Biological Sciences at Secondary Stage - Course (II)	5	2

		Content cum Pedagogy of Biological Sciences at Secondary Stage - Course (III)	6	2
6.	Social Sciences (Economics, Geography, History and Political Science)	Content cum Pedagogy of Social Sciences at Secondary Stage - Course (I)	4	2
		Content cum Pedagogy of Social Sciences at Secondary Stage - Course (II)	5	2
		Content cum Pedagogy of Social Sciences at Secondary Stage - Course (III)	6	2
7.	Commerce, Accountancy & Business Studies	Content cum Pedagogy of Commerce, Accountancy and Business Studies at Secondary Stage- Course (I)	4	2
		Content cum Pedagogy of Commerce, Accountancy and Business Studies at Secondary Stage - Course (II)	5	2
		Content cum Pedagogy of Commerce, Accountancy and Business Studies at Secondary Stage - Course (III)	6	2
8.	Computer Science	Content cum Pedagogy of Computer Science at Secondary Stage - Course (I)	4	2
		Content cum Pedagogy of Computer Science at Secondary Stage - Course (II)	5	2
		Content cum Pedagogy of Computer Science at Secondary Stage - Course (III)	6	2
9.	Arts (Visual & Performance)	Content cum Pedagogy of Arts at Secondary Stage: - Course (I)	4	2
		Content cum Pedagogy of Arts at Secondary Stage - Course (II)	5	2
		Content cum Pedagogy of Arts at Secondary Stage - Course (III)	6	2
10.	Vocational Education	Content cum Pedagogy of Vocational Education at Secondary Stage - Course (I)	4	2
		Content cum Pedagogy of Vocational Education at Secondary Stage - Course (II)	5	2
		Content cum Pedagogy of Vocational Education at Secondary Stage - Course (III)	6	2
11.	Physical Education & Yoga	Content cum Pedagogy of Health, Physical Education and Yoga at Secondary Stage - Course (I)	4	2

		Content cum Pedagogy of Health, Physical Education and Yoga at Secondary Stage - Course (II)	5	2
		Content cum Pedagogy of Health, Physical Education and Yoga at Secondary Stage - Course (III)	6	2
12.	Agriculture	Content cum Pedagogy of Agriculture at Secondary Stage - Course (I)	4	2
		Content cum Pedagogy of Agriculture at Secondary Stage - Course (II)	5	2
		Content cum Pedagogy of Agriculture at Secondary Stage - Course (III)	6	2
13.	Home Science	Content cum Pedagogy of Home Science at Secondary Stage - Course (I)	4	2
		Content cum Pedagogy of Home Science at Secondary Stage - Course (II)	5	2
		Content cum Pedagogy of Home Science at Secondary Stage - Course (III)	6	2

*Note: Pedagogy courses are developed as per curricular areas. HEIs may further develop as per their subject specific needs based on the syllabi.

4.4.1 Basics of Pedagogy at Secondary Stage

Credit: 4
Semester: S-3

4.4.1.1 About the Course

This course deals with diverse range of topics of basics of pedagogy at secondary stage that will equip student teachers with valuable knowledge, capacities and competencies. This course comprises four units and a practicum. This course prepares student teachers to understand secondary-stage learners and design teaching accordingly. This course also aims to equip teachers with the necessary tools, knowledge, and competencies to continuously evolve as professionals and create a positive and transformative impact on their students and society as a whole. In this course a strong foundation will be established by exploring the fundamental principles and concepts that support basics of pedagogy in the light aims and objectives of the curriculum. This course emphasizes understanding learners and their backgrounds comprehensively so that an engaging and supportive learning environment, that fosters a need for learning, can be created for facilitating learner's holistic development. This course is designed to equip student teachers with a wide array of teaching learning strategies. It also focuses on innovative and transformative approaches to education, aiming to create lifelong learners equipped to thrive in an ever-changing world. Through professional development opportunities, student teachers will be better prepared to meet the ever-changing demands of the educational landscape and inspire the next generation of learners.

4.4.1.2 Learning Outcomes

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

- build comprehensive understanding of secondary stage learners,
- assess the physical, mental, social, and emotional growth of secondary stage learners,
- develop skills to observe and recognize the unique capabilities and strengths of secondary stage learner,
- discuss the necessary knowledge and skills to implement effective teaching and learning strategies,
- create enriching and inclusive learning environments to foster values-based education,
- develop a deeper understanding of various pedagogical approaches and their impact on learners,
- determine the knowledge to make informed decisions about instructional practices,
- explain the crucial role of pedagogy in facilitating effective learning experiences for students,
- outline knowledge and skills necessary for continuous professional development.

UNIT - I

Understanding Secondary Stage Learners

- A. Understanding the learners and learner background
- i. The physical, mental, social, and emotional growth of learners
 - ii. Thought processes and cognitive skills of learners.
 - iii. Psychological and social orientations of learners
 - iv. Social and academic lives of learners
 - v. Conflicts and challenges of secondary learners

- vi. Characteristics of secondary stage learners
- B. Observing the unique capabilities of a child

UNIT - II

Strategies of Teaching and Learning

- A. Understanding teaching and learning strategies:
 - i. Concept, characteristics and functions of teaching
 - ii. Making abstract concepts enjoyable by relating them to real-life situations,
 - iii. Promoting multidisciplinary learning through integration of different disciplines
 - iv. Promoting learner participation and engagement in learning
 - v. Building values through art integrated activities, community engagement etc.
 - vi. Promoting multidisciplinary learning through integration of different disciplines
 - vii. Promoting health and social sensitivities
 - viii. Developing respect toward cultural heritage
 - ix. Making classrooms inclusive and joyful learning spaces
- B. Relationship between Aims and Values of Education, Curriculum and Pedagogy

UNIT - III

Pedagogical Approaches

- A. Pedagogical approaches: constructivist approach; collaborative approach; reflective approach; integrative approach, inquiry- based approach; other contemporary approaches, art-integrated learning, sports- integrated learning.
- B. Types of pedagogy: social pedagogy; critical pedagogy; culturally responsive pedagogy; Socratic pedagogy in inclusive setup.
- C. Role of pedagogy in effective learning: how does pedagogy impact the learner?

UNIT - IV

Continuous Professional Development of Teacher

- A. Meaning and need, professional and ethical competencies and need for updating content and pedagogical competencies to develop their professional competencies.
- B. Professional development activities: seminars, conferences, orientation programmes, workshops, online and offline courses, competitions, publications, development of teaching portfolio, capacity building programmes, and teacher exchange programmes.
- C. Development of professional competencies to deal with gender issues, equity and inclusion, ethical issues, environmental issues, human health and well-being, population, human rights, and various issues (emotional, mental, physical issues related to pandemic (for example covid-19).

4.4.1.3 Suggestive Practicum (Any Three)

1. Analyze NEP 2020 with reference to pedagogical aspects of the concerned subject.
2. Analyze and reflect on the qualities of an 'Innovative Teacher' in Context of National Professional Standards for Teachers (NPST) and National Mentoring Mission (NMM).
3. Explore different platforms such as National Teacher's Portal, NISHTHA, DIKSHA, and SWAYAM for an online course and prepare a report.

4. Participate in a workshop or seminar to explore the concept of Continuous Professional Development (CPD), its significance in lifelong learning and prepare a write up on the findings.
5. Develop teaching learning strategies to address the needs of diverse learners in context of gender, equity and inclusion and prepare a PowerPoint presentation.
6. Raise awareness on the ethical and social challenges in education through field trip and create an e-portfolio.
7. Any other project assigned by HEI.

4.4.1.4 Suggestive Mode of Transaction

Lecture cum discussion, project-based method, problem solving method, experiential learning, art integrated learning, sports integrated learning, ICT integrated learning, interactive methods such as group discussions, peer tutoring, workshops, observations, and presentations.

4.4.1.5 Suggestive Mode of Assessment

Portfolio creation, written tests, classroom presentations, seminars, assignments, practicum, sessional, terminal semester examinations (As per UGC norms).

4.4.1.6 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 (English and Hindi)
- National Steering Committee for National Curriculum Frameworks, (2023). Draft National Curriculum Framework for School Education.
- National Policy on Education 1968, 1986 and 2020.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.2 Content cum Pedagogy of Language 1/ Language 2 at Secondary Stage - Course (I)

Credit: 2
Semester: S-4

4.4.2.1 About the Course

Interventions from quality teachers are vital in view of the objectives of NEP 2020. 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 student-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.

4.4.2.2 Learning Outcomes

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

- outline the aims and objectives of teaching Language at the secondary level,
- identify and relate values of the Language with other disciplines,
- summarize the historical perspective of the Language,
- discuss methods, approaches, and materials for teaching Language at the secondary stage in the Indian context,
- appraise the Language diversity of the surroundings.

UNIT - I

Nature, Scope, and Historical Perspective of Language

- A. Nature, scope, and importance of the Language; Linguistic features of the Language.
- B. Functions of Language, Language learning, and Language acquisition.
- C. Historical perspective of the Language with a special focus on inclusivity in classrooms to learn the Language, evolution of Language with the power dynamics.
- D. Language as discourse: Language - Identity and Gender.
- E. Recommendations/suggestions of various committees, commissions, and policies on teaching-learning the Language in school education.
- F. Universality of Languages.

UNIT - II

- A. Aims and objectives of teaching the Language (L1 and L2).
- B. Linkages of the Language with other school subjects.
- C. Linkages between literature and society.
- D. Place of the Language in school curriculum at the national and international scenario.
- E. Values of Language: functionality, fluency, coherence.

UNIT - III

Pedagogical Aspects of Language

- A. Approaches of teaching Language – inductive deductive, constructivist, experiential learning, art-integrated learning, blended learning, interdisciplinary and multidisciplinary approaches.
- B. Critical and analytical pedagogical concerns related to teaching Language with special focus on Higher-Order Thinking skills (HOTS).
- C. 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.
- D. Capabilities of students in Language skills and reflection.

4.4.2.3 Suggestive Practicum (Any Three)

- 1. Prepare a report on any one Language of your neighborhood 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 at the secondary level.
- 5. Prepare a report on various pedagogical activities to teach the Language.
- 6. Any other project assigned by the HEI.

4.4.2.4 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.

4.4.2.5 Suggestive Mode of Assessment

Written tests, classroom presentations, seminars, assignments, practicum, sessional, and terminal semester examinations (As per UGC norms).

4.4.2.6 Suggestive Reading Materials

- 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.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.2 Content cum Pedagogy of Language 1/ Language 2 at Secondary Stage - Course (II)

Credit: 2
Semester: S-5

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 student-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. Student 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.

4.4.2.2 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 different types of teaching-learning aids during classroom teaching,
- make use of multimedia in Language teaching. Acquire knowledge about Language through online resources,
- develop lesson plan for effective teaching of Language,
- summarize the meaning and need of how to learn concepts of Language,
- identify the role of a teacher in facilitating learning of the Language.

UNIT - I

Teaching Learning Resources

- A. Teaching learning aids/materials: concept, role, and importance in classroom teaching learning of Language.
- B. 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.)
- C. Identification and use of teaching aids/teaching learning materials from the environment.
- D. Language laboratory – types, design, management, and practices; Virtual laboratories, teaching learning kits, subject clubs, fairs, exhibitions, educational parks, excursions, community resources and pooling of resources.

UNIT - II

Content Analysis and Planning for Teaching Language

- A. Concept, types and importance of unit and lesson planning.
- B. 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.
- C. Developing unit plans and lesson plans based on learning outcomes and experiential learning (art integrated) of Languages.

UNIT - III

ICT Integration and Application

- A. Scope and importance of using ICT in learning process of Languages.
- B. Use of ICT in the classroom: artificial intelligence, machine learning, smart boards, for enhancing learning.
- C. Tools, software and platform for teaching learning of Language at secondary stage.
- D. Developing ICT integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for classroom and online teaching using digital resources and multimedia.

4.4.2.3 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. Any other project assigned by the HEI.

4.4.2.4 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.

4.4.2.5 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).

4.4.2.6 Suggestive Reading Materials

- 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.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.2 Content cum Pedagogy of Language 1/ Language 2 at Secondary Stage – Course (III)

Credit: 2
Semester: S-6

4.4.2.1 About the Course

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.

4.4.2.2 Learning Outcomes

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

- list the different concepts related to assessment and evaluation in Language Teaching,
- enumerate the characteristics of innovative practices in the teaching-learning process of the Language,
- discuss tools and techniques of assessment and evaluation in Language Teaching,
- examine issues in Language assessment and their impact on classroom teaching,
- apply ICT in the teaching-learning process of Language,
- develop e-content of Language using Language lab and virtual lab.

UNIT - I

21st Century Skills for Learning

- A. Need for and importance of how to learn 21st century skills for learners and teachers of Language.
- B. Psychological, sociological, and philosophical perspective of teaching and learning Language.
- C. Qualities of a Language teacher as professional for enhancing teaching learning skills.
- D. Role of a teacher in facilitating learning and creating dynamic learning environment of Language.

UNIT - II

Assessment and Evaluation

- A. Assessment and evaluation: need for and importance of Languages.
- B. Development of learning indicators, performance-based assessment, learners' records of observations.
- C. Strategies for continuous assessment, school-based assessment, formative and summative assessment, formal, informal and 360o assessment.
- D. Performance assessment: assessment of group activities, field observations, recording and reporting, creating platform and portfolio management, assessment of lab skills, assignments, projects, and presentations.
- E. 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 - III

Research and Innovative Practices in Teaching Languages

- A. Divergent thinking and innovation in psychological, sociological, and philosophical perspectives for quality learning experiences.
- B. Recent trends in research related to teaching learning of Language.
- C. Action research: meaning, significance, steps and planning.
- D. Evidence-based practices and reflection, school-based research in Language.
- E. Effective communication with special reference to multilingualism using Language lab and virtual lab.

4.4.2.3 Suggestive Practicum (Any Three)

1. Design devices for assessment of Listening, Speaking, Reading, and Writing skills of Language through activities such as debate, extempore, group discussion, Speech, etc.
2. Assess the peers in the Language and prepare an analytical report.
3. Write a reflective note on two editorial pieces on the same topic from different newspapers from multilingualism perspective.
4. Complete an online certificate course on Language from SWAYAM portal.
5. Develop a write-up on the power of Language in regard to NEP 2020 recommendations.
6. Any other project assigned by HEI.

4.4.2.4 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.

4.4.2.5 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).

4.4.2.6 Suggestive Reading Material

- 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.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.3 Content cum Pedagogy of Mathematics at Secondary Stage - Course (I)

Credit: 2
Semester: S-4

4.4.3.1 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. This course enables the student-teachers to understand the nature of mathematical knowledge and the mathematics curriculum at secondary stage. The objectives of teaching Mathematics should not be limited to the development of computational skills but to enable mathematical reasoning to solve problems of life. Student teachers will develop skills to formulate classroom objectives 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 for the effective learning of Mathematics. They would be exposed to various pedagogical approaches, methods, and techniques so that they will be able to create a learner friendly classroom environment.

4.4.3.2 Learning Outcomes

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

- appraise the contribution of Indian Knowledge Systems in development of Mathematics,
- 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,
- classify 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

Nature, Scope and Historical Perspective of Mathematics

- A. Development of Mathematics from a historical perspective.
- B. Nature of Mathematical Knowledge – Axioms and Postulates, Conjectures, Proofs in Mathematics: inductive - deductive reasoning, theorems, mathematical modeling.
- C. Importance of Mathematics knowledge in everyday life.
- D. Recommendations of various committees, commissions and policies related to Mathematics education at Secondary stage (especially in National Education Policies and National Curriculum Frameworks).

UNIT - II

Aims and Objectives of Teaching Mathematics

- A. Aims and objectives of teaching Mathematics at secondary stage.
- B. Learning outcomes and competencies of teaching Mathematics at secondary stage.
- C. Linkages of Mathematics with other school subjects and place in school curriculum.

D. Inculcation of values through teaching of Mathematics.

UNIT - III

Pedagogical Aspects of Mathematics

- A. Implication of various approaches of teaching Mathematics – inductive deductive, analytical synthetical, constructivist, blended learning, experiential learning, transdisciplinary, interdisciplinary, and multidisciplinary.
- B. Learner-centric and participative methods of teaching of Mathematics: lecture cum demonstration, problem-solving, laboratory, project based.
- C. Analytical pedagogical concerns in teaching of Mathematics for higher order thinking skills such as critical, creative, decision making, reflective, collaborative, and cooperative.
- D. Techniques of teaching learning Mathematics: oral, written, drill work, homework, self-study, group study, supervised study, concept-mapping, learning, art and sports integrated learning.

4.4.3.3 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.
- 4. Develop strategy to connect any three topics for value inculcation in teaching of Mathematics.
- 5. Analyze the content of one chapter of Mathematics textbook and develop concept maps at secondary stage.
- 6. Select and list approaches and methods for teaching various topics of secondary stage Mathematics.
- 7. Any other project assigned by HEI.

4.4.3.4 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.

4.4.3.5 Suggestive Mode of Assessment

Written test, classroom presentation, workshop, assignments, practicum, sessional and terminal semester examination (As per UGC norms).

4.4.3.6 Suggestive Reading Material

- MESE 001(2003) Teaching and Learning Mathematics. IGNOU series
- NCERT Publications: Pedagogy of Mathematics (Code-13074)

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.3 Content cum Pedagogy of Mathematics at Secondary Stage – Course (II)

Credit: 2
Semester: S-5

4.4.3.1 About the Course

The teaching learning of Mathematics is a complex activity, and many factors determine the success of this activity. The nature and quality of instructional material, the presentation of content, the pedagogic skills of the teacher, the learning environment. Students at this stage are keen in exploring and constructing their own knowledge, so facilitating with resources is important for the schoolteacher. This course will provide illustrative exposure to the resource materials for Mathematics teaching learning. Teaching Mathematics requires a thorough understanding of the pedagogical content knowledge. 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. This course provides skills to develop the planning of Mathematics teaching learning for classroom. 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.

4.4.3.2 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 - I

Teaching Learning Resources

- A. Teaching learning materials: meaning and importance for secondary school Mathematics.
- B. Types of teaching learning resources: print media (Mathematics textbook, teachers' manual/ handbook, laboratory manual), 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
- C. Identification and use of learning resources in Mathematics from the local environment, community resources and pooling of resources.
- D. Mathematics resource room/ laboratory – equipment and management, concept of virtual laboratories.

- E. Organization of Mathematics club, fairs, exhibitions, learner community.

UNIT - II

Content Analysis and Planning for Teaching Mathematics

- A. Analysis for identification of axioms, concepts, rules, formulas, theorems, corollaries; pedagogical content knowledge of arithmetic, algebra, geometry, mensuration, and trigonometry of secondary stage.
- B. Planning and evaluating learning experiences in an inclusive setup based on learning outcomes and competencies, building a community of mathematicians in classrooms.
- C. Developing annual plan, unit plan, lesson plan – need, main consideration, and format.
- D. Strategies for method-based lesson plan for secondary classes - inductive-deductive, analytical- synthetical, lecture cum demonstration, problem-solving, laboratory, and project based.

UNIT - III

ICT Integration and Applications in Teaching of Mathematics

- A. Scope and importance of ICT for teaching and learning Mathematics.
- B. Use of ICT (digital repository, Augmented Reality (AR), Virtual Reality (VR) and Artificial Intelligence (AI) based digital resources, open education resources, blogs, forums, interactive boards, and devices) in the teaching learning, assessment and resource management of secondary Mathematics.
- C. Use of tools, software, and platforms such as GeoGebra, Khan Academy along with national teacher's portal, DIKSHA, SWAYAM.
- D. Developing ICT integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for Mathematics classroom and online teaching.

4.4.3.3 Suggestive Practicum (Any Three)

- 1. Develop learning resources for Mathematics teaching learning.
- 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.

4.4.3.4 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.

4.4.3.5 Suggestive Mode of Assessment

Written test, classroom presentation, workshop, assignments, practicum, sessional, and terminal semester examination (As per UGC norms).

4.4.3.6 Suggestive Reading Materials

- NCERT: A Handbook for Designing Mathematics Laboratory in Schools (Code- 1555)
- NCERT: Manual for Higher Secondary Mathematics Kit (Code- 3165)

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.3 Content cum Pedagogy of Mathematics at Secondary Stage - Course (III)

Credit: 2
Semester: S-6

4.4.3.1 About the Course:

Development of 21st century skills are important for Mathematics teaching learning. Learning the imagination, spatial visualization, mathematical reasoning is important for novice learners. The course comprises three units describing 21st century skills for learning, assessment and evaluation and research and innovative practices in teaching learning Mathematics. This course also aims to improve skills and competencies required for Mathematics teachers to conduct effective learner assessments. The course describes various evaluation strategies and devices which can be efficiently used in the teaching learning of Mathematics 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 Mathematics.

4.4.3.2 Learning Outcomes

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

- analyze the sources of the development of 21st century skills through Mathematics teaching and learning,
- determine role of teacher in facilitating learning and creating dynamic learning environment of Mathematics,
- describe need for and importance of assessment in the learning process of Mathematics,
- develop various types of tests for assessing students learning in Mathematics,
- design and develop innovative strategies and techniques for successful inteaching and learning Mathematics,
- conduct school- based research in Mathematics teaching,
- explain the various methods of exploring knowledge,
- explore innovative ideas for teaching and learning of Mathematics,
- assess the steps of action research.

UNIT - I

21st Century Skills for Learning Mathematics

- A. 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.
- B. Psychological, sociological, and philosophical perspective of teaching learning and development of Mathematics.
- C. Qualities of a Mathematics teacher as professional.
- D. Role of a teacher in facilitating learning and creating dynamic learning environment of Mathematics.

UNIT - II

Assessment for Learning in Mathematics

- A. Meaning, need and organization of oral, written, and practical assessment in Mathematics.
- B. Construction of types of questions in Mathematics: objective, short answer, long answer, considerations for the marking different types of questions in Mathematics.

- C. Planning and developing teachers made tests in Mathematics - Table of Specification (TOS), question paper setting and preparing answer key.
- D. Tools to identify learning difficulties and provide corrective measures in Mathematics, concept of 360° assessment, holistic progress card and assessment of mathematical aspects of students.

UNIT - III

Research and Innovative Practices in Teaching of Mathematics

- A. Divergent thinking for innovation in psychological, sociological, and philosophical perspectives of Mathematics for quality learning experiences.
- B. Innovative practices in Mathematics.
- C. 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.
- D. Recent trends and research related to teaching learning of Mathematics – digital gaming, digital storytelling, using Artificial Intelligence for Mathematics teaching and learning.
- E. Action research for solving problems of teaching and learning of Mathematics: meaning, significance, steps, and planning.

4.4.3.3 Suggestive Practicum (Any Three)

1. List 21st century skills with reference to various topics of school Mathematics.
2. Writing a paper on recent trends and research related to teaching learning of Mathematics.
3. Prepare a scrap book for 'Mathematics in Print Media'.
4. Prepare a small video for recent trends of Mathematics in social media.
5. Plan a teacher made test for a unit of secondary Mathematics.
6. Prepare a report after using an innovative idea to teach a difficult topic of secondary Mathematics.
7. Plan for action research on any one problem of teaching learning Mathematics.
8. Any other project assigned by HEI.

4.4.3.4 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.

4.4.3.5 Suggestive Mode of Assessment

Written test, classroom presentation, workshop, assignments, practicum, sessional and terminal semester examination (As per UGC norms).

4.4.3.6 Suggestive Reading Material

- NCERT (2012). Pedagogy of Mathematics
- NCERT: Manual for Higher Secondary Mathematics Kit (Code- 3165)

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.4 Content cum Pedagogy of Physical Sciences at Secondary Stage – Course (I)

Credit: 2
Semester: S-4

4.4.4.1 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 quality and professionalism. Teacher education programme strongly emphasizes pedagogy, its principles, 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. This course comprises three units and a practicum. 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 perspectives of Physical Sciences are discussed in unit second. 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.

4.4.4.2 Learning Outcomes

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

- explain nature, scope and importance of Physical Sciences,
- illustrate aims and objectives of teaching Physical Sciences for sustainable development of society,
- outline linkages between Physical Sciences and other subjects,
- identify the values and importance of Physical Sciences and alternative knowledge systems,
- summarize the historical/policies perspective of Physical Sciences,
- examine pedagogical concerns of Physical Sciences,
- categorize approaches and methods of teaching learning Physical Sciences,
- apply appropriate pedagogy in teaching learning the concepts of Physical Sciences.

UNIT - I

Nature, Scope and Historical Perspective of Physical Sciences

- A. Nature, scope, and importance of Physical Sciences.
- B. Historical perspective of Physical Sciences.
- C. Contributions of Indian (ancient and modern) and other scientists.
- D. Physical Sciences, society and human and sustainable development.
- E. Recommendations/suggestions of various committees, commissions, and policies in reference to Physical Sciences.

UNIT - II

Aims and Objectives of Physical Sciences

- A. Aims and objectives of teaching Physical Sciences.
- B. Learning outcomes and competencies of teaching Physical Sciences at secondary stage.
- C. Linkages of Physical Sciences with other school subjects and place of the Physical Sciences in school curriculum.
- D. Values of Physical Sciences: scientific attitude and appreciating other systems of knowledge / alternative knowledge systems.

UNIT - III

Pedagogical Aspects of Physical Sciences

- A. Implication of various approaches - inductive deductive, constructivist, experiential learning, art integrated learning, sports integrated learning, blended learning, interdisciplinary and multidisciplinary approaches in Physical Sciences.
- B. Analytical pedagogical concerns in teaching of Physical Sciences for higher order thinking skills such as critical, creative, communication, decision making, reflective.
- C. 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.

4.4.4.3 Suggestive Practicum (Any Three)

1. Explore contributions of Indian scientists in the development of Physical Sciences and make presentations on historical development of Physical Sciences.
2. Analyze recommendations of policies/commissions in context of Physical Sciences.
3. Develop concept maps on different concepts of Physical Sciences.
4. Identify and integrate values in Physical Sciences concepts.
5. Demonstrate different pedagogical approaches and strategies for transacting concepts of Physical Sciences.
6. Prepare write-ups on the teaching of science using interdisciplinary and multidisciplinary approaches as recommended in NEP 2020.
7. Any other project assigned by HEI.

4.4.4.4 Suggestive Mode of Transaction

Lecture cum discussion/demonstration, hands-on activities, experiential learning, art and environment integrated learning, sports integrated learning.

4.4.4.5 Suggestive Mode of Assessment

Written tests, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

4.4.4.6 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.

4.4.4 Content cum Pedagogy of Physical Sciences at Secondary Stage - Course (II)

Credit: 2
Semester: S-5

4.4.4.1 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 on textbook 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, list learning and outcomes, find out about various activities and experiments. Accordingly, they are expected to develop lesson plan based on learning outcomes and experiential learning for classroom and online teaching.

4.4.4.2 Learning Outcomes

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

- identify teaching learning aids / materials and illustrate their importance in teaching learning the concepts of Physical Sciences,
- categorize teaching aids/materials/learning resources,
- develop teaching learning aids/material/kits/learning resources for teaching learning the concepts of Physical Sciences,
- utilize teaching aids/materials/learning resources for teaching learning the concepts of Physical Sciences,
- analyze the content of physical sciences textbooks at secondary stage,
- develop lesson plan based on learning outcomes and experiential learning using appropriate strategies.

UNIT - I

Teaching Learning Resources

- A. Teaching learning aids/materials: concept, definition, role and importance in classroom teaching learning the physical sciences.
- B. 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 classroom teaching learning reflective journals, charts, 2-D and 3-D models, games, cards, worksheets, multimedia.
- C. Identification and use of learning resources in physical sciences from the local environment.

- D. 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

- A. Pedagogical analysis of content taking examples from topics of physical sciences textbooks at secondary stage, identification of concepts, listing learning outcomes and competencies, planning, and evaluating learning experiences in an inclusive setup.
- B. Concept, types and importance of unit and lesson planning.
- C. 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

- A. Scope and importance of ICT in physical sciences.
- B. Use of ICT such as Artificial Intelligence, machine learning, smart boards in the teaching learning, assessment, and resource management.
- C. Tools, software, and platforms for teaching learning of physical sciences at secondary stage.
- D. 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.

4.4.4.3 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.

4.4.4.4 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.

4.4.4.5 Suggestive Mode of Assessment

Written test, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

4.4.4.6 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.

4.4.4 Content cum Pedagogy of Physical Sciences at Secondary Stage - Course (III)

Credit: 2
Semester: S-6

4.4.4.1 About the Course

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. 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. It focuses on Psychological, Sociological and Philosophical Perspective of Activity Oriented Classrooms in Physical Sciences. The importance of planning science learning and teaching in secondary schools. 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. Major reforms in assessment are need of the hour to stay vibrant and effective in the process of teaching learning of Physical Sciences.

