LALIT NARAYAN MITHILA UNIVERSITY
KAMESHWARANAGAR, DARBHANGA

Two- Year

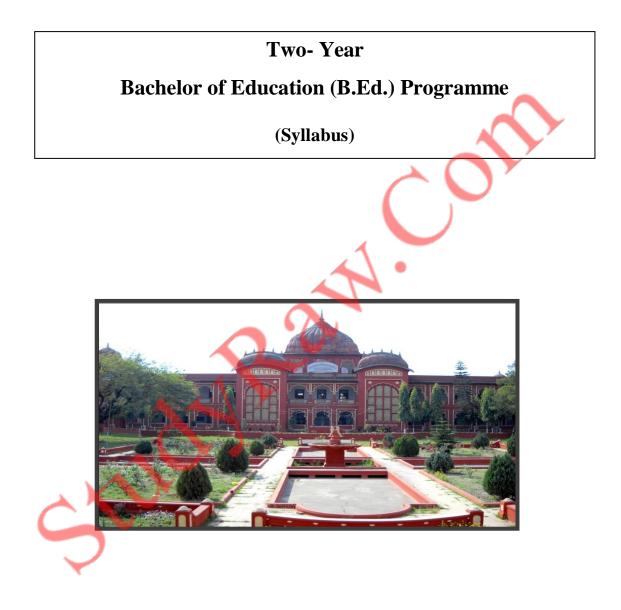**Bachelor of Education (B.Ed.) Programme**

(Syllabus)

Lalit Narayan Mithila University
Kameshwaranagar, Darbhanga

LALIT NARAYAN MITHILA UNIVERSITY
KAMESHWARANAGAR, DARBHANGA

Syllabus for Two Year B.Ed. Programme

Scheme of Study

Course No.	Course Name	Credit	Theory	Practicum*	Full Marks
1ˢᵗ Year **ANNUAL DISTRIBUTION OF COURSES**					
Course 1	Childhood and Growing Up	4	80	20	100
Course 2	Contemporary India and Education	4	80	20	100
Course 3	Learning and Teaching	4	80	20	100
Course 4	Language across the Curriculum	2	40	10	50
Course 5	Understanding Disciplines and Subjects	2	40	10	50
Course 6	Gender, School and Society	2	40	10	50
Course 7a	Pedagogy of School Subject-Part-I	2	40	10	50
Course *EPC1*	Reading and Reflecting on Texts	2	40	10	50
Course *EPC2*	Drama and Art in Education	2	40	10	50
Course *EPC3*	Critical Understanding of ICT	2	40	10	50
	Total	**26**	**520**	**130**	**650**

* Engagement with the Field: Tasks and Assignments for Courses1-6 & 7a

Course No.	Course Name	Credit*	Theory	Practicum**	Full Marks
2ⁿᵈ Year **ANNUAL DISTRIBUTION OF COURSES**					
Course 7b	Pedagogy of School Subject-Part-II	2	40	10	50
Course 8	Knowledge and Curriculum	4	80	20	100
Course 9	Assessment for Learning	4	80	20	100
Course 10	Creating an Inclusive School	2	40	10	50
Course 11	Optional Course***	2	40	10	50
Course *EPC4*	Understanding the Self	2	40	10	50
School Internship		10	–	–	250
	Total	**26**	**320**	**80**	**650**

*One Credit is equal to 16 hours for theory and for practicum 32 hours

**Engagement with the Field: Tasks and Assignments for Courses 7b & 8-10

***Each student-teacher will take One Optional Paper

FIRST YEAR

Course 1: Childhood and Growing Up

Course Objectives:
The student-teachers will be able to
1. Develop an understanding of the notions of childhood and adolescence;
2. Develop an understanding about the impact/influence of socio cultural context in shaping human development, especially with respect to the Indian context;
3. Develop an understanding of dimensions and stages of human development and developmental tasks ;
4. Understand the range of cognitive capacities among learners;
5. Appreciate the critical role of learner differences and contexts in making meanings, and draw out implications for schools and teachers;
6. Understand socialization and its role in identity formation of a child;
7. Understand identity formation and its determinants;

Unit 1: Understanding Childhood

a) Concept of Childhood : Historical and contemporary Perspectives; major discourse
b) Key Factors during Childhood: Family, Neighborhood, Community and School
c) Children and their Childhood: The Contemporary realities with special focus on Bihar
d) Development of learner: physical, cognitive, language, social, and moral; their interrelationships and implications for teachers (with reference to Piaget, Erickson and Kohlberg)

Unit 2: Understanding Adolescence
a) Concept of Adolescence: stereotypes and need of understanding, major issues and factors
b) Understanding Stages of development with special emphasis on adolescence
c) Adolescence: activities, aspirations, conflicts and challenges of learner; the role of teacher, family, community and state
d) The contemporary reality of adolescence with special focus on Bihar

Unit 3: Understanding Socialization and the Context of the Learner
a) Concept of Socialization: major perspectives, education as a medium and key factors
b) Socialization: the context of family, community and school
c) Gender Identities and Socialization Practices in: family, schools, other formal and informal organization; Schooling of Girls
d) Process of Socialization and social realities (with special focus on Bihar): Inequalities, conflict, marginalization

Unit 4: Understanding Differences in Learners

a) Difference in learners based on socio-cultural contexts
b) Dimensions of differences in psychological attributes: cognitive, abilities, interest, aptitude, creativity, personality,
c) Understanding differences based on a range of cognitive abilities: learning difficulties, slow learners and dyslexics, intellectual deficiency, intellectual giftedness
d) Implication for catering to individual variations in view of 'difference' rather than 'deficit' perspective

Unit 5: Learner's Identity Development

a) Understanding 'Identity Formation'
b) Determinants of identity formation in individual and groups; social categories such as caste, class, gender, religion, language and age; peer group

c) School as a site of identity formation in teacher and students
d) The influence of media, technology and globalization on identity formation

Sessional Work

- **Assignment** (Any two of the following) (Concerned teacher can devise assignment as per requirement of the course)

1. Critical analysis of classroom instruction in the light of the understandings developed
2. Case study of a learner with behaviour problem/talented child/a LD child/a slow learner/a disadvantaged child
3. Observing children in their natural setting
4. Study of intelligence of at least 5 school children and relating it with achievement and other background factors

Suggested Readings:

- Benjafield, J.G. (1992). *Cognition,* Prentice Hall, Englewood Cliffs.
- Brown, J.S., Collins A and Dugrid, P (1989). *Situated Cognition and the Culture of Learning,* Educational Researcher; 32-42.
- Denise Pope (2001), *Doing School: How we are creating a Generation of Stressed Out, Materialistic, and Miseducated Students*. New Haven: Yale University Press.
- Gagné, R. M. (1985) *The Conditions of Learning and Theory of Instruction* (4th edition). New York: Holt, Rinehart and Winston
- Gardner, Howard (1989). *Frames of Mind. The Theory of Multiple Intelligences*, Basic Books, New York.
- Jeanne, Ellis Ormrod. *Educational Psychology: Developing Learners*. Fourth Edition
- Jeffrey Arnett (2007), *Adolescence and Emerging Adulthood: A Cultural Approach*. (3rd. ed.). Upper Saddle River, N.J.: Pearson.
- Lindgren, H.C. (1980). *Educational Psychology in the Classroom* Oxford University Press, New York.
- Patricia A. Alexander, Philip H. Winne (2006) *Handbook of Educational Psychology*
- Sarangapani M. Padma(2003.), *Constructing School Knowledge :An Ethnography of learning in an Indian Village*, Sage Publication
- Sturt Mary, Oakden, E.C. (1999) *Modern Psychology and Education*, Routledge.
- Vygotsky, L.S. *Mind in Society*, Harvard University Press: Cambridge, 1978. Chapter 6.
- Woolfolk, A.E. (2009) *Educational Psychology* (11th Edition) (My Education Lab Series) Prentice Hall

Course 2: <u>Contemporary India and Education</u>

Course Objectives:

The student-teachers will be able to

1. Understand the constitutional provisions for education and realizing it
2. Examine the issues and concerns related to universalisation of secondary education
3. Analyse the strategies used for realization UEE and the outcomes of their implementation.
4. Realize the need and importance of equity and equality in education and the constitutional provisions for it.
5. Identify the various causes for inequality in schooling
6. Realize the importance of Right to Education and the provisions made for realizing it.
7. Understand the importance of indicators, standards and strategies for enhancement of quality in secondary schools
8. Understand the need and importance of education for peace and the national and international efforts towards it.

