

SYLLABUS AND SCHEME OF EXAMINATION ORDINANCES FOR B.ED. PROGRAMME

I Eligibility

The M.D.S. University, Ajmer hereby institutes the following ordinances under RIE scheme governing admission, course of study, examination and other matters relating to the degree of B.Ed. programme under the Faculty of Education.

1. The course of study shall extend over a period of two years. It is skill based professional development programme. RIE, Ajmer is catering to the needs of northern states – U.T. Chandigarh, Delhi, Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab, Rajasthan, Uttaranchal and Uttar Pradesh.
2. Candidate with minimum of 50% marks either in Bachelor's Degree and/or in the Master's Degree in Sciences/Social Sciences/Humanities, Bachelor's in Engineering or Technology with Science and Mathematics with 55% marks (with provision for relaxation up to 5% in case of SC/ST and PH candidate) of examination of the MDS University, Ajmer or of any other University recognized as equivalent by the MDS University, Ajmer fulfilling the requirements will be eligible of admission.
3. The Institute will regulate admission through selection on the basis of marks in the qualifying examination and/or in the entrance examination or any other selection process as per the policy of the NCERT/RIE and the University and in accordance with the state quota as decided by the Institute.
4. (a) Candidate will be eligible for admission to the Humanities and Social Science Group if she/he has studied any two of the following combinations for at least two years at graduate level. The relevant subject studied at postgraduate level will also be considered for determining the eligibility of the candidate if she/he has passed his/her undergraduate as well as the postgraduate examinations from the same faculty and has also taken university examination each year:
 - (i) Any one language out of Hindi/English/Urdu as a subject.
 - (ii) Any one subject out of History, Political Science, Geography and Economics.
- 4.(b) Candidate will be eligible for admission to Science group if she/he has studied at least any one of the following two combinations at least for two years at the graduation level as optional/subsidiary subjects. The relevant subject studied at postgraduate level will also be considered for determining the eligibility of the candidate if she/he has passed his/her undergraduate as well as the postgraduate examinations from the same faculty and has also taken university examination each year:
 - (i) Physics, Chemistry and Mathematics.
 - (ii) Chemistry, Botany, Zoology.
5. Out of the total number of seats available for a State in each group, the reservation will be made as per the NCERT's/ Government of India's rule in force from time to time.

II. Scheme of Instructions and Examinations B.Ed. Programme
Course Structure, Scheme of Instruction and Examination Structure of the Curriculum
B.Ed. First Year

Course/Paper	Instructional Time in Periods		Total marks	Internal	External	Duration of Examination in hours
	Per week	Per year				
Group A: Core Courses						
CC 1: Basics in Education	04	104	100	25	75	03
CC 2: Learner, Learning and Cognition	04	104	100	25	75	03
CC 3: Curriculum and School	04	104	100	25	75	03
Group B: Pedagogy Courses (Subject Knowledge and the related Pedagogic Dimensions)						
PC 1: (Part I) Pedagogy of Science (PCM Group) Pedagogy of Physical Science (CBZ Group) Pedagogy of English/Hindi/Urdu (Lang. & Social Sciences Group)	06	104	100	25	75	03
PC 2: (Part I) Pedagogy of Mathematics (PCM Group) Pedagogy of Biological Science (CBZ Group) Pedagogy of Social Sciences (Lang. & Social Sciences Group)	06	104	100	25	75	03
PC 3: Learning to Function as a Teacher	Four weeks		50	50	-	-
PC 4: Assessment for Learning	04	104	100	25	75	03
Group C: Developing Teacher Sensibilities						
Section I: Experiences for Teacher Enrichment						
ETE 1: Strengthening Language Proficiency	02	52	50	50	-	-
ETE 2: Enriching Learning through Information and Communication Technology	02	52	50	50	-	-
ETE 3: Health and Well being	02	52	50	50	-	-
ETE 4: Exploring Library and other Learning Resources	02	52	50	50	-	-
Section II: Experiences for Social and Environmental Sensitivity						
SES 1: Education for Peace	02	52	50	20	30	02
SES 2: Environmental Education	02	52	50	20	30	02
SES 3: Work Experience (Agricultural Practices / Electricity and Electronics)	03	78	50	50	-	-
SES 4: Working with the Community	10 days		Grade	-	-	-
Total	43	1014	1000	490	510	-

ETE 1 to ETE 4 and SES 3: These would be evaluated jointly by a team of internal examiners constituted by the Principal in consultation with the Dean and Head DE/Head DESM/ Head DESSH/ Asstt. Librarian.

SES 4: Meeting with two parents for total growth and development of their wards during internship programme and preparation of report would be essential for each candidate. Evaluation would be done by Grading on five-point scale.

A team constituted by the Principal in consultation with the Dean and Head of the Department concerned shall assess practicum / internals.

B.Ed. Second Year

Course/Paper	Instructional Time in Periods		Total marks	Internal	External	Duration of Examination in Hours
	Per week	Per year				
Group A: Core Courses						
CC 4: Schooling, Socialization and Identity	06	96	100	25	75	03
CC 5: Vision of Education in India: Issues and Concerns	06	96	100	25	75	03
Group B: Pedagogy Courses (Subject Knowledge and the related Pedagogic Dimensions)						
PC 1: (Part II) Pedagogy of Science (PCM Group) Pedagogy of Physical Science (CBZ Group) Pedagogy of English/Hindi/Urdu (Lang. & Social Sciences Group)	09	144	100	25	75	03
PC 2: (Part II) Pedagogy of Mathematics (PCM Group) Pedagogy of Biological Science (CBZ Group) Pedagogy of Social Sciences (Lang. & Social Sciences Group)	09	144	100	25	75	03
PC 3: Learning to Function as a Teacher	Sixteen weeks		350	350	-	-
Group C: Developing Teacher Sensibilities						
Section I: Experiences for Teacher Enrichment						
ETE 5: Arts and Aesthetics	03	48	50	50	-	-
Section II: Experiences for Social and Environmental Sensitivity						
SES 5: Gender Issues in Education	03	48	50	20	30	02
SES 6: Addressing Special Needs in Inclusive School	03	48	50	20	30	02
Total	39	624	900	540	360	-

ETE 5: This would be evaluated jointly by a team of internal examiners constituted by the principal in consultation with the Head of Education department.

Internal Assignments/ Practicum shall be evaluated by a team constituted by the Principal in consultation with the Dean/Head of the Department concerned.