4.4.4.2 Learning Outcomes

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

- explain the significance of acquiring 21st-century skills for Physical Sciences teaching,
- outline the need for and importance of assessment and evaluation in the teaching of Physical Sciences,
- appraise with various assessment strategies for continuous assessment in reference to teaching of Physical Sciences,
- utilize appropriate tools and techniques for assessment and evaluation in teaching learning of Physical Sciences,
- identify recent trends in research related to the teaching and learning and its implications in teaching learning of Physical Sciences,
- prepare unit test item based on TOSS and develop different types of test items,
- construct and administer different type of tests,
- plan offline and online activities for testing higher order thinking skills in teaching learning of Physical Sciences,
- relate ICT integration and elaborate its use in classroom situations,
- identify a problem in the context of Physical Sciences teaching learning and plan action research.

UNIT - I

21st Century Skills for Learning

- A. Need for and importance of how to learn 21st century skills for learners and teachers of Physical Sciences.

- B. Psychological, sociological, and philosophical perspective of teaching and learning Physical Sciences.
- C. Qualities of a Physical Sciences teacher as professional for enhancing teaching learning skills.
- D. Role of a teacher in facilitating learning and creating dynamic learning environment of Physical Sciences.

UNIT - II

Assessment and Evaluation

- A. Assessment and evaluation: need for and importance of Physical Sciences.
- B. Assessment based on learning outcomes, strategies for continuous assessment, school-based assessment, qualitative assessment; formative and summative assessment, formal, informal and 360° assessment.
- C. Performance assessment: assessment of group activities, field observations, recording and reporting, creating platform and portfolio management, assessment of laboratory skills, assignments, projects, and presentations.
- D. 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 the content of Physical Sciences.

UNIT - III

Research and Innovative Practices in Physical Sciences

- A. Divergent thinking and innovation in psychological, sociological, and philosophical perspectives for quality learning experiences.
- B. Recent trends in research related to teaching learning of Physical Sciences.
- C. Action research: meaning, significance, steps and planning.
- D. Evidence-based practices and reflection, school-based research in Physical Sciences.

4.4.4.3 Suggestive Practicum (Any Three)

1. Prepare, administer, and analyze scores of an achievement test.
2. Explore AI based assessment tools and prepare an E-Portfolio for a student of Secondary Stage.
3. Conduct Simulated Teaching session for the concepts of Physical Sciences and observation by self, peer, and teacher.
4. Explore development of multidisciplinary projects and present using PowerPoint.
5. Interpret the concept of Physical Sciences with Psychological, Sociological and Philosophical Perspective.
6. Apply innovative practices in classroom teaching learning of Physical Sciences.
7. Make a presentation on the role of Physical Sciences in sustainable development of society.
8. Plan action research for Continuous Professional Development (CPD) of Physical Sciences teacher.
9. Any other project assigned by HEI.

4.4.4.4 Suggestive Mode of Transaction

Lecture cum discussion/demonstration, demonstration, discovery approach, project approach, inquiry approach, problem-solving, experiential learning.

4.4.4.5 Suggestive Mode of Assessment

Written test, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

4.4.4.6 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.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.5 Content cum Pedagogy of Biological Sciences at Secondary Stage – Course (I)

Credit: 2
Semester: S-4

4.4.5.1 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. 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 three 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 international 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.

4.4.5.2 Learning Outcomes

After completion of this course, Student teachers will be able to:

- explain nature, scope, and importance of Biological Sciences,
- illustrate aims and objectives of teaching Biological Sciences for sustainable development of society,
- outline linkages between Biological Sciences and other subjects,
- identify the values and importance of Biological Sciences and alternative knowledge systems,
- summarize the historical/policies perspective of Biological Sciences,
- examine pedagogical concerns of Biological Sciences,
- categorize approaches and methods of teaching learning Biological Sciences,
- apply proper pedagogy in teaching learning the concepts of Biological Sciences,
- realize the importance of studying Biological Sciences as part of the school curriculum,
- identify the values and significance of Biological Sciences in School curricula,
- apply appropriate method/s in teaching concepts of Biological Sciences.

UNIT - I

Nature, Scope and Historical Perspective of Biological Sciences

- A. Nature, scope, and importance of Biological Sciences.
- B. Historical perspective of Biological Sciences.
- C. Contributions of Indian (ancient and modern) and other scientists.
- D. Biological science for sustaining self, society, environment, and world.
- E. Recommendations/suggestions of various committees, commissions, and policies in reference to Biological Sciences.

UNIT - II

Aims and Objectives of Biological Sciences

- A. Aims and objectives of teaching biological science as a component of multidisciplinary science.
- B. Learning outcomes and competencies of teaching Biological Sciences at secondary stage.
- C. Linkages of Biological Sciences with other school subjects and place of the Biological Sciences in school curriculum.
- D. Values of Biological Sciences; ethical, environmental and sustainability concerns.

UNIT - III

Pedagogical Aspects of Biological Sciences

- A. Implication of various approaches – inductive deductive, constructivist, experiential, art-integrated, blended learning, interdisciplinary and multidisciplinary approaches, stimulating the spirit of investigation and enquiry.
- B. Analytical pedagogical concerns in teaching of physical sciences for higher order thinking skills such as critical, creative, communication, decision making, reflective.
- C. 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; stem and steam concept.

4.4.5.3 Suggestive Practicum (Any Three)

1. Plot a timeline of development of Biological Sciences from ancient to modern times mentioning the important developments.
2. Analyze and prepare a report on pedagogy of Biological Sciences with reference to NEP 2020.
3. Prepare a write up on ancient Indian contributions and practices in Ayurveda/Herbal medicines.
4. Develop concept maps on different concepts of Biological Sciences.
5. Demonstrate different pedagogical approaches and strategies for transacting concepts of Biological Sciences.
6. Any other project assigned by HEI.

4.4.5.4 Suggestive Mode of Transaction

Lecture cum discussion, demonstration, hands-on activities, experiential learning, inquiry, Group work, Presentations, multimedia.

4.4.5.5 Suggestive Mode of Assessment

Written tests, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

4.4.5.6 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.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.5 Content cum Pedagogy of Biological Sciences at Secondary Stage – Course (II)

Credit: 2
Semester: S-5

4.4.5.1 About 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.

4.4.5.2 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 simple teaching learning materials using easily available/local materials,
- analyze the content of Biological Science textbooks at secondary stage,
- review various methods and strategies for teaching Biological Sciences,
- develop learning outcome-based lesson plan to promote experiential learning and higher order thinking skills,
- develop unit plans and lesson plans on different chapters in biology (Grades IX to XII).

UNIT - I

Teaching Learning Resources

- A. Teaching learning aids/materials: concept, definition, role, and importance in classroom teaching learning the Biological Sciences.
- B. 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 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.
- C. 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.
- D. Resource room/ laboratory/ library, virtual laboratories, teaching learning kits, Biological Sciences clubs, fairs, exhibitions, science parks, zoo, botanical gardens, excursions community resources and pooling of resources.

UNIT - II

Content Analysis and Planning for Teaching Biological Sciences

- A. Pedagogical analysis of content taking 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.
- B. Concept, types and importance of unit and lesson planning.
- C. Developing unit plans and lesson plans based on learning outcomes and experiential learning by selecting topics from textbooks of Biological Sciences at secondary stage.

UNIT - III

ICT Integration and Application

- A. Scope and benefits of using IT in teaching learning process; Artificial Intelligence, machine learning, smart boards.
- B. Specific features and limitations of using ICT.
- C. Open Educational Resources in Biological Sciences – BIOIDAC, MOOC, National Teachers Portal, DIKSHA, SWAYAM.
- D. 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.

4.4.5.3 Suggestive Practicum (Any Three)

- 1. Analyze the content of textbooks of Biological Sciences (Classes 9-12).
- 2. Develop e-content for the concepts of Biological Sciences at Secondary Stage.
- 3. Develop unit plans of selected chapters of Textbooks of Biological Sciences.
- 4. Prepare learning outcomes and experiential learning-based lesson plan for the concepts of Biological Sciences.
- 5. Developing ICT integrated lesson plans for offline and online classes.
- 6. Explore a course of Biological Sciences of MOOC and prepare a write up.
- 7. Any other project assigned by HEI.

4.4.5.4 Suggestive Mode of Transaction

Lecture cum discussion, demonstration, Hands-on activities, experiential learning, inquiry, Group work, Presentations, multimedia.

4.4.5.5 Suggestive Mode of Assessment

Written tests, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

4.4.5.6 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.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.5 Content cum Pedagogy of Biological Sciences at Secondary Stage – Course (III)

Credit: 2
Semester: S-6

4.4.5.1 About the Course

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. 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 Biological Sciences.

4.4.5.2 Learning Outcomes

After completion of this course, Student teachers will be able to:

- appraise different types of assessment and strategies for continuous assessment,
- distinguish between assessment and evaluation,
- compare merits and demerits of different types of assessment,
- develop unit test item based on TOS and develop different type of test items,
- construct and administer the achievement test,
- familiarize with basic statistical methods for analyzing performance in tests,
- plan offline and online activity for testing higher order thinking skills,
- recognize challenges in modern day classrooms and plan appropriate strategies,
- relate ICT integration and elaborate its use in classroom situations.

UNIT - I

21st Century Skills for Learning

- A. Need for and importance of how to learn 21st century skills for learners and teachers of Biological Sciences.
- B. Psychological, sociological, and philosophical perspective of teaching and learning Biological Sciences.
- C. Qualities of a Biological Sciences teacher as professional for enhancing teaching learning skills.
- D. Role of a teacher in facilitating learning and creating dynamic learning environment of Biological Sciences.

UNIT - II

Assessment and Evaluation

- A. Assessment and evaluation: concept, need for and importance of teaching learning the Biological Sciences.
- B. Assessment based on learning outcomes, strategies for continuous assessment, school-based assessment, qualitative assessment; formative and summative assessment, formal, informal, and 360-degree assessment.

- C. Performance assessment: assessment of group activities, field observations, recording and reporting, creating platform and portfolio management, assessment of lab skills, assignments, projects, and presentations based on the concepts of Biological Sciences.
- D. 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 - III

Research and Innovative Practices in Biological Sciences

- A. 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.
- B. Recent trends in research related to teaching learning of Biological Sciences.
- C. Action research: meaning, significance, steps, and planning.
- D. Evidence-based practices and reflection, school-based research in Biological Sciences.

4.4.5.3 Suggestive Practicum (Any Three)

1. Prepare, administer, and analyze scores of an achievement test.
2. Explore AI based assessment tools and prepare an E-Portfolio for a student of Secondary Stage.
3. Identify a topic and Plan action research at secondary stage.
4. Conduct Simulated Teaching session for the concepts of Biological Sciences and observation by self, peer, and teacher.
5. Apply innovative practices in classroom teaching learning of Biological Sciences.
6. Any other project assigned by HEI.

4.4.5.4 Suggestive Mode of Transaction

Lecture cum discussion, demonstration, Hands-on activities, experiential learning, inquiry, Group work, Presentations, multimedia.

4.4.5.5 Suggestive Mode of Assessment

Written tests, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

4.4.5.6 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.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.6 Content cum Pedagogy of Social Sciences at Secondary Stage - Course (I)

Credit: 2
Semester: S-4

4.4.6.1 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 teaching and 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 different learning approaches and methods. This course comprises three units and a practicum. The course is devoted to developing an understanding of the nature and scope of Social Sciences and the aims and objectives of teaching Social Sciences and its linkages with other disciplines. Historical/policy perspectives of Social Sciences are discussed in unit second. Critical, creative, and analytical pedagogical concerns in teaching Social Sciences with special reference to higher-order thinking are also placed in unit third.

4.4.6.2 Learning Outcomes

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

- explain the nature and scope of Social Sciences,
- examine the pedagogical aspects of the Social Sciences,
- elaborate the aims and objectives of the Social Sciences,
- analyze the historical perspective and inherent values in Social Sciences,
- identify the importance/significance of Social Sciences in daily life,
- develop learning objectives and outcomes,
- differentiate between Social Sciences and social studies,
- determine the suitability of the methods for teaching learning Social Sciences,
- apply approaches and strategies of teaching learning Social Sciences at the secondary stage.

UNIT - I

Nature, Scope, and Historical Perspective of Social Sciences

- A. Nature of Social Sciences.
- B. Historical development of Social Sciences, scope, and role of Social Sciences in daily life.
- C. Disciplines of Social Sciences and their interrelationship.
- D. Concept of Social Sciences and Social Studies.
- E. Recommendations and suggestions of various committees, commissions, and policies in reference to Social Sciences.

UNIT - II

Aims and Objectives of Teaching Social Sciences

- A. Aims and objectives of teaching Social Sciences at secondary stage.
- B. Learning outcomes and competencies of teaching Social Science at secondary stage.
- C. Linkages of Social Sciences with other subjects and its place in school curriculum.
- D. Values of Social Sciences such as intellectual, utilitarian, moral and aesthetic and environmental.

UNIT - III

Pedagogical Aspects of Social Sciences

- A. 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 Social Sciences textbooks.
- B. Moving towards more holistic, interdisciplinary, and multidisciplinary approaches of learning Social Sciences, learning exclusive of pre-conceptions and misconceptions, blended learning.
- C. 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 and applications of suitable methods for learning the selected chapters/concepts in Social Sciences textbooks.
- D. Critical, creative and analytical pedagogical concerns in teaching the Social Sciences with special reference to higher-order thinking.

4.4.6.2.3 Suggestive Practicum (Any Three)

- 1. Develop write-ups on the teaching of Social Sciences using interdisciplinary and multidisciplinary approaches as suggested in NEP 2020.
- 2. Develop learning objectives and learning outcomes for the concepts of Social Sciences at the secondary stage.
- 3. Design an excursion activity to transact concepts of Social Sciences.
- 4. Prepare a detailed project on the curricular integration of skills, capacities, and values in Social Sciences.
- 5. Demonstrate different pedagogical approaches and strategies for transacting concepts of Social Sciences
- 6. Analyze the different recommendations of policies/commissions in context to Social Sciences.
- 7. Any other project assigned by HEI.

4.4.6.4 Mode of Transactions

Lectures with discussion, Hands-on activities, project approach, problem-solving, concept mapping, collaborative & cooperative approach, experiential learning, and toy/art/sports integrated learning.

4.4.6.5 Suggestive Mode of Assessment

Written tests, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

4.4.6.6 Suggestive Reading Material:

- NCERT Textbooks of Social Sciences for Classes IX - XII
- Epistemology of Social Sciences, the scientific status, values and Institutionalisation, Vol. XXXVI, UNESCO publications, (1984)
- National Policy on Education 1968, 1986 and 2020.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.6 Content cum Pedagogy of Social Sciences at Secondary Stage - Course (II)

Credit: 2
Semester: S-5

4.4.6.1 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 Social Sciences at secondary stage. Enough space is provided to discuss different types of teaching aids/materials for teaching learning concepts of Social Sciences. It focuses on learning resources in Social Sciences to enable student teachers to make use of available learning resources and also process to generate new resources for teaching learning the concepts of Social Sciences. It also focuses on textbook analysis and planning for teaching Social Sciences and its pedagogical issues in the light of NEP 2020. Student teachers are expected to identify various concepts and processes, list learning outcomes, find out about various activities. Accordingly, they are expected to develop lesson plan based on learning outcomes and experiential learning for classroom and online teaching. Pedagogy must evolve to make education more experiential, holistic, integrated, inquiry-driven, discovery-oriented, learner-centered, discussion-based, flexible, and enjoyable. This pedagogical course of Social Sciences enhances the pedagogical knowledge and skills of prospective teachers through different learning approaches. 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. It focuses on psychological, sociological and philosophical perspective of Social Sciences. In this course student teachers will learn how to plan different types of activities in online and offline mode. It emphasizes on how to integrate and use ICT in Social Sciences' classroom.

4.4.6.2 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,
- identify learning resources from the local environment and apply the concepts of Social Sciences in daily life,
- utilize teaching learning resources effectively in teaching Social Sciences content at the secondary stage,
- prepare ICT integrated lesson plans for online classroom teaching using digital resources and multimedia.

UNIT - I

Teaching Learning Resources

- A. Teaching learning aids/materials: concept, definition, role, and importance in classroom teaching learning Social Sciences.
- B. 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.)

- C. Identification and use of learning resources in Social Sciences from the local environment
- D. Social Sciences projects, clubs, fairs, exhibitions and visits places of historical and geographical importance, Social Sciences laboratory and museum as a learning resource including virtual laboratories, community resources and pooling of learning resources.

UNIT - II

Content Analysis and Planning for Teaching Social Sciences

- A. Concept, types and importance of unit and lesson planning.
- B. Pedagogical analysis of content taking examples from topics of subject textbooks of secondary stage, identification of concepts, listing learning outcomes and competencies, planning and evaluating learning experiences in an inclusive setup.
- C. Developing unit plans and lesson plans based on learning outcomes and experiential learning (art and sports integration) of Social Sciences.
- D. Need for enrichment of content knowledge in Social Sciences.

UNIT - III

ICT Integration and Application

- A. Scope and importance of using ICT in learning process of Social Sciences.
- B. Use of ICT in the classroom: Artificial Intelligence, machine learning, smart boards for student development.
- C. Tools, software, and platform for teaching learning of Social Science at secondary stage.
- D. Developing ICT integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for classroom and online teaching using digital resources and multimedia.

4.4.6.3 Suggestive Practicum (Any Three)

1. Prepare one working model/toy/game on the concepts of Social Sciences.
2. Create an e-content on any two concepts of Social Sciences at secondary stage.
3. Prepare a lesson plan keeping in view blended learning approach for the concepts of Social Sciences followed by presentation in the class.
4. Select a topic for teaching learning of Social Science and develop a write up (name of unit, name of theme/topic, learning outcomes, material used and procedure).
5. Identify and use learning resources from the surroundings in Social Sciences and write a detailed report.
6. Prepare lesson plans based on learning outcomes and experiential learning by selecting two topics from the Social Sciences textbooks at secondary stage.
7. Any other project assigned by HEI.

4.4.6.4 Suggestive Mode of Transaction

Lectures, hands-on activities, discovery approach, project approach, inquiry approach, experimentation, problem-solving, concept mapping, collaborative & co-operative approach, experiential learning, art integrated learning, sport integrated learning.

4.4.6.5 Suggestive Mode of Assessment

Written tests, classroom presentations, workshops, seminars, assignments, practicums, sessional

and terminal semester examinations (as per UGC norms).

4.4.6.6 Suggestive Reading Material

- *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: Towards Preparing Professional and Humane Teacher*. NCTE, New Delhi.
- UNESCO, (1984) *Epistemology of Social Science, the Scientific Status, Values and Institutionalization*, Vol. XXXVI, UNESCO Publications.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.6 Content cum Pedagogy of Social Sciences at Secondary Stage - Course (III)

Credit: 2
Semester: S-6

4.4.6.1 About the Course:

This course focuses on the need and scope to know how to learn the concepts of Social Science. They will also understand the role of a teacher as facilitator. They will reconcile themselves as per National Professional Standards for Teachers (NPST) and National Mentoring Mission (NMM). The teacher will enable the students to understand the importance of continuous professional development to meet the current challenges. The students 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 emphasizes innovative practices to enhance effective communication to be a dynamic and innovative Social Science teacher. Therefore, the course highlights the need and significance of continuous professional 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.

4.4.6.2 Learning Outcomes

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

- discuss the meaning and need of how to learn the concepts of Social Science,
- identify the role of teacher in facilitating learning for Social Science,
- enumerate the characteristics of innovative practices in teaching-learning process of Social Science,
- plan action research to improve practices of Social Science,
- compare and apply the different types/modes of assessment,
- develop the learning indicators and construct test items to measure learning achievement,
- construct and administer achievement test,
- apply tools and techniques of assessment in teaching learning process.

UNIT - I

21st Century Skills for Learning

- A. Need for and importance of how to learn 21st century skills for learners and teachers of Social Sciences.

- B. Psychological, sociological, and philosophical perspective of teaching and learning Social Sciences.
- C. Qualities of a Social Sciences teacher as professional for enhancing teaching learning skills.
- D. Role of a teacher in facilitating learning and creating dynamic learning environment of Social Science.

UNIT - II

Assessment and Evaluation

- A. Assessment and evaluation: need for and importance of Social Sciences.
- B. Development of learning indicators, performance-based assessment, learners' records of observations.
- C. Strategies for continuous assessment, school-based assessment, formative and summative assessment, formal, informal and 360o assessment.
- D. Performance assessment: assessment of group activities, field observations, recording and reporting, creating platform and portfolio management, assessment of lab skills, assignments, projects, and presentations.
- E. 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 Social Sciences.

UNIT - III

Research and Innovative Practices in Teaching Social Sciences

- A. Divergent thinking and innovation in psychological, sociological, and philosophical perspectives for quality learning experiences.
- B. Recent trends in research related to teaching learning of Social Sciences.
- C. Action research: meaning, significance, steps and planning.
- D. Evidence-based practices and reflection, school-based research in Social Sciences.

4.4.6.3 Suggestive Practicum (Any Three)

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 Secondary Stage.
3. Explore development of multidisciplinary projects and present using PowerPoint in Social Sciences.
4. Apply innovative practices in classroom teaching learning of Social Sciences.
5. Plan action research for Continuous Professional Development (CPD) of Social Sciences teacher.
6. Pilot new ways of assessment using educational technologies focusing on 21st century skills.
7. Organize a field trip and write a detailed report evaluating the learning processes.
8. Any other project assigned by HEI.

4.4.6.4 Suggestive Mode of Transaction

Lectures cum discussion, observation, project approach, field based, inquiry approach,

experimentation, problem-solving, concept mapping, collaborative & co-operative approach, experiential learning.

4.4.6.5 Suggestive Mode of Assessment

Written tests, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

4.4.6.6 Suggested Reading Material

- 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: Towards Preparing Professional and Humane Teacher. NCTE, New Delhi.
- UNESCO, (1984) Epistemology of Social Science, the Scientific Status, Values and Institutionalization, Vol. XXXVI, UNESCO Publications.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.7 Content cum Pedagogy of Commerce at Secondary Stage - Course (I)

Credit: 2
Semester: S-4

4.4.7.1 About the Course:

Commerce is an important school subject and students are expected to master knowledge and skills related to business, accounts, Finance, and allied areas during study. Commerce 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 Commerce' at school level has a great relevance to acquaint prospective schoolteachers with various pedagogical aspects and interventions in commerce. This course encompasses three units 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 level.

4.4.7.2 Learning Outcomes

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

- discuss contribution of Indian (ancient and modern) and other expert in development of commerce,
- explain the nature and scope of Commerce as an important subject for civil society,
- interpret the recommendation of the various policy documents about Commerce education,
- outline linkages between Commerce and other subjects,
- classify the aims and objectives of teaching commerce,
- examine pedagogical concerns of Commerce,
- demonstrate various approaches and methods of teaching commerce,
- apply proper pedagogy in teaching learning the concepts of Commerce,
- plan strategies to inculcate values through teaching of Commerce.

UNIT - I

Nature, Scope, and Historical Perspective of Commerce

- A. Nature, scope, and importance of Commerce as a school subject.
- B. Historical perspective of development of Commerce as a subject.
- C. Contributions of Indian (ancient and modern) and other experts.
- D. Commerce, society and human and sustainable development.
- E. Recommendations and suggestions of various committees, commissions, and policies in reference to Commerce education.

UNIT - II

Aims and Objectives of Teaching Commerce

- A. Aims and objectives of teaching Commerce at secondary stage.
- B. Learning outcomes and competencies of teaching Commerce at secondary stage.

- C. interrelationships within Commerce and allied subject knowledge (accountancy, business studies, management, finance, economics)
- D. Linkages of Commerce with other disciplines and place of Commerce in school curriculum.
- E. Inculcation of values through teaching of commerce.

UNIT - III

Pedagogical Aspects of Commerce

- A. Implication of various approaches- inductive deductive, constructivist, art integrated learning, sports integrated learning, blended learning, interdisciplinary and multidisciplinary approaches in commerce.
- B. Analytical pedagogical concerns in teaching of Commerce for higher order thinking skills such as critical, creative, communication, decision making, reflective.
- C. Methods of teaching learning commerce: learner-centric and participative, demonstration, case study, discussion, problem-solving, laboratory, project based, scientific inquiry, discovery, experimentation, concept-mapping, seminar, collaborative and cooperative learning.
- D. Experiential learning in Commerce – industry trips, real field experiences, dalton method, simulations, role play.

4.4.7.3 Suggestive Practicum (Any Three)

1. Participate in the discussion (class level) on any recent development in the field of Commerce and prepare a report.
2. Make a report on activities performed by any one company regarding its social responsibility.
3. Prepare learning outcomes for any two units of Commerce at secondary stage.
4. Explore contributions of Indian experts in the development of Commerce and make presentations on historical development of commerce.
5. Analyze recommendations of policies/commissions in context to commerce.
6. Develop Concept maps on different topics of commerce.
7. Demonstrate different pedagogical approaches and strategies for transacting concepts of commerce.
8. Prepare write-ups on the teaching of Commerce using interdisciplinary and multidisciplinary approaches as recommended in NEP 2020.
9. Any other project assigned by HEI.

4.4.7.4 Suggestive Mode of Transaction

Lecture cum discussion/demonstration, hands-on activities, experiential learning, art and environment integrated learning, sports integrated learning.

4.4.7.5 Suggestive Mode of Assessment

Written tests, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

4.4.7.6 Suggestive Reading Material

- 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, Business Studies for Class XI and XII
- NCERT Textbooks, Accountancy for Class XI and XII

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.7 Content cum Pedagogy of Commerce at Secondary Stage - Course (II)

Credit: 2
Semester: S-5

4.4.7.1 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 Commerce 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 also focuses on textbook analysis and planning for teaching Commerce. and its pedagogical issues in the light of NEP 2020. Student teachers are expected to identify various concepts and processes, list learning and outcomes, find out about various activities and experiments. Accordingly, they are expected to develop lesson plans based on learning outcomes and experiential learning for classroom and online teaching.

4.4.7.2 Learning Outcomes

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

- identify teaching learning aids / materials and illustrate their importance in teaching learning the concepts of Commerce,
- categorize teaching aids/materials/learning resources,
- develop teaching learning aids/material/kits/learning resources for teaching learning the concepts of Commerce,
- utilize teaching aids/materials/learning resources for teaching learning the concepts of commerce,
- analyze the content of Commerce textbooks at secondary stage,
- develop lesson plan based on learning outcomes and experiential learning using appropriate strategies.

UNIT - I

Teaching Learning Resources

- A. Teaching learning aids/materials: concept, definition, role, and importance in classroom teaching learning the commerce.
- B. 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 classroom teaching learning (reflective journals, charts, 2-D and 3-D models, games, cards, worksheets, multimedia etc.)
- C. Identification and use of learning resources in Commerce from the local environment.
- D. Resource room/ laboratory/ library, virtual laboratories, teaching learning kits, Commerce clubs, fairs, exhibitions, excursions, community resources and pooling of resources.

UNIT - II

Content Analysis and Planning for Teaching Commerce

- A. Pedagogical analysis of content taking examples from topics of Commerce textbooks of secondary stage, identification of concepts, listing learning outcomes and competencies, planning, and evaluating learning experiences in an inclusive setup.
- B. Concept, types and importance of unit and lesson planning.
- C. Developing unit plans and lesson plans based on learning outcomes and experiential learning by selecting topics from textbooks of Commerce at secondary stage.

UNIT - III

ICT Integration and Application

- A. Scope and importance of ICT in commerce.
- B. Use of ICT (such as Artificial Intelligence, machine learning, smart boards) in teaching learning, assessment and resource management.
- C. Tools, software, and platforms for Commerce specific online learning, e-commerce, m-commerce.
- D. Developing ICT integrated lesson plans by taking topics of Commerce at secondary stage using Technological Pedagogical Content Knowledge (TPCK) for classroom and online teaching.

4.4.7.3 Suggestive Practicum (Any Three)

- 1. Develop e-content for the concepts of Commerce at Secondary Stage.
- 2. Analyze the content of textbooks of Commerce.
- 3. Identify the learning resources for transiting the concepts of Commerce.
- 4. Develop teaching aids/teaching materials for teaching concepts of Commerce at secondary stage.
- 5. Prepare learning outcomes and experiential learning-based lesson plan for the concepts of Commerce.
- 6. Develop a project on the concepts of Commerce using interdisciplinary and multidisciplinary approaches as recommended in NEP 2020.
- 7. Any other project assigned by HEI.