Unit-1: Constitutional Provisions and Education
   a) Constitutional provisions of education
   b) Policies and programmes for realizing the constitutional obligations
   c) Universalization of Elementary education- issues and concerns, Role of SSA
   d) Right to Education Act 2009

Unit-2: Universalization of Secondary Education
   a) Concept, aims and problems of Secondary Education
   b) Secondary Education Commission-1952-53, Indian Education Commission-1964-66- their recommendations on secondary education
   c) Universalization of Secondary Education (USE)- Role of RMSA
   d) Salient features of NPE 1986 Revised Education Policy 1992 and National Knowledge Commission (NKC) with reference to school education

Unit-3: Equity & Equality in Education
   a) Meaning of Equality of Educational Opportunities
   b) Constitutional provisions for ensuring equity
   c) Nature and forms of inequality including dominant and minor groups, gender
   d) Inequality in schooling: public-private schools; Rural-urban-tribal schools, and schools for differentially-abled

Unit-4: Quality in education
   a) 'Quality education'- meaning and implications
   b) Indicators of quality: related to learning environment, Student Outcomes
   c) Quality education- its accreditation
   d) Enhancement of quality in secondary schools

Unit-5: Peace Education
   a) Concept of Peace; Peace as a dynamic Social Reality
   b) Relevance of Peace: national and international contexts
   c) Role of education in promotion of peace: implications for pedagogy
   d) Teacher role in promoting peace

Sessional Work

- **Assignment** (Any two of the following) (Concerned teacher can devise assignment as per requirement of the course)
1. Presentation on the reports and policies on USE
2. Analysis of school curriculum for integrating environmental concerns
3. Conduct surveys of various educational contexts (*eg.* Schools of different kinds) to identify various forms of inequality
4. Individual or group projects to visualize feasible school-based strategies for contributing to 'peace' and 'environmental conservation'

Suggested Readings:

- Anand, C.L. *et.al.* (1983). *Teacher and Education in Emerging Indian Society*, NCERT, New Delhi.
- NCERT (1993). *Teacher and Education in Emerging Indian Society*, New Delhi
- Govt. of India (1986). *National Policy on Education*, Min. of HRD, New Delhi.
- Govt. of India (1992). *Programme of Action (NPE)*. Min of HRD.
- Mohanty, J., (1986). *School Education in Emerging Society*, Sterling Publishers.
- MacMillan, New Delhi.
- NCERT (1986). *School Education in India – Present Status and Future Needs*, New Delhi.
- Salamatullah, (1979). *Education in Social context*, NCERT, New Delhi.

- Ministry of Education. *'Education Commission "Kothari Commission".* 1964-1966. Education and National Development. Ministry of Education, Government of India 1966.
- *National Policy on Education. 1986.* Ministry of HRD, Department of Education, New Delhi.
- *Seventh All India School Education Survey*, NCERT: New Delhi. 2002
- UNDPA. *Human Development Reports.* New Delhi. Oxford: Oxford University Press.
- UNESCO. (2004) *Education for All: The Quality Imperative. EFA Global Monitoring Report.* Paris.
- UNESCO's *Report on Education for sustainable development.*
- Ministry of Law and Justice (2009) *Right to Education.* Govt of India
- Govt of India (1992) *Report of Core group on value orientation to education, Planning commission*
- Arvind Kumar (2003). *Environmental challenges of the 21st century*, APH Publishing corporation, New Delhi

Course 3: <u>Learning and Teaching</u>

Course Objectives:
The student-teachers will be able to
1. Reflect on their own implicit understanding of the nature and kinds of learning
2. Gain an understanding of different theoretical perspectives on learning
3. Demonstrate understanding of the role of a teacher at different phases of instruction
4. Write instructional objectives teaching of a topic
5. Demonstrate understanding of different skills and their role in effective teaching
6. Use instructional skills effectively

Unit 1 Understanding Learning
a) Nature of learning: learning as a process and learning as an outcome
b) Types of learning: factual, associations, conceptual, procedural, generalizations, principles and rules, attitudes, values and skills
c) Pedagogic principles for organizing learning: behaviouristic, cognitivistic, humanistic and constructivistic
d) A critical analysis of the relevance and applicability of various learning theories for different kinds of learning situations

Unit 2 Factors Influencing Learning
a) Biological and hereditary factors influencing learning
b) Factors related to the subject matter content and learning material and method of learning; attention, motivation and readiness as factors influencing scholastic learning
c) Factors influencing remembering and forgetting, conceptual organization and reorganization, scaffolding,
d) Role of the teachers, school and parents in addressing various factors influencing learning: a few strategies

Unit 3 Understanding Teaching
a) Teaching as a planned activity – its elements and assumptions
b) Phases of teaching: pre-active, interactive and post-active.
c) Proficiency in teaching: meaning and place of awareness, skills, competencies and commitment; general and subject related skills and competencies required in teaching
d) Teacher's professional identity- what does it entail?

Unit 4 Pre-active and Interactive Phases of Teaching
a) Teacher roles and functions in the pre-active phase –
  - Understanding the learner and learner readiness characteristics, the   subject matter content and their inter-linkages,
  - Specification of objectives

- Selecting the appropriate instructional approaches, strategies and learning resources
- Preparation of a Plan: Unit Plan and Lesson Plan

b) Teacher roles and functions in the interactive phase - facilitating and managing learning; Expository Strategy (Presentation-discussion-demonstration, the Advance Organizer Model), Inquiry Strategy (Concept Attainment/ Concept Formation, Inductive Thinking, Problem Based Learning/Project Based Learning)

c) Interactive Phase of Teaching – Approaches and Skills of Teaching

- Approaches to Individualized Instruction: Computer Managed Instruction, Programmed Instruction, and Learning Activity Packages;
- Approaches to Small Group and Whole Group Instruction: Cooperative and Collaborative approaches to learning, Brain storming, Role Play and Dramatization, Group Discussion, Simulation and Games, Debate, Quiz and Seminar

Instructional Skills: Structuring, Soliciting and Reacting, Verbal and Non-verbal, Feedback and Reinforcement, Discourse, Demonstration and Modelling

Unit 5 Post-active Phase of Teaching and Learners' Evaluation
a) Teacher roles and functions in the post-active phase: evaluation of pupil learning, evaluation
b) Generating feedback on all three phases of teaching
c) Reflection and appraisal for professional development in teaching: self-reflection, observation and feedback by peers
d) Analysis of teaching using different media, appraisal by students

Sessional Work
- **Assignment** (Any two of the following) (Concerned teacher can devise assignment as per requirement of the course)
1. Study of instructional practices with reference to use of classroom skills
2. Classification of instructional objectives of a lesson under domains and levels
3. Writing instructional objectives for different content categories
4. Construction of Unit/Lesson Plan
5. Practice of skills in a simulated situation

Suggested Readings:

- Bloom, B S., Englehart M D, Furst E J, Hill W H and Khrathwohl, D R (1956, 1964) *Taxonomy of Educational Objective* Handbook 1, Cognitive Domain, Handbook 2, Affective Domain, Longman London
- Buch, M B and Santharam M R (1972) *Communication in Classroom*, CASE, Faculty of Ed. &Psy. M S Univ. Baroda
- Davis, Irork (1971) **The Management of Learning**, McGraw Hill, London
- Jangira N K and Ajit Singh (1982) *Core Teaching Skills: The Microteaching Approach*, NCERT, New Delhi
- Nagpure, V. (1992) *Teacher Education at Secondary Level*, Himalaya Publishing House, 'Ramdoot', Dr BaleraoMarg, Girgaon, Bombay 400 004
- Passi, B K (1976) *Becoming better teacher-Micro-teaching Approach*, SahityaMudranalaya, Aahmedabad
- Sharma, R A (1983) *Technology of Teaching*; International Publishing House, Meerut
- Kumar, K L (1996) *Educational Technology*; New Age International (P) Ltd Publishers, New Delhi
- Singh, L C *Microteaching: Theory and Practical*, National Psychological Corporation, Agra

Course 4: <u>Language across the Curriculum</u>

Course Objectives:
The student-teachers will be able to
1. Have a conceptual understanding of language;
2. Understand the language background of students as first or second language users of the language used in teaching the subject;
3. Understand multilingualism in the classroom, school language and home language;
4. Develop sensitivity with respect to language diversity that exists in the classroom;
5. Understand the nature of classroom discourse

Unit 1: Learner and their Language

a) Meaning of Language; various forms, systems and properties
b) Understanding the knowledge of language in learners
c) Language capital of learners before school entry
d) How children learn language with special reference to Skinner, Chomsky, Piaget and Vygotsky
e) Difference between acquiring language and learning language

Unit 2: Context and Perspectives of Language
a) Social, cultural and political context of language
b) Language and identity
c) Language and power
d) Language and Gender
e) Multilingual perspective of India and Bihar
f) Constitutional provisions related to languages in India

Unit 3: Language- School Curriculum
a) Language as a 'subject' and as a 'medium' in school
b) Language, dialect and script
c) Role and importance of language in the curriculum
d) Place of mother language in present school curriculum
e) Understanding the objectives of learning languages: imagination, creativity, sensitivity, skill development
f) Medium of instruction : suggestions of different commissions
g) Major debates about languages in classroom discourse

Sessional Work
- **Assignment** (select any two of the following)(Concerned teacher can devise assignment as per requirement of the course)

Course 5: <u>Understanding Disciplines and Subjects</u>

Course Objectives:
The student-teachers will be able to
1. Understand the basic premises of subject/discipline
2. Understand the need for classification of human knowledge
3. Know required basic competencies for effective transaction of knowledge
4. Know how to enhance knowledge of the discipline
5. Importance of research for advancement of subject/discipline

Unit 1: Basic Understanding of subject and disciplines
   a) Human knowledge and need of classification of knowledge into subject/discipline- Language, Social Science, Science and Mathematics
   b) Difference between subject and discipline
   c) Nature and scope of subject/discipline
   d) Basic premises and philosophy of subject
   e) Aim of subject/discipline for learners development in the national context

Unit 2: Competencies for the subject/discipline
   a) Mastery over the subject
   b) Communicating the subject
   c) Subject specific terms and their uses
   d) Projects/activities in the subject

Unit 3: Advancement of the subject/discipline
   a) Research in subject/discipline
   b) Methods of data collection in the subject
   c) Drawing conclusion, generalization and theory development
   d) Preparing reference, notes and bibliography

Sessional Work
   - **Assignment** (select any two of the following)(Concerned teacher can devise assignment as per requirement of the course)

Course 6: <u>Gender, School and Society</u>

Course Objectives:

The student-teachers will be able to

   1. Develop basic understanding and familiarity with key concepts- gender, gender bias, gender stereotype, empowerment, gender parity, equity, and equality, patriarchy and feminism;
   2. Understand the gradual paradigm shift from women' studies to gender studies and some important landmarks in connection with gender and education in the historical and contemporary period;
   3. Learn about gender issues in school, curriculum, textual materials across disciplines, pedagogical processes and its intersection with class, caste, religion and region; and
   4. Understand how gender, power and sexuality relate to education (in terms of access, curriculum and pedagogy).