B.Ed (Both Years)

Course/Paper	Instructional Time in periods		Total marks	Internal	External	Duration of Examination In Hours
	Per week	Per year				
Group A: Core Courses						
CC 1: Basics in Education	04	104	100	25	75	03
CC 2: Learner, Learning and Cognition	04	104	100	25	75	03
CC 3: Curriculum and School	04	104	100	25	75	03
CC 4: Schooling, Socialization and Identity	06	96	100	25	75	03
CC 5: Vision of Education in India: Issues and Concerns	06	96	100	25	75	03
Group B: Pedagogy Courses : Subject Knowledge and the related Pedagogic Dimensions (Part I)						
PC1 (Part I) Pedagogy of Science (PCM Group) Pedagogy of Physical Science (CBZ Group) Pedagogy of English/Hindi/Urdu (Lang. & Social Sciences Group)	06	156	100	25	75	03
PC2 (Part II) Pedagogy of Mathematics (PCM Group) Pedagogy of Biological Science (CBZ Group) Pedagogy of Social Sciences (Lang. & Social Sciences Group)	06	156	100	25	75	03
PC1 (Part II) Pedagogy of Science (PCM Group) Pedagogy of Physical Science (CBZ Group) Pedagogy of English/Hindi/Urdu (Lang. & Social Sciences Group)	09	144	100	25	75	03
PC2 (Part II) Pedagogy of Mathematics (PCM Group) Pedagogy of Biological Science (CBZ Group) Pedagogy of Social Sciences (Lang. & Social Sciences Group)	09	144	100	25	75	03
PC 3: Assessment for Learning	04	104	100	25	75	03
PC 4: Learning to Function as a Teacher(School Internship)	20 weeks		400	400	-	-
Group C: Developing Teacher Sensibilities						
Section I: Experiences for Teacher Enrichment						
ETE 1: Strengthening Language Proficiency	02	52	50	50	-	-
ETE 2: Enriching Learning through Information and Communication Technology	02	52	50	50	-	-
ETE 3: Health and Well being	02	52	50	50	-	-
ETE 4: Exploring Library and other Learning Resources	02	52	50	50	-	-
ETE 5: Arts and Aesthetics	03	48	50	50	-	-
Section II: Experiences for Social and Environmental Sensitivity						
SES 1: Education for Peace	02	52	50	20	30	02
SES 2: Environmental Education	02	52	50	20	30	02
SES 3: Work Experience (Agricultural Practices and Horticulture / Electricity and Electronics)	03	78	50	50	-	-
SES 4: Working with the Community	10 days		Grade			
SES 5: Gender Issues in Education	03	48	50	20	30	02
SES 6: Addressing Special Needs in Inclusive Schools	03	48	50	20	30	02
Total	80	1638	1900	1030	870	

Instructional time for both B.Ed First Year and Second Year is 32 weeks per Year. Instructional time of B.Ed First Year includes two weeks for Working with Community and four weeks for Pre-Internship. So regular classroom instruction would be executed for 26 weeks. In B.Ed Second Year, School internship of 16 weeks is included, so regular class room instruction would be for 16 weeks.

Note: For Pedagogy Courses in Science/Mathematics/Language/Social Science subjects, combinations will be as follows:

1. For Science Subjects

(i) For PCM Group

- (a) 1st Pedagogy Course : Pedagogy of Science
(Science comprises of Physics, Chemistry and an additional input of Biology)
- (b) 2nd Pedagogy Course: Pedagogy of Mathematics

(ii) For CBZ Group

- (a) 1st Pedagogy Course: Pedagogy of Physical Science
(Physical Science comprises of Physics and Chemistry)
- (b) 2nd Pedagogy Course: Pedagogy of Biological Science
(Biological Science comprises Botany and Zoology)

2 For Language and Social Science Subjects

- (a) 1st Pedagogy Course: Pedagogy of Language (English/ Hindi/ Urdu)
- (b) 2nd Pedagogy Course: Pedagogy of Social Sciences
(Social Sciences comprises of History, Geography, Political Science and Economics)

III Examination

1. There shall be a University examination at the end of each year as per details of the scheme of examination.
2. A candidate will be permitted to appear in the annual examination only if she/he has pursued a regular course of study and has at least 80% attendance in all course work and practicum classes and 90% attendance in School Internship.
3. Candidates, who represent their institute/university/state/nation in recognized sports/games/cultural/literary/NCC/NSS activities, will get credit of attendance for that period. This will be allowed on production of a certificate from the concerned organizing authority and on the basis of the recommendations of the Head of the Institute.
4. The minimum pass marks in each year examination shall be 40% for each theory paper and Practicum and 50% for Learning to function as a teacher (School Internship) separately. Candidate will have to pass each external paper and internal separately.
5. A candidate who fails only in one course/paper in the examination of First year of the B.Ed. Programme will be eligible to take the examination in that part of the course/paper External / Internal as the case may be, in which she/he fails along with the Second year examination.
6. A candidate who fails only in one course/paper in examination of the Second year of the B.Ed. programme will be allowed to appear as an ex-student in that

part of the course/paper in which she/he fails at the subsequent annual examination.

7. In case a candidate fails in Learning to function as a teacher (School Internship), she/he will have to undergo the full year of the course of study as a regular student in the subsequent year.
8. A candidate will be given a maximum of three chances to pass the examination in any year of the Programme. If she/he does not pass the examination even after three chances she/he will not be eligible for B.Ed. degree.
9. Division will be awarded to the successful candidates at the end of Second year examination on the basis of cumulative total of marks obtained in the two years of the Programme in all the courses/papers including Learning to function as a teacher (School Internship).

IV Award of Division

- I. Successful candidates will be awarded division on the basis of the aggregate marks of all the Core Courses, Pedagogy Courses and Courses on Developing Teacher Sensibilities as per the following:

First division	60% and above
Second division	50% and above but less than 60%
Third division	40% and above but less than 50%
- 2 Candidates can apply for Re-evaluation in any of the theory courses as per rules stipulated by the University for B.Ed. degree. Changes in Statutes/ Ordinances/ Rules/ Regulations/ Syllabi and books may from time to time be made by amendment or remaking and a candidate shall, except in so far as the University determines otherwise, comply with any change that applies to years she/he has not completed at the time of change.

Notes:

- i. A course/ paper means any Core Courses (i.e. CC1 to CC5), Pedagogy Courses (i.e. PC1 to PC4) and Courses on Developing Teacher Sensibilities (i.e. ETE1 to ETE5 and SES1 to SES6) inclusive of Practicum, as the case may be.
- ii. Marks of that part of the course/ paper in which the candidate passes will be carried over.