4.4.7.4 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, Flip classroom, Use of digital platform.

4.4.7.5 Suggestive Mode of Assessment

Written test, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

4.4.7.6 Suggestive Reading Material

- 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, Accountancy for Class XI and XII
- NCERT Textbooks, Business Studies for Class XI and XII

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.7 Content cum Pedagogy of Commerce at Secondary Stage - Course (III)

Credit: 2
Semester: S-6

4.4.7.1 About the Course:

The 21st century skills are the major concerns for a progressive society. Development of 21st century skills are important for a Commerce teacher and learner. This course comprises three units and a practicum. The first unit emphasizes professional and skill development of the teachers of the Commerce. The second unit focuses on assessment and evaluation. It also focuses on assessment 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. 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. 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.

4.4.7.2 Learning Outcomes

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

- appraise different types of assessment and strategies for continuous assessment,
- compare merits and demerits of different types of assessment in Commerce,
- prepare unit test item based on TOS and develop different type of test items,
- construct and administer the diagnostic and achievement test,
- plan offline and online activity for testing higher order thinking skills,
- analyze NEP 2020 with special reference to activity-oriented classrooms,
- relate ICT integration and elaborate its use in classroom situations.

UNIT - I

21st Century Skills for Learning

- A. Need for and importance of how to learn 21st century skills for learners and teachers of Commerce.
- B. Psychological, sociological, and philosophical perspective of teaching and learning Commerce.
- C. Qualities of a Commerce teacher as professional in enhancing learning.
- D. Role of a teacher in facilitating learning and creating dynamic learning environment of Commerce.

UNIT - II

Assessment and Evaluation

- A. Assessment and evaluation: need for and importance of Commerce.
- B. Assessment based on learning outcomes, strategies for continuous assessment, school-based assessment, qualitative assessment; formative and summative assessment, formal, informal and 360° assessment.
- C. Performance assessment: assessment of group activities, field observations, recording and reporting, creating platform and portfolio management, assessment of laboratory skills, assignments, projects, and presentations.
- D. 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 the content of Commerce.

UNIT - III

Research and Innovative Practices

- A. Divergent thinking and innovation in psychological, sociological, and philosophical perspectives for quality learning experiences.
- B. Recent trends in research related to teaching learning of Commerce.
- C. Action research for improvement in the learning of Commerce: meaning, significance, steps and planning.
- D. Evidence-based practices and reflection, school-based research in Commerce.

4.4.7.3 Suggestive Practicum (Any Three)

- Prepare, administer, and analyze scores of an achievement test.
- Explore AI based assessment tools and prepare an E-Portfolio for a student of Secondary Stage.
- Conduct Simulated Teaching session for the concepts of Commerce and observation by self, peer, and teacher.
- Explore development of multidisciplinary projects and present using PowerPoint.
- Interpret the concept of Commerce with Psychological, Sociological and Philosophical Perspective.
- Apply innovative practices in classroom teaching learning of Commerce.
- Make a presentation on the role of Commerce in sustainable development of society.
- Conduct action research for Continuous Professional Development (CPD) of Commerce teacher.

4.4.7.4 Suggestive Mode of Transaction

Lecture cum discussion/demonstration, demonstration, discovery approach, project approach, inquiry approach, problem-solving, experiential learning.

4.4.7.5 Suggestive Mode of Assessment

Written test, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

4.4.7.6 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.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.8 Content cum Pedagogy of Computer Science at Secondary Stage - Course (I)

Credit: 2
Semester: S-4

4.4.8.1 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.

4.4.8.2 Learning Outcomes

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

- identify the nature, scope, and Importance of Computer Science,
- explain aims and objectives of teaching Computer Science,
- recognize the multidisciplinary nature of Computer Science and its linkages with other school subject,
- summarize the historical and policy perspective of Computer Science,
- demonstrate the practical, social, disciplinary, and cultural values of teaching learning Computer Science,
- discuss the policy recommendations and suggestions in regard to Computer Science,
- examine the implications of different pedagogical approaches of teaching Computer Science,
- analyze different methods of teaching Computer Science.

UNIT - I

Nature, Scope and Historical Perspective of Computer Science

- A. Nature, scope and importance of Computer Science.
- B. Historical perspective of Computer Science.
- C. Computer Science as an evolving discipline.
- D. Recommendations/suggestions of various committees, commissions, and policies in reference to Computer Science.

UNIT - II

Aims and Objectives of Teaching Computer Science

- A. Aims and objectives of teaching Computer Science.
- B. Learning outcomes and competencies of teaching Computer Science at secondary stage.
- C. Linkages of Computer Science with other school subjects and its place in school curriculum.
- D. Values of teaching Computer Science: practical, social, disciplinary, and cultural values.

UNIT - III

Pedagogical Aspects of Computer Science

- A. Implication of various approaches - inductive deductive, constructivist, experiential learning, computer/ web supported pedagogical approaches such as personalized adaptive learning and Computer Managed Learning (CML), multimedia approach, interdisciplinary and multidisciplinary approaches in Computer Science.
- B. Analytical pedagogical aspects in teaching of Computer Science for higher order thinking skills such as critical, creative, communication, decision making and reflective.
- C. Methods of teaching the Computer Science: learner-centric and group-centric, lecture cum demonstration, problem-solving, laboratory, and project based, analytic and synthetic, flipped classrooms, Computer Assisted Instructions (CAI), mobile learning and online learning.

4.4.8.3 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.

4.4.8.4 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.

4.4.8.5 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).

4.4.8.6 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.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.8 Content cum Pedagogy of Computer Science at Secondary Stage - Course (II)

Credit: 2
Semester: S-5

4.4.8.1 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.

4.4.8.2 Learning Outcomes

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

- identify various types of teaching learning aids/materials and illustrate their importance in teaching of Computer Science,
- analysis the content of Computer Science textbooks at secondary stage,
- develop lesson plans based on specified learning outcomes,
- assess the potential of social media platforms as teaching learning resources in the context of teaching of Computer Science,
- utilize virtual laboratories, Computer Science clubs, fairs, exhibitions, excursions, community resources, and pooling of resources effectively to enhance Computer Science learning experience,
- explore and categorize educational software, mobile apps and websites catering to Computer Science topics for secondary stage learners,
- apply the concept of Technological Pedagogical Content Knowledge (TPCK) to create ICT-integrated lesson plans for effective implementation in online teaching learning environments.

UNIT - I

Teaching Learning Resources

- A. Teaching learning aids/materials: concept, definition, role, and importance in teaching learning of Computer Science.
- B. 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.

- C. Identification and use of learning resources in Computer Science from the local environment.
- D. Resource rooms, Computer Science laboratory – layout, management, 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 - II

Content Analysis and Planning for Teaching Computer Science

- A. Pedagogical analysis of content taking examples from topics of Computer Science textbooks at secondary stage, identification of concepts, listing learning outcomes and competencies, planning and evaluating learning experiences in an inclusive setup.
- B. Concept, types and importance of unit planning and lesson planning.
- C. Developing unit plans and lesson plans based on learning outcomes and experiential learning by selecting topics from textbooks of Computer Science at secondary stage.

UNIT - III

ICT Integration and Applications

- A. Scope and importance of ICT in Computer Science.
- B. Use of ICT such as Artificial Intelligence, machine learning, smart boards in the teaching learning, assessment process and resource management of Computer Science.
- C. Tools, software, and platform for teaching learning of Computer Science at secondary stage.
- D. Developing ICT integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for classroom and online teaching.

4.4.8.3 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 outcomes in the form of a report.
- 3. Critically analyze two chapters of Computer Science textbooks at secondary stage.
- 4. Develop an e-Content on any one topic from Computer Science textbook at secondary stage.
- 5. Develop an outcome-based lesson plan on a topic of Computer Science at secondary stage by integrating ICT tools.
- 6. Plan judicious use of technology in inclusive classrooms and prepare a PowerPoint presentation.
- 7. Any other project assigned by HEI.

4.4.8.4 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.

4.4.8.5 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).

4.4.8.6 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.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.8 Content cum Pedagogy of Computer Science at Secondary Stage - Course (III)

Credit: 2
Semester: S-6

4.4.8.1 About the Course

This course comprises of three units and a practicum. It lays the foundation of research by focusing on the significance of 21st-century skills in the context of teaching learning of Computer Science. It explores the essential skills that student teachers need to acquire and apply in the ever-evolving technological landscape. The course examines the psychological, sociological, and philosophical perspectives that influence teaching and learning Computer Science. Moreover, it identifies the qualities of a competitive Computer Science teacher, emphasizing their role in enhancing the learning experience. In this course, student teachers will recognize how assessment plays a crucial role in ascertaining learners' understanding and progress. The course will emphasis on fostering innovation and research in the teaching of Computer Science. Student Teachers will explore the concept of divergent thinking and its application in constructing quality learning experiences in teaching and learning of Computer Science. They will also review recent trends and research findings related to teaching and learning in the field of Computer Science. The course will introduce the concept of action research and school-based research to student teachers, and they will explore evidence-based practices and the importance of reflective practices in improving teaching methodologies.

4.4.8.2 Learning Outcomes

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

- explain the significance of acquiring 21st-century skills for Computer Science teaching,
- outline the need for and importance of assessment and evaluation in the teaching of Computer Science,
- appraise with various assessment strategies for continuous assessment in reference to teaching of Computer Science,
- utilize appropriate tools and techniques for assessment and evaluation in teaching learning of Computer Science,
- identify recent trends in research related to the teaching and learning and its implications in teaching learning of Computer Science,
- prepare unit test item based on TOSS and develop different types of test items,
- construct and administer different type of tests,
- plan offline and online activities for testing higher order thinking skills in teaching learning of Computer Science,
- relate ICT integration and elaborate its use in classroom situations,
- identify a problem in the context of Computer Science teaching learning and plan action research.

UNIT - I

21st Century Skills for Learning

- A. Need for and importance of how to learn 21st century skills for learners and teachers of Computer Science.
- B. Psychological, sociological, and philosophical perspective of teaching and learning Computer Science.
- C. Qualities of a Computer Science teacher as professional for enhancing teaching learning skills.
- D. Role of a teacher in facilitating learning and creating dynamic learning environment of Computer Science.

UNIT - II

Assessment and Evaluation

- A. Assessment and evaluation: need for and importance of Computer Science
- B. Assessment based on learning outcomes, strategies for continuous assessment, school-based assessment, formative and summative assessment, formal, informal and 360° assessment.
- C. Performance assessment: assessment of group activities, field observations, recording and reporting, creating platform and portfolio management, assessment of lab skills, assignments, projects, and presentations.
- D. 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.

UNIT - III

Research and Innovative Practices in Teaching of Computer Science

- A. Divergent thinking and innovation in psychological, sociological, and philosophical perspectives for quality learning experiences in teaching of Computer Science.
- B. Recent trends in research related to teaching learning of Computer Science.
- C. Action research: meaning, significance, steps, and planning.
- D. Evidence-based practices and reflection, school-based research in Computer Science.

4.4.8.3 Suggestive Practicum (Any Three)

- 1. Prepare, administer, and analyze the scores of an achievement test.
- 2. Prepare an assessment tool on any one topic at Secondary Stage using E-Resources.
- 3. 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.
- 4. 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.
- 5. Apply innovative practices in classroom teaching learning of Computer Science and prepare an e-portfolio.
- 6. Plan action research for continuous professional development of Computer Science teacher.
- 7. Any other project assigned by HEI.

4.4.8.4 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.

4.4.8.5 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).

4.4.8.6 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.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.9 Content cum Pedagogy of Arts Education at Secondary Stage - Course (I)

Credit: 2
Semester: S-4

4.4.9.1 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 heft, or mental concepts. Through the involvement of the hearts, mind, and hand, the education of Arts, craft, and design plays a special role in the holistic development of human beings, empowering them to construct their own world with wisdom and to comprehend and value the work of others. 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.

4.4.9.2 Learning Outcomes

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

- discuss the modern meaning of arts and design,
- reflect on Indian arts and its relevance in secondary school,
- interpret the need of arts education in nation development,
- explain arts education as a curricular discipline and its evolution as a subject,
- discuss significance of arts education in school and its relationship with other school subjects,
- outline aims, objectives and learning outcomes of teaching arts at school level,
- select objectives and competencies for teaching of Arts,
- adapt various methods for teaching of Arts,
- maximize the reflection on values inculcation.

UNIT - I

Nature, Scope, and Historical Perspective of Arts Education

- A. Appreciation of arts, the modern concept of Arts, interdependence of arts, craft, and design, forms of Arts.
- B. The scope of arts and its importance in the development of nation and as a profession.
- C. Knowledge of Indian arts – from earliest to the contemporary as a subject, historical perspective, and major landmarks in the evolution of arts (visual and performing arts) as a subject.
- D. Recommendations/suggestions of various committees, commissions and policies, provisions in NEP 2020 in reference to Arts Education.

UNIT - II

Aims and Objectives of Arts Teaching

- A. Aims and objectives of teaching Arts at secondary stage.
- B. Learning outcomes and competencies of teaching Arts at secondary stage.
- C. Understanding arts/craft (visual and performing) traditions of India and its relevance in secondary school, traditional crafts as a pedagogy assimilating with other school subjects.
- D. Inculcation of different values through teaching of Arts.

UNIT - III

Pedagogical Aspects of Arts Education

- A. Implication of various approaches such as inductive-deductive, constructivist, experiential learning, blended learning, interdisciplinary and multidisciplinary approaches in teaching of Arts.
- B. Analytical pedagogical aspects in teaching of arts for the development of high order thinking skills such as critical, creative, communication, decision making, collaborative and reflective.
- C. Methods of teaching arts: learner-centric and participatory methods. lecture cum demonstration, activity based, discussion, problem-solving, project based, hands on activity, field-based observations, assignments, brainstorming as a thinking strategy, design thinking skills, divergent thinking, meta-cognition, artistic expression, exploration and creation, experimentation, collaborative and cooperative learning, peer learning.

4.4.9.3 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 HEL.

4.4.9.4 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.

4.4.9.5 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).

4.4.9.6 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 Peace, 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.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.9 Content cum Pedagogy of Arts Education at Secondary Stage – Course (II)

Credit: 2
Semester: S-5

4.4.9.1 About the Course

Art focuses on the presentation of ideas, sentiments, and visual aspects. A person who produces or develops Arts by applying deliberate skill and imaginative creativity is called an Artist. It's crucial to comprehend content analysis if one wants to teach Arts. It gives teachers the ability 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 deals to develop the skills of student teachers related to effective teaching such as listing behavioural outcomes, planning activities and experiments, evaluation procedures, identification and selection of teaching learning resources, and how integrating various pedagogical techniques in the teaching of content related to Arts Education. It emphasizes the skill of developing lesson plans for the teaching of Arts (Visual and Performing).

4.4.9.2 Learning Outcomes

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

- distinguish learning resources and e-resources for Arts teaching,
- classify, identify, and use learning resources from the local environment,
- analyze different contents from textbooks for pedagogical aspects,
- apply Artificial Intelligence in various fields of Arts education,
- develop skills of meaningful observation and judgements,
- design and maintain portfolios,
- value Arts and TPACK and provide ICT based opportunity to learn,
- develop unit and lesson plans for the content of Arts education,

UNIT - I

Teaching Learning Resources for Arts Teaching

- A. Teaching learning resources: concept, characteristics, and importance in teaching of Arts.
- B. 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, posters, charts, 2-D and 3-D models, worksheets, multimedia etc.
- C. Identification and use of learning resources from the local environment in teaching of arts.
- D. Resource room/ laboratory/ library - 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.

UNIT - II

Content Analysis and Planning for Teaching Arts

- A. Pedagogical Analysis of Content Taking Examples from Topics of Arts Textbooks of Secondary Stage, Identification of Concepts, Listing Learning Outcomes and Competencies, Planning and Evaluating Learning Experiences in an Inclusive Setup.
- B. Concept, Types and Importance of Unit Planning and Lesson Planning. Essential components of lesson plan for the teaching of Arts.
- C. Developing Unit Plans and Lesson Plans based on Learning Outcomes (topics to be taken from textbooks). Experiential Learning in Arts Teaching.

UNIT - III

ICT Integration and Applications in Arts Education

- A. Scope and importance of ICT in arts education.
- B. Use of ICT such as Artificial Intelligence, machine learning, smart boards in the teaching of arts, assessment process and resource management.
- C. Use of tools, software, and platforms for teaching learning of arts at secondary stage.
- D. Developing ICT integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for face to face and online teaching.

4.4.9.3 Suggestive Practicum (Any Three)

1. Analyze Arts Education textbooks and prepare a suggestive report.
2. Prepare a report on the pedagogical analysis of any two topics from Arts textbook.
3. Organize activities such as Drama, Theatre, Poster designing, sketching and land escapes and prepare a report.
4. Maintain a diary on Arts interactions.
5. Develop an e-content for teaching learning of Arts.
6. Critically evaluate the available MOOCs on Arts Education and prepare a report.
7. Any other project assigned by HEI.

4.4.9.4 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.

4.4.9.5 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).

4.4.9.6 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 Peace, Paris, November 3 {No.99-241} UNESCO PRESSE. http://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.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.9 Content cum Pedagogy of Arts Education at Secondary Stage – Course (III)

Credit: 2
Semester: S-6

4.4.9.1 About the Course

Art is a window to the imagination. Art can help students develop the kind of creativity, ingenuity, communication, and performance skills that will assist them throughout their education and career. Any teacher of Art must be skilled in the various approaches, strategies, and techniques for the assessment and evaluation. The Teacher must be competent to provide quality feedback and know the process of reporting. They should know how to enhance learning and plan future activities. The course includes three units based on 21st Century Skills for Learning, Assessment and Evaluation in Teaching of Arts, Research, and Innovative Practices in Teaching of Arts. The course focuses on the development of skills associated with the measurement of learning outcomes, providing feedback, reporting, constructing achievement tests, planning action research projects and school-based research in the teaching of Arts. The course emphasizes the versatility of Arts for a wide range of prospective career options in different fields, including writing, photography, fine Arts, animation, digital media, spatial design, fashion, jewellery and graphic design and promoting entrepreneurship.

4.4.9.2 Learning Outcomes

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

- explain the need for and importance of how to learn,
- summarize 21st century skills for learners and teachers of Arts Education,
- discuss the qualities required for teachers of Arts Education,
- observe and evaluate learning in an inclusive setup,
- discuss the importance of evaluation and assessment in Arts teaching,
- construct table of specialization and write items,
- assess and reflect on evaluation devices for arts teaching,
- adapt performance-based evaluation,
- plan action research project in the teaching of Arts Education.

UNIT - I

21st Century Skills for Learning

- A. 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.
- B. Psychological, sociological, and philosophical perspective of teaching and learning of arts education, application of arts and aesthetics in day-to-day life in the institute and in the community.
- C. Qualities of arts teachers as professionals, role of a teacher in facilitating learning and creating dynamic learning environment for Arts Education.

UNIT - II

Assessment and Evaluation in Teaching of Arts

- A. Assessment and evaluation: need for and importance of Arts Education.

- B. Assessment based on learning outcomes, strategies for continuous assessment, finding gaps in learning and planning further activities for improvement, qualitative assessment, 360° assessment in Arts Education.
- C. Performance based assessment, assessment of group activities, field observations, recording and reporting, creating platform and portfolio management, assessment of lab skills, assignments, projects, and presentations.
- D. Tools and techniques of assessment and evaluation in arts education; 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 of Arts.

UNIT - III

Research and Innovative Practices in Teaching of Arts

- A. Divergent thinking and innovation in psychological, sociological, and philosophical perspectives for quality learning experiences in teaching of Arts, promoting creativity and innovation.
- B. Recent trends in research related to teaching learning of Arts.
- C. Action research in arts education, meaning, significance, steps, and planning.
- D. School based research in arts education, evidence-based practices and reflection, arts & design and skill development and entrepreneurship.

4.4.9.3 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.
6. Conduct School Based Research and prepare an evidence-based report.
7. Conduct Case Studies/ Market Surveys/ Field visit and prepare a report.
8. Any other project assigned by HEI.

4.4.9.4 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.

4.4.9.5 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).

4.4.9.6 Suggestive Reading Materials:

- Draft National Curriculum Framework for School Education,
- National Education Policy 2020, MoE, Government of India (Hindi and English).
- 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 Peace, Paris, November 3 {No.99-241} UNESCO PRESSE. http://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.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.10 Content cum Pedagogy of Vocational Education at Secondary Stage - Course (I)

Credit: 2
Semester: S-4

4.4.10.1 About the Course

Vocational Education is a critical aspect of education and training that prepares individuals for the workforce. It provides practical skills and knowledge necessary for specific trades and professions, and it plays a significant role in the economy's growth. The objective is to provide students with the tools they need to become self-sufficient and productive members of society. This course encompasses three 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. It focuses on the implication of various approaches for the development of higher order thinking skills and different methods of teaching learning Vocational Education.

4.4.10.2 Learning Outcomes

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

- explain the nature and scope of Vocational Education,
- interpret 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,
- select learning outcomes and competencies for teaching of Vocational Education,
- analyze pedagogical aspects in Teaching of Vocational Education for development of Higher Order Thinking Skills,
- make use of methods and approaches of teaching Vocational Education
- maximize the reflection on values inculcation,

UNIT - I

Nature, Scope, and Historical Perspective of Vocational Education

- A. Meaning and types of Vocational Education such as agriculture, beauty and wellness industry, apparel, furnishing, jewellery designing, plumbing, electronics and automotive.
- B. Nature, scope and relevance of Vocational Education.
- C. Historical perspective and major landmarks in the evolution of Vocational Education as a subject.
- D. Recommendations/suggestions of various committees, commissions and policies, provisions in NEP 2020 in reference to Vocational Education.

UNIT - II

Aims and Objectives of Vocational Education Teaching

- A. Aims and objectives of teaching Vocational Education at the secondary stage, formulation of objectives in behavioural terms.
- B. Learning outcomes and competencies of teaching Vocational Education at secondary stage.
- C. Place and significance of Vocational Education in secondary school; its linkages with other school subjects.
- D. Identify and integrate values in Vocational Education concepts.

UNIT - III

Pedagogical Aspects of Vocational Education

- A. Implication of various approaches such as inductive-deductive, constructivist, experiential learning, blended learning, interdisciplinary and multidisciplinary approaches in teaching of Vocational Education.
- B. 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.
- C. 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.

4.4.10.3 Suggestive Practicum (Any Three)

- 1. Analyze recommendations of NEP 2020 with reference to emphasis on Vocational Education.
- 2. Prepare a report on skill development in relation to achievement of Make in India.
- 3. Prepare a report on interdisciplinary and multidisciplinary approaches used in the practices of Vocational Education.
- 4. Write learning outcomes and competencies for two topics of Vocational Education at Secondary Stage.
- 5. Conduct a short survey to know the expectations of students, parents, industries, and society about Vocational Education and compile a report.
- 6. Any other project assigned by HEI.

4.4.10.4 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.

4.4.10.5 Suggestive Mode of Assessment

Written test, classroom presentations, discussion forums, observation, research/study report, assignments, practicum, sessional and terminal examination (As per UGC Norms).

4.4.10.6 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).

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.10 Content cum Pedagogy of Vocational Education at Secondary Stage - Course (II)

Credit: 2
Semester: S-5

4.4.10.1 About the Course

Teaching Vocational Education is a challenging but rewarding endeavour that requires careful planning and preparation. The aim of Vocational Education is to prepare students for successful careers in their chosen fields. Instructors must develop effective lesson plans tailored to their student's needs and interests while ensuring that they have the most up-to-date and relevant resources available. The course covers three units focusing on teaching learning resources for Vocational Education teaching, content analysis and planning for teaching Vocational Education and ICT integration and applications in Vocational Education teaching learning. The course deals with types of teaching learning resources, identification and utilizing of learning resources, pedagogical analysis of content, and developing art integrated unit plans and lesson plans. The course emphasizes on importance and use of ICT in Vocational Education and plans using Technological Pedagogical Content Knowledge (TPCK) for face-to-face and online teaching.

4.4.10.2 Learning Outcomes

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

- identify and use learning resources from the local environment,
- discuss the importance of teaching learning resources in the teaching of Vocational Education,
- classify teaching resources and use e-resources for Vocational Education teaching,
- analyze the content of Vocational Education for integration in pedagogical activities,
- identify concepts, list learning outcomes and plan teaching learning process in an inclusive setup,
- utilize tools, software, and platforms for online teaching learning,
- integrate art and TPCK to develop lesson plans for face to face and online teaching learning.

UNIT - I

Teaching Learning Resources for Vocational Education Teaching

- A. Teaching learning resources: concept, characteristics, and importance in teaching of Vocational Education.
- B. Types of teaching learning aids/ materials: print media (such as textbook, teachers' manual/ handbook, industry catalogue, 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.
- C. Identification and use of learning resources from the local environment in teaching of Vocational Education, industry-oriented learning resources.
- D. Resource room/ laboratory/ library - management and practices; virtual laboratories, teaching learning kits, fairs, exhibitions, industry excursions, community resources and pooling of resources.

UNIT - II

Content Analysis and Planning for Teaching Vocational Education

- A. 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.
- B. Concept, types and importance of unit planning and lesson planning, essential components in the lesson plan of Vocational Education.
- C. Developing art integrated unit plans and lesson plans based on learning outcomes (topics to be taken from Vocational Education textbooks), experiential learning in Vocational Education teaching.

UNIT - III

ICT Integration and Applications in Vocational Education Teaching

- A. Scope and importance of ICT in Vocational Education.
- B. Use of ICT such as Artificial Intelligence, machine learning, smart boards in the teaching of Vocational Education, assessment process and resource management.
- C. Use of tools, software, and platforms of Vocational Education at secondary stage.
- D. Developing ICT integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for face to face and online teaching.

4.4.10.3 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. Develop e-Content for teaching Vocational Education.
- 4. Search MOOCs available in the field of Vocational Education and prepare a report mentioning link and their appropriateness.
- 5. Critically evaluate a textbook of Vocational Education and prepare a report.
- 6. Any other Project assigned by HEI.

4.4.10.4 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, Self-study, and Experiential method.

4.4.10.5 Suggestive Mode of Assessment

Written test, classroom presentations, discussion forums, observation, research/study report, assignments, practicum, sessional and terminal examination (As per UGC Norms).

4.4.10.6 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).

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.10 Content cum Pedagogy of Vocational Education at Secondary Stage - Course (III)

Credit: 2
Semester: S-6

4.4.10.1 About the Course

Vocational Education focuses on hands on training which allows the students to develop necessary skills required for their chosen profession. The objective is to provide students with the tools they need to become self-sufficient and productive members of society, ultimately helping individuals to achieve career success, financial stability and developing entrepreneurship skills. As an educator, there are many factors to be considered while planning for teaching learning Vocational Education. This course is designed to incorporate three key areas of Vocational Education teaching associated with 21st Century Skills for Learning, Assessment and Evaluation in Teaching of Vocational Education and Research and Innovative Practices in Teaching Vocational Education. This course focuses on the assessment and evaluation of essential Vocational Education components using different assessment tools. The course deals with the Need for and Importance of 21st Century Skills and Creating a Dynamic Learning Environment, Qualitative Assessment, 360° Assessment, Action Research and School Based/Industry Based Research.

4.4.10.2 Learning Outcomes

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

- discuss the need for and importance of how to learn,
- appraise 21st century skills for learners and teachers of Vocational Education,
- list the characteristics of Vocational Education teachers as professionals,
- create dynamic learning environment for Vocational Education teaching,
- summarize the need and importance evaluation and assessment Vocational Education teaching,
- construct Table of Specification and write items,
- identify and plan action research in the teaching of Vocational Education,
- adapt performance-based assessment for improving outcomes.

UNIT - I

21st Century Skills for Learning

- A. Need for and Importance of How to Learn, 21st Century Skills for Learners and Teachers of Vocational Education.
- B. Psychological, Sociological and Philosophical Perspective of Teaching and Learning of Vocational Education.
- C. Qualities of Vocational Education Teachers as Professionals. Role of a Teacher in Facilitating Learning and Creating Dynamic Learning Environment of Vocational Education.

UNIT - II

Assessment and Evaluation in Teaching of Vocational Education

- A. Assessment and Evaluation: Need for and Importance of Vocational Education.
- B. Assessment Based on Learning Outcomes, Strategies for Continuous Assessment, finding gaps in learning and planning further activities for improvement, Qualitative Assessment, 360° Assessment.
- C. Performance based Assessment, Assessment of Group Activities, Field Observations, Recording and Reporting, Creating Platform and Portfolio Management, Assessment of Lab Skills and industry visit, Assignments, Projects, and Presentations.
- D. 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 of Vocational Education.