Unit 1 Gender Issues: Key Concepts:
   a) Gender, sex, sexuality, patriarchy, masculinity, feminism
   b) Gender bias, gender stereotyping, and empowerment
   c) Paradigm shift from women's studies to gender studies
   d) Contemporary period: Recommendations of policy initiatives, commissions and committees, schemes, programmes and plans.

Unit 2 Gender, Power and Education
   a) Theories on Gender and Education: Application in the Indian context-Socialization theory, Gender differences, Structural theory
   b) Gender identities and socialization practices in: Family, Schools and Other formal and informal organizations
   c) Schooling of girls: Inequalities and resistances (issues of access, retention and exclusion)

Unit 3: Gender issues in Curriculum
   a) Gender, culture and institution: Intersection of class, caste, religion and region
   b) Curriculum and the gender questions
   c) Gender and hidden curriculum
   d) Gender in text and context (textbooks, classroom processes, including pedagogy)
   e) Teacher as an agent of change

Sessional Work
   - **Assignment** (select any two of the following)(Concerned teacher can devise assignment as per requirement of the course)

Course 7a: PEDAGOGY OF SCHOOL SUBJECT-Part-I

A student-teacher has to select two pedagogical subjects (each of 50 marks), one subject in each year, from the following list. The choice of such subject will depend on the main papers which they have studied at the graduation level/master level. Along with these, two languages cannot be opted as pedagogical subjects. From this list itself learner has to choose second school subject under Course 7b in Second Year.

Under 7a in the first year, a student has to select any one pedagogy subject from the following list:

1. Pedagogy of Modern Indian Language (*Hindi, Urdu, Maithili* or *Bengali;* any one)
2. Pedagogy of English
3. Pedagogy of Classical Language (*Sanskrit*)
4. Pedagogy of Physical Science
5. Pedagogy of Social Science
6. Pedagogy of Commerce
7. Pedagogy of Home Science
8. Pedagogy of Computer Science

(A) Pedagogy of Modern Indian Language (*Hindi, Urdu, Bengali, Maithili*)

1. **Learning language**
   a) Child development and its relationship to language
   b) The nature of the language (Mother tongue), its sound system, vocabulary system, structure and its writing system.
   c) Principles and problems of teaching the mother tongue.

2. **Organizing Teaching-Learning in language**
   a) A language teacher
   b) Understanding of classroom communication
   c) Critical understanding of language curriculum, syllabus and textbook
   d) Planning for teaching-learning in language
   e) Challenges in teaching language

3. **Strategies for learning subject matter content in language**
   a) Critical understanding of various strategies in teaching –learning of language Learning by exposition, inductive-deductive, guided discovery, cognitive apprenticeship, learning by scaffolding

b) Teaching methods used in teaching language; Paradigm shift in teaching-learning of the subject *viz.* constructivist approach
c) Learning in Groups- Cooperative and collaborative learning, addressing needs of heterogenous classroom

4. Assessment of and for learning in language
a) Issues in assessment in language
b) Shifting Trends in assessment in language
c) Construction of test design and subject question paper along with marking scheme
d) Diagnosing basic causes of difficulties in learning of language -concept, generalizations, problem-solving and proof
e) Planning remedial teaching strategies based on the perceived causes, implementing and evaluating the strategies

Sessional Work
- **Assignment(select any two of the following)**(Concerned teacher can devise assignment as per requirement of the course)

    1. Designing learning activities, appropriate strategies, selecting/preparing learning resources; assessment techniques and tools, etc.
    2. Analysis of unit/chapter in subject textbook to identify the concepts, principles and processes and to understand the underlying the subject structures
    3. Analysis of subject textbook of the concerned class taught by the pupil-teacher (content,exercises, activities, activities, activities and overall presentation of the book)
    4. Critical analysis of teaching skills and strategies used in a lesson taught in a class or lesson plan in a nearby school
    5. Identification of learning difficulties experienced by students in a lesson and evaluation of the diagnostic and remedial strategies adopted by the teacher in a nearby school

Suggested Readings:
Flower, R.P. *Language and Education*
Habolot, P. *Language Learning*
Oad, L.K. *Hindi Shikshanmein Truti Nidan evam Upchar*
Pandey, R.S. *Hindi Shikshan*
Quirk, R. *The study of the Mother Tongue*
Singh, N.K. *Madhyamik Vidyalayonmein Hindi Shikshan*
Sharma, D.L. *Hindi Shikshan Prashikshan*

(B) Pedagogy of English

1. Learning English- a foreign language
a) Learning English- second language (associate language) in India
b) The Constituents of learning a foreign language: the sound system, the structural devices, vocabulary
c) Principles and problems of teaching English

2. Organizing Teaching-Learning in English
a) An English teacher
b) Understanding of classroom communication
c) Critical understanding of English curriculum , syllabus and textbook
d) Planning for teaching-learning in English

3. **Strategies for learning subject matter content in English**
    a) Critical understanding of various strategies in teaching –learning of Sanskrit Learning by exposition, inductive-deductive, guided discovery, cognitive apprenticeship, learning by scaffolding
    b) Teaching methods used in teaching of English; Paradigm shift in teaching-learning of the subject *viz.* constructivist approach
    c) Learning in Groups- Cooperative and collaborative learning, addressing needs of heterogenous classroom

4. **Assessment of and for learning in English**
    a) Issues in assessment in English
    b) Shifting Trends in assessment in English
    c) Construction of test design and subject question paper along with marking scheme
    d) Diagnosing basic causes of difficulties in learning of English -concept, generalizations, problem-solving and proof
    e) Planning remedial teaching strategies based on the perceived causes, implementing and evaluating the strategies

Sessional Work

- **Assignment** (**select any two of the following**)(Concerned teacher can devise assignment as per requirement of the course)
    1. Designing learning activities, appropriate strategies, selecting/preparing learning resources; assessment techniques and tools, etc.
    2. Analysis of unit/chapter in subject textbook to identify the concepts, principles and processes and to understand the underlying the subject structures
    3. Analysis of subject textbook of the concerned class taught by the pupil-teacher (content, exercises, activities, activities, activities and overall presentation of the book)
    4. Critical analysis of teaching skills and strategies used in a lesson taught in a class or lesson plan in a nearby school
    5. Identification of learning difficulties experienced by students in a lesson and evaluation of the diagnostic and remedial strategies adopted by the teacher in a nearby school

Suggested Readings:

Agnihotri, R.K. &Khanna, A.L. (Ed.).*English Language Teaching in India- issue and Innovations.*
Allen, H.B. & Campbell, R.N. *Teaching of English as a second Language*
Bright, J.A.&Megreger, G.P. *Teaching English as a second Language*
Chaudhary, N.R. *Teaching English in Indian Schools*
Frishy, A.C. *Teaching English*
Hornby, A.S. *Teaching of structural words*
Mukalel, J.C. *Approaches to English Language Teaching*
Varghese, B.V. *Modern methods of Teaching English*

(C) Pedagogy of Classical Language (*Sanskrit*)

1. **Learning a classical language**
    a) Learning *Sanskrit*- a classical language in India
    b) Difficulties in teaching a *Sanskrit*
    c) The nature of *Sanskrit*-its sound system, vocabulary system, structure and its writing system.
    d) Principles and problems of teaching *Sanskrit*.