B. Ed. First Year
Group A: Core Courses
CC 1: Basics in Education

Instructional Time: 4 periods/week
Exam. Duration: 3 Hours

Max. Marks: 100
Internal: 25
External: 75

Objectives of the Course:

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

- understand and analyze educational concepts, their premises and contexts that are unique to education.
- understand the nature and purpose of education with reference to school knowledge.
- learn to avail opportunity for interactive and reflective modes of learning.
- understand the concepts of teacher and learner's autonomy.
- become aware of importance to values and value formation process in education.

Course Outline:

Unit I: Education - Nature and Purpose

- Meaning, Nature, Purpose and importance of Education: Education as a process of individual and social development, harmonious development of individual and society. Education as an intentional (intellectual and self critical) or unintentional. Agencies of education: Family, society and Institutes.
- Processes and Modes of Education: Education is a natural and social process. Education as an ability to question and imagine alternatives. Education as a process of making one a self-learner and independent of both the teacher and the institution. Education in schools and its linkages with outside school experience.

Unit II: Knowledge and Knowing

- Knowledge and knowing- concept, meaning and nature. doing thinking and analyzing with experiences. Differentiate between information, knowledge, belief and truth.
- Knowing Process: Natural and scientific concepts of 'knower' (ज्ञाता) 'object' (Ks;) and 'knowledge' (ज्ञान) and their inter relationship. Limitations of knowing. Presuppositions of construction of knowledge. Roles of knower and known in knowledge transmission and construction. Role of culture in knowing.

Unit III: Facets and Forms of Knowledge and its Organization in Schools

- Facets of knowledge with reference to school knowledge : different facets of knowledge and their relationship such as - Local and universal, concrete and abstract, theoretical and practical, contextual and textual, school and out of school.
- Selection, legitimation and organization of knowledge in school knowledge and its reflection in the form of curriculum, syllabus and textbooks.

Unit IV: Autonomy of Teacher and Learner

- Autonomy of teacher - Why, what and to what extent. Difference between autonomy and freedom. Teacher's autonomy and its importance in enriching learning environment. Relationship between autonomy and accountability. Hindering factors that affect teacher's autonomy.
- Autonomy of learner - Why, what and to what extent, Restrains on learners in schools. Learning without burden, Joyful and cooperative learning. Individual autonomy and collective responsibility of teacher and learner.

Unit V: Education and Values

- Concept and nature of values, - Relative and absolute. Education with reference to human rights and values. Values prevalent in Indian constitution and society. Education is a normative endeavour.
- Process of value formations in schools and out of schools and its impact on learners' value perspective. Role of education in transformation of values in society. School system to nurture a culture of peace.

Modes of Learning Engagement:

The Course is visualized to be conducted through group discussion, self study and reflection. The study of themes in each unit will be done through a range of activities such as: initiation of the dialogue within the group, organizing study groups, organizing discussion in small groups, or planning for short presentations. The sub-themes organized as units of the course, can be discussed by student teachers (using their own experiences and common-sense understanding, to begin with). Teacher educators will be present and participate in the plenary discussions as 'facilitators'.

Practicum:

Some activities for practicum are listed below.

1. Individual self-study of a text/article, with theme questions in mind
2. Group study of a text/article on a given theme
3. Observational studies and activities: it may be worthwhile to carry out observations in the field, record what is observed and use the information while discussing with either teacher educator or peers.
4. Observation with a purpose to reflect on knowledge preservation, transmission/construction and generation in oral, written, and technological traditions.
5. Observation of schools, teachers, student activities in a school context
6. The student-teachers will maintain a portfolio of observations and notes on discussions; these will be submitted periodically to the faculty for appraisal and feedback.

Modes of Internal Assessment

	Marks
Written tests	10
Selected Projects & Assignments from Practicum	15

Suggested Readings:

1. Agrawal, A. (1995). Dismantling the Divide Between Indigenous and Scientific Knowledge : Development and Change. 26:413-39
2. Ant Weiler, C. (1998). Low Knowledge and Local Knowing: An Anthropological Analysis of Contested “Cultural Products” in the Context of Development. *Anthropos*. 93:46-94.
3. Chomsky, N. (1986). Knowledge of Language. New York. Prager.
4. Datta, D.M. (1972). Six ways of Knowing. Calcutta. Calcutta University Press,
5. Dewey, John (1997). Experience and Education, Touchstone, New York.
6. Krishna Murthy, J. (1947). On Education, New Delhi. Orient Longman.
7. Kumar Krishna (1996). Learning From Conflict, New Delhi. Orient Longman.
8. Peters, R.S. (1967). The Concept of Education, UK. Routledge.
9. Margaret, K.T. (1999) The open Classroom, New Delhi. Orient Longman.
10. Prema Clarke (2001). Teaching & Learning: The Culture of pedagogy, New Delhi. Sage Publication.
11. Steven H. Cahn. (1970). The Philosophical Foundation of Education, New York. Harper & Row Publishers.
12. Sykes, Marjorie.(1988). The Story of Nai Taleem. Wardha. Nai Taleem Samiti.
13. Thapan. M. (1991). Life at School: An Ethnographic Study. Delhi. Oxford University Press.
14. Anand, C.L. etal. (1983). The teacher and Education in Emerging Indian Society New Delhi. NCERT.
15. Report of the University Education Commission. (1948).
16. Sexena N.R. (1995-96) Swaroop Philosophical and Sociological Foundation of Education. Meerut. Usha Printer.
17. Taneja V.R. (1973). Educational Thought and Practice. New Delhi. Sterling Publication.
18. रवीन्द्र नाथ ठाकुर, (1999) शिक्षा के विविध आयाम रवीन्द्र नाथ का शिक्षा, दिल्ली, अरुण प्रकाशन, ई-54, मानसरोवर पार्क ।
19. डॉ रामनाथ शर्मा (1996) डॉ. राजेन्द्र कुमार शर्मा, शैक्षिक समाजशास्त्र, नई दिल्ली एटलांटिक पब्लिशर्स एण्ड डिस्ट्रीब्यूटर्स ।
20. आर.आर. रस्क अनुवादक एल. के. ओड़, (1990) शिक्षा के दार्शनिक आधार . जयपुर. राजस्थान हिन्दी ग्रंथ अकादमी ।

B. Ed. First Year**Group A: Core Courses****CC 2: Learner, Learning and Cognition****Instructional Time: 4 periods/week****Exam. Duration: 3 Hours****Max. Marks: 100****Internal: 25****External: 75****Objectives of the Course:**

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

- situate individual development in a socio-cultural context;

- develop an understanding about the impact/influence of socio-cultural context in shaping human development, especially with respect to the Indian context;
- acquire theoretical perspectives and develop an understanding of dimensions and stages of human development and developmental tasks;
- understand a range of cognitive skills and affective processes in human learners;
- become aware of different contexts of learning and situate schools as a special environment for learning;
- reflect on their own implicit understanding of the nature and kinds of learning;
- gain an understanding of different theoretical perspectives on learning with a focus on cognitive views of learning as well as social– constructivist theories;
- explore the possibilities of an understanding of processes in human cognition and meaning–making them as basis for designing learning environments and experiences at school; and
- appreciate the critical role of learner’s based on differences and contexts in making meanings, and hence draw out implications for schools and teachers.