UNIT - III

Research and Innovative Practices in Teaching of Vocational Education

- A. Divergent Thinking and Innovation in Psychological, Sociological and Philosophical Perspectives for Quality Learning Experiences in teaching of Vocational Education.
- B. Recent Trends in Research Related to Teaching Learning of Vocational Education.
- C. Action Research in Vocational Education, Meaning, Significance, Steps and Planning.
- D. School Based/Industry Based Research in Vocational Education, Evidence-Based Practices and Reflection.
- E. Vocational Education, skill development, Make in India, and Entrepreneurship.

4.4.10.3 Suggestive Practicum (Any Three)

- 1. Construct an Achievement test/ Table of Specialization.
- 2. Prepare a portfolio/kit of any Vocation.
- 3. Find success stories related to skill development and entrepreneurship in Vocational Education and appreciate their uniqueness in the form of a report.
- 4. Identify a problem and plan action research project for Vocational Education.
- 5. Conduct School Based Research/ case study/ industry and market related surveys and prepare an evidence-based report.
- 6. Prepare a write up on quality of learning experiences for teaching Vocational Education.
- 7. Any other project assigned by HEI.

4.4.10.4 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, Self-study, and Experiential method.

4.4.10.5 Suggestive Mode of Assessment

Written test, classroom presentations, discussion forums, observation, research/study report, assignments, practicum, sessional and terminal examination (As per UGC Norms).

4.4.10.6 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).

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.11 Content cum Pedagogy of Physical Education and Yoga at Secondary Stage – Course (I)

Credit: 2
Semester: S-4

4.4.11.1 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 quality and professionalism. Teacher education programme strongly emphasizes pedagogy, its principles, 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 Education and Yoga is intended to enhance the pedagogical content knowledge of student teachers through different learning approaches and methods. This course comprises three 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 and its linkages with other disciplines. Historical/policy perspectives of Physical Education and Yoga are discussed in unit second. Physical Education and Yoga is conceptualized in very broad terms by relating it to technology, society, humans, and sustainable development. It also focuses on the place of Physical Education and Yoga in school curriculum including an emphasis on how to build inclusive classrooms. It focuses on pedagogical concerns of Physical Education and Yoga. 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.

4.4.11.2 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,
- outline linkages between Physical Education and Yoga with other school subjects,
- appraise the values inculcation for Physical Education and Yoga,
- summarize the historical perspective of Physical Education and Yoga in policies/commissions,
- make use of pedagogical aspects of Physical Education and Yoga,
- categorize approaches and methods of teaching learning Physical Education and Yoga,
- apply appropriate pedagogy in teaching learning the concepts of Physical Education and Yoga.

UNIT - I

Nature, Scope and Historical Perspective of Physical Education and Yoga

- A. Nature, scope, and importance of Physical Education and Yoga.
- B. Historical perspective of Physical Education and Yoga.
- C. Contributions of Indian (ancient and modern) and other personalities.

- D. Role of Physical Education & Yoga in society and sustainable development.
- E. Recommendations/suggestions of various committees, commissions, and policies.

UNIT - II

Aims and Objectives of Teaching Physical Education and Yoga

- A. Aims and objectives of teaching Physical Education and Yoga.
- B. Learning outcomes and competencies of teaching Physical Education and Yoga at secondary stage.
- C. Linkages of Physical Education and Yoga with other school subjects and place of the Physical Education and Yoga in school curriculum.
- D. Inculcation of values through teaching of Physical Education and Yoga.

UNIT - III

Pedagogical Aspects of Physical Education and Yoga

- A. Implication of various approaches- inductive-deductive, constructivist, experiential learning, art integrated learning, interdisciplinary and multidisciplinary approaches in Physical Education and Yoga.
- B. Analytical pedagogical concerns in teaching of Physical Education and Yoga for high order thinking skills such as critical, creative, communication, decision making.
- C. Methods of teaching learning Physical Education and Yoga: learner-centric and group-centric, lecture cum demonstration, activity based, imitation, drill and practice, discussion, problem-solving, project based, hands on activity, discovery, experimentation, field activities, collaborative, cooperative and peer learning.

4.4.11.3 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. Make a presentation on the historical development of Physical Education and Yoga.
- 3. Analyze recommendations of policies/commissions in context of Physical Education and Yoga.
- 4. Identify and analyze the types of values inculcated through teaching of Physical Education and Yoga concepts and prepare a report.
- 5. Prepare write-ups on the teaching of Physical Education and Yoga using interdisciplinary and multidisciplinary approaches as recommended in NEP 2020.
- 6. Any other project assigned by HEI.

4.4.11.4 Suggestive Mode of Transaction

Lecture cum discussion, demonstration, hands-on activities, experiential learning, art integrated learning, field activities.

4.4.11.5 Suggestive Mode of Assessment

Written tests, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

4.4.11.6 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, Health and Physical Education. Textbook for IX-XII class New Delhi.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.11 Content cum Pedagogy of Physical Education and Yoga at Secondary Stage – Course (II)

Credit: 2
Semester: S-5

4.4.11.1 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 Education and Yoga at secondary stage. Enough space is provided 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. It also focuses on textbook analysis and planning for teaching Physical Education and Yoga and its pedagogical issues in the light of NEP 2020. Student teachers are expected to identify various concepts and processes, list learning and outcomes, find out about various activities and experiments. Accordingly, they are expected to develop lesson plans based on learning outcomes and experiential learning for classroom and online teaching.

4.4.11.2 Learning Outcomes

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

- identify teaching learning aids / materials and illustrate their importance in teaching learning the concepts of Physical Education and Yoga,
- categorize teaching aids/materials/learning resources,
- develop teaching learning aids/material/kits/learning resources for teaching learning the concepts of Physical Education and Yoga,
- utilize teaching aids/materials/learning resources for teaching learning the concepts of Physical Education and Yoga,
- analyze the content of Physical Education and Yoga textbooks at secondary stage,
- develop lesson plan based on learning outcomes and experiential learning using appropriate strategies.

UNIT - I

Teaching Learning Resources

- A. Teaching learning aids/materials: concept, definition, role and importance in classroom teaching learning the Physical Education and Yoga.
- B. 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 classroom teaching learning (reflective journals, charts, 2-D and 3-D models, games, cards, worksheets, multimedia etc.)
- C. Identification and use of learning resources in Physical Education and Yoga from the local environment.

- D. 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.

UNIT - II

Content Analysis and Planning for Teaching Physical Education and Yoga

- A. Pedagogical analysis of content taking examples from topics of Physical Education and Yoga textbooks of secondary stage, identification of concepts, listing learning outcomes and competencies, planning and evaluating learning experiences in an inclusive setup.
- B. Concept, types and importance of unit and lesson planning.
- C. Developing unit plans and lesson plans based on learning outcomes and experiential learning by selecting topics from textbooks of Physical Education at secondary stage.

UNIT - III

ICT Integration and Applications

- A. Scope and importance of ICT in Physical Education and Yoga.
- B. Use of ICT such as Artificial Intelligence, machine learning, smart boards in the teaching learning, assessment and resource management.
- C. Tools, software, and platforms for Physical Education and Yoga specific online learning.
- D. Developing ICT integrated lesson plans by taking topics of Physical Education and Yoga at secondary stage using Technological Pedagogical Content Knowledge (TPCK) for classroom and online teaching.

4.4.11.3 Suggestive Practicum (Any Three)

- Develop e-content for the concepts of Physical Education and Yoga at Secondary Stage.
- Analyze the content of textbooks of Physical Education and Yoga (Classes 9-12)/ Materials/Resources/Syllabi.
- Identify the learning resources for transiting the concepts of Physical Education and Yoga.
- Develop teaching aids/teaching materials for teaching concepts of Physical Education and Yoga at secondary stage.
- Develop learning outcomes for the concepts of Physical Education and Yoga at the secondary stage.
- Prepare learning outcomes and experiential learning-based lesson plan for the concepts of Physical Education and Yoga.
- Develop a project on the concepts of Physical Education and Yoga using interdisciplinary and multidisciplinary approaches as recommended in NEP 2020.
- Any other project assigned by HEI.

4.4.11.4 Suggestive Mode of Transaction

Lecture cum discussion, demonstration, hands-on activities, experiential learning, art integrated learning, field activities.

4.4.11.5 Suggestive Mode of Assessment

Written tests, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

4.4.11.6 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, Health and Physical Education. Textbook for IX-XII class New Delhi.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.11 Content cum Pedagogy of Physical Education and Yoga at Secondary Stage - Course (III)

Credit: 2
Semester: S-6

4.4.11.1 About the Course

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. 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. It focuses on Psychological, Sociological and Philosophical Perspective of Activity Oriented Classrooms in Physical Education and Yoga. the importance of planning science learning and teaching in secondary schools. 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.

4.4.11.2 Learning Outcomes

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

- appraise different types of assessment and strategies for continuous assessment,
- distinguish between assessment and evaluation,
- compare merits and demerits of different types of assessment,
- prepare unit test item based on TOS and develop different type of test items,
- construct and administer the diagnostic and achievement test,
- plan offline and online activity for testing higher order thinking skills,
- analyze NEP 2020 with special reference to activity-oriented classrooms,
- relate ICT integration and elaborate its use in classroom situations.

UNIT - I

21st Century Skills for Learning

- A. Need for and importance of how to learn 21st century skills for learners and teachers of Physical Education and Yoga.
- B. Psychological, sociological and philosophical perspective of teaching and learning Physical Education and Yoga.
- C. Qualities of a Physical Education and Yoga teacher as professional in enhancing learning.
- D. Role of a teacher in facilitating learning and creating dynamic learning environment of Physical Education and Yoga.

UNIT - II

Assessment and Evaluation

- A. Assessment and evaluation: need for and importance of Physical Education and Yoga.
- B. Assessment based on learning outcomes, strategies for continuous assessment, school-based assessment, qualitative assessment; formative and summative assessment, formal, informal and 360° assessment.
- C. Performance assessment: assessment of group activities, field observations, recording and reporting, creating platform and portfolio management, assessment of laboratory skills, assignments, projects, and presentations.
- D. 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 the content of Physical Education and Yoga.

UNIT - III

Research and Innovative Practices

- A. Divergent thinking and innovation in psychological, sociological, and philosophical perspectives for quality learning experiences.
- B. Recent trends in research related to teaching learning of Physical Education and Yoga.
- C. Action research: meaning, significance, steps, and planning.
- D. Evidence-based practices and reflection, school-based research in Physical Education and Yoga.

4.4.11.3 Suggestive Practicum (Any Three)

- 1. Prepare, administer, and analyze scores of an achievement test.
- 2. Conduct Simulated Teaching session for the concepts of Physical Education and Yoga and observation by self, peer, and teacher.
- 3. Explore development of multidisciplinary projects and present using PowerPoint.
- 4. Interpret the concept of Physical Education and Yoga with Psychological, Sociological and Philosophical Perspective.
- 5. Apply innovative practices in classroom teaching learning of Physical Education and Yoga.
- 6. Make a presentation on the role of Physical Education and Yoga in sustainable development of society.
- 7. Conduct action research for Continuous Professional Development (CPD) of Physical Education and Yoga teacher.
- 8. Any other project assigned by HEI.

4.4.11.4 Suggestive Mode of Transaction

Lecture cum discussion, demonstration, hands-on activities, experiential learning, art integrated learning, field activities.

4.4.11.5 Suggestive Mode of Assessment

Written tests, classroom presentations, workshops, seminars, assignments, practicums, sessional and terminal semester examinations (as per UGC norms).

4.4.11.6 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, Health and Physical Education. Textbook for IX-XII class New Delhi.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.12 Content cum Pedagogy of Agriculture at Secondary Stage – Course (I)

Credit: 2
Semester: S-4

4.4.12.1 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. 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.

4.4.12.2 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,
- explain Agriculture as a curricular discipline and its evolution as a subject,
- discuss significance of Agriculture in school and its relationship with other subjects,
- outline aims, objectives and learning outcomes of teaching Agriculture at school level,
- select objectives and competencies for teaching of agriculture,
- reflect upon and adopt various methods for teaching of agriculture,
- reflect on values inculcation.

UNIT - I

Nature, Scope, and Historical Perspective of Agriculture

- A. Agriculture: nature, scope and its importance in national economy, modern and sustainable agriculture, Agriculture as a discipline and profession.
- B. Historical perspective and major landmarks in the evolution of Agriculture in India as a subject.
- C. Recommendations/suggestions of various committees, commissions and policies, provisions in NEP 2020 in reference to Agriculture.

UNIT - II

Aims and Objectives of Agriculture Teaching

- A. Aims of teaching Agriculture at school level.
- B. Objectives of teaching Agriculture at secondary level.
- C. Learning outcomes and competencies of teaching Agriculture at secondary stage.
- D. Place and significance of Agriculture in secondary school; its linkages with other school subjects.
- E. Inculcation of values through teaching of Agriculture.

UNIT - III

Pedagogical Aspects of Agriculture Teaching

- D. Implication of various approaches such as inductive-deductive, constructivist, experiential learning, blended learning, interdisciplinary and multidisciplinary approaches in teaching of Agriculture.
- E. 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.
- F. 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 field-based observations, direct observation of agricultural practices, collecting field specimens, case study, assignments, discovery, experimentation, collaborative and cooperative learning, peer learning.

4.4.12.3 Suggestive Practicum (Any Three)

- 1. Prepare a report on Sustainable Agriculture in relation to achievement of sustainable development goals.
- 2. Analyze NEP 2020 with reference to emphasis on Agriculture Education.
- 3. Prepare a report on interdisciplinary and multidisciplinary approaches used in the practices of Agriculture.
- 4. Write learning outcomes and competencies for two topics of Agriculture at Secondary Stage.
- 5. Collect Field Specimens and prepare herbarium.
- 6. Any other project assigned by HEI.

4.4.12.4 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.

4.4.12.5 Suggestive Mode of Assessment

Written test, classroom presentations, discussion forums, observation, research/study report, assignments, practicum, sessional and terminal examination (As per UGC Norms).

4.4.12.6 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.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.12 Content cum Pedagogy of Agriculture at Secondary Stage – Course (II)

Credit: 2
Semester: S-5

4.4.12.1 About the Course

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 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.

4.4.12.2 Learning Outcomes

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

- distinguish learning resources and e-resources for Agriculture teaching,
- identify and use learning resources from the local environment,
- analyse different contents from textbooks for pedagogical aspects,
- plan instructional process and adopt the child centered approaches of teaching,
- explain Technological Pedagogical Content Knowledge (TPCK),
- apply Artificial Intelligence in various fields of Agriculture,
- integrate arts and TPCK and provide ICT based opportunity to learn,
- develop unit and lesson plans for varied contents of Agriculture,
- observe Agriculture fields as learning place and write field notes.

UNIT - I

Teaching Learning Resources for Teaching Agriculture

- A. Teaching learning resources: concept, characteristics, and importance in teaching of Agriculture
- B. 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.
- C. Identification and use of learning resources from the local environment in teaching of Agriculture, agricultural field notes, reports and records.
- D. 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 - II

Content Analysis and Planning for Teaching Agriculture

- A. 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.
- B. Concept, types and importance of unit planning and lesson planning.
- C. 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.

UNIT - III

ICT Integration and Applications

- A. Scope and importance of ICT in Agriculture
- B. Use of ICT such as Artificial Intelligence, machine learning, smart boards in the teaching of Agriculture, assessment, and resource management.
- C. Use of tools, software, and platforms for Agriculture specific online learning.
- D. Developing ICT integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for face to face and online teaching.

4.4.12.3 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. Any other project assigned by HEI.

4.4.12.4 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.

4.4.12.5 Suggestive Mode of Assessment

Written test, classroom presentations, discussion forums, observation, research/study report, assignments, practicum, sessional and terminal examination (As per UGC Norms).

4.4.12.6 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.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.12 Content cum Pedagogy of Agriculture at Secondary Stage – Course (III)

Credit: 2
Semester: S-6

4.4.12.1 About the Course

An Agriculture teacher must know about the various approaches, strategies, and techniques for the assessment and evaluation of learning among students. Teachers must measure what, how, and how much students are learning in the classroom to determine their progress. The Teacher must be competent enough to weigh the achievements, provide quality feedback, know the process of reporting, and reiterate the progress of the students. They should know how to enhance learning and plan future activities. The course includes three units focusing on the 21st Century Skills for Learning, the Need for and Importance of How to Learn, the qualities of Agricultural Teachers as Professionals, and Research and Innovative Practices in the field of teaching Agriculture. It describes the role of teachers in facilitating learning and a dynamic learning environment and will make the pupil-teachers skilled in the measurement of learning outcomes, providing feedback, and reporting. Further, the course will help in the development of assessment and evaluation skills among the student teachers. They will develop the skills to construct achievement tests and conduct action research and school-based research in Agriculture teaching.

4.4.12.2 Learning Outcome

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

- explain the need for and importance of how to learn,
- describe 21st century skills for learners and teachers of agriculture,
- discuss the qualities required for teachers of agriculture,
- observe and evaluate learning in an inclusive setup,
- discuss the importance of evaluation and assessment in agriculture teaching,
- provide feedback based on learning outcomes,
- write items and construct table of specialization,
- reflect on evaluation devices for agriculture teaching,
- adopt performance-based evaluation and improving student outcomes,
- conduct action research in the teaching of Agriculture.

UNIT - I

21st Century Skills for Learning

- A. Need for and importance of how to learn 21st century skills for learners and teachers of Agriculture.
- B. Psychological, sociological, and philosophical perspective of teaching and learning of Agriculture.
- C. Qualities of agricultural teachers as professionals, role of a teacher in facilitating learning and creating dynamic learning environment of Agriculture.

UNIT - II

Assessment and Evaluation in Agriculture Teaching

- A. Assessment and evaluation: need for and importance of Agriculture.

- B. Assessment based on learning outcomes, strategies for continuous assessment, finding gaps in learning and planning further activities for improvement, qualitative assessment, 360° assessment.
- C. Performance based assessment, assessment of group activities, field observations, recording and reporting, creating platform and portfolio management, assessment of lab skills, assignments, projects, and presentations.
- D. 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 of Agriculture.

UNIT - III

Research and Innovative Practices in Teaching of Agriculture

- A. Divergent thinking and innovation in psychological, sociological, and philosophical perspectives for quality learning experiences in teaching of Agriculture.
- B. Recent trends in research related to teaching learning of Agriculture.
- C. Action research in agriculture, meaning, significance, steps, and planning.
- D. School based research in agriculture, evidence-based practices, and reflection.

4.4.12.3 Suggestive Practicum (Any Three)

1. Conduct School Based Research and prepare an evidence-based report.
2. Prepare a plan for action research.
3. Conduct Case Studies, Market Surveys or Field visit and prepare a report.
4. Enlist quality of experiences for teaching of Agriculture.
5. Construct an Achievement test/ Table of Specialization.
6. Any other project assigned by HEI.

4.4.12.4 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.

4.4.12.5 Suggestive Mode of Assessment

Written test, classroom presentations, discussion forums, observation, research/study report, assignments, practicum, sessional and terminal examination (As per UGC Norms).

4.4.12.6 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.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.13 Content cum Pedagogy of Home Science at Secondary Stage - Course (I)

Credit: 2
Semester: S-4

4.4.13.1 About the Course

Home Science is a multidisciplinary branch of study that makes the most use of the resources at hand to produce methodical and scientific information about various facets of family life. It involves every family member's health and happiness. This course encompasses three units describing the modern meaning of homemaking and the purpose of teaching Home Science in schools, nature, scope and importance of Home Science teaching, its historical perspective. The course emphasizes the aims, objectives and learning outcomes of teaching Home Science at the secondary level. The course deals with the implication of various approaches, development of high order thinking skills and various methods of teaching Home Science.

4.4.13.2 Learning Outcomes

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

- explain the modern meaning of Home Science and its nature,
- discuss evolution of Home Science as a school subject and its correlation with other subjects,
- examine the scope and importance of Home Science in daily life,
- outline the aims, objectives and learning outcomes of the teaching of Home Science,
- adapt appropriate teaching methods based on learning outcomes,
- select participatory method for teaching Home Science,
- improve high order thinking skills,
- demonstrate values related to Home Science.

UNIT - I

Nature, Scope, and Historical Perspective of Home Science

- A. Modern meaning of Home Science, nature of Home Science as a discipline.
- B. Historical perspective and major landmarks in the evolution of Home Science as a subject.
- C. Scope of Home Science and its importance in daily life and as a profession.
- D. Recommendations/suggestions of various committees, commissions and policies related to education of Home Science.

UNIT - II

Aims and Objectives of Home Science Teaching

- A. Aims and objectives of teaching Home Science.
- B. Learning outcomes and competencies of teaching Home Science at secondary stage.
- C. Place of Home Science in school curriculum, its correlation with other school subjects, economics in Home Science.
- D. Inculcation of associated values for teaching Home Science.

UNIT - III

Pedagogical Aspects of Home Science

- A. Implication of various approaches such as inductive-deductive, constructivist, experiential learning, interdisciplinary and multidisciplinary and blended learning approaches in Home Science teaching.
- B. Analytical pedagogical aspects in teaching of agriculture for the development of high order thinking skills such as critical, creative, communication, decision making, collaborative and reflective.
- C. Methods of teaching Home Science: one to one teaching and group teaching in Home Science, lecture cum demonstration, observation, activity based, discussion, problem-solving, laboratory, project based, hands on activity, discovery, inquiry, experimentation, exhibition and displays, collaborative and cooperative learning, peer learning and flipped classroom.

4.4.13.3 Suggestive Practicum (Any Three)

1. Prepare a report on the significance of Home Science in daily life.
2. Formulate objectives based on learning outcomes for two chapters of Home Science at secondary stage.
3. Analyze recommendations of NEP 2020 with reference to Home Science education.
4. Prepare a report on interdisciplinary and multidisciplinary approaches used in the practices of Home Science.
5. Identify and integrate values in Home Science concepts and prepare a write up.
6. Any other project assigned by HEI.

4.4.13.4 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.

4.4.13.5 Suggestive Mode of Assessment

Written test, classroom presentations, discussion forums, observation, research/study report, assignments, practicum, sessional and terminal examination (As per UGC Norms).

4.4.13.6 Suggestive Reading Materials:

- 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 Steering Committee for National Curriculum Frameworks, (2023). Draft National Curriculum Framework for School Education.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.13 Content cum Pedagogy of Home Science at Secondary Stage - Course (II)

Credit: 2
Semester: S-5

4.4.13.1 About the Course

Home Science is a subject that demands activities and practical learning. For becoming an effective teacher in Home Science, it is important to develop the skill of identifying and using teaching learning resources and understanding content analysis. There are certain components to the process of content analysis for teaching. It enables teachers to compile and analyze differences in the subject matter, student perceptions, and pertinent trends. The course consists of three units related to the importance and types of teaching-learning resources, development of the skill for pedagogical analysis of content for listing behavioural outcomes, planning activities, development of unit and lesson plan, and ICT integration and applications in the teaching of Home Science. The course provides a platform for student teachers to learn about varied kinds of resources which can be used in the teaching of Home Science, 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 and ICT-integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for face-to-face and online teaching of Home Science.

4.4.13.2 Learning Outcomes

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

- identify and use learning resources from the local environment,
- discuss the importance of teaching learning resources in the teaching of Home Science,
- classify teaching resources and use e-resources for Home Science teaching,
- analyze the content of Home Science for integration in pedagogical activities,
- identify concepts, list learning outcomes and plan teaching learning process in an inclusive setup,
- use of tools, software, and platforms for online learning,
- integrate art and TPCK to develop unit and lesson plans.

UNIT - I

Teaching Learning Resources for Home Science Teaching

- A. Teaching learning resources: concept, characteristics, and importance in teaching of Home Science.
- B. 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.
- C. Identification and use of learning resources from the local environment in teaching of Home Science.

- D. 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, equipment in Home Science, their importance and maintenance.

UNIT - II

Content Analysis and Planning for Teaching Home Science

- A. Pedagogical analysis of content taking examples from topics of Home Science textbooks of secondary stage, identification of concepts, listing learning outcomes and competencies, planning, and evaluating learning experiences in an inclusive setup.
- B. Concept, types (theory and practical) and importance of unit and lesson planning in Home Science teaching, essential components in the lesson plan of Home Science.
- C. Developing unit plans and lesson plans based on learning outcomes (topics to be taken from Home Science textbooks of secondary level), art integrated lesson plan, experiential learning in Home Science teaching.

UNIT - III

ICT Integration and Applications in Home Science Teaching

- A. Scope and importance of ICT in Home Science.
- B. Use of ICT such as Artificial Intelligence, machine learning, smart boards in teaching learning, assessment, and resource management.
- C. Tools, software, and platform for teaching learning of Home Science at secondary stage.
- D. Developing ICT integrated lesson plans using Technological Pedagogical Content Knowledge (TPCK) for classroom and online teaching.

4.4.13.3 Suggestive Practicum (Any Three)

- 1. Develop e-Content for teaching Home Science.
- 2. Search MOOCs available in the field of Home Science and prepare a report mentioning link and their appropriateness.
- 3. Critically evaluate a textbook of Home Science and prepare a report.
- 4. Prepare a Home Science kit.
- 5. Organize an exhibition/ seminar and prepare a report.
- 6. Prepare an art integrated lesson plan based on experiential learning on any topic of Home Science.
- 7. Any other project assigned by HEI.

4.4.13.4 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.

4.4.13.5 Suggestive Mode of Assessment

Written test, classroom presentations, discussion forums, observation, research/study report, assignments, practicum, sessional and terminal examination (As per UGC Norms).

4.4.13.6 Suggested Reading Materials:

- 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 Steering Committee for National Curriculum Frameworks, (2023). Draft National Curriculum Framework for School Education.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

4.4.13 Content cum Pedagogy of Home Science at Secondary Stage - Course (III)

Credit: 2
Semester: S-6

4.4.13.1 About the Course

A Home Science teacher must know about the various approaches, strategies, and techniques for the assessment and evaluation of learning among students. The Teacher must be competent to provide quality feedback and know the process of reporting. They should know how to enhance learning and plan future activities. The course comprises three units describing 21st Century Skills for Learning, Assessment and Evaluation in Teaching Home Science and Research and Innovative Practices in Teaching Home Science. The course deals with the role of teachers in facilitating learning and a dynamic learning environment, measurement of learning outcomes, providing feedback, reporting and construction of achievement tests. The course describes various evaluation strategies and devices which can be efficiently used in the teaching of Home Science 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 Home Science. It focuses on the development of skills associated with Home Science and entrepreneurship.

4.4.13.2 Learning Outcomes

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

- discuss the need for and importance of how to learn,
- appraise 21st century skills for learners and teachers of Home Science,
- list the characteristics of Home Science teachers as professionals,
- create dynamic learning environment for Home Science teaching,
- summarize the need and importance evaluation and assessment in Home Science teaching,
- construct Table of Specification and write items,
- plan action research in the teaching of Home Science,
- adapt performance-based assessment for improving outcomes,
- design and maintain rubrics and portfolios.

UNIT - I

21st Century Skills for Learning

- A. Need for and importance of how to learn, 21st century skills for learners and teachers of Home Science.
- B. Psychological, sociological, and philosophical perspective of teaching and learning of Home Science.
- C. Home Science teachers as professionals, characteristics, networking, and ethics.
- D. Role of a teacher in facilitating learning and creating dynamic learning environment of Home Science.

UNIT - II

Assessment and Evaluation in Teaching of Home Science

- A. Assessment and evaluation: need for and importance of Home Science.
- B. Assessment based on learning outcomes, strategies for continuous assessment, finding gaps in learning and planning further activities for improvement, qualitative assessment, 360° assessment.
- C. Performance based assessment, assessment of group activities, field observations, recording and reporting, creating platform and portfolio management, assessment of lab skills, assignments, projects, and presentations.
- D. 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 of Home Science.

UNIT - III

Research and Innovative Practices in Teaching of Home Science

- A. Divergent thinking and innovation in psychological, sociological, and philosophical perspectives for quality learning experiences in teaching of Home Science.
- B. Recent trends in research related to teaching learning of Home Science, kinds of data in Home Science and its management.
- C. Action research in Home Science, meaning, significance, steps and planning.
- D. School based research in Home Science, evidence-based practices, and reflection.
- E. Home Science, skill development and entrepreneurship such as tailoring, knitting, cooking, baking, embroidery, jewellery designing, budgeting.