2. **Organizing Teaching-Learning in Sanskrit**
   a) A *Sanskrit* teacher
   b) Understanding of classroom communication
   c) Critical understanding of *Sanskrit* curriculum , syllabus and textbook
   d) Planning for teaching-learning in*Sanskrit*

3. **Strategies for learning subject matter content in Sanskrit**
   a) Critical understanding of various strategies in teaching –learning of *Sanskrit* Learning by exposition, inductive-deductive, guided discovery, cognitive apprenticeship, learning by scaffolding
   b) Traditional methods of teaching *Sanskrit*; Paradigm shift in teaching-learning of the subject *viz.* constructivist approach
   c) Learning in Groups- Cooperative and collaborative learning, addressing needs of heterogeneous classroom

4. **Assessment of and for learning in Sanskrit**
   a) Issues in assessment in *Sanskrit*
   b) Shifting Trends in assessment in *Sanskrit*
   c) Construction of test design and subject question paper along with marking scheme
   d) Diagnosing basic causes of difficulties in learning ofSanskrit -concept, generalizations, problem-solving and proof
   e) Planning remedial teaching strategies based on the perceived causes, implementing and evaluating the strategies

Sessional Work

- **Assignment(select any two of the following)**(Concerned teacher can devise assignment as per requirement of the course)

   1. Designing learning activities, appropriate strategies, selecting/preparing learning resources; assessment techniques and tools, etc.
   2. Analysis of unit/chapter in subject textbook to identify the concepts, principles and processes and to understand the underlying the subject structures
   3. Analysis of subject textbook of the concerned class taught by the pupil-teacher (content,exercises, activities, activities, activities and overall presentation of the book)
   4. Critical analysis of teaching skills and strategies used in a lesson taught in a class or lesson plan in a nearby school
   5. Identification of learning difficulties experienced by students in a lesson and evaluation of the diagnostic and remedial strategies adopted by the teacher in a nearby school

Suggested Readings:
Apte, G.D. &Dongre, P.K. *Teaching of Sanskrit insecondary schools*
Chaturvedi, S.P. *Sanskrit Shikshan*
Mishra, P.S. *Sanskrit Shikshan*
Pandey,R.S. *Sanskrit Shikhan*
Triothi, R.N. *Sanskrit AdhayapanVidhi*

(D) Pedagogy of Mathematics

1. **Foundations of Mathematics**
   a) Nature of Mathematics- Meaning, its dimension (the historical, scientific, aesthetic, recreational) and history of mathematics with special emphasis on Indian Mathematics

b) Learning of Mathematics- Constructivists perspectives of teaching Mathematics emphasizing Piaget and Vygotsky, critical and realistic Mathematics education

c) Curriculum reform in Mathematics – Critical appraisal of NCF- 2005, BCF 2008 in the context of Mathematics teaching, Need for standards for school Mathematics

d) Contextual Issues- Learning Mathematics without burden, developing democracy and equity through Mathematics, Child mathematician , developing scientific attitude

2. **Organizing Teaching-Learning in Mathematics**
   a) A Mathematics teacher
   b) Understanding of classroom communication
   c) Planning for teaching-learning in Mathematics- analysis of aim and general objectives of teaching Mathematics vis-à-vis the objectives of secondary education, lesson and unit plans
   d) Critical understanding of Mathematics curriculum , syllabus and   textbook

3. **Strategies for learning subject matter content in Mathematics**
   a) Paradigm shift in teaching-learning of the subject *viz.* constructivist approach
   b) Critical understanding of various strategies in teaching –Learning by exposition, Learning by discovery, inductive-deductive, guided discovery, cognitive apprenticeship, learning by scaffolding
   c) Teaching problem-solving in Mathematics-definition of problem, posing a problem, generating problem, modelling and model for problem solving, exploring various options for solving the problem *i.e.* developing heuristics approach
   d) Learning in Groups- Cooperative and collaborative learning, addressing needs of heterogenous classroom

4. **Assessment of and for learning in Mathematics**
   a) Issues in assessment in Mathematics
   b) Shifting Trends in assessment in Mathematics
   c) Construction of test design and subject question paper along with marking scheme
   d) Diagnosing basic causes of difficulties in learning of Mathematics -concept, generalizations, problem-solving and proof
   e) Planning remedial teaching strategies based on the perceived causes, implementing and evaluating the strategies

Sessional Work

- **Assignment(select any two of the following)**(Concerned teacher can devise assignment as per requirement of the course)

  1. Designing learning activities, appropriate strategies, selecting/preparing learning resources; assessment techniques and tools, etc.
  2. Analysis of unit/chapter in subject textbook to identify the concepts, principles and processes and to understand the underlying the subject structures
  3. Analysis of subject textbook of the concerned class taught by the pupil-teacher (content, exercises, activities, activities, activities and overall presentation of the book)
  4. Critical analysis of teaching skills and strategies used in a lesson taught in a class or lesson plan in a nearby school
  5. Identification of learning difficulties experienced by students in a lesson and evaluation of the diagnostic and remedial strategies adopted by the teacher in a nearby school

Suggested Readings:

Cooney, Thomas J. and Others (1975).*Dynamics of Teaching Secondary School Mathematics,* Boston: Houghton Mifflin.

Driscoll,M., Egan, M., Nikula, J., &DiMatteo, R. W. (2007). *Fostering geometric thinking: A guide for teachers, grades 6-10.* Portsmouth, NH: Heinemann.

Driscoll,M.(1999). *Fostering algebraic thinking: A guide for teachers, grades 5-10.* Portsmouth, NH: Heinemann.

Malone, J. and Taylor, P. (eds) (1993). *Constructivist Interpretations of Teaching and Learning Mathematics*, Perth: Curtin University of Technology.

Marshall, S.P.(1995) *Schemes in Problem-solving.* NY: Cambridge University Press.

NCERT, *A Textbook of Content-cum-Methodology of Teaching Mathematics*, New Delhi: NCERT.

Nickson, Marilyn (2000). *Teaching and Learning Mathematics: A Guide to Recent Research and its Applications,* NY: Continuum.

Nunes, T and Bryant, P (Eds) (1997*). Learning and Teaching Mathematics: An International Perspective*, Psychology Press.

Lester, F.K (Ed) (2007). *Second Handbook of Research on Mathematics Teaching and Learning*, Charlotte, NC: NCTM & Information Age Publishing.

Polya, George (1957) *How to solve it*, Princeton, NJ: Princeton University Press.

(E) Pedagogy of Physical Science

1. **Foundations of Physical Science**
   a) Nature of Physical Science- Meaning, its dimension (the historical, scientific, aesthetic, recreational) development of science with special reference to India
   b) Learning of Physical Science- Constructivists perspectives of teaching Physical Science emphasizing Piaget and Vygotsky, critical and realistic Physical Science education
   c) Curriculum reform in Science- Critical appraisal of NCF- 2005, BCF 2008 in the context of Science teaching, Need for standards for school Science
   d) Contextual Issues - Learning Science without burden, developing democracy and equity through Science, environment protection, sustainable development; Child Scientist , developing scientific attitude

2. **Organizing Teaching-Learning in Physical Science**
   a) A Science teacher
   b) Understanding of classroom communication
   c) Planning for teaching-learning in Science - analysis of aim and general objectives of teaching Science vis-à-vis the objectives of secondary education, lesson and unit plans
   d) Critical understanding of Science curriculum , syllabus and textbook

3. **Strategies for learning subject matter content in Physical Science**
   a) Paradigm shift in teaching-learning of the subject *viz.* constructivist approach
   b) Critical understanding of various strategies in teaching –Learning by exposition, Learning by discovery, inductive-deductive, guided discovery, cognitive apprenticeship, learning by scaffolding
   c) Teaching problem-solving in Science-definition of problem, posing a problem, generating problem, modelling and model for problem solving, exploring various options for solving the problem *i.e*. developing heuristics approach
   d) Learning in Groups- Cooperative and collaborative learning, addressing needs of heterogenous classroom

4. **Assessment of and for learning in Physical Science**
   a) Issues in assessment in Physical Science
   b) Shifting Trends in assessment in Physical Science
   c) Construction of test design and subject question paper along with marking scheme
   d) Diagnosing basic causes of difficulties in learning of Physical Science -concept, generalizations, problem-solving and proof
   e) Planning remedial teaching strategies based on the perceived causes, implementing and evaluating the strategies

Sessional Work

- **Assignment(select any two of the following)**(Concerned teacher can devise assignment as per requirement of the course)

    1. Designing learning activities, appropriate strategies, selecting/preparing learning resources; assessment techniques and tools, etc.
    2. Analysis of unit/chapter in subject textbook to identify the concepts, principles and processes and to understand the underlying the subject structures
    3. Analysis of subject textbook of the concerned class taught by the pupil-teacher (content, exercises, activities, activities, activities and overall presentation of the book)
    4. Critical analysis of teaching skills and strategies used in a lesson taught in a class or lesson plan in a nearby school
    5. Identification of learning difficulties experienced by students in a lesson and evaluation of the diagnostic and remedial strategies adopted by the teacher in a nearby school

Suggested Readings:

Dass, R.C. *Science Teaching in Schools*

Gupta, S.K. *Technology of Science Education*

Heiss, Obourn and Hoffman, *Modern Science Teaching*

Hurd, P.D.*New Directions in Teaching Secondary School Science*

Nsse*Rethinking in Science Education*

Misra ,K.S. *Perspectives in Science Education*

Newbury, N.F. *Teaching of Chemistry*

Vaidya,N. *Impact Science Teaching*

Washton*Teaching Science Creativity*

UNESCO: *New Trends in Chemistry Teaching*

(F) Pedagogy of Biological Science

1. **Foundations of Biological Science**
    a) Nature of Biological Science- Meaning, its dimension (the historical, scientific, aesthetic, recreational) development of science with special reference to India
    b) Learning of Biological Science- Constructivists perspectives of teaching Biological Science emphasizing Piaget and Vygotsky, critical and realistic Physical Science education
    c) Curriculum reform in Science- Critical appraisal of NCF- 2005, BCF 2008 in the context of Science teaching, Need for standards for school Science
    d) Contextual Issues - Learning Science without burden, developing democracy and equity through Science, environment protection, sustainable development; Child Scientist, developing scientific attitude

2. **Organizing Teaching-Learning Biological Science**
    a) A Science teacher
    b) Understanding of classroom communication
    c) Planning for teaching-learning in Science - analysis of aim and general objectives of teaching Science vis-à-vis the objectives of secondary education, lesson and unit plans
    d) Critical understanding of Science curriculum , syllabus and textbook

3. **Strategies for learning subject matter content in Biological Science**
    a) Paradigm shift in teaching-learning of the subject *viz.* constructivist approach
    b) Critical understanding of various strategies in teaching –Learning by exposition,