Course Outline:

Unit I: Learner as a Developing Individual

- Developmental Influences: Development as a resultant of interactions between individual potential (innate, acquired) and external environment (physical, socio-cultural, economic and technological).
- Nature and nurture, continuity and discontinuity and growth and maturation issues.
- Implications for teachers to develop holistic understanding of the learner in context.
- The understanding of cognitive and affective processes influencing the development of the learner and their applications in classroom teaching.

Unit II: Development and Learning

- Meaning and principles of development, relationship between development and learning.
- Dimensions of individual development: physical, cognitive, language, emotional, social and moral, their interrelationships and implications for teachers (relevant ideas of Piaget, Erikson and Kohlberg).
- Stages of development—developmental tasks with focus on processes growth and development across various stages from infancy to post adolescence (special emphasis on concerns of adolescence).
- Meaning of 'cognition' and its role in learning.
- Socio-cultural factors influencing development and learning.
- Facilitating holistic development (for self and society). (The focus is on understanding the key concepts of development and cognition, different stages

and dimensions of development and their applications in teaching–learning contexts).

Unit III: Theoretical Perspectives on Learning

- Implicit knowledge and beliefs about learning (demystifying misconceptions).
- Perspectives on human learning: Behaviourist (conditioning paradigm in brief), Cognitivist and Social Cognitivist (Bandura), Information-Processing view, Humanist, Social-Constructivist Social Cognitive Learning (drawing selectively on the ideas of Skinner, Piaget, Rogers, Vygotsky).
 - (i) Concepts and principles of each perspective and their applicability in different learning situations
 - (ii) Relevance and applicability of various theories of learning for different kinds of learning situations
 - (iii) Role of learner in various learning situations, as seen in different theoretical perspectives
 - (iv) Role of teacher in teaching-learning situations: a) transmitter of knowledge, b) model, c) facilitator, d) negotiator, e) co-learner. (The focus is on building understanding of different psychological perspectives of learning and helping student teachers to learn to apply them in different learning situations).

Unit IV: Learning in 'Constructivist' Perspective

- Distinctions between learning as 'construction of knowledge' and learning as 'transmission and reception of knowledge'.
- Social-Constructivist perspective (also Bruner and Ausubel's perspective) and applications of Vygotsky's ideas in teaching.
- Understanding processes that facilitate 'construction of knowledge' :
 - (i) Experiential learning and reflection
 - (ii) Social mediation
 - (iii) Cognitive negotiability
 - (iv) Situated learning and cognitive apprenticeship
 - (v) Meta-cognition.
- Creating facilitative learning environment,
- Teachers' attitudes, expectations – enhancing motivation, Achievement motivation, positive emotions, self-efficacy, collaborative and self regulated learning. (The focus is on learning as a constructive rather than a reproductive process. The learner- centered orientation has implications for understanding learning as contextual and self-regulated process and following suitable classroom practices).

Unit V: Individual differences among Learners

- Dimensions of differences in psychological attributes—cognitive abilities, interest, aptitude, creativity, personality, values.

- Understanding learners from multiple intelligence perspective with a focus on Gardner's theory of multiple intelligence. Implications for teaching-learning in the light of changing concept of intelligence, including emotional intelligence.
- Differences in learners based on predominant 'learning styles'.
- Differences in learners based on socio-cultural contexts: Impact of home languages of learners' and language of instruction, impact of differential 'cultural capital' of learners.
- Understanding differences based on a range of cognitive abilities— learning difficulties, slow learners and dyslexics, intellectual deficiency, intellectual giftedness. Implications for catering to individual variations in view of 'difference' rather than 'deficit' perspective.

Modes of Learning Engagement:

Modes of learning engagement will include:

- Reflective Written Assignments
- Lecture-cum-discussion
- Study of selected readings and discussions around overviews
- Anecdotes, experiential and reflective writings.
- Audio-visual clips of learning situations and interactions, analysis and discussion in small groups as well as large group
- Group presentations of key themes and concepts
- Exemplars of 'constructivist' learning situations, Case studies, their analysis and discussion
- Close observation of learners (students) in learning situations at school, as well as in other contexts; making field notes
- Interpretation, analysis and discussion of observations
- Assignments based on the above

Practicum:

1. Reflective Written Assignments
2. Field observation notes
3. Analysis of a learning situation and case study, using theoretical perspectives
4. Administration of any one standardized tests (Intelligence/aptitude/ attitude/ creativity) and preparation of psychological assessment report.
5. Prepare a critical report on implications of any one theory for learning – Piaget, Erickson and Bandura.
6. Select a child with learning problem (refer 5.5) and carry out academic assessment in any one subject, identify the remedial measures and prepare a report.
7. Preparation of learners' profile based on cognitive and non-cognitive characteristics to depict inter and intra individual differences.

Modes of Internal Assessment	Marks
Written tests	10
Any three of the following:	15
Reflective Written Assignments	

Field observation notes

Analysis of a learning situation and case study, using theoretical perspectives

Project work

Suggested Readings:

1. Ambron, S.R. (1981). *Child Development*. New York. Holt Rinehart & Winston.
2. Atkinson, Richard C. Et.al. (1983). *Introduction to Psychology*. New York. Harcourt Brace Johanovich Inc.
3. Benjafield, J.G. (1992). *Cognition*. Prentice Hall, Englewood Cliffs.
4. Blackie, J.(1971). *How Children Learn* in J.C. Stone an F.W. Schneider (eds.) New York. *Readings in the Foundations of Education, Vol II*, Cromwell.
5. Brown, J.S., Collins A and Dugrid, P (1989). *Situated Cognition and the Culture of Learning*, *Educational Researcher*: 32-42.
6. Dececco. (1970). *Italy. Psychology & Learning and Instruction Educational Psychology* Prentice.
7. Flavell, J.H. (1963). *The Developmental Psychology of Jean Piaget*, New York. Van No strand.
8. Gange, R. M. (1985). *The Conditions of Learning and Theory of Instruction* (4th edition). New York. Holt, Rinehart and Winston.
9. Gardner, H. (1999). *The disciplined mind what all students should understand*. New York. Simon & Schuster.
10. Gardner, Howard (1989). *Frames of Mind*. New York. *The Theory of Multiple Intelligences*, Basic Books.
11. Gardner, Howard (1991). *The Unschooled Mind*. New York. Basic Books.
12. Hurlock, E.B. (1964). *Child Development*. New York. Mcgraw Hill Book Co.
13. Kolb, D.A. (1984). *Experiential Learning*. Englewood Cliffs. NJ: Prentice-Hall
14. Rogers. C.R. (1980). *Educational Psychology in the Classroom*. New York. Oxford University Press.
15. Luria, A. R. (1976). *Cognitive Development: Its Cultural and Social Foundations*. Cambridge, Mass. Havward University Press.
16. Phillippe Aives. (1962). *Centuries of Childhood. A Sociology of Family Life*. New York. Knops.
17. Rosser, Rosemary A. (1993). *Cognitive Development. USA Psychological and Biological Perspectives*, Allyn dand Bacon.
18. Wolfolk (1987). *Educational Psychology*. Prentice Hall Eaglewood Cliff.
19. Srivastava, A.K. (1998). *Child Development. The Indian Perspective*. New Delhi. NCERT.
20. Sibia, A. (2006). *Life at Mirambika*. New Delhi. NCERT.
21. Sarangapani M. Padma. (2003). *Constructing School Knowledge. An Ethnography of learning in an Indian Village*. New Delhi. Sage Publication
22. Chauhan S. S. (2002). *Advanced Education Psychology*. Delhi. Vikas Publication.
23. Woolfolk, A.E. (2009). *Educational Psychology (11th Edition) (My Education Lab Series)* Prentice Hall.

23. Wertsch, J.V. (1985). Vygotsky and the Social Formation of Mind. Harvard University Press .
24. Chauhan, S.S. (1990). Advanced Educational Psychology. New Delhi. Vikas Publication House.
25. Sharma R.A. (1996). Fundamentals of Educational Psychology. Meerut. Lal Book Depot,

B. Ed. First Year
Group A: Core Courses
CC 3: Curriculum and School

Instructional Time: 4 periods/week

Max. Marks: 100

Exam. Duration: 3 Hours

Internal: 25

External: 75

Objectives of the Course:

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

- develop an Understanding of the emerging Curriculum theory.
- develop an Understanding in to the various foundation of curriculum planning
- acquaint the student with the existing approaches to curriculum design.
- reflect on various trends in curriculum development.
- enable student to understand the basic concepts to educational management.
- develop a futuristic vision about devising new curriculum design.
- orient the student teachers with curriculum process and construction to curriculum development.

Course Outline:

Unit I: Concept of Curriculum

- Understanding the meanings and nature of Curriculum: need and importance of curriculum in schools
- Differentiating Curriculum Framework, Curriculum and Syllabus; their significance in school education
- Facets of curriculum: core curriculum - significance in Indian context,
- Meaning and concerns of 'hidden' curriculum
- Curriculum visualized at different levels: national-level; state-level; school level; class-level and related issues

Unit II: Curriculum Determinants and Considerations

- Broad determinants of curriculum making: (At the national or state level)
 Educational and Professional Polices
 - Socio-political aspirations including ideologies and educational vision
 - economic necessities
 - technological possibilities
 - cultural orientations
 - national priorities
- Considerations in curriculum development: (at school level)
 - Forms of knowledge and its characterization in different school subjects;

- Relevance and specificity of educational objectives for concerned level;
- Learner characteristics
- Teachers' experiences and concerns
- Socio-cultural context of students - multi-cultural, multi-lingual aspects
- Critical issues: environmental concerns, gender differences, inclusiveness, value concerns and issues, social sensitivity

Unit III: Curriculum Development (at school level)

- Understanding shifts in emphasis in approach to curriculum: from subject centered 'minimum levels of learning' and behaviouristic learning outcomes; to integrated approach involving development of perspectives, concepts and skills across subjects, incorporating environmental/local concerns, to activity centered and constructivist orientation
- Process of Curriculum making
 - Formulating aims and objectives (based on overall curricular aims and syllabus)
 - Criteria for selecting knowledge and representing knowledge in the form of thematic questions in different subjects
 - Organizing fundamental concepts and themes vertically across levels and integrating themes within (and across) different subjects
 - Selection and organization of learning situations

Unit IV: School - the site of curriculum engagement

- Role of school Philosophy, Management and Administration (and organization) in creating a context for development of curriculum.
- Available infrastructure, curricular sites and resources (library, laboratory, school playground, neighbourhood etc)
- School culture, climate, environment and time management as the context for teachers' work
- Construction of curriculum vis a vis teachers' role and support in 'developing curriculum' 'transacting curriculum' and 'researching curriculum'
- Space for teacher as a Critical Pedagogue
- Role of external agencies in providing curriculum and pedagogic support to teachers within schools – local, regional, national

Unit V: Curriculum implementation and renewal

- Operationalizing curriculum into learning situations - Teachers' role in generating dynamic curricular experiences through:
 - flexible interpretation of curricular aims
 - contextualization of learning
 - varied learning experiences
- Selection and development of learning resources (text-books, teaching-learning materials and resources outside the school- local environment, community and media, etc.
- Evolving assessment modes

- Reviewing and renewal of aims and processes
- Process of curriculum evaluation and revision- need for a model of continual evaluation
- Feedback from learners, teachers, community and administrators;
- Observable in congruencies and correspondence between expectations and actual achievements

Modes of Learning Engagement:

A set of readings need to be compiled, which includes those which clarify key concepts, trace the evolution of alternative conceptions of curriculum, contextualize the problem of curriculum, indicate ways of developing, implementing and reviewing curriculum. In addition, National Curriculum documents and relevant secondary school syllabi should also be made available.