4.4.13.3 Suggestive Practicum (Any Three)

- 1. Construct an Achievement test/ Table of Specialization.
- 2. Prepare a portfolio.
- 3. Find success stories related to skill development and entrepreneurship in Home Science and present/appreciate its uniqueness in the form of report.
- 4. Identify a problem and plan action research.
- 5. Conduct School Based Research, case studies, market surveys and prepare an evidence-based report.
- 6. Prepare a write-up on quality of learning experiences for teaching Home Science.
- 7. Any other project assigned by HEI.

4.4.13.4 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.

4.4.13.5 Suggestive Mode of Assessment

Written test, classroom presentations, discussion forums, observation, research/study report, assignments, practicum, sessional and terminal examination (As per UGC Norms).

4.4.13.6 Suggestive Reading Materials:

- 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 Steering Committee for National Curriculum Frameworks, (2023). Draft National Curriculum Framework for School Education.

*Teachers may also suggest books/readings as per the need of the learners and learning content.

Suggestive Web Links

- http://14.139.60.153/bitstream/123456789/6857/1/AGRICULTURAL%20EDUCATION%20IN%20INDIA-CSL-IOD_IO112637.pdf
- http://Arts.brighton.ac.uk/_data/assets/pdf_file/0004/65308/Susan-Orr-Artsicle-Issue-10-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/B-d/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_maths.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.org/10.5032/jae.2019.02085>
- <https://dpi.wi.gov/sites/default/files/imce/cal/pdf/planning-curriculum-in-Arts-and-design.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-Artsicle/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&recordId=9028066&fileId=9028067>
- <https://mospace.umsystem.edu/xmlui/bitstream/handle/10355/14417/research.pdf?sequence=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>
- <https://ncert.nic.in/textbook/pdf/lehe103.pdf>
- <https://ncert.nic.in/textbook/pdf/lehe105.pdf>
- <https://ncert.nic.in/textbook/pdf/lehe106.pdf>
- <https://ncert.nic.in/vocational.php?ieft1=0-6>
- <https://ncert.nic.in/vocational.php?iepf1=0-8>
- <https://ncert.nic.in/vocational.php?iepg1=1-5>
- <https://ncert.nic.in/vocational.php?ievt1=1-3>
- <https://ncert.nic.in/vocational.php?ivas1=1-7>
- <https://ncert.nic.in/vocational.php?ivsm1=ps-5>
- <https://old.amu.ac.in/emp/studym/100008102.pdf>
- [https://sos.cg.nic.in/E-Books/12th/English/eng-book%20321%20Home%20Science/321_Home%20Science%20-%201%20\(Final%20Book\).pdf](https://sos.cg.nic.in/E-Books/12th/English/eng-book%20321%20Home%20Science/321_Home%20Science%20-%201%20(Final%20Book).pdf)
- <https://swayam.gov.in>
- https://ualresearchonline.Arts.ac.uk/id/eprint/629/1/cltad_learningoutcomes.pdf
- https://www.academia.edu/3188050/Formative_assessment_in_Arts_and_Design
- <https://www.biologyonline>
- https://www.education.gov.in/sites/upload_files/mhrd/files/NCF-School-Education-Pre-Draft.pdf
- https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf
- https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_final_HINDI_0.pdf
- <https://www.education.gov.pg/TISER/documents/pastep/pd-tm-7-2-general-teaching-methods-student.pdf>
- <https://www.fao.org/3/i2516e/i2516e.pdf>
- https://www.granthaalayahpublication.org/journals/granthaalayah/article/view/IJRG22_A05_6154
- <https://www.mooc.org>
- <https://www.nsead.org/files/6f85ab8587bc53ce653702da1cc15690.pdf>
- <https://www.oecd.org/education/skills-beyond-school/LearningForJobsPointersfor%20PolicyDevelopment.pdf>

- [https://www.researchgate.net/publication/253504153 A Document Analysis Of The Pedagogical Knowledge Espoused In Agriculture Teaching Methods Courses](https://www.researchgate.net/publication/253504153)
- [https://www.researchgate.net/publication/341659182 3 The Role of Arts in School Education](https://www.researchgate.net/publication/341659182)
- [www.ibe.unesco.org.](http://www.ibe.unesco.org)
- www.teachtci.com

1.0 ABILITY ENHANCEMENT AND VALUE-ADDED COURSES

The Ability Enhancement and Value-Added Courses are designed to help student teachers acquire and demonstrate:

- knowledge and capacities in areas that are essential to a holistic education.
- capacities and values that are both useful to life as well as to a career in education.
- sensitivity, critical thinking and analytical capacities, reflection, sensibilities for dialogue and cooperative learning, aesthetic appreciation, and values for a sustainable world - all this in the context of India's rich and diverse cultural context.
- capacity to explore possibilities in different areas of learning, directly and indirectly connected to education.

Principles of Designing the Course

- The courses have a practical orientation in that they emphasize real-world application of ideas with special focus on application in the practice of education.
- Pedagogy across courses emphasize 'practice' and 'doing.'
- The courses facilitate breadth of knowledge rather than depth.
- The courses have emphasized on the capacities and values that are important for teachers.

5.1 Language 1 (As per the 8th Schedule of the Constitution of India)

Credits: 4
Semester: S-1

5.1.1 About the Course

Language has undeniable links with all kinds of learning. Language enables an individual to understand new concepts, exchange ideas and communicate thoughts with fellow beings. To appreciate fully the role of language in education, one must begin to develop a holistic perspective on language. Language needs to be examined in a multi-dimensional space, giving due importance to its structural, literary, sociological, cultural, psychological, and aesthetic aspects. The National Education Policy 2020 envisages imparting language skills as part of holistic education. It lays thrust on the need to enhance linguistic skills for better cognitive development and the development of a rounded personality of the learners. This course aims at enabling student teachers to enhance their ability to listen, speak, read, write and demonstrate linguistic skills in an effective manner. Linguistic skills - listening, speaking, reading, writing, speaking effectively - are fundamental to constructing knowledge in all academic disciplines, and, participating effectively in the world of work and creating sense in the everyday life. Through this course, the students will be able to enhance proficiency in reading with comprehension, understanding, thinking, and conceptualizing. The course seeks to enhance critical thinking abilities and effective communication skills of student teachers. The course involves hands-on activities and practical sessions that help student teachers develop and use linguistic skills in a variety of situations.

5.1.2 Learning Outcomes

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

- Demonstrate knowledge and capacity for effective listening, speaking, reading, writing and critical thinking.
- recognize the link between language and cognition and using linguistic knowledge and skills for effective communication of ideas and thoughts.
- build inter-personal relationships and enhance social skills.

UNIT - I

Understanding Language, Communication and Cognition

- A. Language, communication, and cognition; Definitions and functions of language. Types of communication, Language, culture and society, Bi-/Multilingualism in India, Language learning, translation, formal and informal communication, verbal and non-verbal communication, gestures language skills (listening, speaking, reading, & writing) and the new-age technologies. Language as a means of communication and language as a medium of cognition.
- B. Nature and process of communication: principles, Definition, and types; Language: Definition, characteristics, functions; Language and society: language variation, language and dialect, language policy and language planning, language standardization; Multilingualism in Indian context, Language as a means of communication and language as a medium of cognition.
- C. The process of communication, barriers to communication, written and oral

communication, the story of human communication from early times to new age; Language variation, Multilingualism.

- D. Context of communication, the role of decoder, face to face interaction, turn taking, conversation, politeness principles, opening and closing, regional variation, social variation, the standard language.

UNIT - II

Understanding Grammar

- A. Classification of speech sounds and letters, stress, pitch, tone, intonation and juncture, parts of speech, identification of morphemes, word formation processes, sentences-simple, complex, and compound, semantics and pragmatics, lexical semantics, speech acts.
- B. Production of speech sounds in languages; Suprasegmentals: stress, pitch, tone, intonation; Word formation processes; Sentence formation, semantics, and pragmatics.
- C. Identification of morphemes, word formation processes; Sentence formation, vocabulary formation; Pragmatics and speech acts.
- D. Sound production in the language; Coining new words, Speech acts.

UNIT - III

Reading Skills

- A. Reading comprehension, types of reading, text, meaning and context, reading as an interactive process; strategies for making students active readers and developing critical reading skills; Understanding denotative and connotative aspects of a text, Vocabulary development through reading.
- B. Features that make texts complex, reading as an interactive process; Strategies for making students active readers and developing critical reading skills; Understanding denotative and connotative aspects of a text, Vocabulary development through reading.
- C. Reading discipline-based texts; vocabulary development

UNIT - IV

Writing Skills

- A. Speech versus writing; Types of writing; writing for specific purposes (essays, letters, and reports).
- B. Language and style of Writing; Dealing with New Words (Academic Vocabulary Building)
- C. Summarizing and Paraphrasing techniques.

UNIT - V

Speaking skills

- A. Speaking to learn and learning to speak; situational conversations and role plays; tasks/activities for developing speaking (speech, elocution, discussion, debate, storytelling, illustrations).
- B. Activities for developing speaking, role play; The impact of culture on speaking.
- C. Presentation and speaking skills; Practicing narrative skills; Body language, voice, and pronunciation; Creating interest and establishing a relationship with the audience.

UNIT - VI

Listening Skills

- A. Why listening is important; kinds of listening; Listening strategies.
- B. Need for modelling good listening behaviour; Listening across the curriculum, note taking.
- C. Listening Comprehensions and Recorded speeches/texts; Understanding of various accents.

UNIT - VII

Academic writing

- A. Academic writing components; development of academic language; Activities to develop academic writing skills.
- B. Developing Critical, analytical, and interpretive thinking skills.
- C. Learning to analyze.

UNIT - VIII

Critical thinking

- A. Enhancing Critical thinking abilities; Critical Interpretation, Questioning and Challenging your Beliefs and Values; developing ideas and evaluating an argument.
- B. Observing a problem, describing the problem, framing the problem, comparing, and evaluating a problem.

5.1.3 Suggestive Practicum

- 1. How do you interpret every day and reflect what you read? Prepare a report.
- 2. Analyze a recorded video from the perspective of voice and pronunciation and write a report.
- 3. Observing, describing and frame a problem and evaluating it.

5.1.4 Suggestive Mode of Transaction

Teaching this course will involve a mix of 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. The students are expected to read assigned chapters/ articles before the session and the course requires active participation from the students.

5.1.5 Suggestive Mode 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.

5.1.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

5.2 Language 2 (Other than L1)

Credit 4
Semester S-2

5.2.1 About the Course

The course aims to prepare the students to teach language at the school level. It focuses on training the students to the sounds systems of languages, word formation processes, sentence formation, semantic and pragmatic aspects of languages. The course intends to enable the learners to integrate all the four language skills using different genres. The major aim of this course is to empower the learners to contribute to the discourses on various issues and themes. The course also orients the students to the use of different technology and digital media for developing their own communicative skills as well as the school students they would teach in the future. The course helps improve basic communication skills such as listening, speaking, reading, and writing skills among L2 language learners. The course is designed to enhance knowledge of grammar of L2 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. The course also seeks to enhance students' critical thinking capacities and demonstrate effective communication skills and provide hands-on activities to student teachers to develop their linguistic skills through practical sessions.

5.2.2 Learning Outcomes

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

- demonstrate reading, writing, listening, speaking, and thinking abilities in L2,
- 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.

UNIT - I

Language, Society, and learning

- A. Bi-/Multilingualism and scholastic achievements; need to promote multilingualism; Language variation and social variation; languages, dialects and varieties, cultural transmission of language, language, and gender; language and identity; language and power; constitutional provisions and National Education Policy 2020.
- B. Language acquisition and Language learning; language learning from mother tongues to other tongues; advantages of learning other languages; language and education; notion of first language, second language and others.

UNIT - II

Speech and Writing

- A. Writing Systems: Speech and writing; arbitrariness in language; types of writing systems.
- B. Classification sessions of speech sounds: vowels, consonants, and others; suprasegmental: stress, pitch, tone, intonation, and juncture; Acoustic phonetics.

UNIT - III

Understanding Grammar

- A. Word and meaning; parts of speech, grammatical categories; word formation: affixation, compounding, reduplication, vocabulary building.
- B. Sentence and its constituents: simple, complex, and compound sentences; Semantics and pragmatics: lexical meaning- synonymy, antonymy, meronymy, grammatical meaning, speech acts.

UNIT - IV

Basic Communication Skills in L2

- A. Pronunciation and listening comprehension skills.
- B. Reading and reading comprehension skills.
- C. Effective writing skills; effective presentation and speaking skills; summarizing and paraphrasing skills.

UNIT - V

Critical Reading and Thinking Skills

- A. Components of critical thinking and reading; high order cognitive development; critical thinking and problem solving; rational inquiry.

5.2.3 Suggestive Practicum

- 1. Listen to a recorded speech and classify it based on sounds: vowels, consonants, and others; suprasegmental: stress, pitch, tone, intonation, and juncture; Acoustic phonetics.
- 2. Analyze sentences and their constituents as simple, complex, and compound sentences from written work.

5.2.4 Suggestive Mode of Transaction

Teaching this course will involve a mix of 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. The students are expected to read assigned chapters/ articles before the session and the course requires active participation from the students.

5.2.5 Suggestive Mode 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.

5.2.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

5.3 Art Education (Performing and Visual) and Creative Expressions

Arts - Approach

1. Every student has to complete two courses in the Arts of 2 credits each across the Visual and Performing Arts.
2. There are many art forms within both the Visual and Performing Arts.
3. All these forms require teacher expertise as well as time and resources for the student to learn.
4. We have described **three exemplar arts courses** based on different forms of Visual and Performing Arts.
5. Institutions could choose to offer any specific art form based on the availability of faculty and resources. Institutions could then design their courses based on these three exemplars.

5.3 Art Education (Performing and Visual) and Creative Expressions

Exemplar 1 - Puppetry

Credits 2
Semester S-1 and S-7

5.3.1 About the Course

Engagement with various forms of art as self-expression and need to develop sensibility to appreciate them has been an important concern in educational theory and practice. This concern is premised on the claim that forms of self-expression contribute immensely to the development of cognitive, affective, and psycho-motor dimensions among children, as well as that through one or another art form, children come to explore ways of expressing themselves. Further, it is also the case that critical appreciation of art enables children to form judgments of a very special kind, namely, aesthetic judgment. This enables students as they grow into adults to have focused attention on making sense of and appreciating cultural productions.

Children enjoy artwork a lot. They explore and find meaning in artwork. Their psycho-motor skills get developed through art. The huge element of socialization is acquired through different forms of art. They get to know each other and understand each other and make friends through art. They develop their peer group through getting involved in art forms. Learning to work with others is also achieved through art. It gives them space to think independently, create and reflect. It is one space where all the three are involved- hand, head, and heart.

Therefore, educational practitioners that the students of MA Education aim to be, will need to bring an element of art in practices that they engage in. To be able to do this, they need an appreciation of art in general, familiarity with one art form, and basic skills and capabilities to be creative and artful. Additionally, they should be familiar with some critical debates in art education, even if their work is in other subject areas.

To this end in the first semester students will do one course that aims to help them recognize and appreciate the importance of aesthetic judgment, develop familiarity with an art form and basic skills to be creative and artful in their expressions. Skills develop from practice, therefore hands-on training in doing art will be emphasized in this course. This course aims to help students develop a habit of performing skillful activities that are essentially aesthetic and artful which is expected to contribute to other educational practices that they develop in other courses in the programme. Therefore, this course will explicitly relate this skill to activities that practitioners of education engage in, like teaching, development of teaching-learning material, and content of other subject areas wherever possible.

Puppetry

Puppetry is an integrated art form, which takes into its fold everything from fine arts to performance. Puppetry is one of the oldest forms of performing art. Puppetry has evolved over the years into a sophisticated form of art. The journey was very interesting with a lot of ups and downs. There are thousands of forms of puppetry from simple finger puppets to highly complex puppets played by more than 3 people. Each country has a puppet form, why country, each area in a country has a puppet form. Hence, in India you will find many, many forms of puppetry.

In puppetry there are two main aspects. One the designing and creating of puppets and the other playing or performing puppetry. These two skills are different. Designing will need a lot of thinking, visualization, and technical skills while performance will need high level

communication skills. Hence, together they make a consolidated a high range of skills. In this course, students are exposed to different forms of puppets and puppetry. There will be a discussion around the forms and the aesthetic sense of puppetry. Later the students are encouraged to prepare, design and create puppets. They then prepare script and play the puppets. This creation of the puppets together in small groups with a lot of discussions and give and take helps the students develop working together skills and conceptual understanding.

Learning Outcomes

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

- articulate the importance of aesthetics and art in elementary education,
- demonstrate their familiarity with and appreciation of puppetry,
- design puppets,
- practice and create a short puppetry show.

UNIT - I

Importance of Aesthetics and Art education (2 Sessions)

In this unit the basic idea of aesthetics and art, and ways in which the aesthetic dimension manifests itself in human life will be discussed. Using various examples of art, students will engage in identifying aesthetic aspects of daily life, develop aesthetic judgment, and gain familiarity with the role of art in education. Students will also be introduced to three aspects of art in education: The value of art itself and its use as an instrument in education; moral dimensions of works of art and the controversial distinction between the value of Popular art and High art.

UNIT - II

Designing Puppets (6 Sessions)

In this unit, students will learn about puppetry, its history and specifically about how puppets work. This unit will also discuss the imagination required to design puppets, visualize how puppets will be used and the technicalities of designing puppets. These will be learnt by designing puppets. Students will start with constructing finger puppets and move towards small shapes through papers, like Fish, birds, rat - then they will design masks, flat masks, and masks with dimensions. At the end they will design puppets with old newspaper. The puppets are designed with old newspapers and colour papers. They decorate it and design it in such a way that it can be played, performed. They prepare costumes and all other accessories.

UNIT - III

Performing the puppets (4 Sessions)

This unit will engage in performance of puppetry and the level of communication skills required to create a good engaging story and perform it with the help of puppets they have created. The performance will be expected to relate to some activity in the educational context. Students will perform the puppets they have designed. Initially each member will play their own puppets. Later they will play in pairs, later they will be formed into a small group and asked to prepare their own skits with the puppets. They conclude by performing in small groups. Their learning is consolidated and reflected.

Discussion is held on how different aspects of puppet making can be incorporated in class room processes of young children. Adapting the individual and group exercises done during the puppetry course will be discussed to be used in the classroom situation.

5.3.3 Pedagogy

The Pedagogy is basically hand-on training. More emphasis is given to experiential learning. They do things and through doing learn about art and its connection to education. The process takes you through different forms of art- fine arts, playing with colours, costume designing, facial make -up, script writing, music, and performance.

5.3.4 Suggestive Mode of Assessment

Details to be determined by the faculty member as per applicable UGC norms.

Week wise break up of sessions			
Sl. no	Topics	Session flow	Remarks
1	Aesthetics and art, art in everyday life.	Based on their experience	
2	Importance of art. Appreciation of art.	Discussion	
3	Art for art sake. Art with social responsibility. art for social change	Debate	
4	The world of puppetry. Different forms of puppetry.	Presentations	
5	History of puppetry	Lecture	
6	Preparation- finger puppets	Hands on	
7	Preparation of masks	Hands on	
8	Preparing puppets	Hands on	
9	Performing individually	Practice	
10	Performing in pairs	Practice	
11	Performing in groups – 3, 4, 5.	Practice	
12	Assignments	Written.	

5.3.5 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

5.3 Arts (Performing and Visual) and Creative Expressions

Exemplar 2 - Theatre

Credits 2
Semester S-1 and S-7

5.3.1 About the Course

The engagement with various forms of art as self-expression and the need to develop a sensibility to appreciate them has been an important concern in educational theory and practice. This concern is premised on the claim that forms of self-expression contribute immensely to the development of cognitive, affective, and psycho-motor dimensions among children, as well as that through one or another art form that children come to explore ways of expressing themselves. Further, it is also the case that critical appreciation of art enables children to form judgments of a very special kind, namely, an aesthetic judgment. This enables students as they grow into adults to have focused attention on making meaning of what surrounds them and in appreciating cultural productions.

Children are naturally tuned to appreciate art, as it activates their senses. Further, their psycho-motor skills get developed through art. It gives them space to think independently, create and reflect, while working with others. It is a unique space where all the three are involved- hand, head and heart.

Therefore, students who aim to be educational practitioners, will need to bring an element of art in educational practices that they engage in. To be able to do this, they need an appreciation of art in general, familiarity with one art form, and basic skills and capabilities to be creative and artful.

To this end in the first semester students will attend one course that aims to help them recognize and appreciate the importance of aesthetic judgment, develop familiarity with an art form and basic skills to be creative in their expressions. Skills develop from practice, therefore hands on training in doing art will be emphasised in this course. This course aims to help students develop a habit of improvising on theatrical performances that include following aesthetic judgement at all stages, which will contribute to other educational practices that they develop in the larger programme. Therefore, this course will explicitly relate this skill to activities that practitioners of education engage in, like teaching, development of teaching-learning material, and also producing content of other subject areas wherever possible.

Theatre

Theatre is a collaborative art form, and it is inherently interdisciplinary in its nature. It comprises many facets and skills like acting, directing, writing, designing the sets and costumes, make-up, production, lights, sounds and music. All these elements and skill sets come together and are stitched in the form of a ‘play’ which is performed live, in front of an audience. In the Indian context, theatre has a deep-rooted history with its classical, folk, and other cultural forms until other contemporary forms of theatre evolved in recent times.

Theatre education for children can play a vital role in their individual, social, and emotional development. It teaches them the values of trust and interdependence, makes them confident to express themselves and helps them learn to work in a collaborative environment. It develops their ability to contextualise, critique and discuss certain questions and thoughts they encounter in everyday life. It further helps them imagine, explore, and create their own narratives.

In this course, we will briefly talk about the aesthetics of theatre and how theatre exists in different forms. The students will learn some basic theatre tools that will help them create and perform a narrative they collaboratively arrive at.

In simple terms one can say theatre has two major aspects i.e., creating the script and then performing it. Body is the primary instrument in any theatrical performance accompanied by text, material, visual and sound. This course will introduce students to these aspects of any theatre performance, in the form of direct experience by doing this themselves.

5.3.2 Learning Outcomes

After completion of this course, students will be able to:

- articulate the importance of aesthetics and art in elementary education,
- demonstrate their familiarity with and appreciation of theatre,
- learn basic theatre tools of improvisation, ideation, and creation of a script,
- create a short performance with educational possibilities.

UNIT - I

Importance of Aesthetics and Art education (2 Sessions)

In this unit the basic idea of aesthetics and art, and ways in which the aesthetic dimension manifests itself in human life will be discussed. Using various examples of art, students will engage in identifying aesthetic aspects of daily life, develop aesthetic judgment, and gain familiarity with the role of art in education. Students will also be introduced to three aspects of art in education: The value of art itself and its use as an instrument in education; moral dimensions of works of art and the controversial distinction between the value of Popular art and High art.

UNIT - II

Introduction to Theatre, and Beginning with the body (3 Sessions)

We will discuss some core essentials in the aesthetics of theatre like the performance, the makers, the audience, and the context and how we relate this to the world around us, in everyday lives. In this unit, we will discuss examples of how theatre was used in social movements that have contributed to educating the larger population about important social issues. Additionally, we will also learn from practices and approaches of theatre groups like Budhan Theatre who work with denotified tribes, and Manalmagudi who work closely with physical nonverbal theatre. Exposing students to these approaches will lead to rich discussions on the role of theatre in pedagogy and practice.

In this unit, students will learn certain principles and awareness on how to use their body and voice in a given space and time, with respect to other bodies. There will be several games, exercises that will familiarise them with certain basics of movement, voice, acting and thereby create improvisations and images in a given context. The activities and tasks will be both in individuals and groups.

UNIT - III

Arriving at a script

(3 Sessions)

We will engage in some theatre making processes to arrive at a script by the end of this unit. How to adapt or devise a script with actors? How can we borrow from everyday experiences of memory, sound and visuals, without a written text or spoken word? Plays, stories, poems, newspapers articles, will be shared to read, reflect, analyse, and re-create like “Why, why Girl” by Mahashweta Devi, “Ratna Pakshi” by K Ramaiah, “Beyond the land of Hattamala and Scandal in Fairyland” by Baadal Sircar, and songs of Kabir etc. The texts chosen will have a direct relation with topics from social studies, moral and political education.

Students will use their skills of improvisation they learned in Unit 2 to explore, ideate, create, and finally arrive at a script. What kind of stories, narratives, and characters they choose to perform will lead back to the discussion of aesthetics. Students will mostly work in groups to choose or create a text, concept, or an idea which they want to perform. Students will be encouraged to use their perspectives on the education system, in converting the text into a script.

UNIT - IV

Performing the script

This unit will engage in the actual making of the final piece they choose to make. Students will have to visualise the final text on stage and start rehearsing in their groups. Apart from using their bodies to play characters, the students will also have to think about design and other aesthetic elements like sets, props, costumes, lights, music and sounds they want to use in the performance.

Students will have to practice beyond the six classes as the class time will be utilised to discuss and provide feedback as the work progresses. The last two classes in this unit will be utilised for the final rehearsals and assessments. The final performance will take place in front of a small audience followed by a brief post-performance discussion. Students will engage in discussing and reflecting on the views, questions and comments shared by the audience.

5.3.3 Pedagogy

The pedagogy is basically hands-on training. More emphasis is given to experiential learning. They do things and through doing, they learn about art and its connection to education. The process takes you through different forms of art- fine arts, playing with colours, costume designing, facial make -up, script writing, music, and performance.

5.3.4 Suggestive Mode of Assessment

Details to be determined by the faculty member as per applicable UGC norms.

Week wise break up of sessions		
Week	Topics	Session flow
1	UNIT - I: Aesthetics and art, art in everyday life. Importance of art. Appreciation of art	Based on their experience
2	Art for art's sake. Art with social responsibility. Art for social change	Discussion
3	UNIT 2: Aesthetics of Theatre	Discussion
4	Body work - Individual and group	Hands on
5	Body work – Improvisation	Hands on
6	UNIT - III: Adaptation of texts. Aesthetic choices.	Hands on, discussion
7	Story making and devising	Hands on
8	Arriving at a text	Hands on
9.	UNIT - IV: Visualising the final piece. Thinking about design and aesthetic elements.	Hands on, Discussion
10.	Rehearsals and feedback	Hands on
11.	Rehearsals and feedback	Hands on
12.	Final rehearsals and assessment	
13.	Finals rehearsals and assessment	
14.	Performance and audience discussion	

5.3.5 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

5.3 Arts (Performing and Visual) and Creative Expressions

Exemplar 3 - Collage-Making

Credits 2
Semester S-1 and S-7

5.3.1 About the Course

Engagement with various forms of art as self-expression and the need to develop sensibility to appreciate them has been an important concern in educational theory and practice. This concern is premised on the claim that forms of self-expression contribute immensely to the development of cognitive, affective and psycho-motor dimensions among children, as well as that through one or another art form, children come to explore ways of expressing themselves. Further, it is also the case that critical appreciation of art enables children to form judgments of a very special kind, namely, aesthetic judgment. This enables students as they grow into adults to have focused attention on making sense of and appreciating cultural productions.

Children enjoy artwork a lot. They explore and find meaning in artwork. Their psycho-motor skills get developed through art. The huge element of socialization is acquired through different forms of art. They get to know each other and understand each other and make friends through art. They develop their peer group through getting involved in art forms. Learning to work with others is also achieved through art. It gives them space to think independently, create and reflect. It is one space where all the three are involved- hand, head, and heart.

Therefore, educational practitioners that the students aim to be, will need to bring an element of art in practices that they engage in. To be able to do this, they need an appreciation of art in general, familiarity with one art form, and basic skills and capabilities to be creative and artful. Additionally, they should be familiar with some critical debates in art education, even if their work is in other subject areas.

To this end, students will do one course that aims to help them recognize and appreciate the *importance of aesthetic judgment, develop familiarity with an art form* and basic skills to be *creative and artful in their expressions*. Skills develop from practice, therefore hands-on training in doing art will be emphasized in this course. This course aims to help students develop a habit of performing skillful activities that are essentially aesthetic and artful which is expected to contribute to other educational practices that they develop in other courses in the programme.

Therefore, this course will explicitly relate this skill to activities that practitioners of education engage in, like teaching, development of teaching-learning material, and content of other subject areas wherever possible.

Collage as visual art medium

A major aspect of college, and one that is sometimes overlooked, is the incredibly diverse array of materials and objects that can be used. Collecting interesting materials is an ongoing activity for artists and for those who teach college. But it is just as important for young people to hunt for and make decisions about materials they would like to incorporate into their work. All materials, and the alterations that artists make to them, are suggestive of ideas and concepts based on their surfaces, forms, textures, degree of transparency and opacity, color, and other visual characteristics. Materials also connect us, through association and reference, to social and cultural worlds and places. What ideas might a scrap of newspaper, as a collage material,

express? How might these meanings differ from those of, say, feathers? Or twigs? Or a thin piece of plastic cut out from a plastic bag?