Learning by discovery, inductive-deductive, guided discovery, cognitive apprenticeship, learning by scaffolding
c) Teaching problem-solving in Science-definition of problem, posing a problem, generating problem, modelling and model for problem solving, exploring various options for solving the problem *i.e.* developing heuristics approach
d) Learning in Groups- Cooperative and collaborative learning, addressing needs of heterogeneous classroom

4. **Assessment of and for learning in Biological Science**
   a) Issues in assessment in Biological Science
   b) Shifting Trends in assessment in Biological Science
   c) Construction of test design and subject question paper along with marking scheme
   d) Diagnosing basic causes of difficulties in learning of Biological Science -concept, generalizations, problem-solving and proof
   e) Planning remedial teaching strategies based on the perceived causes, implementing and evaluating the strategies

Sessional Work

- **Assignment(select any two of the following)**(Concerned teacher can devise assignment as per requirement of the course)

  1. Designing learning activities, appropriate strategies, selecting/preparing learning resources; assessment techniques and tools, etc.
  2. Analysis of unit/chapter in subject textbook to identify the concepts, principles and processes and to understand the underlying the subject structures
  3. Analysis of subject textbook of the concerned class taught by the pupil-teacher (content, exercises, activities, activities, activities and overall presentation of the book)
  4. Critical analysis of teaching skills and strategies used in a lesson taught in a class or lesson plan in a nearby school
  5. Identification of learning difficulties experienced by students in a lesson and evaluation of the diagnostic and remedial strategies adopted by the teacher in a nearby school

Suggested Readings:
Bremmer,J. *Teaching Biology*
Carin, R.A. &Sund, R.B. *Teaching Science through Discovery*
Green, T.L. *Teaching of Biology in Tropical Secondary Schools*
Miller, D.F. and Blaydes, *G.W. Methods and Materials for Teaching Biological Sciences*
UNESCO: *New Trends in Biology Teaching*

(G) Pedagogy of Social Science

1. **Foundations of Social Science**
   a) Nature of Social Science- Meaning, its dimension (the historical, scientific, aesthetic, recreational) development of Social science with special reference to India
   b) Learning of Social Science- Constructivists perspectives of teaching Social Science emphasizing Piaget and Vygotsky, critical and realistic Social Science education
   c) Curriculum reform in Social Science - Critical appraisal of NCF- 2005, BCF- 2008 in the context of Social Science teaching, Need for standards for school Social Science
   d) Contextual Issues in learning Social Science- democracy, equity, gender, environment protection, sustainable development; Learning Social Science without burden

2. **Organizing Teaching-Learning Social Science**
   a) A Social Science teacher
   b) Understanding of classroom communication
   c) Planning for teaching-learning in Social Science - analysis of aim and general objectives of teaching Social Science vis-à-vis the objectives of secondary education, lesson and unit plan
   d) Critical understanding of Social Science curriculum , syllabus and   textbook

3. **Strategies for learning subject matter content in Social Science**
   a) Paradigm shift in teaching-learning of the subject *viz.* constructivist approach
   b) Critical understanding of various strategies in teaching–Learning by exposition, Learning by discovery, inductive-deductive, guided discovery, cognitive apprenticeship, learning by scaffolding
   c) Teaching problem-solving in Social Science-definition of problem, posing a problem, generating problem, modeling and model for problem solving, exploring various options for solving the problem
   d) Learning in Groups- Cooperative and collaborative learning, addressing needs of heterogeneous classroom

4. **Assessment of and for learning in Social Science**
   a) Issues in assessment in Social Science
   b) Shifting Trends in assessment Social Science
   c) Construction of test design and subject question paper along with marking scheme
   d) Diagnosing basic causes of difficulties in learning of Social Science
   e) Planning remedial teaching strategies based on the perceived causes, implementing and evaluating the strategies

Sessional Work

- **Assignment(select any two of the following)**(Concerned teacher can devise assignment as per requirement of the course
   1. Designing learning activities, appropriate strategies, selecting/preparing learning resources; assessment techniques and tools, etc.
   2. Analysis of unit/chapter in subject textbook to identify the concepts, principles and processes and to understand the underlying the subject structures
   3. Analysis of subject textbook of the concerned class taught by the pupil-teacher (content, exercises, activities, activities, activities and overall presentation of the book)
   4. Critical analysis of teaching skills and strategies used in a lesson taught in a class or lesson plan in a nearby school
   5. Identification of learning difficulties experienced by students in a lesson and evaluation of the diagnostic and remedial strategies adopted by the teacher in a nearby school

Suggested Readings:

Agarwal, J.C. *Teaching Social Studies*
Bining, A.C. &Bining, A.H. *Teaching the social study in secondary school*
Bawa, M.S. (Ed.) *Source Book on Strategies of Teaching Social Science*
Jam, *A.C. Samajik Gyan Shikshan*
Singh, R.P. *Samajik Adhyayan Ka Shikshan*
Tyagi, G.S.D. *Samajik Adhyayan Tatha Nagrik Shastra Ka Shikshan*
Wesley, E.B. &Wronski S.P. *Teaching Of Social Studies in High Schools*

(H) Pedagogy of History

1. **Foundations of History**
   a) Nature of History - Meaning, its dimension (the historical, aesthetic, recreational);its relationship with other social science- geography, political science, economics
   b) Learning of History-Constructivists perspectives of teaching History emphasizing Piaget and Vygotsky, critical and realistic History education
   c) Curriculum reform in Social Science - Critical appraisal of NCF- 2005, BCF- 2008 in the context of Social Science teaching, Need for standards for school Social Science
   d) Contextual Issues in learning History –Whose history?; Sources and their interpretation; Learning History without burden

2. **Organizing Teaching-Learning in History**
   a) A History teacher
   b) Understanding of classroom communication
   c) Planning for teaching-learning in History - analysis of aim and general objectives of teaching History vis-à-vis the objectives of secondary education, lesson and unit plan
   d) Critical understanding of History curriculum , syllabus and textbook

3. **Strategies for learning subject matter content in History**
   a) Paradigm shift in teaching-learning of the subject *viz.* constructivist approach
   b) Critical understanding of various strategies in teaching –Learning by exposition, Learning by discovery, inductive-deductive, guided discovery, cognitive apprenticeship, learning by scaffolding
   c) Teaching problem-solving in History -definition of problem, posing a problem, generating problem, modeling and model for problem solving, exploring various options for solving the problem *i.e.* developing discovery approach
   d) Learning in Groups- Cooperative and collaborative learning, addressing needs of heterogeneous classroom

4. **Assessment of and for learning in History**
   a) Issues in assessment in History
   b) Shifting Trends in assessment in History
   c) Construction of test design and subject question paper along with marking scheme
   d) Diagnosing basic causes of difficulties in learning of History
   e) Planning remedial teaching strategies based on the perceived causes, implementing and evaluating the strategies

Sessional Work

- **Assignment(select any two of the following)**(Concerned teacher can devise assignment as per requirement of the course)

   1. Designing learning activities, appropriate strategies, selecting/preparing learning resources; assessment techniques and tools, etc.
   2. Analysis of unit/chapter in subject textbook to identify the concepts, principles and processes and to understand the underlying the subject structures
   3. Analysis of subject textbook of the concerned class taught by the pupil-teacher (content, exercises, activities, activities, activities and overall presentation of the book)
   4. Critical analysis of teaching skills and strategies used in a lesson taught in a class or lesson plan in a nearby school
   5. Identification of learning difficulties experienced by students in a lesson and evaluation of the diagnostic and remedial strategies adopted by the teacher in a nearby school

Suggested Readings:

Agarwal, J.C. *Teaching of History.*

Ballard, M,*New Movements in the Study and Teaching of History*.

Ghate, V.D. *Ethihas Shikshan.*

Johnson, H. *Teaching of History.*

Kochhar, S.K. *Teaching of History.*

Tyagi, G.S.D. *Ethihas Sikshan.*

(I) Pedagogy of Economics

1. **Foundations of Economics**
   a) Nature of Economics - Meaning, its dimension (the historical, aesthetic, recreational);its relationship with other social science- geography, political science, history
   b) Learning of Economics - Constructivists perspectives of teaching Economics emphasizing Piaget and Vygotsky, critical and realistic Economics education
   c) Curriculum reform in Social Science - Critical appraisal of NCF- 2005, BCF- 2008 in the context of Social Science teaching, Need for standards for school Social Science
   d) Contextual Issues in learning Economics –Learning Economics without burden, knowledge economy, globalization, liberalization, world bank, sustainable development, development with social justice

2. **Organizing Teaching-Learning in Economics**
   a) An Economics teacher
   b) Understanding of classroom communication
   c) Planning for teaching-learning in Economics - analysis of aim and general objectives of teaching Economics vis-à-vis the objectives of secondary education, lesson and unit plan
   d) Critical understanding of Economics curriculum , syllabus and textbook

3. **Strategies for learning subject matter content in Economics**
   a) Paradigm shift in teaching-learning of the subject *viz.* constructivist approach
   b) Critical understanding of various strategies in teaching –Learning by exposition, Learning by discovery, inductive-deductive, guided discovery, cognitive apprenticeship, learning by scaffolding
   c) Teaching problem-solving in Economics -definition of problem, posing a problem, generating problem, modeling and model for problem solving, exploring various options for solving the problem
   d) Learning in Groups- Cooperative and collaborative learning, addressing needs of heterogeneous classroom

4. **Assessment of and for learning in Economics**
   a) Issues in assessment in Economics
   b) Shifting Trends in assessment in Economics
   c) Construction of test design and subject question paper along with marking scheme
   d) Diagnosing basic causes of difficulties in learning of Economics
   e) Planning remedial teaching strategies based on the perceived causes, implementing and evaluating the strategies

Sessional Work

- **Assignment(select any two of the following)**(Concerned teacher can devise assignment as per requirement of the course)
   1. Designing learning activities, appropriate strategies, selecting/preparing learning resources; assessment techniques and tools, etc.