The following modes of learning engagement are suggested:

- Introductory lectures on key themes and concepts
- Study and discussions on the process of curriculum development at various levels
- Study of the NCF 2005 as well as the earlier Curriculum Frameworks and a prescribed syllabus;
- Discussion on purpose of curriculum framework;
- Critical evaluation of the extent to which the curriculum framework is reflected in the syllabus (in small groups)
- Interactions with school teachers and principal about how they operationalize the prescribed curriculum into an action plan; how curriculum is evaluated and revised
- Observing the kinds of curricular experiences a school provides apart from classroom teaching and discern their relevance vis a vis learner development; for this, interactions with teachers and students could be held
- Study of selected readings and presentations based on these

Practicum:

1. Preparation of any topic from the course content and presenting in the classroom.
2. Analytical study of school- curriculum development.
3. Report on curriculum development for the school stage in state/UT.
4. Write a paper on curriculum development.
5. Development of a unit test and its try out.
6. Evaluation of a school textbook.

Modes of Internal Assessment Marks

Written tests

10

Any three of the following:

15

- Nature and level of participation in discussions
- Presentations based on readings
- Field notes on observations and interviews in schools, and linking these with concepts introduced
- Analysis of curriculum development/implementation processes within a school, based on field notes and observations.

Suggested Readings:

1. Bob Moon and Patricia Murphy (Ed). (1999). Curriculum in Context. London. Paul Chapman Publishing.
2. Chryshochoos, N.E. (1998). Learner Needs and Syllabus Design. M.A. Dissertation. England. School of English. University of Durham.
3. D.J. Flinders and S.J. Thorton (eds). (1997). My Pedagogic Creed. New York. The Curriculum Studies Reader, Routledge.
4. G.W. Ford and Lawrence Pungo. (1964). The structure of Knowledge and the curriculum. Chicago. Rand McNally & Company.
5. Groundland, N.E. (1981). Measurement and Evaluation in Teaching. New York. Macmillan.
6. Kelley, A.B. (1996). The Curricular Theory and Practice. US. Harper and Row.
7. Kumar Krishna. (1997). What is Worth Teaching. New Delhi. Orient Longman.
8. Taba, Hilda. (1962). Curriculum Development. Theory and Practice. New York. Har Court, Brace and Wald.
9. Tyler, R.W. (1949). Basic Principles of Curriculum and Instruction. Chicago. University of Chicago Press.
10. KochharS.K. (1970). Secondary School. New Delhi. Sterling publishers Administration.
11. The Report of Education Commission. (1964-66). MHRD Govt. of India .
12. भटनागर, सुरेश. (1996). शैक्षिक प्रबन्ध और शिक्षा की समस्याएँ. मेरठ. सुर्या पब्लिकेशन।
13. गुप्ता एल. डी. (1990). उच्च शैक्षिक प्रशासन. हरियाणा साहित्य अकादमी चण्डीगढ।
14. सुखिया एस. पी. (1965). विद्यालय प्रशासन एवं संगठन. आगरा. विनोद पुस्तक मंदिर।
15. वशिष्ठ के के. (1985). विद्यालय संगठन एवं भारतीय शिक्षा की समस्याएँ, मेरठ. लायल बुक डिपो।
16. देव आचार्य महेन्द्र. (1998). विद्यालय प्रबन्ध,राष्ट्रवाणी. दिल्ली. प्रकाशन।
17. शर्मा आर.ए. (1995). विद्यालय संगठन तथा शिक्षा. मेरठ. प्रशासनसूर्या पब्लिकेशन।
18. व्यास हरिश्चन्द्र. (2003). शैक्षिक प्रबन्ध और शिक्षा की समस्याएँ. नई दिल्ली. आर्य बुक डिपो, 30 नाईवालाकरौलबाग।

B.Ed. First Year

Group B: Pedagogy Courses

PC 1: Pedagogy of Science

Part I

Instructional Time: 4 periods/week (Theory)

2 periods/ week (Practicum)

Exam. Duration: 3 Hours

Max. Marks : 100

Internal : 25

External : 75

Objectives of the Course:

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

- gain insight about the nature and curriculum of science.
- comprehend the approaches and strategies of learning science at secondary level.
- apply pedagogic aspects in teaching-learning of science effectively by adopting

- appropriate teaching strategy.
- discuss a topic in science, construct test items to measure objectives belonging to various cognitive levels.
- use teaching aids effectively in teaching science.

Course Outline:

Unit-I: Nature and Curriculum of Science

Nature of Science: History, Philosophy and nature of science, its role and importance in daily life. Science as interdisciplinary area of learning, contribution of eminent scientists—Isaac Newton, Dalton, Neils Bohr, De Broglie, C. V. Raman, J. C. Bose, Albert Einstein, Charls Darwin, H.G. Khurana, etc.

Science Curriculum: objectives of science curriculum, trends in Science curriculum, learner centred curriculum in science, analysis of science syllabi and textbooks of NCERT and states at upper primary and secondary level; Analysis of other print and non-print materials (A.V. & ICT) used in various states in the area of physical science. Objectives of teaching science, instructional objectives, identification of teaching points, organising the content, designing learning experiences, instructional resources: multimedia, computer, charts, models, improvised apparatus and their role and functions.

Unit II: Approaches and Strategies of Learning Science

Lesson Planning: Pedagogical shift from science as fixed body of knowledge to process of constructing knowledge, scientific method—observation, enquiry, hypothesis, experimentation, data collection, generalization and unit and lesson planning using constructivist approach taking examples from specific contents of science such as electric circuit, magnetic effects of current, physical and chemical changes, animal and plant kingdom.

Strategies of Learning: inquiry approach, experimentation, problem solving, concept mapping, collaborating learning and experiential learning in science, facilitating learners for self-study in science.

Unit III: Pedagogic aspects in teaching - learning of Science

Pedagogic aspects in teaching-learning of physical science concepts such as Newton's laws of motion, universal law of gravitation, heat as energy, temperature, transfer of heat, reflection, refraction and total internal reflection of light.

Mole concept and Avogadro number, structure of atom, periodicity of elements, acid, base & salt and pH scale, carbon and its compounds.

Unit IV: Exploring learning of Science

Exploring learning of science concepts such as types and structure of cell, brief account of functions of various cell organelles, cell division, elementary idea of mitosis and meiosis. Structure and function of meristems (apical meristems), permanent tissue (Complex, secretory) structure and functions of epithelial, connective, muscular and nervous tissues, feeding mechanism, nutrients, balance diet and nutrition deficiency diseases. communicable and non communicable diseases.

Unit V: Evaluation in Science

Concept of CCE, modes of evaluation: oral, observation and written, objective and essay type questions, types of objective test items: short answer, type, multiple choice type, fill-in-blank type, true-false, matching type, making of test items, achievement test, diagnostic test and their construction, preparation of blue print taking examples of concepts of science mentioned in unit III and IV.