Working with and creating artwork in Collage involves various aspects: selecting materials, manipulating materials, investigating materiality, closely observing materials, discovering possibilities, composing, designing the artwork, planning, finding solutions, applying solutions, thinking flexibility, decision-making, research, using imagination, expressing, taking creative risks, develop perseverance, and much more. Students will also be introduced to various aspects of art in education: The value of art and artmaking by itself, art's use as an instrument in education, social and moral dimensions of art, and the controversial perceptions around good art and bad art.

This course aims for students to understand the importance of aesthetics and art in education, the role art can play in education, and mainly to appreciate, understand and gain skills with the medium of collage and its techniques.

5.3.2 Learning Outcomes

After completion of this course, students will be able to:

- articulate the importance and the role of aesthetics and art in education.
- understand the medium of collage and its versatility.
- design, plan, and create an expressive self-portrait collage by applying a variety of collage techniques.
- design and set up an interactive visual art exhibition to display their artworks.
- understand and appreciate art-based learning experiences.
- develop the ability to reflect and challenge their assumptions and beliefs around art and develop new understandings.

UNIT - I

Understand the importance of Aesthetics and Art in Education (2 Sessions)

Students will be introduced to Aesthetics and Arts by engaging in experiences, discussions, and dialogues. Students will experience a session of 'Visual thinking strategy' (VTS) activity in which students will collectively view and engage in a series of artworks closely, share their observations, critically analyze their observations, listen to multiple perspectives from peers, suspend judgements, and draw their own understanding of the artwork. Students will recognize aesthetic and un-aesthetic experiences through compare and contrast. Through this activity and unpacking of the experience, students will start making connections and develop understandings around what aesthetics mean, aesthetic aspects of daily life, develop aesthetic judgment, and how arts evoke emotion and awaken.

UNIT - II

Exploring paper collage and its techniques (4 Sessions)

Students will be introduced to the medium of collage and open their minds to the possibilities within this medium. Students will view and discuss examples of collage artworks, artist process and artist interview videos. Students will get a chance to compare and contrast various ways collage as a medium is used. Students will reflect upon their own past art educational experiences and observations and engage in dialogue and discussions. Students will analyze effective and ineffective ways of using the medium of collage in educational and other settings.

Through inquiry-based participatory demonstrations, students will investigate and discover a variety of ways to manipulate paper and create individual and unique two-dimensional compositions in the medium of paper Collage. They will understand and learn the techniques, artistic terminologies of the collage medium. Students will reflect on their experience and engage in facilitated discussions to deepen their understanding on the role of art medium exploration and how it can foster various learning skills.

Students then use their knowledge and experience from the previous sessions and explore collage as a medium further. Students will investigate, discover, and learn to create visual textures, physical textures, and create their own unique patterns. They will understand the difference between textures and patterns. Students will use a variety of techniques to create unique textures and patterns, analyze their findings, give each other feedback, work in groups to problem solve, etc. They will understand how art medium explorations can be used as a pedagogical tool in learning environments.

Students will bring in various materials found around them like different kinds of paper, paper-based materials, natural materials, fabric, and explore these materials and use them as materials to create collage compositions. Students will explore a wide range of techniques and discover their own ways to manipulate these found materials to create interesting textures and patterns. Students will work in groups, problem solve, investigate, develop solutions on their own, and share their findings with each other. Through discussions, students will reflect upon this exploration experience and understand how art making processes can develop skills and abilities in a learner.

Resource Videos

1. *Works of Deborah Roberts, William Kentridge, Wangechi Mutu, etc*
2. *Marc, Cut paper collage artist* - <https://www.youtube.com/watch?v=WgRZlWl-Oh0>
3. *G. Subramanian: Collage art* - <https://www.youtube.com/watch?v=ioRRi9R46a0>
4. *Amber Fletschock, Collage artist* - <https://www.youtube.com/watch?v=aa7p1vYqUc4>
5. *Arturo Herrera, artist* - https://www.youtube.com/watch?v=Oagx3_NZ5HU

UNIT - III

Ideating for an Expressive Self-Portrait (2 Sessions)

In this session students will further explore and discover possibilities in Collage as a medium. Students will learn a variety of ways to make paper stands and create interesting paper sculpture compositions using 3D techniques. Students will draw from their previous experiences of using paper for 2D explorations and add more interest to their unique 3D explorations. Students will share their findings with peers and widen their understanding about the possibilities. Students will reflect on all the material exploration sessions thus far and participate in a facilitated dialogue around art making and education.

Students will engage in a close observation sketching and drawing activity. Through a guided process, students will create a well observed self-portrait drawing. Students will engage in discussions and dialogue to unpack the self-portrait drawing experience, the learnings, discoveries, challenges and more. Through this activity students will also be able to challenge assumptions around talent and art-making.

Resources: Handouts out on Collage techniques and artist examples

Resources: JR's Face to face project (videos and readings)
https://www.youtube.com/watch?v=4u_G0G6Jog4

UNIT - IV

Creation of an Expressive Self-Portrait Collage (3 Sessions)

Students will engage in a step-by-step process involving sketching, ideating, planning, applying their discoveries of using paper as a collage material, and finally create a large expressive self-portrait using the medium of paper collage. Throughout the process students will problem-solve, critically think, push their imagination, find multiple solutions, make independent decisions, receive and give peer feedback, use resources effectively, draw from their own experiences, apply their learnings into creating this unique and expressive self-portrait piece.

UNIT - V

Designing and setting up an Exhibition (2 Sessions and Exhibition Day)

Students will collectively start designing and planning for the exhibition to put up their artworks for a general audience to view and engage with. Students will be planning the various aspects of a visual art exhibition: ways to display artworks, designing the layout of the exhibition space and how the audience will move within the space, design invitations, ways that the audience can engage with the artworks, various ways the artists can talk about their art-making, and more. Students will divide the tasks among themselves, take on the various roles required, and set up the exhibition space.

Resources: Planning templates

5.3.3 Pedagogy

- Students will engage in hands-on art making activities.
- Students will engage in discussions and dialogues with peers.
- Students will engage in giving and receiving peer feedback.
- Students will continually reflect on their learning through journaling.
- Students will work independently and collaboratively throughout the course.
- Students will receive reference materials and resources to broaden and deepen their understanding.

5.3.4 Suggestive Assessment

Details to be determined by the faculty member as per applicable UGC norms.

5.3.5 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

5.4 Understanding India (Indian Ethos and Knowledge Systems)

Credits 2
Semester: S-1

5.4.1 About the Course

At a time when the world finds itself deep in dynamism, led by technological innovations and environmental changes, there is a need for an inward-looking approach to building the young minds of a country. By looking inwards, one not only finds a sociological belongingness but also a spiritual and intellectual rooting in these changing times. The course provides an overview of India's heritage and knowledge traditions across key themes of economy, society, polity, law, environment, culture, ethics, science & technology, and philosophy. It places special emphasis on the application of these knowledge traditions, helping students to not only know and appreciate India's heritage and knowledge traditions but also to independently evaluate them through a multidisciplinary lens. This evaluation would produce valuable lessons for obtaining transferable and 21st-century skills. The course requires no pre-requisite knowledge or understanding. Spread over two years, the course will establish foundational knowledge and build upon it. It will allow students to have a basic understanding of the traditions of India and how it has evolved over the years. The course is designed to enable student teachers to outline and interpret the processes and events of the formation & evolution of knowledge of India through a multidisciplinary lens; to evaluate the diverse traditions of India to distinguish its achievements and limitations, and to develop and articulate an ethics-based education rooted in Indian thought to their students in the classroom context.

5.4.1 Learning Outcomes

After the completion of the course, students will be able to:

- recognize the vast corpus of knowledge traditions of India, while developing an appreciation for it,
- apply their acquired research and critical thinking skills in multidisciplinary themes,
- summarize and pass on their learnings to their students of different Indian traditions in an easily digestible manner.

UNIT - I

Introduction to the Knowledge of India

- A. Definition & scope; Relevance of this knowledge.
- B. Need to revisit our ancient knowledge, traditions, and culture.

UNIT - II

Culture - Art and Literature

- A. Fine arts (traditional art forms, contemporary arts, arts & spirituality, arts and Identity, and art and globalization);
- B. Performing Arts (Indian dance systems, traditional Indian pieces of music, visual arts, folk arts, etc.,).
- C. Literature (Sanskrit literature, religious literature, Indian poetry, folk literature, Indian fiction, Sangam literature, Kannada, Malayalam literature, Bengali literature, etc.

UNIT - III

Polity and Law

- A. Kingship & types of government (oligarchies, republics); Local administration (village administration);
- B. Basis of Law: Dharma & its sources; Criminal Justice: police, jails, and punishments; Lessons from Chanakyaniti; Lessons for modern-day India: Towards a tradition-driven equitable and just polity and law system.

UNIT - IV

Economy

- A. Overview of the Indian Economy from the Stone Age to the Guptas: The new culture of Urbanization (including castes, guilds, and other economic institutions; Harappan civilization economy; growth of agriculture and proliferation of new occupations; growth of writing);
- B. Internal & external trade and commerce, including trade routes, Indo-roman contacts, and maritime trade of South India; Temple economy.
- C. Land ownership - land grants & property rights, land revenue systems.
- D. Understanding Arthashastra: Ideas & Criticism; Locating relevance of ancient Indian economic thought in modern-day Indian Economy.

UNIT - V

Environment & Health

- A. Understanding Equilibrium between Society & Environment: Society's perceptions of natural resources like forests, land, water, and animals.
- B. Sustainable architecture & urban planning; Solving today's environmental challenges (best practices from indigenous knowledge, community-led efforts, etc.).
- C. India's Health Tradition: Ayurveda, Siddha, Ashtavaidya, Unani, and other schools of thought; Lessons from Sushruta Samhita and Charaka Samhita;
- D. Mental health in ancient India: towards time-tested concepts of mental wellness (concept of mind, dhyana, mind-body relationship, Ayurveda, yoga darshan, atman, etc.)

5.4.3 Suggestive Practicum

The modes of curriculum transaction will include lectures, Tutorials, and Practicum.

- Practicum will include organization of day trips that help student teachers watch events relating to visual and performing art; activities that enable student teachers to identify and record through photos, videos, etc. the elements of ancient architecture still existing in the city around them; organization of Individual and group presentations based on themes such as Polity, Law and Economy etc., organization of a 'Knowledge of India' day in the institution to celebrate the culture (food, clothes, etc.) that they would have been explored in lectures and tutorials; interactions with family members, elders, neighbors, and other members of society about the evolution of local systems and economy etc.

5.4.4 Suggestive Mode of Transaction

- Lectures will include learner-driven participatory sessions, and Guest lectures through experts and practitioners, such as fine arts and performing arts practitioners along with contemporary poets & writers of Indian literature.

- Tutorials will include Screening of documentaries and films followed by a discussion; Learner-driven discussions in the form of focus group discussions (FGDs), Socratic Discussions, etc.; Debate/discussion can be organized to explain India's Vaad tradition; discuss on how some of the ancient methods of teaching are relevant in today's time; discussions that help Identify ethical dilemmas in daily lives and understanding the importance of ancient ethics and values to resolve them.

5.4.5 Suggestive Mode of Assessment

The approaches to learning assessment will include, for example:

- Supporting the curiosity and interest of student teachers in the selected themes through a multi-modal approach, including regular assessments and actionable feedback that enable learners to outline and interpret the processes and events of the formation & evolution of knowledge of India through a multidisciplinary lens.
- Enabling the student teachers to demonstrate critical analysis and independent thinking of the processes and events in the formulation & evolution of different traditions that help student teachers evaluate the diverse traditions of India to distinguish its achievements and limitations.
- Use of first-hand or second-hand experiences that enable student-teachers to develop and articulate an ethics-based education rooted in Indian thought to their students in the classroom context.

5.4.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

5.4 Understanding India (Indian Ethos and Knowledge Systems)

Credits 2
Semester: S-2

5.4.1 About the Course

At a time when the world finds itself deep in dynamism, led by technological innovations and environmental changes, there is a need for an inward-looking approach to building the young minds of a country. By looking inwards, one not only finds a sociological belongingness but also a spiritual and intellectual rooting in these changing times. The course provides an overview of India's heritage and knowledge traditions across key themes of economy, society, polity, law, environment, culture, ethics, science & technology, and philosophy. It places special emphasis on the application of these knowledge traditions, helping students to not only know and appreciate India's heritage and knowledge traditions but also to independently evaluate them through a multidisciplinary lens. This evaluation would produce valuable lessons for obtaining transferable and 21st-century skills. The course requires no pre-requisite knowledge or understanding. Spread over two years, the course will establish foundational knowledge and build upon it. It will allow students to have a basic understanding of the traditions of India and how it has evolved over the years. The course is designed to enable student teachers to outline and interpret the processes and events of the formation & evolution of knowledge of India through a multidisciplinary lens; to evaluate the diverse traditions of India to distinguish its achievements and limitations, and to develop and articulate an ethics-based education rooted in Indian thought to their students in the classroom context.

5.4.2 Learning Outcomes

After the completion of the course, students will be able to:

- recognize the vast corpus of knowledge traditions of India, while developing an appreciation for it,
- apply their acquired research and critical thinking skills in multidisciplinary themes,
- summarize and pass on their learnings to their students of different Indian traditions in an easily digestible manner.

UNIT - I

Introduction of Knowledge of India

- A. Recap of the previous semester's definition and introduction.
- B. Recap of previous knowledge.

UNIT - II

Philosophy, Ethics & Values: Schools of Philosophy

- A. Vaishesika, Nyaya, Samkhya, Yoga, Purva Mimamsa and Vedanta or Uttara Mimamsa (theory and the major thinkers) – and Jain, Buddhist, and Charvak traditions.
- B. Vedanta: philosophical systems (Advaita, Vishishtadvaita, Dvaita).
- C. Ethics, morality, and social dilemma (including self-leadership) and their relevance in today's time.
- D. How do Indians value spirituality? Spirituality and Social Responsibility; Importance of Spirituality in current times.

- E. Using ethics in a technologically volatile world: leading an ethical and modern life.
- F. Practical Vedanta for well-being (mindfulness, inter-connectedness, society-self relationship, etc.).

UNIT - III **Culture- Lifestyle**

- A. Food (regional cuisines, ayurvedic diet, food and festival, vegetarianism, Jainism in food, food and hospitality, and globalization).
- B. Clothes (traditional Indian clothing, textile arts, religious costumes, clothing status, clothing, gender, globalization in clothing).
- C. Sports (traditional Indian sports, martial arts, sports, and gender, sports & globalization).
- D. The lifestyle of Yoga; adapting ancient lifestyle – A path towards longevity.

UNIT - IV **Science & Technology**

- A. Arithmetic and logic.
- B. Natural sciences: math, physics, metallurgy, and chemistry.
- C. Astronomy: India's contributions to the world.
- D. Indian notions of time and space.
- E. Technology in the economy: agriculture, transportation, etc.

UNIT - V **Linguistic Traditions**

- A. History of linguistics in India (conceptualizing ancient Indian linguistics, oral traditions, etc.).
- B. Language as Culture: Evolution of Languages over the years & language as building blocks to different cultures and society
- C. Language: Identity, culture, and History.

5.4.3 Suggestive Practicum

The modes of curriculum transaction will include lectures, Tutorials, and Practicum.

- Practicum will include organization of day trips that help student teachers watch events relating to visual and performing art; activities that enable student teachers to identify and record through photos, videos, etc. the elements of ancient architecture still existing in the city around them; organization of Individual and group presentations based on themes such as Polity, Law and Economy etc., organization of a 'Knowledge of India' day in the institution to celebrate the culture (food, clothes, etc.) that they would have been explored in lectures and tutorials; interactions with family members, elders, neighbors, and other members of society about the evolution of local systems and economy etc.

5.4.4 Suggestive Mode of Transaction

- Lectures will include learner-driven participatory sessions, and Guest lectures through experts and practitioners, such as fine arts and performing arts practitioners along with contemporary poets & writers of Indian literature.
- Tutorials will include Screening of documentaries and films followed by a discussion; Learner-driven discussions in the form of focus group discussions (FGDs), Socratic

Discussions, etc.; Debate/discussion can be organized to explain India's Vaad tradition; discuss on how some of the ancient methods of teaching are relevant in today's time; discussions that help Identify ethical dilemmas in daily lives and understanding the importance of ancient ethics and values to resolve them.

5.4.5 Suggestive Mode of Assessment

The approaches to learning assessment will include, for example:

- Supporting the curiosity and interest of student teachers in the selected themes through a multi-modal approach, including regular assessments and actionable feedback that enable learners to outline and interpret the processes and events of the formation & evolution of knowledge of India through a multidisciplinary lens.
- Enabling the student teachers to demonstrate critical analysis and independent thinking of the processes and events in the formulation & evolution of different traditions that help student teachers evaluate the diverse traditions of India to distinguish its achievements and limitations.
- Use of first-hand or second-hand experiences that enable student teachers to develop and articulate an ethics-based education rooted in Indian thought to their students in the classroom context.

5.4.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

5.5 Teacher and Society

Credit: 2
Semester S-2

5.5.1 About the Course

Teachers unarguably have the key role in nurturing young lives and shaping positive and inspired future generations. Emphasizing on the crucial role of teachers NEP 2020 states “teachers truly shape the future of our children - and, therefore, the future of our nation.” “The high respect for teachers and the high status of the teaching profession must be restored to inspire the best to enter the teaching profession. The motivation and empowerment of teachers is required to ensure the best possible future for our children and our nation.” (NEP Para 5.1). The NEP in its introductory section states, “the teacher must be at the centre of the fundamental reforms in the education system” and highlights the need to “help re-establish teachers, at all levels, as the most respected and essential members of our society, because they truly shape our next generation of citizens”. (NEP 2020, Introduction). The policy also stresses the need to “do everything to empower teachers and help them to do their job as effectively as possible.” It is recognized that teachers are second to mothers in having the opportunity to work with children during the most impressionable years in their life and shape opinions, form ideas about personal and social goals and about society and life, contributing so much to the development of both individuals and society.

The focus of the course on ‘Teacher & Society’ is on developing an understanding among student teachers of the roles of teachers in the emerging Indian society, including the changing roles of teachers in the context of the global flows of people, culture and resources that are shaping society, and the application of technologies that are constantly redefining not only the educational landscape but also the human relationships and social norms which are continuously undergoing change which entails a recalibration of the teacher roles aligned to the current and future realities and preparing teachers for the volatile, uncertain, complex and ambiguous world. The course enables the students to understand the roles and obligations of teachers as an architect of the society based upon the cultural ethos, traditions, and diversity. The student teachers shall be equipped with the knowledge, capacities and value system that enables them to act as an agent for fostering national integration, a feeling of pride in the cultural heritage and achievements of India. This course also aims to ensure that student teachers understand their responsibility for producing a future generation that undertakes its responsibility as an awakened citizen who avoids wastage of national resources and takes up a proactive role for the emergence of India as a strong and disciplined nation.

In addition to these, the course also seeks to enable each of the student teachers to respond to the needs of students from diverse cultural, linguistic, social and economic backgrounds; to be sensitive to gender issues, promote tolerance and social cohesion, provide special attention to students with learning disabilities, learn and apply new pedagogies and technologies, keep pace with current educational developments and initiatives; and keep oneself professionally engaged to update/upgrade knowledge and practice. Student teachers will be encouraged to comprehend how societal structures, context and historical patterns shape teacher identities on one hand and how teacher identities, beliefs, values, convictions and commitment shape the ethics, culture, norms and values on the other; thus, impacting the larger societal thoughts and actions. The

course also explores the relationship of the teacher with education development, community and society through different course units that talk of the teacher as a person and as a professional, the socio-cultural and technological contexts of the teacher and how they impact the teaching-learning process, the multiple roles, identities and expectations of a teacher. It invites the student teachers to be reflexive of one's thoughts, beliefs and actions and continuously take a gaze inside out so as to unbiasedly engage children in a reflective dialogue.

The course explores the agentic role of a teacher, how it gets influenced and how it influences the education system. It concludes with the re-calibrating of roles of teacher and teaching beyond the curricular boundaries as an architect of an inclusive, harmonious, and developing India.

5.5.2 Learning Outcomes

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

- examine the relationship between teacher beliefs, values, character, life history, social and cultural context and teaching critically,
- explain the teacher roles and characteristics; the personal and professional self; the teacher as a communicator, the charismatic influencer, the reflective practitioner, competent, learner and much more and their significant role in nurturing the posterity.
- differentiate between the narrow curricular aims of education and the broader educational aims and their role in shaping self, school, and society,
- demonstrate an ability to develop positive classrooms through engaging in the ethic of care,
- demonstrate an ability to critically reflect on personal and collective practice so as to improve learning and teaching,
- conceptualize teacher agency, its individual, contextual, and structural dimensions and how it gets impacted and in turn shapes education.

UNIT - I

Understanding the Teacher: Exploring the Personal and Professional Teacher

- A. Exploring the wider Personal and General Social Context of Teacher: Life History, Teacher Beliefs, Values and Aspirations, Diverse Identities, Social Contexts and Commitment to Learning and Education.
- B. Exploring the Professional Teacher: Qualifications, Education in teaching, Attitude, Aptitude, Experience and Exposure.
- C. The Charismatic Teacher, the Communicator Teacher, The Missionary Teacher, The Competent Practitioner, The Reflective Practitioner, The Learning Teacher.
- D. Reflexive Practice: Nurturing the Professional Capital through collaborative and/or collective engagement with self, others, the social context.

UNIT - II

Nurturing the Teacher: A Dialogue beyond the curricular goals, for Life and Posterity

- A. Teaching: One profession, many roles
- B. Teaching Character: Nurturing Teachers for Human Flourishing.
- C. Holistic Teacher Development: Nurturing the Panchakoshas.
- D. Teacher Values, Beliefs, and current Philosophy of Teaching: A Reflective Dialogue.
- E. Developing an Ethic of Care in Teacher Education: Nurturing Teachers towards a pedagogy of care.

UNIT - III

Understanding and Fostering Teacher Agency: Role in shaping Education Systems of Tomorrow

- A. Teacher Agency: What is it and why does it matter?
- B. Individual, Cultural and Structural Dimensions of Teacher Agency.
- C. Teacher discourses, Philosophy, Relationships, Networks and Professional Development: Shaping teacher agency and Creative insubordination.
- D. Challenges and Issues in fostering Teacher Agency: Performativity, Non-academic engagements, Systemic apathy, Policy and Practice gaps and others.
- E. Role of Teacher in shaping the educational policy, practice, and reforms

UNIT - IV

Teacher as an Architect of the New India: Shaping the Society of Tomorrow

- A. Engaging in Critical Education: Dialogues on power relations associated with Gender, Ethnicity, Culture, Disability, Class, Poverty, the reproduction of disadvantage and realizing the true human potential.
- B. Being a Critical Teacher: Raising debates around rapid technological advancement and impact on individual, family and social life; the growing isolation and impact on mental and social health and well-being, changing relationships between the 'state' and the 'market' and their impact on formal education; the conceptualization of teacher, teaching and teacher roles, 'globalization' and the reconstructed nationalism shaping the socio-political milieu and impact on social psyche, growing materialistic urge, sensory drives and the gradual deterioration of the individual and societal character.

5.5.3 Suggestive Practicum

1. Take up a case study of any one teacher education Institution.
2. Write a biography of any one of your favourite teachers/ Educationists.

5.5.3 Suggestive Mode of Transaction

Teacher and Society is a reformatory course that invites teachers to re-think teachers and teaching. It awakens and inspires teachers to realize broader educational aims through an action and reflection cycle. The approach therefore would include a blend of lectures, in-class seminars, thinking exercises, critical reflections, group-work, case-based approaches, and enquiry-based learning.

▪ Learners would also be exposed to case studies featuring teachers from a representative cross-section of Schools in India and critically analyse their exercise of agentic force in school improvement and the improvement of teaching practice.

- Situating themselves in the geo-political context, the learners will get to critically engage in some of the policy dialogues.
- Learners would reflect on their practice as pre-service interns, knowledge, skills, and understandings—and identify opportunities to apply course learnings to their school context.

5.5.5 Suggestive Mode of Assessment

Being a very thought-provoking course, the assessment would largely include critical thinking kind of assignments. The following are some exemplars.

1. Write your current teaching philosophy based on your beliefs and values.
2. Choose any one area of immediate societal concern like environmental degradation, increasing crime against women, cybercrimes, bullying or any other and draw an action plan that you as a teacher would undertake to mobilize self, school and society towards betterment.
3. Critical Reflections on popular debates around power relations associated with Gender, Ethnicity, Culture, Disability, Class, Poverty, and such others

These are just prototypes and institutes may choose either of these or think of other innovative assignments that would inculcate in the future teachers a sense of belonging for society.

5.5.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

5.6 Information & Communication Technology (ICT) in Education

Credit 2
Semester S-5

5.6.1 About the Course

The present course focuses on moving beyond computer literacy and ICT-aided learning, to help student teachers interpret and adapt ICTs in line with educational aims and principles. The paper will orient the learners about the need for and importance of ICT in education. It will describe the importance of opensource software in education. Students will be given exposure to the various approaches and stages towards the use of ICT in education. Students are expected to develop reasonably good ICT skills in terms of the use of various computer software and ICT tools.

5.6.2 Learning Outcomes

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

- explain the concept, nature, and scope of ICT in education,
- describe the importance of open-source software in education,
- list and explain various approaches to the adoption and use of ICT in education,
- describe the importance of various emerging technologies in education,
- See relationship between the social, economic, and ethical issues associated with the use of ICT,
- list out the challenges of educational technology in India,
- use various technological tools for improving teaching-learning- assessment processes.

UNIT - I

Introduction to (ICT) in Education

- A. Meaning, Nature, importance of Information Technology, Communication Technology & Information and Communication Technology (ICT) and Instructional Technology,
- B. Educational Technology and ICT in Education (Difference, Scope of ICT- Teaching, learning, Research & Publication Educational Administration and Assessment),
- C. Technology & Engagement: Internet, Collaborative learning through Online Discussion Forums, group assignments & Peer reviews,
- D. Meaning and Uses of Systems Approach in instructional design,
- E. Models of Development of Instructional Design (ADDIE, ASSURE, Dick and Carey Model Mason's),
- F. Flanders' Interaction Analysis Category System (FIACS),
- G. Challenges relating to Educational Technology.

UNIT - II

Emerging Technologies in Education

- A. E-learning Concept, methods, and media (LMS, Virtual Universities, Massive Open Online Course (MOOCs), Indian MOOCs, Types of MOOCs: cMOOCs, xMOOCs & LMOOCs).
- B. Open Education Resources (Creative Commons, Concept, and application).

- C. Augmented reality, Virtual reality, Artificial intelligence, Mixed Reality & Gamification in education (Meaning, history, importance, tools and uses).
- D. Cloud Computing & Internet of Things - Meaning, importance and uses.
- E. Ethical issues & safety in ICT- (Teaching, Learning and Research, Cyber bullying, Cyber security literacy & data protection, Online identity and privacy).

UNIT - III

ICT in Teaching-Learning & Assessment

- A. Concept, Approaches to integrating ICT in teaching and learning: Technological Pedagogical Content Knowledge (TPCK), Technology Integration Matrix (TIM).
- B. Implication of Learning Theories in ICT in Education: Behaviourism, Cognitivism & Constructivism.
- C. Developing functional skills to use discipline specific ICT tools (Geogebra, PhET, Stellarium, Open Street Map, Marble, Turtle Art, Technological tools for Mind mapping etc.).
- D. ICT and Assessment- Electronic assessment portfolio – Concept and types; e-portfolio tools.
- E. Online and offline assessment tools – Rubrics, survey tools, puzzle makers, test generators, reflective journal, question bank.
- F. ICT applications for Continuous and Comprehensive Evaluation (CCE).

5.6.3 Suggestive Practicum

1. Prepare an assessment tool on any one chapter of the textbook.
2. Explore any one online platform for MOOCs and prepare a report highlighting its structure and courses.