2. Analysis of unit/chapter in subject textbook to identify the concepts, principles and processes and to understand the underlying the subject structures
3. Analysis of subject textbook of the concerned class taught by the pupil-teacher (content, exercises, activities, activities, activities and overall presentation of the book)
4. Critical analysis of teaching skills and strategies used in a lesson taught in a class or lesson plan in a nearby school
5. Identification of learning difficulties experienced by students in a lesson and evaluation of the diagnostic and remedial strategies adopted by the teacher in a nearby school

Suggested Readings:

Binning and Binning: *Teaching Social Studies in Secondary schools.*

Moffat, M.P. *Social Studies Instruction.*

Kieth: *New Developments in the Teaching of Economics.*

Pandey, K.P. *Arthashastra Shikshan*

Tyagi, G. S .D.*Arthashastra Shikshan*

(J) Pedagogy of Commerce

1. **Foundations of Commerce**
   a) Nature of Commerce-Meaning, its dimension (the historical, scientific, aesthetic, recreational); and its scope
   b) Learning of Commerce -Constructivists perspectives of teaching Commerce emphasizing Piaget and Vygotsky, critical and realistic Commerce education
   c) Curriculum reform in Commerce
   d) Contextual Issues in learning Commerce -Learning Commerce without burden, globalization, market sans (without) boundaries

2. **Organizing Teaching-Learning in Commerce**
   a) A Commerce teacher
   b) Understanding of classroom communication
   c) Planning for teaching-learning in Commerce - analysis of aim and general objectives of teaching Commerce , lesson and unit plan
   d) Critical understanding of Commerce curriculum , syllabus and textbook

2. **Strategies for learning subject matter content in Commerce**
   a) Paradigm shift in teaching-learning of the subject *viz.* constructivist approach
   b) Critical understanding of various strategies in teaching –learning of Commerce-Learning by exposition, Learning by discovery, inductive-deductive, guided discovery, cognitive apprenticeship, learning by scaffolding
   c) Teaching problem-solving in Commerce - definition of problem, posing a problem, generating problem, modeling and model for problem solving, exploring various options for solving the problem
   d) Learning in Groups- Cooperative and collaborative learning, addressing needs of heterogeneous classroom

3. **Learning Resources and Organizing Activities**
   a) Material and situation based activities in Commerce
   b) Preparation and utilization of Learning resources in Commerce
   c) Use of ICT to enhance learning in the subject
   d) Organizing Co-Curricular Activities in the subject area

4. **Assessment of and for learning in Commerce**
   a) Issues in assessment in Commerce

b) Shifting Trends in assessment in Commerce
c) Construction of test design and subject question paper along with marking scheme
d) Diagnosing basic causes of difficulties in learning of Commerce -concept, generalizations, problem-solving and proof
e) Planning remedial teaching strategies based on the perceived causes, implementing and evaluating the strategies

Sessional Work

- **Assignment(select any two of the following)**(Concerned teacher can devise assignment as per requirement of the course)
    1. Designing learning activities, appropriate strategies, selecting/preparing learning resources; assessment techniques and tools, etc.
    2. Analysis of unit/chapter in subject textbook to identify the concepts, principles and processes and to understand the underlying the subject structures
    3. Analysis of subject textbook of the concerned class taught by the pupil-teacher (content, exercises, activities, activities, activities and overall presentation of the book)
    4. Critical analysis of teaching skills and strategies used in a lesson taught in a class or lesson plan in a nearby school
    5. Identification of learning difficulties experienced by students in a lesson and evaluation of the diagnostic and remedial strategies adopted by the teacher in a nearby school

Suggested Readings:
 Jain, K.C.S. *VanijyaShikshan*
Rai, B.C. *Teaching of Commerce*
Shukla, R. *ArthashastraaurVanijyashastrakiShiksha*
Verma, R.P.S. &Singh,E.P. *VanijyakaAdhyapan*

(K) Pedagogy of Political Science

1. **Foundations of Political Science**
    a) Nature of Political Science -Meaning, its dimension (the historical, scientific, aesthetic, recreational); and its scope, its relationship with other social science- geography, history, economics

    b) Learning of Political Science - Constructivists perspectives of teaching Commerce emphasizing Piaget and Vygotsky, critical and realistic Political Science education
    c) Curriculum reform in Political Science- Critical appraisal of NCF- 2005, BCF- 2008 in the context of Social Science teaching, Need for standards for school Social Science
    d) Contextual Issues in learning Political Science –Learning Political Science without burden, citizenship education, fundamental rights and duties, human rights, constitutional values, globalization

2. **Organizing Teaching-Learning Political Science**
    a) A Political Science teacher
    b) Understanding of classroom communication
    c) Planning for teaching-learning in Political Science - analysis of aim and general objectives of teaching Political Science, lesson and unit plan
    d) Critical understanding of Political Science curriculum , syllabus and   textbook

3. **Strategies for learning subject matter content in Political Science**

a) Paradigm shift in teaching-learning of the subject *viz.* constructivist approach

b) Critical understanding of various strategies in teaching –learning of Political Science- Learning by exposition, Learning by discovery, inductive-deductive, guided discovery, cognitive apprenticeship, learning by scaffolding

c) Teaching problem-solving in Political Science- definition of problem, posing a problem, generating problem, modelling and model for problem solving, exploring various options for solving the problem

d) Learning in Groups- Cooperative and collaborative learning, addressing needs of heterogeneous classroom

4. **Assessment of and for learning in Political Science**
   a) Issues in assessment in Political Science
   b) Shifting Trends in assessment Political Science
   c) Construction of test design and subject question paper along with marking scheme
   d) Diagnosing basic causes of difficulties in learning of Political Science -concept, generalizations, problem-solving and proof
   e) Planning remedial teaching strategies based on the perceived causes, implementing and evaluating the strategies

Sessional Work

- **Assignment (select any two of the following)**(Concerned teacher can devise assignment as per requirement of the course)

  1. Designing learning activities, appropriate strategies, selecting/preparing learning resources; assessment techniques and tools, etc.
  2. Analysis of unit/chapter in subject textbook to identify the concepts, principles and processes and to understand the underlying the subject structures
  3. Analysis of subject textbook of the concerned class taught by the pupil-teacher (content, exercises, activities, activities, activities and overall presentation of the book)
  4. Critical analysis of teaching skills and strategies used in a lesson taught in a class or lesson plan in a nearby school
  5. Identification of learning difficulties experienced by students in a lesson and evaluation of the diagnostic and remedial strategies adopted by the teacher in a nearby school

Suggested Readings:

Agarwal, J. C., *Teaching of political science and civics.*
Awasthi, P.N., *Nagrikshastra shikshanvidhi.*
Baghela, H.S. &Vyas, H.C., *Nagrikshastra shikshan.*
Tyagi, G.S.D., *Nagrikshastra shikshan.*

(L) Pedagogy of Geography

1. **Foundations of Geography**
   a) Nature of Geography-Meaning, its dimension (the historical, scientific, aesthetic, recreational); and its scope, its relationship with other social science- geography, history, economics
   b) Learning of Geography - Constructivists perspectives of teaching Commerce emphasizing Piaget and Vygotsky, critical and realistic Political Science education
   c) Curriculum reform in Geography - Critical appraisal of NCF- 2005, BCF- 2008 in the context of Social Science teaching, Need for standards for school Social Science
   d) Contextual Issues in learning Geography –Learning Geography without burden, globalization, sustainable development, environment protection

2. **Organizing Teaching-Learning in Geography**
   a) A Geography teacher
   b) Understanding of classroom communication
   c) Planning for teaching-learning in Geography - analysis of aim and general objectives of teaching Geography, lesson and unit plan
   d) Critical understanding of Geography curriculum , syllabus and textbook

3. **Strategies for learning subject matter content in Geography**
   a) Paradigm shift in teaching-learning of the subject *viz.* constructivist approach
   b) Critical understanding of various strategies in teaching –learning of Geography - Learning by exposition, Learning by discovery, inductive-deductive, guided discovery, cognitive apprenticeship, learning by scaffolding
   c) Teaching problem-solving in Geography - definition of problem, posing a problem, generating problem, modeling and model for problem solving, exploring various options for solving the problem
   d) Learning in Groups- Cooperative and collaborative learning, addressing needs of heterogeneous classroom

4. **Assessment of and for learning in Geography**
   a) Issues in assessment in Geography
   b) Shifting Trends in assessment in Geography
   c) Construction of test design and subject question paper along with marking scheme
   d) Diagnosing basic causes of difficulties in learning of Geography -concept, generalizations, problem-solving and proof
   e) Planning remedial teaching strategies based on the perceived causes, implementing and evaluating the strategies