Modes of Learning Engagement:

Constructivist approach: Activity based learning experimentation, Interactive learning, Group work, demonstration method, Peer learning, Project work, Assignments followed by presentation, Discussion, Inquiry approach, Concept mapping etc.

Language across the Curriculum Activities: As an integral part of teaching-learning process, relevant activities should be carried out to enhance and promote language skills (LSRW) and proficiency based on the rationale of Language across Curriculum. The activities in this regard are language centered and, therefore, the focus of learning and teaching activities should be on language skills not necessarily on the content. The activities in this regard may be designed/improvised according to the context. Some of the exemplar activities may include:

- Presentation (Oral and Written) based on themes from the content area
- Debate on themes from the content area
- Panel discussion/Seminar/ discussion etc.
- Group discussion/group work
- Question-answer sessions
- Role play/dramatization
- Extempore speech/Elocution
- Organization of reading/reflection activities beyond the textbooks

Practicum:

Activities based on Science at school level

1. Preparation of teaching aids: charts, models, Preparation of one working model.
2. Preparation of a model lesson plan followed by seminar/ presentation before the whole group.
3. Preparation of kit for teaching learning of a topic along with write up (name of unit, name of the theme/topic, material used, procedure, learning outcomes)
4. Construction of an achievement test, its administration on one section of a class and analysis of results.
5. Study of laws of reflection and refraction.
6. Verification of Ohm's law
7. Demonstration of Magnetic effect of current
8. Preparation of crystals of copper sulphate.
9. Study of Exothermic and endothermic reactions
10. Preparations of gases (H_2 , O_2 & CO_2) and study of their properties
11. Study of chemical reactions (combination and decomposition reactions)
12. Preparation of blood film/blood group testing

- 13 Study of diffusion and osmosis
- 14 Study of evolution of CO₂ and heat in respiration
- 15 Study of evolution of O₂ in photosynthesis.

Modes of Internal Assessment	Marks
Written Tests	10
Any three activities given under Practicum	15

Suggested Readings:

1. Lewis, J. (1972). Teaching of school physics, UNESCO. Penguin Book.
2. Anderson, Hans O and Koutnik, Paul G. (1972). Towards More effective science Instruction in education. The MacMillan Co. London. New York and Courier MacMillan.
3. Das, RC. (1984). Curriculum and Evaluation. New Delhi. National Council of Educational, Research and Training.
4. Driver, R. (1983). The pupil as scientist. Buckingham. Open University Press.
5. Saxena A.B. (1988). Vigyan Shikshan Ka Ayonjan. Agra. Har Prasad Bhargava & Sons.
6. NCERT (2009) Science Textbook for Class IX and X. New Delhi. NCERT
7. NCERT (2005) National Curriculum Framework. New Delhi. NCERT

Web Sites :

1. <http://www.tc.columbia.edu/mst/science.ed/courses.asp>.
2. <http://www.edu.uwo.ca>

B.Ed. First Year
Group B: Pedagogy Courses
PC 1: Pedagogy of Physical Science
Part I

Instructional Time :	4 periods/week (Theory)	Max. Marks: 100
	2 periods/ week (Practicum)	Internal: 25
Exam. Duration :	3 Hours	External: 75

Objectives of the Course:

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

- gain insight about the nature and curriculum of science.
- comprehend the approaches and strategies of learning physical science at level.
- apply pedagogic aspects in teaching-learning of physical science effectively by adopting appropriate teaching strategy.
- discuss a topic in science, construct test items to measure objectives belonging to various cognitive levels.
- use teaching aids effectively in teaching science.

Course Outline:

Unit I: Nature and Curriculum of Science

Nature of Science: history, philosophy and nature of science, its role and importance in daily life. Science as interdisciplinary area of learning, contribution of eminent scientists—Isaac Newton, Dalton, Neils Bohr, De Broglie, C. V. Raman, J. C. Bose, Albert Einstein, etc.

Science Curriculum: objectives of science curriculum, trends in science curriculum, learner centred curriculum in science, analysis of science syllabi and textbooks of NCERT and states at upper primary and secondary level; Analysis of other print and non-print materials (A.V. & ICT) used in various states in the area of physical science. Objectives of teaching science, instructional objectives, identification of teaching points, organising the content, designing learning experiences, instructional resources: multimedia, computer, charts, models, improvised apparatus and their role and functions.

Unit II: Approaches and Strategies of Learning Physical Science

Lesson Planning: Pedagogical shift from science as fixed body of knowledge to process of constructing knowledge, scientific method—observation, enquiry, hypothesis, experimentation, data collection, generalization and unit and lesson planning using constructivist approach taking examples from specific contents of science such as electric circuit, magnetic effects of current, physical and chemical changes.

Strategies of Learning: inquiry approach, experimentation, problem solving, concept mapping, collaborating learning and experiential learning in science, facilitating learners for self-study in science.

Unit III: Pedagogic aspects in teaching - learning of Science

Pedagogic aspects in teaching-learning of science concepts such as nature of matter: classification of matter based on chemical constitution elements, compounds and mixtures, types of mixtures- homogenous and heterogeneous solution, atoms and molecules, atomic theory of matter, atomic and molecular masses, concept of mole, chemical reactions, types of chemical reactions: combination, decomposition displacement reactions, electronic concept of oxidation reduction, oxidation number of redox reactions, elementary idea of electro chemical cell and dry cell.

Unit IV: Exploration of learning of Science

Exploration of learning of science concepts such as displacement, motion and its types, speed, velocity and acceleration, angular velocity and acceleration, force: magnitude and direction, addition and subtraction, resultant, balanced and unbalanced force, momentum, work: work done by force, dependence of work on relative orientation of force and displacements, energy, (kinetic and potential) work - energy equivalence, power conversion of K.E. into P.E. and vice-versa, law of conservation of energy and momentum, gravitation: Newton's laws of gravitation, acceleration due to gravity, factors affecting 'g'.

Unit V: Evaluation in Science

Concept of CCE, modes of evaluation: oral, observation and written, objective and essay type questions, types of objective test items: short answer, type, multiple choice type, fill-in-blank

type, true-false, matching type, making of test items, achievement test, diagnostic test and their construction, preparation of blue print taking examples of concepts of science mentioned in unit III and IV.

Modes of Learning Engagement:

Constructivist approach: Activity based learning experimentation, Interactive learning, Group work, Peer learning, Project work, Assignments followed by presentation, Discussion, Inquiry approach, Concept mapping etc.