5.6.4 Suggestive Mode of Transaction

The pedagogy for the course ICT in Education should be designed to ensure that students have a good understanding of how to use technology for improving teaching-learning-assessment processes. It should provide a balance between theoretical knowledge and practical skills. The approaches to curriculum transaction may include the following:

- Active learning encourages student teachers to participate in discussions, brainstorming sessions, and problem-solving activities that help them develop critical thinking and problem-solving skills.
- Collaborative learning involves group projects and tasks that encourage student teachers to work collaboratively and learn from each other.
- Experiential learning involving Hands-on activities, field trips, and real-life scenarios that will give student teachers the opportunity to apply their knowledge and skills in a practical setting.
- Use of multimedia tools such as videos, interactive simulations, and animations that help enhance learning and make it more engaging.
- Self-directed and self-managed learning activities that encourage students to take charge of their learning process through independent research, self-reflection, and self-assessment which can promote lifelong learning.

5.6.4 Suggestive Mode of Assessment

The assessment for the course ICT in Education should evaluate students' knowledge, capacities, and attitudes towards the use of technology in education. The assessment methods will include the following:

- Project-based assessments involving projects that require student teachers to create an instructional/learning resource that incorporates ICT tools and then assess the quality of the resource.
- Peer assessment helps students develop their critical thinking and evaluative capacities through group tasks requiring assessment by a group of the work of another group.
- Reflective journals requiring student teachers to maintain a reflective journal and to reflect on their learning experience involving the use of ICT tools in education.
- Online quizzes and tests involving online quizzes and tests that can assess students' knowledge of the theoretical aspects of ICT in education.
- Observation and feedback involving observation of performance of student teachers during classroom activities and providing feedback that help assess their practical skills in using ICT tools for improving teaching-learning-assessment processes.

5.6.6 Suggested Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

5.7 Mathematical and Quantitative Reasoning

Credits 2
Semester S-6

5.7.1 About the Course

This course introduces the student teachers to study the basic mathematical & quantitative reasoning for their practical usage. This course is designed to provide student teachers with the knowledge and capacities required to analyze, interpret, and communicate quantitative data. Student teachers will learn to think critically about data and use quantitative reasoning to solve real-life problems.

5.7.2 Learning Outcomes

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

- adapt mathematical reasoning to solve problems in the real world and explain some fundamental ideas and tenets in this field,
- analyze and interpret quantitative data,
- interpret & deduce the right conclusions from numerical representations like formulas, graphs, or tables,
- demonstrate critical thinking and problem-solving skills using mathematical and quantitative reasoning methods,
- evaluate operational matrix,
- analyze educational data and create educational model & use them in decision making,
- analyze and evaluate mathematical and quantitative reasoning problems and solutions.

UNIT - I

Introduction to mathematical and quantitative reasoning

- A. Meaning, nature and scope of mathematical and quantitative reasoning.
- B. Importance of mathematical and quantitative reasoning in various fields.
- C. Types of quantitative reasoning.
- D. Usage of mathematical and quantitative reasoning.
- E. Concept of mathematization.

UNIT - II

Introduction to data in Education

- A. Data requirement, different sources of data
- B. School enrolment: gross enrolment ratios, net enrolment ratios, educational progression: dropout rate, literacy: measures of literacy
- C. Indian censuses, details of different items on which Indian censuses collect data.
- D. Nationwide sample surveys, National family health survey, District level household survey, UDISE

UNIT - III

Data Analysis & Interpretation

- A. Concept of data interpretation (equation, diagram, graph, tables)
- B. Statistical analysis of data in educational context and its applications (measures of central tendency, measures of variability, percentile)
- C. Visual and numerical representation of data and its application (bar diagram, histogram, pie charts)
- D. Learning analytics: concept, significance, types, levels, and its applications in educational context.

5.7.3 Suggestive Practicum

1. Take last 5 years of UDISE data and analyze various indicators related to schools, teachers, and students.

5.7.4 Suggestive Mode of Transaction

The approaches to curriculum transaction will focus on developing the analytical and critical thinking skills of students, as well as their ability to apply mathematical and quantitative reasoning in real-life situations. Some of the approaches to curriculum transaction will include the following:

- Active Learning which involves active participation of student teachers in problem-solving situations, group discussions, and hands-on activities that help student teachers engage with the material and apply mathematical thinking and reasoning to solve problems.
- Real-World Applications involving the use of real-world examples to demonstrate the practical applications of mathematical concepts that help student teachers see the relevance of what they are learning and how it can be applied in various fields.
- Collaborative learning encourages student teachers to work together in small groups, where they can share ideas and help each other learn. This fosters a sense of community in the classroom and helps students develop teamwork and communication skills.
- Technology Integration involves the incorporation of technology tools such as calculators, spreadsheets, and interactive software to help student teachers visualize and solve mathematical problems more easily.
- Overall, a pedagogy that combines active learning, real-world applications, collaborative learning, technology integration, and effective assessment strategies that help student teachers develop a strong foundation in mathematical and quantitative reasoning.

5.7.4 Suggestive Mode of Assessment

Use of a variety of assessment methods such as quizzes, exams, group projects, and presentations to evaluate student learning. Providing timely feedback and offering opportunities for students to revise their work and improve their understanding.

5.7.6 Suggested Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

5.8 Sports, Nutrition and Fitness

Credits 2
Semester S-7

5.8.1 About the Course

This course aims at enabling student teachers to recognize the importance of good health, fitness, and the right nutrition to live a healthy life. It also provides students with the experience of organizing and participating in sports and games.

5.8.2 Learning Outcomes

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

- explain the importance of sports, and the need and impact of sport for maintaining,
- discuss physical fitness, and the methods of teaching and organization of different types of sports,
- explain the importance of physical fitness, describe different components of physical fitness, and identify activities that help maintain physical fitness,
- Recognize the importance of basic health and nutrition and healthy lifestyles and identify food items that help maintain basic health and nutrition among children of different age groups.

UNIT - I

Sports

- A. Meaning of sports, importance of sports, types of sports.
- B. Different stages of sports (primary and secondary).
- C. Psychology of sports, methods of teaching different sports (indoor, outdoor, team and individual), different sports activities (individual and team games).
- D. Sports for children with disabilities and inclusion.

UNIT - II

Physical Fitness

- A. Meaning and importance of Physical fitness, components of physical fitness, Muscular Strength, Endurance, Flexibility, Body Composition, Cardiovascular Endurance, importance of healthy lifestyle.
- B. Coordination of Health and Fitness.

UNIT - III

Nutrition

- A. Meaning of nutrition, types of nutrition, importance of nutrition, need of nutrition, methods for teaching nutrition,
- B. Nutrition for different age group, nutritious food for sports personalities and common individuals, nutrition and health, nutrition and fitness, nutritious food in schools (midday meals), hostels.

5.8.3 Suggestive Practicum

Reflective Reading of different Sports Personalities. Collections of different types of games (Indoor, Outdoor, Individual, Team); Organizing different games (Play) for different age-groups,

Organizing Group Games for cooperation, Organizing fitness programmes, Exercises at various levels. Collection of different nutritious items food. (Charts, Things, Objects, Models). Programmes organized to promote the use of nutritious food.

5.8.4 Suggestive Mode of Transaction

The mode of transaction should be designed to ensure that should provide a balance between theoretical knowledge and practical skills. The approaches to curriculum transaction may include the following:

- Active learning encourages student teachers to participate in discussions, brainstorming sessions, and problem-solving activities that help them develop critical thinking and problem-solving skills.
- Collaborative learning involves group projects and tasks that encourage student teachers to work collaboratively and learn from each other.

5.8.5 Suggestive Mode of Assessment

Assessment of theoretical aspects and Practicum.

5.8.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

5.9 Yoga and Understanding Self

Credits 2
Semester S-8

5.9.1 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. Yoga as a way of life is characterized by peace and tranquillity, harmony and health, love and happiness, precision, and efficiency. The course seeks to engage 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, Prāṇāyāma, Bandha & mudra, Dhāraṇa & Dhyāna, etc), meditation and reflective practices, and the importance of these aspects in becoming an effective teacher. It lays equal weightage to the theory and practicum.

5.9.2 Learning Outcomes

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

- explain the importance of Yoga and how it helps an individual in understanding Self,
- describe the importance of practicing Yoga Asana,
- practice basic Yoga Asanas/ Kriyas.

UNIT - I

Philosophy and Historical Perspective of Yoga

- A. Concept and Meaning of Yoga, Philosophy of Yoga,
- B. Brief history and development of Yoga (Classical Yoga, Post Classical Yoga and Modern Period)
- C. Importance of Yoga for healthy living, Yoga and its relevance in the modern times, Traditions in Yoga.

UNIT - II

Schools of Yoga

- A. Different streams \schools of Yoga (Gnana, Bhakthi, Karma).
- B. Construction of Yoga Practice for all round development.
- C. Principals of Yoga: - Ahimsa, Satya, Asteya, Brachmacharya, Aparigraha, Shoucha, Santhosha, Tapas, swadyaya and Isvara Paridhana.

UNIT - III

Modern Principles of Yoga and Meditation

- A. Modern Principles: Human Body is a holistic entity, Individuals and their need are Dhāraṇa & Dhyāna, etc, meditation and reflective practices, and the importance of these aspects in becoming an effective teacher, unique Self-empowering, the quality and state of an individual mind is crucial to healing.

- B. Meditation: - its Importance, Types, and Process, Pranayama: its importance, types and process, Yoga as a Way of life for Peace, Harmony, Health love and happiness. Yoga in Indian philosophy for understanding Self.

5.9.3 Suggestive Practicum

1. Practice of Basic Yoga Asanas/ Kriyas.

5.9.4 Suggestive Mode of Transaction

Reflective reading of different Yoga practicing Personalities, Learning by doing, Relaxation Techniques for imparting concentration, Understanding Self and personality development.

5.9.5 Suggestive Mode of Assessment

Assessment of practicum; Assessment of practice of basic Yoga Asanas/ Kriyas; Assessment of Reflective level Readings.

5.9.6 Suggested Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

5.10 Citizenship Education, Sustainability, and Environmental Education

Credits 2
Semester S-8

5.10.1 About the Course

This course seeks to orient student teachers to the Constitution of India with a particular emphasis on Fundamental Rights and Fundamental Duties, and to prepare them for their roles and responsibilities as responsible, productive, and effective citizens of India. The course also seeks to enable student teachers to understand the interconnected and interdependent world, India's rich heritage and philosophical foundation of "Vasudaiva Kutumbakam" (Whole world is one family), acquire the knowledge, capacities, values, and dispositions needed to understand global issues and become active promoters of more peaceful, harmonious and sustainable societies. The course also seeks to create among student teachers an awareness of responsible global citizenship required for responding to contemporary global challenges.

The sustainability aspect of the course seeks to develop among student teachers an understanding of the idea of 'Sustainability' in all fields of human activities, including achieving sustainable development in its three dimensions – economic, social, and environmental – in a balanced manner. The environmental education component of the course aims at creating an awareness among student teachers of environmental issues, including actions required for mitigating the effects of climate change, environmental degradation and pollution, and initiatives required for effective waste management, conservation of biological diversity, management of biological/natural resources, forest and wildlife conservation, and sustainable development and living. The course will also deepen the knowledge and understanding of India's environment in its totality, their interactive processes, and effects on the future quality of people's lives.

5.10.2 Learning Outcomes

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

- explain the concept of citizenship and citizenship education,
- describe the aims of and approaches to citizenship education,
- explain the concept and aims of Global Citizenship and Global Citizenship Education,
- describe the aims of and approaches to global citizenship education,
- explain the concept of 'Sustainability' in all fields of human activities, and approaches to achieving sustainable development in its three dimensions – economic, social and environmental – in a balanced manner,
- demonstrate an awareness of environmental issues, and actions required for mitigating the effects of climate change, environmental degradation and pollution, and initiatives required for effective waste management, conservation of biological diversity, management of biological/natural resources, forest and wildlife conservation, and sustainable development and living.

UNIT - I **Citizenship Education**

- A. Concept of citizenship and citizenship education.
- B. Aims of and approaches to citizenship education.
- C. Concept of Global Citizenship and Global Citizenship Education.

- D. Aims of and approaches to global citizenship education.
- E. Concept of *Vasudhaiva Kutumbakam*, its importance in development of a holistic perspective towards local and global communities.

UNIT - II

Sustainability

- A. Concept of ‘Sustainability’ in all fields of human activities.
- B. Approaches to achieving sustainable development in its three dimensions – economic, social, and environmental.
- C. Sustainable development goals.
- D. Sustainable management of natural resources.
- E. School- and community-based activities.
- F. Education for sustainable development

UNIT - III

Environmental Education

- A. Environmental issues.
- B. Actions required for mitigating the effects of climate change, reducing environmental degradation, pollution etc.
- C. Initiatives required for effective waste management, conservation of biological diversity, management of biological/natural resources, forest and wildlife conservation, and sustainable development and living.
- D. Approaches to delivering Environmental Education
- E. Role of Mass Media and Technology in delivering environmental education.
- F. Roles Governmental and Non-Governmental Organizations in promoting Environmental Education.
- G. School and community-based environmental education activities.

5.10.3 Suggestive Practicum

1. Write a report on the roles of governmental and non-governmental organizations in promoting Environmental Education.

5.10.4 Suggestive Mode of Transaction

Lecture-cum- discussion, Focus Group discussions, in-class seminars, Library Work, Assignments, Project Work, Lesson Plan Development, Interaction with different stakeholders, ICT based educational materials, Group Work, critical reflections, group-work, case-based approaches, and enquiry-based learning.

5.10.5 Suggestive Mode of Assessment

Assessment of practicum and assessment of reflective level readings.

5.10.6 Suggestive Reading Materials

Teachers may suggest books/readings as per the need of the learners and learning content.

6.0 SCHOOL EXPERIENCE

Field engagement is an integral part of a teacher education programme. In field engagement of a pre-service teacher education programme, the student teachers are engaged in different kinds of practical tasks or activities relating to the teaching profession in a supervised condition. Through field engagement, the student teachers understand school processes, participate in activities, and internalize school-related ethics, values, and norms. School experience is integral to the Integrated Teacher Education Programme (ITEP); it allows student teachers to experience the school environment and apply theoretical learning.

Objectives

The School Experience will help the student teachers:

1. To understand on the roles of different personnel associated with the academics, resources, and the school system's management.
2. To be conscious of their duties as teachers concerning students, school, community, and other stakeholders.
3. To reflect on diverse school contexts and to appreciate the role of school teachers.
4. To understand and participate in different curricular activities like school assemblies, games and sports, cultural activities, and other events.
5. To participate in different programmes of school like parental engagement, motivating the students from the socio-economically disadvantaged group, and promoting inclusion and equity.
6. To develop skills associated with the profession - adaptation, collaboration, problem-solving, and participative decision-making.
7. To develop contextual learning competencies, skills, and attitudes for becoming effective teachers.
8. To develop ICT and research skills.

Table 1: Outline of Activities under School Experience

Course	Credits	Semester	Description
Pre-Internship	2	5	Orientation and preparation in the institute
School Observation	2	6	Two weeks visit to different types of schools
Internship	10	7	12 weeks of working in school(s) as an integral part of the system
School-based research projects	2	7	Identification of the issue, research design, intervention during the school internship and preparation of the research report
Creating TLM	2	8	Visit different types of local vocational artists/professions, design learning resources using local traditions and connect artists to school.

Post Internship	2	8	In the institute: Sharing of experiences with other student teachers and submission of the report
Total	20 Credits		

6.1 Pre-Internship Practice

Credits 2
Semester: S-5

6.1.1 About the Course

Pre-Internship is a vital component of the Teacher Education Programme. It is a prerequisite for the student teachers to experience a simulated classroom environment to prepare them for real-life situations. Student teachers get exposure in a conducive, guided environment to manage a classroom and learn pedagogic and classroom management skills and get an opportunity to have hands-on experience.

6.1.2 Learning Objectives:

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

- acquainted with various pedagogic practices, classroom management skills, assessment tools and learning standards,
- get experience of conducting classes by observing lessons transacted by teacher educators (demonstration lessons),
- develop lesson plans to transact them using appropriate pedagogies and learning resources,
- develop and practice teaching skills in a guided environment to be an effective teacher,
- be prepared for the school internship.

6.1.3 Suggestive Mode of Transaction

- Demonstration lesson (minimum 1 in each pedagogical subject)
- Peer Group teaching and peer observation (minimum 5 in each pedagogical subject)
- Observation of lessons by teacher educators during peer group teaching
- Reflective group discussions/workshops/seminars
- Preparation and presentation of the video content illustrating best classroom practices.

6.1.4 Content

The pre-internship will include activities relating to the stage-specific pedagogy courses, ability enhancement and value-added courses and foundation courses transacted during previous semesters. It will also include knowledge of pedagogy, formats of lesson plans, different ICT tools, schooling systems in India, principles of classroom management, assessment, and other relevant content.

6.1.5 Activities to be conducted:

- Observation of lessons transacted by teacher educators to identify pedagogic skills.
- Exposure to various types of lesson plans through workshops.
- Development of relevant Teaching Learning Materials (TLMs).
- Participation in screening and discussion of educational videos on pedagogy and assessment.
- Learning about inclusiveness in school education
- Orientation for Action Research/case study

6.1.5.1 Foundational Stage

Orientation of student teachers to different pedagogic (flexible, multilevel, play/activity/story-based learning) and classroom management skills

- Observation of the lessons demonstrated by teacher educators/experts in the institute.
- Designing guided play/activities for each class/subject based on learning outcomes.
- Identify local toys/games to facilitate play activities and pedagogical practices.
- Study Foundational Stage Learning Standards in the NCF-FS
- Content analysis and development of the unit plan, concept map and lesson plan.
- Discussion on unit plan and lesson plan with teacher educators/experts
- Preparation of a Portfolio (for self-work) that the student-teacher will use to keep all her/his work.
- Develop a one-day teaching plan that caters to all domains of development and record the difference in children's engagement before and after implementing the new plan.
- Transaction of demonstration lesson plan in a guided situation in the institute in the macro group (get the feedback from the mentor and TE)
- Collection and development of warmup activities and trials with the student trainee for rapport building with the young children.
- Exploring available learning resources, local traditional stories, rhymes, riddles, and educational videos
- Developing local, low-cost, and innovative TLMs
- Reading and reflecting on inspiring books on pedagogic practices like '*Divaswapna*'

6.1.5.2 Preparatory Stage

- Orientation of student teachers to different pedagogic (play, discovery, and activity/project-based) and classroom management skills
- Observation of the lesson demonstrated by teacher educators/experts in the institute.
- Designing guided play/activities for each class/subject based on learning outcomes.
- Identify local toys/games to facilitate play activities and pedagogical practices.
- Study Preparatory Stage Learning Standards from the NCF
- Content analysis and development of the unit plan, concept map and lesson plan.
- Discussion on unit plan and lesson plan with teacher educators/experts
- Preparation of a Portfolio (for self-work) that the student-teacher will use to keep all her/his work.
- Exploring available learning resources and educational videos
- Developing local, low-cost and innovative TLMs
- Reading and reflecting on inspiring books on pedagogic practices like '*Divaswapna*'

6.1.5.3 Middle Stage

- Orientation of student teachers to different pedagogic practices like experiential learning, inter-relationship amongst different subjects, integration of Indian Knowledge Systems (IKS) and values in school subjects, and classroom management skills
- Observation of the lesson demonstrated by teacher educators/experts in the institute.
- Designing guided activities for each class/subject based on learning outcomes.
- Study Middle Stage Learning Standards in the NCF
- Content analysis and development of the unit plan, concept map and lesson plan.
- Discussion on unit plan and lesson plan with teacher educators/experts

- Preparation of a Portfolio (for self-work) that the student-teacher will use to keep all her/his work.
- Participate in discussions/reflective sessions for conceptualizing teaching-learning practices.
- Exploring available learning resources and educational videos
- Developing local, low-cost and innovative TLMs
- Reading and reflecting on inspiring books on pedagogic practices

6.1.5.4 Secondary Stage

- Orientation of student teachers to different pedagogic approaches like storytelling, art-integrated, sports-integrated, project-based, and ICT-integrated for developing critical thinking, attention to life aspirations, and greater flexibility and classroom management skills.
- Observation of the lesson demonstrated by teacher educators/experts in the institute.
- Designing guided activities, including a laboratory for each class/subject based on learning outcomes.
- Study Secondary Stage Learning Standards in the NCF
- Content analysis and development of the unit plan, concept map and lesson plan.
- Discussion on unit plan and lesson plan with teacher educators/experts
- Preparation of a Portfolio (for self-work) that the student-teacher will use to keep all her/his work.
- Participate in discussions/reflective sessions for conceptualizing teaching-learning practices.
- Exploring available learning resources and educational videos
- Developing local, low-cost, and innovative TLM s
- Reading and reflecting on inspiring books on pedagogic practices

6.1.6 Assessment

Competence/Artifact	Method of assessment	Assessed By	Credits
Classroom teaching skills and assessment tools (including learning standards)	Simulated Presentation	Teacher-Educator	1
Reflective group discussions/workshop	Observations	Teacher-Educator	0.5
Artefacts (Lesson Plans, TLM, Curated Videos) and action research procedures.	Evaluation	Teacher-Educator	0.5

6.1.7 Outcomes

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

1. describe the prerequisites of the internship,
2. demonstrate knowledge of pedagogic practices, classroom management skills, assessment tools and learning standards,
3. develop lessons plans and relevant Teaching Learning Materials (TLMs),
4. develop readiness to take up an internship programme.

6.2 School Observation

Credit: 2
Semester: S-6

6.2.1 About the Course

As school is the heart of the teacher education programme, the student teachers need to gain hands-on experiences from various activities organized by the school. School observation offers an opportunity to learn the processes and practices in a school setup. To expose the student teachers to various schooling systems (urban, rural, tribal, residential, non-residential, government, private, affiliated to different school boards like Central Board, State Board, International Board) prevailing in the country. 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.

6.2.2 Learning Objectives

After completion of school observation program, student teachers will be able to:

- get acquainted with various schooling systems.
- 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.
- study availability and the work of human resources, including members of school management (SMC), school head, teachers, administrative and support staff)
- 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 the available physical and digital documents, including UDISE data.
- study interpersonal relationships among the stakeholders.
- 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.

6.2.3 Suggestive Mode of Transaction

- Observation
- Interaction
- Discussion
- Reviewing the available literature on the different schooling system
- Collection of relevant documents and data

Preparation for school observation

- Orientation on the school observation process
- Development of the observation formats/tools

School Observation (minimum three types of schools)

- Student teachers will go for school observation in small groups to observe and collect data by using the developed formats/tools.
- Analysis of the collected data
- Preparing a comprehensive profile of the schools observed

Post-school observation session

- Group-wise presentation of the school profile
- Discussion and Feedback
- Reflection on the understanding of various types of schooling systems.

6.2.4 Content

The school observation as a field-based activity will cover observation of school and classroom processes. The student teachers under the mentorship of teacher educators will visit schools, interact with teachers and students and other stakeholders, and relate the observation with the courses studied during the previous semesters, i.e. Foundations of Education, Disciplinary Courses, Pedagogy courses and Ability Enhancement & Value-Added Courses.

- Meaning and Nature of school observation process
- Difference between monitoring and observation
- Theory and practices of school observation components such as:
 1. Schooling system
 2. Rapport with all the stakeholders
 3. Office management procedures of different types of schools
 4. School environment in all perspectives
 5. Process of conducting curricular activities in the schooling process
 6. Existing infrastructure available in the school
 7. Utility of ICT and TLM facilities
 8. Interpersonal relationships among the stakeholders
 9. Various assessment processes adopted in different types of schools.
 10. Engagement of parents and other community members in school activities.

6.2.5 Activities to be conducted.**6.2.5.1 Foundational Stage**

- Visit to preschool, Balvatika, and classes I and II (foundational stage/ standalone Anganwadi, standalone preschool, co-located Anganwadi and preschools/Balvatika sections in school set up)
- Collect information on the demography of students in preschool, classes I and II, linkage of foundational with the preparatory stage through interaction with teachers, students, and staff.
- To study the use of print materials like collages, flashcards and activities related to foundational literacy and numeracy through classroom observation.
- Observe the activities related to FLN, use of mother tongue as medium of instruction and handling classrooms with children from different home languages.
- Observation of pedagogic practices at preschool, classes I and II

- Observe the use of local/traditional toys, stories, rhymes, songs, games, riddles in the class.
- Observation of availability and usage of reading corners, fun zones,
- Observation of play areas across the foundational stage (both indoor and outdoor)
- Study the practices followed by the school for the growth and health of children- provision of supplementary nutrition, immunization, health check-ups, and referral services.
- Presentation of the classroom observations (play activities and FLN practices) and discussions in groups
- Observation of assessment tools and practices at foundational stage

6.2.5.2 Preparatory Stage

- Visit three types of schools with observation formats developed in the institute and get acquainted with various schooling systems. Establish rapport with all stakeholders.
- Collect information on the demography of students in classes III to V, the link of the preparatory stage with the foundational and middle stages through interaction with teachers, students, and staff.
- Observation of classroom practices to study toy-based, art-integrated, and sports-integrated pedagogy.
- Observe the activities related to holistic assessment as recommended in NEP 2020 and NCFSE.
- Observation of play areas across the preparatory stage (both indoor and outdoor)
- Observe school processes and the extent of transaction of the curriculum through play, discovery, and activity-based and prepare a report.
- Reflect on effective classroom teaching learning strategies.

6.2.5.3 Middle Stage

- Visit three types of middle 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 VI to VIII and understand the linkage of the middle stage with the secondary and preparatory stages through interaction with teachers, students, and staff.
- Observe school processes and curriculum transactions through experiential learning and prepare a report.
- Interact with teachers and students and report on implementing ten bag-less days and skill development courses.
- Reflect on effective classroom teaching learning strategies.
- Observe integration of IKS, values, local resources in teaching learning process
- Observe practice and assessment of vocational education in the school.
- Observe the availability and usage of library resources, laboratories (General Science, Mathematics, Languages, Social Science, Computer), sports facilities, and art and music learning facilities.
- Study the provision of other student support services- guidance and counselling, scouts and guides, and health and wellness programme.

6.2.5.4 Secondary Stage

- Visit three types of secondary 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 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.
- Interact with teachers and students and report on implementing ten bag-less days and internship opportunities to learn vocational subjects.
- Study the available opportunities for learning interdisciplinary subjects.
- Observe the availability and usage of library resources, laboratories (Atal Tinkering Lab, Physics, Chemistry, Biology, Mathematics, Languages, Social Science, Computer), sports facilities, and art and music learning facilities.
- Study the provision of other student support services- guidance and counselling, NCC, NSS, health and wellness programme.
- 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.

6.2.6 Assessment

Competence/Artifact	Method of assessment	Assessed By	Credits
Involvement and active participation during the school visit	Observations	Teacher Educator	0.5
Comprehensive school profile	Presentation & reflection	Teacher-Educator	1.5

6.2.7 Outcomes

Student teachers will be able to:

- describe various schooling systems,
- describe the processes, practices, and overall environment of the school,
- establish rapport with the stakeholders of the school system state the process of conducting different activities in the school,
- describe the available school infrastructure (classrooms, libraries, laboratories, playground, sanitation, drinking water facility, mid-day meal facility, inclusive facilities, safety and security, rainwater harvesting),
- describe the availability and usage of ICT and TLMs,

- summarize the available documents in both physical and digital modes, including UDISE data,
- reflect upon relationships among the stakeholders,
- analyze various assessment processes adopted in different types of schools,
- prepare and present a comprehensive profile of the schools observed (including classroom processes).

6.2.8 Suggested Components for school observation report

- School information (Context, Vision and Mission, Association with the Board)
- School Infrastructure
- Provision for CWSN/Divyang Children
- Inclusiveness at all levels
- Teacher-Student Ratio
- Teaching-Learning process
 - Academic plan
 - Classroom activities
 - Assessment
- School Development Plan (SDP)
- Academic Calendar
- Administrative processes
 - Maintenance of students' records
 - Maintenance of teachers' records
- Cultural activities
- Sports activities
- Annual Day
- National and Social functions
- School Management
- School Discipline
- Interpersonal Relationships
- Understanding different types (socio-economic status, ability) of students and their needs
- Development of ICT and TLMs
- Engagement of parents and community members in the school activity
- Office Management
- The assessment process includes provision and practices for 360-degree holistic assessment.
- The overall progress of the school (planning, organizing, staffing, directing, motivating and controlling)
- Challenges faced and overcoming them.

6.3 School-Based Research Projects

Credit: 2
Semester: S-7

6.3.1 About the Course

Action research enables teachers to reflect on their wisdom to bring the desired changeover and explore the system when necessary. They may experiment with practices in a controlled environment to improve the transactional processes. 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. These two processes explore the answers to the problem and contribute towards theory development. These two methodologies foster critical thinking, problem-solving, collaboration and ethical decision-making skills. The student teachers are placed in schools for internships. School Internship provides the student teachers with a platform to apply theoretical knowledge understanding, techniques, methods, and approaches in an actual classroom situation. 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.