Sessional Work

- **Assignment (select any two of the following)**(Concerned teacher can devise assignment as per requirement of the course)
   1. Designing learning activities, appropriate strategies, selecting/preparing learning resources; assessment techniques and tools, etc.
   2. Analysis of unit/chapter in subject textbook to identify the concepts, principles and processes and to understand the underlying the subject structures
   3. Analysis of subject textbook of the concerned class taught by the pupil-teacher (content, exercises, activities, activities, activities and overall presentation of the book)
   4. Critical analysis of teaching skills and strategies used in a lesson taught in a class or lesson plan in a nearby school
   5. Identification of learning difficulties experienced by students in a lesson and evaluation of the diagnostic and remedial strategies adopted by the teacher in a nearby school

Suggested Readings:

Branom, *Teaching of geography.*
Gospel, G.H., *The teaching of geography.*
UNESCO: *Source books for geography teaching.*
Singh, H.N., *Bhugol shikshan.*

(M) Pedagogy of Home Science

1. **Foundations of Home Science**
   a) Nature of Home Science- Meaning, its dimension (the historical, scientific, aesthetic, recreational) development of science with special reference to India
   b) Learning of Home Science- Constructivists perspectives of teaching Home Science emphasizing Piaget and Vygotsky, critical and realistic Home Science education
   c) Curriculum reform in Home Science
   d) Contextual Issues - Learning Home Science without burden, food security, GM food, home management, environment protection, developing scientific attitude

2. **Organizing Teaching-Learning Home Science**
   a) A Home Science teacher
   b) Understanding of classroom communication
   c) Planning for teaching-learning in Science - analysis of aim and general objectives of teaching Science vis-à-vis the objectives of secondary education, lesson and unit plans
   d) Critical understanding of Science curriculum , syllabus and textbook

3. **Strategies for learning subject matter content in Home Science**
   a) Paradigm shift in teaching-learning of the subject *viz.* constructivist approach
   b) Critical understanding of various strategies in teaching –Learning by exposition, Learning by discovery, inductive-deductive, guided discovery, cognitive apprenticeship, learning by scaffolding
   c) Teaching problem-solving in Home Science-definition of problem, posing a problem, generating problem, modeling and model for problem solving, exploring various options for solving the problem
   d) Learning in Groups- Cooperative and collaborative learning, addressing needs of heterogeneous classroom

4. **Assessment of and for learning in Home Science**
   a) Issues in assessment in Home Science
   b) Shifting Trends in assessment Home Science
   c) Construction of test design and subject question paper along with marking scheme
   d) Diagnosing basic causes of difficulties in learning of Home Science -concept, generalizations, problem-solving and proof
   e) Planning remedial teaching strategies based on the perceived causes, implementing and evaluating the strategies

Sessional Work

- **Assignment (select any two of the following)**(Concerned teacher can devise assignment as per requirement of the course)
   1. Designing learning activities, appropriate strategies, selecting/preparing learning resources; assessment techniques and tools, etc.
   2. Analysis of unit/chapter in subject textbook to identify the concepts, principles and processes and to understand the underlying the subject structures
   3. Analysis of subject textbook of the concerned class taught by the pupil-teacher (content, exercises, activities, activities, activities and overall presentation of the book)
   4. Critical analysis of teaching skills and strategies used in a lesson taught in a class or lesson plan in a nearby school
   5. Identification of learning difficulties experienced by students in a lesson and evaluation of the diagnostic and remedial strategies adopted by the teacher in a nearby school

Suggested Readings:

Asthan, S.R. *GrihvigyankaAdhyapan*

Das, R.R. and Ray, B. *Teaching of home science*

Shreya, G. P. *Grih Vigyan Shikshan*

(N) Pedagogy of Computer Science

1. **Foundations of Computer Science**
   a) Introduction to Computer- Definition & structure of Computer and history of Computer Science
   b) Hardware in Computer: Input devices - Key Board, Mouse, Scanner, Microphone, Digital Camera; Output devices - Monitor, Printer, Speaker, Screen image projector; Storage devices - Hard Disk, CD & DVD, Mass Storage Device (Pen drive)
   c) Software in Computer: Operating System - Concept and function; Application Software (Its uses in Education)- 1) Word Processors 2) Presentation3) Spread sheet, 4) Database Management; Viruses & its Management
   d) Contextual Issues- Developing scientific attitude, Computer Science and employability, Computer Science and unemployment (machine can do various activity at a time, needing less human resources), Social media

2. **Organizing Teaching-Learning in Computer Science**
   a) A Computer Science teacher
   b) Understanding of classroom communication
   c) Planning for teaching-learning in Computer Science- analysis of aim and general objectives of teaching Computer Science *vis-à-vis* the objectives of secondary education; lesson and unit plan

3. **Strategies for learning subject matter content in Computer Science**
   a) Paradigm shift in Education due to ICT content, with special reference to curriculum, role of teacher, methods of teaching, classroom environment
   b) Computer Assisted learning, Project Based learning, technology added learning, Collaborative learning
   c) Challenges in integrating ICT in school education
   d) Internet, Intranet in Education- email, chat, blog, online conferencing, wiki

4. **Assessment of and for learning in Computer Science**
   a) Issues in assessment in Computer Science
   b) Assessment in Computer Science
   c) Construction of test design and subject question paper along with marking scheme
   d) Diagnosing basic causes of difficulties in learning of Computer Science
   e) Planning remedial teaching strategies based on the perceived causes, implementing and evaluating the strategies

Sessional Work

- **Assignment(select any two of the following)**(Concerned teacher can devise assignment as per requirement of the course)

  1. Designing learning activities, appropriate strategies, selecting/preparing learning resources; assessment techniques and tools, etc.
  2. Preparing a spread sheet of students performance in any teaching subject
  3. Analysis of subject textbook of the concerned class taught by the pupil-teacher (content, exercises, activities, activities, activities and overall presentation of the book)

4. Critical analysis of teaching skills and strategies used in a lesson taught in a class or lesson plan in a nearby school
5. Identification of learning difficulties experienced by students in a lesson and evaluation of the diagnostic and remedial strategies adopted by the teacher in a nearby school

Suggested Readings:
1. *Computer fundamentals*–Arora and Bansal
2. *Information and communication* - Kishore, Chavan
3. *Information Technology* - Dyne, Nand Kishore
4. *ABC of internet*-Crumlish Christian
5. *Fun of computer* - Singh and Sukhvir
6. *ICT Strategies of for school*– MohantyLaxman

(O) Pedagogy of Psychology

1. Foundations of Psychology
a) Modern concepts of Psychology, nature and scope of Psychology
b) Learning of Psychology- Constructivists perspectives of teaching Psychology emphasizing Piaget and Vygotsky, critical and realistic Psychology education
c) Curriculum in Psychology
d) Contextual Issues - Learning Psychology without burden, developing healthy attitude

2. Organizing Teaching-Learning Psychology
a) A Psychology teacher
b) Understanding of classroom communication
c) Planning for teaching-learning in Psychology - analysis of aim and general objectives of teaching Psychology vis-à-vis the objectives of secondary education, lesson and unit plans
d) Critical understanding of Psychology curriculum , syllabus and textbook

3 Strategies for learning subject matter content in Psychology
a) Paradigm shift in teaching-learning of the subject *viz.* constructivist approach
b) Critical understanding of various strategies in teaching –Learning by exposition, Learning by discovery, inductive-deductive, guided discovery, cognitive apprenticeship, learning by scaffolding
c) Teaching problem-solving in Psychology-definition of problem, posing a problem, generating problem, modeling and model for problem solving, exploring various options for solving the problem
d) Learning in Groups- Cooperative and collaborative learning, addressing needs of heterogeneous classroom

4. Assessment of and for learning in Psychology
a) Issues in assessment in Psychology
b) Shifting Trends in assessment Psychology
c) Construction of test design and subject question paper along with marking scheme
d) Diagnosing basic causes of difficulties in learning of Psychology -concept, generalizations, problem-solving and proof
e) Planning remedial teaching strategies based on the perceived causes, implementing and evaluating the strategies

Sessional Work

- **Assignment (select any two of the following)**(Concerned teacher can devise assignment as per requirement of the course)
  1. Designing learning activities, appropriate strategies, selecting/preparing learning resources; assessment techniques and tools, etc.
  2. Analysis of unit/chapter in subject textbook to identify the concepts, principles and processes and to understand the underlying the subject structures
  3. Analysis of subject textbook of the concerned class taught by the pupil-teacher (content, exercises, activities, activities, activities and overall presentation of the book)
  4. Critical analysis of teaching skills and strategies used in a lesson taught in a class or lesson plan in a nearby school
  5. Identification of learning difficulties experienced by students in a lesson and evaluation of the diagnostic and remedial strategies adopted by the teacher in a nearby school

(P) Pedagogy of Philosophy

1. Foundations of Philosophy

a) Meaning, nature and scope of Philosophy
b) Historical development of Philosophy- Indian and Western contexts
c) Learning of Philosophy - Constructivists perspectives of teaching Philosophy emphasizing Piaget and Vygotsky, critical and realistic Philosophy education
d) Curriculum in Philosophy
e) Contextual Issues - Learning Philosophy without burden, developing healthy attitude

2. Organizing Teaching-Learning Philosophy
a) A Philosophy teacher
b) Understanding of classroom communication
c) Planning for teaching-learning in Philosophy - analysis of aim and general objectives of teaching Philosophy vis-à-vis the objectives of secondary education, lesson and unit plans
d) Critical understanding of Philosophy curriculum , syllabus and textbook