6.3.2 Learning Objectives

The student teachers will:

- 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.

6.3.3 Suggestive Mode of Transaction

The following strategies will be used during the school-based research project:

- Discussions with teacher educator, school head, mentors, and peers for identification of problem and development of intervention(s).
- Finalize the school-based research project proposal outline through discussion with mentor teachers/teacher educators.
- Document analysis, interaction with all stakeholders, and field visits.
- Sharing and presentation of the outcomes of school-based research.

6.3.4 Content:

The student teachers during previous semesters have studied different courses in Foundations of Education, Disciplinary Courses, Stage-specific pedagogy courses, Ability Enhancement and Value-Added Courses. The required knowledge of action research and case study includes- the concept and importance of action research/case study, the steps of conducting action research/case study (objectives, methods, research design, design tools, data collection, and data analysis) and report writing.

The research problem will be taken from the day-to-day teaching-learning process of the school. Some of the significant areas may cover:

- Learning progress and outcomes in different subjects
- School-based assessment
- Learners' diversity and inclusion
- Participation in arts, games, sports

6.3.5 Suggestive Mode of Assessment

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. The following rating scale may be used to assess the student teachers:

Competence/Artifact	Method of assessment	Assessed By	Credits
Observation during the execution of action research	Observation	Teacher-Educator	0.5
Research Report	Presentation of Report	Teacher-Educators (panel of three experts)	1.5

6.3.6 Learning Outcomes

The student teachers will:

- present contextual problems, an appropriate research design and the plan of action for undertaking school-based research,
- demonstrate the tools and techniques used for the collection of relevant data,
- summarize the analyzed data used to identify the causes,
- demonstrate the interventions used for addressing the problems,
- present the effectiveness of the intervention(s),
- share the school-based research experiences through reports and presentation.

6.4 Internship in Teaching

Credit: 10
Semester: S-7

6.4.1 About the Course

Teacher preparation is a reflective and experiential process, and internship is vital to connecting student teachers with school, teachers, students and other stakeholders in various ways. It provides a platform and actual field experience for the student teachers to apply theoretical knowledge and teaching methods. During the internship, student teachers are placed in schools in groups as an integral part of all school activities. This provides them with the opportunity to observe classes taken by school teachers, take independent classes, develop a relationship with students, contribute to everyday school activities (e.g., conducting the assembly, assisting in the mid-day meal scheme, organizing school events) and get exposure to all school administrative practices (e.g., maintaining administration records, creating an annual calendar). This enables them to get intensive experience in all aspects of teaching- preparation, planning, developing/collecting/localizing Teaching Learning Materials, classroom transactions, assessment, reflection, and review of their experience. The student teachers are exposed to situations where they can observe different roles played by the teacher in the field, which they will also have to undergo. After completing the internship, student teachers will be ready to take up a teacher's responsibility independently.

6.4.2 Suggestive Structure

ITEP 7th semester has an internship programme where student teachers are expected to go to the participating schools and visit the Institute for completion of other courses. ITEP institute can choose suitable option based on their context.

- Four days in schools and two days at ITEP Institute
- Six weeks in one school, three weeks in the institute and six weeks in another school (preferably in two different types of schools)
- Three weeks in the institute and 12 weeks in two types of schools
- Any other option can be adopted by the institute depending on their local conditions keeping 12 weeks of school internship.

6.4.3 Learning Objectives:

On completion of the school internship, student teachers will be able to:

1. explain the overall functioning of the school.
2. describe and appreciate the different roles played by a teacher in the school.
3. experience the importance of teacher-student relationships for effective teaching.
4. develop age-appropriate pedagogic skills.
5. use different pedagogies learnt in real-life classrooms.
6. create appropriate teaching-learning materials.
7. develop necessary planning and execution skills to conduct school activities (assembly, celebrations, cultural programmes).
8. express the school, teacher, parents, and community relationships.
9. create rapport with the stakeholders and understand their roles in the school system.
10. create student portfolios and comprehensive 360-degree (holistic) progress reports.
11. discuss the importance of maintaining different types of records in the school system.

12. develop research aptitude and ability to conduct action research for the situations/problems faced during their school internship experience.

6.4.4 Suggestive Mode of Transaction

- Observation
- Interaction
- Discussion
- Teaching in the classroom
- Analysis and reporting
- Collection of relevant documents and data

6.4.5 Content

1. Pedagogies' different methods and strategies
2. Scheme of lessons
3. Peer lesson observation
4. Management of substitute classes
5. Various TLMs (including ICT tools) and their uses in teaching-learning.
6. Achievement test
7. Diagnostic tests
8. Analysis of the result of the achievement test
9. Assembly activities
10. Action research and case studies.

6.4.6 Activities:

Student teachers are required to undertake the following stage specific activities:

6.4.6.1 Foundational stage

1. Meet the subject-based mentors, collect timetables of preschool, Balvatika, and classes I and II and develop a scheme of lessons from the syllabus to be covered during the internship.
2. Get acquainted with the school within 2-3 days. Observe classroom teaching of school teachers.
3. Plan and transact minimum 80 lessons (40+40), including 4 stray lessons (2+2). Stray lessons are class appropriate lessons on any topic(s) to be transacted by student teachers as per their convenience to build up confidence gradually. The last 5 lessons in each pedagogy course may be transacted using lesson notes.
 - Lesson plans should derive their inspiration from NCF-FS documents.
 - Lesson plans should include a theme/ web chart/concept map for integrating early learning activities related to FLN.
 - Lesson plans must promote education for sustainability, including equity, environment, global citizenship, pride and rootedness in Indian culture and character building.
4. Participate in post-lesson discussions with peers, mentor(s) and teacher educators.
5. Observe peer lessons and discuss with the group.
6. Conduct sports activities and arts and crafts activities.

7. Participate in student support services- guidance and counselling, bunny, health and wellness programmes.
8. Create age and developmentally appropriate TLM that caters to different domains of development, for example, picture reading posters, letter-sound dominoes, number-object dominoes, stories, rhymes, toys, and number puzzles.
9. Identify the toys and TLM available for 3 to 8-year-olds. and map them with different concepts and skills.
10. Develop differential assessment plans based on interest and expected goals/competencies.
11. Identify children with special needs and address their learning needs.
12. Experience classes as a substitute teacher.
13. Participate in the reading corners, fun zones, gallery walks and other activities.
14. Participate in teacher development and training activities.
15. Participate and Organize school assemblies and other events (cultural, sports, yoga, and other development activities).
16. Attend Parents-Teachers Association (PTA) meetings if held during the internship.
17. Attend School Management Committee (SMC) meeting if held during the internship.
18. Study the process of parent and community engagement for the school development programme.
19. Conduct action research /case study.
20. Prepare a sample student portfolio,
21. Write a reflective diary daily and prepare a report of each activity.

6.4.6.2 Preparatory Stage

1. Meet the subject-based mentors, collect timetables of classes III to V and develop a scheme of lessons from the syllabus to be covered during the internship.
2. Get acquainted with the school within 2-3 days. Observe classroom teaching of school teachers.
3. Plan and transact minimum 80 lessons (40+40), including 4 stray lessons (2+2). Stray lessons are class appropriate lessons on any topic(s) to be transacted by student teachers as per their convenience to build up confidence gradually. The last 5 lessons in each pedagogy course may be transacted using lesson notes.
 - Lesson plans should include activities to promote creativity, inquiry, inquisitiveness, experimentation, exploration, analytical thinking.
 - Lesson plans must promote education for sustainability, including equity, environment, global citizenship, pride and rootedness in Indian culture and character building.
4. Participate in post-lesson discussions with peers, mentor(s) and teacher educators.
5. Observe peer lessons and discuss with the group.
6. Conduct sports, arts and crafts activities.
7. Participate in student support services- guidance and counselling, clubs and bulbul, health, and wellness programmes.
8. Create teaching-learning materials, including ICT tools for opted pedagogic courses.
9. Plan assessment, prepare material and formative and summative assessment tools, and analyze the results.
10. Prepare and conduct diagnostic tests to identify learning difficulties, analyze data and prepare learning enhancement plan.

11. Experience classes as a substitute teacher.
12. Participate in library functioning and literary activities.
13. Participate in teacher development and training activities.
14. Participate and Organize school assemblies and other events (cultural, sports, yoga, and other development activities).
15. Attend Parents-Teachers Association (PTA) meetings if held during the internship.
16. Attend School Management Committee (SMC) meeting if held during the internship.
17. Study the process of parent and community engagement for the school development programme.
18. Conduct action research /case study.
19. Prepare a sample student portfolio,
20. Write a reflective diary daily and prepare a report of each activity.

6.4.6.3 Middle Stage

1. Meet the subject-based mentors, collect timetables of classes VI to VIII and develop a scheme of lessons from the syllabus to be covered during the internship.
2. Get acquainted with the school within 2-3 days. Observe classroom teaching of school teachers.
3. Plan and transact minimum 80 lessons (40+40), including 4 stray lessons (2+2). Stray lessons are class appropriate lessons on any topic(s) to be transacted by student teachers as per their convenience to build up confidence gradually. The last 5 lessons in each pedagogy course may be transacted using lesson notes.
 - Lesson plans should include activities to promote creativity, inquiry, inquisitiveness, experimentation, exploration, analytical thinking, synthesis to understand the coherent whole, problem-solving, and application of knowledge in real-life situations.
 - Lesson plans must promote education for sustainability, including equity, environment, global citizenship, pride and rootedness in Indian culture and character building.
4. Participate in post-lesson discussions with peers, mentor(s) and teacher educators.
5. Observe peer lessons and discuss with the group.
6. Conduct laboratory activities (Atal Tinkering Lab, Science, Mathematics, Languages, Social Science, Computer), sports, and arts and crafts activities.
7. Participate in student support services- guidance and counselling, NCC, health and wellness programme.
8. Create teaching-learning materials, including ICT tools for opted pedagogic courses.
9. Plan assessment, prepare material and formative and summative assessment tools, and analyze the results.
10. Prepare and conduct diagnostic tests to identify learning difficulties, analyze data and prepare learning enhancement plan.
11. Experience classes as a substitute teacher.
12. Participate in library functioning and literary activities.
13. Participate in teacher development and training activities.
14. Organize school assemblies and other events (cultural, sports, yoga, and other development activities).
15. Attend Parents-Teachers Association (PTA) meetings if held during the internship.

16. Attend School Management Committee (SMC) meeting if held during the internship.
17. Study the process of parent and community engagement for the school development programme.
18. Conduct action research /case study.
19. Prepare a sample student portfolio,
20. Write a reflective diary daily and prepare a report of each activity.

6.4.6.4 Secondary Stage

1. Meet the subject-based mentors, collect timetables of classes IX to XII and develop a scheme of lessons from the syllabus to be covered during the internship.
2. Get acquainted with the school within 2-3 days. Observe classroom teaching of school teachers.
3. Plan and transact minimum 80 lessons (40+40), including 4 stray lessons (2+2). Stray lessons are class appropriate lessons on any topic(s) to be transacted by student teachers as per their convenience to build up confidence gradually. The last 5 lessons in each pedagogy course may be transacted using lesson notes.
 - Lesson plans should include the components to develop critical and reflective thinking, problem-solving, differential learning, synthesis, and application of knowledge in real-life situations.
 - Lesson plans must promote education for sustainability, including equity, environment, global citizenship, pride and rootedness in Indian knowledge systems and character building.
4. Participate in post-lesson discussions with peers, mentor(s) and teacher educators.
5. Observe peer lessons and discuss with the group.
6. Conduct laboratory activities (Atal Tinkering Lab, Physics, Chemistry, Biology, Mathematics, Languages, Social Science, Computer), sports, and arts and crafts activities.
7. Participate in student support services- guidance and counselling, NCC, NSS, health and wellness programme.
8. Create teaching-learning materials, including ICT tools for opted pedagogic courses.
9. Plan assessment, prepare material and formative and summative assessment tools, and analyze the results.
10. Prepare and conduct diagnostic tests to identify learning difficulties, analyze data and prepare learning enhancement plan.
11. Experience classes as a substitute teacher.
12. Participate in library functioning and literary activities.
13. Participate in teacher development and training activities.
14. Organize school assemblies and other events (cultural, sports, yoga, and other development activities).
15. Attend Parents-Teachers Association (PTA) meetings if held during the internship.
16. Attend School Management Committee (SMC) meeting if held during the internship.
17. Study the process of parent and community engagement for the school development programme.
18. Conduct action research /case study.
19. Prepare a sample student portfolio,
20. Write a reflective diary daily and prepare a report of each activity.

6.4.7 Suggestive Mode of Assessment:

The activities conducted / skills acquired during the internship by the student teachers will be assessed as per the following scheme:

Competence/Artifact	Method of assessment	Assessed By	Credits
Observation of classroom practices	<ul style="list-style-type: none">• Observation of a Minimum of 6 lessons of School Teachers (3+3)• Observation of a Minimum of 10 lessons of Peers (5+5)	Teacher-Educator	Non-evaluative
Unit planning, Lesson Planning & Transaction	40 lessons transaction for each pedagogical subject * Unit plans and lesson plans * Minimum 2 Innovative lesson plans in each pedagogy subject (Eg: Storytelling, Drama based, Arts and crafts, Use of Technology)	Teacher-Educator, School Mentor	6.0
Assessment Planning and execution	Preparation of report on assessment plan in each lesson transacted i.e., within lesson transaction and lesson end activities. Preparation of a Blue Print (For one/two Pedagogical course/s) and preparation of Assessment tools Conduct of Unit Test & analysis of results (for both Pedagogical course/s) Development of plan for learning enhancement of students related to subjects (for both Pedagogical course/s)	Teacher-Educator, School-Mentor	1.5
Participation/Organization of assembly and other school-level activities, PTM & SMC Meetings	Observation & Interaction	School Mentor	0.5
Preparation of Logbook /Teachers diary Min 5 lessons for each pedagogical method	Review	Teacher-Educator, School Mentor	0.5
Overall feedback on student-teacher performance by School	Observation and Interaction	School Head	0.5

Head			
Test lesson (one in each pedagogical method)	Presentation	Teacher-Educator	1.0

6.4.8 Stakeholders Responsibilities

Role of Head of ITEP Institution

- Identification of the adequate number of internship schools
- Signing the MoU with the schools
- Sharing of mutual expectations of ITEP institutions and the participating schools
- Identification of the internship programme coordinator
- Monitor the progress of the entire School Experience Programme

Role of Teacher-Educators of the ITEP Institution

- Guide the student teachers in preparing lessons and activities, assessment, observation of lessons on peer teaching, action research, and case studies conducting school activities preparation and report writing on Teaching Learning Materials.
- Conduct pre- and post-lesson discussions regularly.
- Assess the transaction of lessons for the complete duration of the lesson in the rating proforma developed by the teacher education institute and give feedback/remarks to the student teachers for lesson improvement.
- Submission of monitoring and supervision reports to the institute in time.
- Discuss with the student teachers frequently and organize a phase-end meeting of the student teachers and mentors to assess the progress and performance of the student teachers.

Role of School Head

- To introduce the student teachers to the students and staff of the school in the assembly on the first day.
- To facilitate student teachers to take classes as per stage requirements- Foundational, Preparatory, Middle, and Secondary.
- Ensure the alignment of the timetable, scheme of lessons and plan of activities/ assignments of the student teachers to be carried out during the programme in the school.
- Countersign on the attendance register maintained by the group leader/ mentor of the school.
- Ensure that all facilities and provisions are available to the student teachers to teach their lessons and carry out their assignments smoothly.
- grant of leave applications of the student teachers in exceptional circumstances.
- Involve student teachers in different activities of the school.
- Facilitate phase-end meetings of the student teachers and the mentors to assess the progress and removal of difficulties.
- Countersign/ certify the report/ documents of the activities/ assignments conducted by the student teachers towards the end of the internship programme.
- Provide input about student-teacher performance.
- Provide suggestions for improvement of the programme to the ITEP institution.

Role of Mentors

- Guide student teachers to prepare detailed lesson plans, brief lesson notes and plans of activities/ assignments to be conducted by them in school.
- Review the lesson plan before a student-teacher transacts the lesson in the class.
- Observe the classes of student teachers.
- Assess each lesson on the prescribed proforma and write remarks in the lesson plan book provided by the student teachers.
- Give feedback continuously to the student teachers for their improvement in their teaching and other curricular activities.
- Conduct post-lesson discussions regularly.
- Countersign in the peer-teaching observation schedules after their observations in the classroom.
- Organize frequent meetings with the student teachers and supervisors to discuss the progress, difficulties faced, and experience gained by student teachers.

Role of Student-Teacher

- Report to the school head of the participating school at least one day before the start of the internship placement.
- Seek information about the classes, timetable, and topics to teach in stage-specific pedagogic courses from the mentors on the first day of the internship programme.
- Mark your attendance as per the school practice.
- Plan all the assignments/ activities with the help of the mentor/ supervisors.
- Seek cooperation from mentors and supervisors in case of difficulty.
- Prepare the lesson plan and get approval from the mentor/ supervisor before transacting every lesson.
- Take classes according to the timetable of the participating school.
- Take substitute classes and participate in other school duties assigned by the school.
- Follow the conduct and dress code of the participating school.
- Get prior leave approval from the head of the participating school in case of emergency.
- Maintain a diary and regularly list all the innovations, challenges faced and reflections for improvement.
- Check with your mentor before attempting learning activities that depart from routine classroom procedures.
- Carry out the activities you plan for school students according to your approved plans.
- Maintain cordial relationships with the students and staff of the school.
- Refrain from making negative comments about the school or the school's personnel, especially when talking with fellow student teachers.
- Submit student teaching profiles, one each, to the supervisor and mentor who supervises your teaching.
- Before the completion of the internship programme, make sure to return all textbooks and materials to the school.

6.5 Post Internship

Credit: 2
Semester: S-8

6.5.1 About the Course

After successful completion of internship programme in 7th semester, student teachers compile the learnings, discuss with peers about their experiences, reflect on the experiences, refine the artifacts developed during internship and prepare comprehensive internship report during post internship in 8th semester.

6.5.2 Learning Objectives

After completion of the activities, the student teachers will be able to:

- develop comprehensive understanding of the school ecosystem,
- describe their learning from internship with the peers and teacher educators,
- reflect on school internship sharing learning experiences on each activity undertaken.

6.5.3 Suggestive Mode of Transaction

- Discussion
- Presentation, Gallery walks and Exhibition.
- Report Writing

6.5.4 Activities:

6.5.4.1 Experience Sharing and Reflective Learning

- Presentation of reflective journal summary
 - My Learning Journey: by each student-teacher
- Gallery walks (Exhibition): TLMs, display of participation in school activities (photos/stories) and other artefacts created during the internship by student teachers.
- Sharing of best practices (PPTs, Videos.)
- Survey and collect the local stories and rhymes from the parents and community (in the context of the foundational stage)
- Holding a training workshop for the parents and community and encouraging them to act as volunteers.
- Awareness and advocacy programme in FLN for parents and community: Role play with parents and community on conducting specific FLN activities.
- Organizing a parents /community mela/fair on homemade TLM for FS children

6.5.4.2 Submission of Internship Report

- Reflective Journal
- Lesson Plans and TLMs
- Observation records (Teacher Educator, Mentor, school heads, Teachers, Parents)
- Assessment records and Student Portfolio
- Action research report/case study
- Comprehensive internship report.

i. Suggestive Mode of Assessment

Competence/Artifact	Method of assessment	Assessed By	Credits
Artefacts created during the internship. My Learning Journey	Exhibition & Presentation	Teacher-Educator	1
Comprehensive Internship Report	Review	Teacher-Educator	1

6.5.6 Learning Outcomes

The student teachers will be able to:

- demonstrate/Exhibit/Manifest comprehensive understanding of the school ecosystem.
- reflect on school internship experiences in a report.
- share their learning from school internship with peers and teacher educators.

6.6 Creating Teaching Learning Material (TLM)/Work Experience

Credit: 2
Semester: S-8

6.6.1 About the Course

Having developed an understanding of education's philosophical, sociological, and psychological perspectives and gained hands-on experiences from pre-internship school observation and internship phases, the student teachers have developed a comprehensive understanding of education. By utilizing these experiences and understanding, the Student teachers will be in a position to develop/create Teaching Learning Materials (in various forms, Programed Learning Materials, Educational videos, teachers' handbooks, flashcards, story books, toys, games, posters, collages, innovative lesson plans using different pedagogies, to mention a few) which in turn may be helpful to both the school students with whom he/she has interacted during school experiences and the student teachers. Schools provide a systematic teaching environment for the learners to acquire the knowledge, skills and attitude required to meet the varied aspirational needs and educational goals. Work experience fosters basic knowledge, skills and disposition among the students that prepare them to think of becoming skilled entrepreneurs. To orient the school students on work education, the student teachers need exposure to visit the local vocational artisans, crafts person and entrepreneurs and prepare learning resources to enhance their professional skills and competencies. Teaching Learning Materials of good quality with (i) innovations, (ii) the use of low-cost materials, (iii) local context and (iv) modern technology (for digital learning materials) will enhance students' engagement, interest, and practical learning.

6.6.2 Learning Objectives

After completion of the activities, the student teachers will be able to:

- Assess the need for Teaching Learning Materials and prepare innovative TLM,
- Develop an understanding of the importance of work experience and competencies of a local crafts person, artisans and entrepreneurs,

6.6.3 Suggestive Mode of transaction

- Workshop
- Group discussion
- Field visits and interaction
- Analysis of existing local-specific learning resources, toys
- Exhibition of TLM and presentation of reflective reports on the use of learning resources, including toys.

6.6.4 Content

- Understanding how students learn at different stages.
- Knowledge of toys and other TLMs from different parts of the countries
- Knowledge of relevant TLMs for specific groups of children- CWSN, kinesthetic learners, visual learners, auditory learners addressing individual differences.

6.6.5 Activities to be conducted.

The following are a few suggestive activities:

- Orientation workshop on work experience and development of learning resources
- Field visit for interaction with local artisans, craftspeople, and entrepreneurs.
- Observe Traditional work practices and their integration into Local Technologies and Ideas.
- Analysis of available local specific, indigenous learning resources, including toys and their use in the learning-teaching process
- Development of at least two low-cost learning resources as per the local contexts (foundational/preparatory/middle/secondary) and presentation/exhibition
- Prepare the manual of TLM highlighting the objectives that will be achieved by its use, the material used, the process of its development and its use during classroom transaction.

1.6.6 Suggestive Mode of Assessment

Assessment			
Competence/Artifact	Method of assessment	Assessed By	Credits
TLM developed	Presentation /Exhibition	Teacher Educators (panel of three experts including an external expert)	1.5
Manual	Presentation	Teacher Educator	0.5

6.6.7 Outcomes

The student teachers will:

- demonstrate the use of TLM for enhanced learning,
- explain the importance of work experience and competencies of local crafts person.

7.0 CURRICULAR COMPONENT: COMMUNITY ENGAGEMENT AND SERVICE

(This component is common to student teachers across Stage Specialization)

Credits: 2
Semester: S-8

7.1 About the Course

The curricular component of ‘community engagement and service’ seeks to expose student teachers to the socio-economic issues in society and community-supported development activities so that classroom learnings can be supplemented by life experiences to generate solutions to real-life problems. This course is designed to develop insights into the functions of the community, enhance the ability of student teachers to enlist community support to and participation in school-related activities, make the community aware of the importance of education, issues associated with schooling, gender inequity, health & wellness of children, initiatives for supporting lifelong education etc. It aims at sensitizing the student teachers to initiate actions with the support of the community members to address the social, cultural and educational problems, and develop social leadership skills through community service. The component seeks to enable student teachers to be acquainted with various community development initiatives and organize activities such as *street plays, advocacy activities, door-to-door campaigns, and prabhat-pheris* etc. to mobilize community participation in development initiatives.

This curricular component envisages participation of student-teacher in activities undertaken under the National Service Scheme (NSS), New India Literacy Programme, Student the mentoring initiatives, etc. Some of the activities include: Survey of community resources for participation in different school activities, Study of the situation with regard to school dropout and the reason thereof (Stage wise); Survey of a specific settlement to study the socioeconomic and educational status; Survey of non-literates in a specific settlement, including identification of 4-5 non-literate adults who will be supported by student teachers to become literate; training of local youth in First-Aid and other relevant activities; assessment of the situation with regard to Health and wellness of children in a locality, creating awareness of the importance of sustainable development, making the community members aware of the importance of environmental protection, creating awareness of rainwater harvesting, mentoring school students with learning deficits, guidance and counselling to school students etc.

7.2 Learning Outcomes

On successful completion of the ‘Community Engagement and Service’ programme, the student-teacher should be able to:

- recognize the socio-economic issues in the community and identify initiatives that could help solve problems faced by the community,
- demonstrate an awareness of the functions of the community, and the measures required for enlisting community participation in school-related activities,
- undertake initiatives that are required to make the community aware of the importance of education, issues associated with schooling, gender inequity, health & wellness of children, illiteracy among youth and adults in the community etc.,

- suggest actions in collaboration with community members to address the social, cultural and educational problems in the community,
- organize activities such as *street plays*, *advocacy activities*, *door-to-door campaigns*, and *prabhat-pheris* etc. to mobilize community participation in development initiatives,
- demonstrate social leadership quality through community services,
- organize interactions between schools and local communities for generating solutions to problems such as dropout and learning deficits,
- facilitate partnerships between local communities to enhance participation of the community in school-related activities such as PTA meetings,
- recognize the fault lines of the society, such as casteism, social taboos and superstitions etc. and work towards bridging them to establish harmony in the society,
- demonstrate positive feelings towards the local community and appreciate traditional knowledge and practices,
- Recognize the values of public service and active citizenship.

7.3 Approach to curriculum transaction

The student teachers will be provided opportunities to have exposure to community life for ten days in total, two days in Preparation for Community Engagement & Service in the institution, seven days working with the community, and the last day in the institution for sharing their experiences and reflections. The activities may be conducted in groups or individually as appropriate.

Days 1-2: Preparation for community services (In the institution)

- Orientation of student teachers on Community Engagement & Services through discussion and group activities.
- Workshop for developing tools for different activities during the programme.

Days 3-9: Engagement with the community (Mandatory onsite stay with the community)

Students will be divided into smaller groups; They would participate in the planned activities with defined roles for seven days on a rotation basis. These activities include:

- participation of student teachers in activities undertaken under the National Service Scheme (NSS), New India Literacy Programme, Student mentoring initiatives, etc.
- Survey of community resources for supporting school activities.
- Study of the situation regarding school dropout and the reason thereof (Stage wise).
- Survey of specific settlement to assess the situation about non-literates in the settlement, including identification of 4-5 non-literate youth and adults who will be supported by student teachers to become literate,
- Training of local youth in First Aid and other relevant interventions,
- Assessment of the situation about Health and wellness of children in a locality,
- Creating awareness of the importance of sustainable development, and making the community members aware of the need to support initiatives to ensure environmental protection, creating awareness of rainwater harvesting, mentoring school students with learning deficits, guidance and counselling to school students etc.)
- Visit and interact with local artisans and craftspeople.

The above activities typically will include working with the community, collecting data, playing local games, community awareness programmes like nukkad natak, rallies, organizing and participating in the cultural programmes with the community members etc.

The student teachers shall conduct different pre-scheduled activities throughout the day. Morning sessions will be used for activities with the community and data collection. The afternoon session will be devoted to data analysis and preparation of the report, and participation in games & sports activities. Evening session will involve cultural activities with community members.

Day 10: Feedback session and Reflection (: In the Institution)

- Sharing experiences and discussion on activities carried out.
- Presentation and submission of report on the activities carried out.
- Evaluation of the activities by collecting feedback on the effectiveness of the campaign from the mentor and the students.
- Reflection of experience (individual/group) of organizing community service

7.4 Assessment components and weightage

- Involvement and active participation in activities relating to Community Engagement and Service: (Assessment method: Observation by teacher educator, teacher and community members); Weightage: 75%; Assessed by the teacher educator, teacher and community members),
- Group Report & Reflections: Method of assessment: Presentation by student teachers); Weightage: 25% (Assessed by Teacher Educator)

7.5 Suggestive Links

- Ministry of Education (2021). Vidyanjali: Guidelines for Promoting Community and Voluntary Participation for Enhancing Quality School Education, Government of India. https://vidyanjali.education.gov.in/assets/pdf/Final_Guidelines_Vidyanjali_%20December.pdf
- RIE Bhubaneswar (2020). Handbook on Field Engagement in Pre-service Teacher Education, Bhubaneswar, Regional Institute of Education.