3. Strategies for learning subject matter content in Philosophy
a) Paradigm shift in teaching-learning of the subject *viz.* constructivist approach
b) Critical understanding of various strategies in teaching –Learning by exposition, Learning by discovery, inductive-deductive, guided discovery, cognitive apprenticeship, learning by scaffolding
c) Teaching problem-solving in Philosophy -definition of problem, posing a problem, generating problem, modeling and model for problem solving, exploring various options for solving the problem
d) Learning in Groups- Cooperative and collaborative learning, addressing needs of heterogeneous classroom

4. Assessment of and for learning in Philosophy
a) Issues in assessment in Philosophy
b) Shifting Trends in assessment Philosophy
c) Construction of test design and subject question paper along with marking scheme
d) Diagnosing basic causes of difficulties in learning of Philosophy -concept, generalizations, problem-solving and proof
e) Planning remedial teaching strategies based on the perceived causes, implementing and evaluating the strategies

Sessional Work

- **Assignment (select any two of the following)**(Concerned teacher can devise assignment as per requirement of the course)
  1. Designing learning activities, appropriate strategies, selecting/preparing learning resources; assessment techniques and tools, etc.
  2. Analysis of unit/chapter in subject textbook to identify the concepts, principles and processes and to understand the underlying the subject structures
  3. Analysis of subject textbook of the concerned class taught by the pupil-teacher (content, exercises, activities, activities, activities and overall presentation of the book)
  4. Critical analysis of teaching skills and strategies used in a lesson taught in a class or lesson plan in a nearby school
  5. Identification of learning difficulties experienced by students in a lesson and evaluation of the diagnostic and remedial strategies adopted by the teacher in a nearby school

Suggested Readings:

1. Victor, P George (2002), *Teaching Philosophy in 21st Century*, D. K. Print World, Delhi
2. Scheffler, Israel (1956), *Philosophical Models of Teaching*, Harvard Educational Review
3. Fletcher, BA (1961), *A Philosophy for a Teacher*, Oxford Press, New York
4. Scheffler, Israel (1973), *Reason and Teaching,* London
5. Brookfield, S (1990), *The Skillful Teacher*, San Francisco
6. Goodyear, GE & Allchin, D (1998), 'Statement of Teaching Philosophy' *To Improve the   Academy*, 17, 103-22

Course *EPC 1*: <u>Reading and Reflecting on Texts</u>

Course Objectives:
The student-teachers will be able to
1. To engage with reading interactively-individually and in small groups;
2. Reading a variety of text and reflexively placing what one has read;
3. Develop strategies for different types of reading skills;
4. Writing with a sense of purpose;
5. Responding to a text with one's own opinion or writing.

Unit 1: Speaking and Reading Skills
   a) Definition, Components: Punctuation, Articulation, Public Speaking, Telephone etiquette
   b) Definition of Reading, Levels of Reading, Techniques of Reading
   c) Different types of reading skills and strategies
   d) Reading a variety of texts as empirical, conceptual, historical work, policy documents, studies about school and teaching-learning
   e) Reading Narrative texts, expository texts from diverse sources, autobiographical narratives, field notes and ethnographies

Unit 2: Improving Written, Communication and Presentation Skills
   a) Writing and Expressing,
   b) Organizing content and preparing an outline, Constructing Meaningful Sentences
   c) Responding to a text with one's own opinion or writing
   d) Analysing audience and locale and Making Effective Presentations

Unit 3: Reflecting on Texts
   a) Simple meaning of the text
   b) Reading between the lines- hidden meaning of text

c) Reading biographies, anecdotes, notes
d) Preparing notes

Sessional Work
- **Assignment** (select any two of the following)(Concerned teacher can devise assignment as per requirement of the course)
  Read any one of the following texts and give critical appraisal of it:
  a) *Deevaswapna* by Gijubhai Badheka
  b) *De-schooling Society* by Ivan Illich
  c) *Juthan* by OmprakashValmiki
  d) *Tottochan*
  e) *National Policy on Education 1986*
  f) *Learning without Burden-*Yashpal Committee Report

Course *EPC 2*: <u>Drama and Art in Education</u>

Course Objectives:
The student-teachers will be able to
1. Extend their awareness through multiple perspectives, to look at reality through fantasy;
2. Live or relive moments and evoke or even recreate situations;
3. Understand the medium, in order to transpose learners into different time and space, to shape their consciousness through introspection and collective experiences;
4. Understanding the self and as a form of self-expression for enhancing creativity

Unit 1: Drama as Performing Art

a) Understanding the concept of Drama and its relevance for Education
b) Drama as pedagogy
c) Organizing drama: preparatory activities and resources, dramatic society
d) Forms of Drama : solo, group
e) Playing Drama: story, dialogue, characters, symbols, creating different situations
f) Knowledge of Indian and regional drama traditions
g) Social Relevance of dance and Drama in Contemporary Indian Scene
h) Appreciating art of drama in learners

Unit 2: Visual Arts and Crafts
a) Understanding visual arts and crafts with their relevance for Education
b) Visual arts and crafts as pedagogy
c) Visual arts and crafts : different forms, basic resources and their use
d) Knowledge of Indian Craft Traditions and regional folk arts
e) Appreciating visual arts and crafts in learners

Unit 3: Art –aided Learning and role of a Teacher
a) Integrating Drama with school curriculum
b) Dance/drama research and other component of correlated arts
c) Integrating Arts and Crafts with school curriculum
d) Visualizing School and Classroom as a space for art aided learning
e) Preparation of teacher for art aided learning
f) Role of Media and technology in the study and propagation of dance/drama

Sessional Work

- **Assignment** (Any two of the following)(Concerned teacher can devise assignment as per requirement of the course)

Course *EPC 3*: <u>Critical Understanding ICT</u>

Course Objectives:

The student-teachers will be able to

1. Appreciate the concept of integration of Information and Communication Technology with Education
2. Assure a positive role in Technology Medicated Communication in the classroom
3. Benefit from the computers and internet for Educational research and interaction.
4. Employ various technological equipment/amenities and the application software in, skillfully and intelligently producing, structured Educational Courseware for use in methodologies (teaching subjects)
5. Evaluate Educational Software and Computer Based Educational Courseware.

Unit 1: Concept of Information and Communication Technology (ICT)

a) ICT in Education**:** Concept, need and importance of ICT in Education.
b) Difference between Educational Technology, Communication Technology and Information Technology.
c) Challenges in integrating Information and Communication Technology in School Education in the scenario of schools in Bihar

Unit 2: Interaction through Computers and Internet

a) Computer Fundamentals: Meaning, characteristics, Basic components (hardware and software) and functioning of a computer (through Block Diagram)
b) Using Computer in Schools: Instruction (including Computer Based Instructions, Computer Assisted Instructions, and Computer Managed Instruction), Computer Based Education and Computer Managed Education (with special focus on Admission, Administration, and Evaluation).
c) Internet: Use of Internet in Education, Research & Communication; including e-learning and Educational uses of search engines, e-mail, educational chat rooms, blogs, discussion groups/boards, e - conferencing.
d) Technology Mediated Communication: Concept of Classroom (Technology Mediated) Communication. Role of a Teacher in Technology Mediated Communication.

Unit 3: ICT and Evaluation

a) Educational Software: Concept, need and Evaluation of Educational software.
b) Question Bank Development in school scenario (with inbuilt Evaluation mechanism): Developing Question Bank using Hot Potatoes with different types of questions such as multiple choice, short answers, jumbled sentences, crossword, match, order, gap-fill exercises.
c) Technology supported presentations/projects/assignments**:** Concept, need and Evaluation of Students' Educational MM presentations/projects/assignments.

Sessional Work

- **Assignment** (Any two of the following)(Concerned teacher can devise assignment as per requirement of the course)
  1. Development of Software: Transparencies / Slides /Scripts / Scenarios.
  2. Development of Programmed Learning Material
  3. Development of Learning Multimedia Package.

4. Organizing workshop on Handling Hardware.
5. Conducting a Lesson using OHP / Slide Projector / Video / Computer.

Suggested Readings:

- *Computers and Communication Technology.* (2008). Part I & II (Class XI), available online on the National Council of Educational Research and Training, New Delhi website: www.ncert.nic.in
- *Computers in Education* (2000). Indira Gandhi National Open University, Delhi: http://www.ignou.ac.in (in *Hindi Shiksha me Computer*)
- Hot Potatoes™ available at http://web.uvic.ca/hrd/hotpot/
- Morrison, G.R., Lowther, D.L. &Demeulle L. (1999). *Integrating Computer Technology into the Classroom.* United States of America: Merrill (Prentice Hall)
- Moursund, D. (2005). *Introduction to Information and Communication Technology in Education.* Retrieved from website of University of Oregon: www.uoregon.edu
- National Policy on ICT in School Education. (2010). New Delhi: Department of School Education and Literacy. Ministry of HRD, GOI. Retrieved from: http://mhrd.gov.in/ict_school
- Roblyer, M.D. (2008). *Integrating Educational Technology into Teaching.* New Delhi: Pearson Education, South Asia, India.
- Singh, Kamal Deep. (2012). *Lesson through Multimedia.* N. Delhi: Arya Book Depot.

School Internship

Having gained some experience with the child, the community and schools during the course works in institutes, the student-teachers need to be sent to schools for firsthand experience. During the first year, to support better understanding of schools and in preparation of Internship, teacher education institutes shall make provisions for visits to innovative centres of pedagogy and learning - innovative schools, educational resource centres, etc. and to a designated school for at least four weeks.