Language across the Curriculum Activities: As an integral part of teaching-learning process, relevant activities should be carried out to enhance and promote language skills (LSRW) and proficiency based on the rationale of Language across Curriculum. The activities in this regard are language centered and, therefore, the focus of learning and teaching activities should be on language skills not necessarily on the content. The activities in this regard may be designed/improvised according to the context. Some of the exemplar activities may include:

- Presentation (Oral and Written) based on themes from the content area
- Debate on themes from the content area
- Panel discussion/Seminar/ discussion etc.
- Group discussion/group work
- Question-answer sessions
- Role play/dramatization
- Extempore speech/Elocution
- Organization of reading/reflection activities beyond the textbooks

Practicum:

Activities based on Science syllabus at secondary level

1. Preparation of one working model.
2. Preparation of a model lesson plan followed by seminar /presentation before the whole group.
3. Preparation of kit for teaching learning of a topic along with write up (name of unit, name of the theme/topic, material used, procedure, learning outcomes)
4. Construction of an achievement test, its administration on one section of a class and analysis of results.
5. Preparation of designs of ideal Laboratory/Herbarium/Aquarium/terrarium.
6. Measuring the rates of water absorption and loss in plants and animals.
7. To design and perform experiment to demonstrate that by product of Respiration in plants and animals is heat.
8. To demonstrate oxygen consumption during respiration in plants and animals.
9. Perform experiments to detect the presence of carbohydrates, lipids and proteins in food by qualitative chemical tests.
10. Measurement of length, mass, time, temperature, current, voltage.
11. Graphic manipulation like (a) distance-time graph (b) velocity – time graph (c) voltage – current graph (d) temperature – time graph.

12. Study of motion under force (design and demonstration).
13. Methods of preparation of common laboratory reagents.
14. Separation of substances of a given mixture like (i) NaCl, NH₄Cl and sand and (ii) Sulphur, NaCl and Iron scrap.
15. Preparation of crystals of CuSO₄ .5 H₂O

Modes of Internal Assessment	Marks
Written Test	10
Any three activities given under Practicum	15

Suggested Readings:

1. P. K. G. Nair. (1985). Principle of Environmental Biology. UNESCO training of science teachers and educators Bangkok UNESCO.
2. NCERT. (1978). Teacher Education Curriculum Framework. New Delhi. NCERT.
3. Das. R.C.(1985). Science Teaching in Schools. Sterling publication.
4. Heiss, E.d. Obourn, E.S. Hoffman, C.W. (1961). Modern Science teaching. New York. McMillan Publication.
5. NCERT. (2009). Science Textbook for Class IX & X. New Delhi. NCERT.

Web Sites

1. <http://www.tc.columbia.edu/mst/science.ed/courses.asp>.
2. <http://www.edu.uwo.ca>

B.Ed. First Year
Group B: Pedagogy Courses
PC 1 – Pedagogy of English
Part I

Instructional Time: 4 periods/week (Theory)	Max. Marks: 100
2 periods /week (Practicum)	Internal: 25
Exam. Duration: 3 Hours	External: 75

Objectives of the Course:

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

- understand the nature and resources of language and issues related to language acquisition, language learning and multilingualism.
- acquire knowledge about the role, status, objectives and problems of teaching English as a second language in India.
- develop the four basic skills i.e. listening, speaking, reading and writing in students.
- enrich their knowledge of English vocabulary, structures, grammar and usage.
- improvise and use appropriate aids for teaching English.
- know, compare and analyze various methods of and approaches to teaching English as a second language.
- plan and teach lessons in English prose, poetry, grammar and composition related to the textbooks prescribed by different State Boards of Secondary Education.
- use various techniques for the evaluation of learner's achievement in English.
- identify and analyze errors to plan and execute remedial instruction.

Course Outline:**Unit I: English Grammar and Usage**

- Determiners
- Infinitive, Participles and Gerund
- Tense
- Auxiliaries and Modals
- Concord
- Clauses : Conditionals
- Transformation of Sentences: Direct and Indirect Speech, Active and Passive Voice

Unit II: Nature of Language

- Nature of language
- Characteristics of language
- Forms of language (oral and written)
- Functions of language
- Language and communication

Unit III: Language Learning

- Language Acquisition
- Language Learning: Types and process: L1, L2 and FL
- Language and learning: Language Across Curriculum
- Multilingualism as a Resource

Unit IV: Acquisition of Language Skills

- Receptive skills: listening and reading skills
Developing listening skills through storytelling, dialogues, situational conversations, role plays etc. Developing reading skills through Reading Aloud and Silent reading, Intensive & Extensive Reading, Skimming and Scanning
- Productive Skills: speaking and writing
Developing speaking and writing skills through storytelling, dialogues, situational conversations, role plays etc. Developing writing skills, process, mechanics and steps of writing: brainstorming, note-making, organizing thoughts, preparing first draft, editing and improving, finalizing. Writing and teaching of letters, applications, reports, stories, e-mails, paragraphs, CV/resume, précis, summary, notes, dialogues etc.

Unit V: Language Teaching

- Approaches, Methods and Techniques
- Various types of Approaches: Structural-Situational Approach Communicative Approach, Constructivist Approach and Eclectic Approach.
- Various types of Methods: Grammar-Translation Method, Bilingual Method, Direct Method etc.

- Teaching Different Forms of English Literature: Prose, Poetry and Drama
- Lesson planning: Nature, objectives and needs; Lesson planning in prose, poetry and drama at school level.

Modes of Learning Engagement:

Modes of Learning Engagement will be based on eclectic approach. It includes questioning, Lecture-cum-discussion, Demonstrations, Communicative activities, Situational teaching and Learning by Doing, organizing inquiry activities/open ended activities for learning English, Group work and discussion; Use of ICT related to ELL/ELT, Group work on pedagogic analysis of content and planning lessons, and peer interaction. The emphasis will be on learner-centered teaching.

Language across the Curriculum Activities:

As an integral part of teaching-learning process, relevant activities should be carried out to enhance and promote language skills (LSRW) and proficiency based on the rationale of Language Across Curriculum. The activities in this regard are language centered and, therefore, the focus of learning and teaching activities should be on language skills not necessarily on the content. The activities in this regard may be designed/improvised according to the context. Some of the exemplar activities may include:

- Presentation (Oral and Written) based on themes from the content area
- Debate on themes from the content area
- Panel discussion/Seminar/discussion etc.
- Group discussion/group work
- Question-answer sessions
- Role play/dramatization
- Extempore speech/Elocution
- Organization of reading/reflection activities beyond the textbooks

Practicum:

1. Observation and recording of practical difficulties in the teaching of English at upper primary and secondary levels.
2. Preparing a small dictionary of the difficult words used in the upper primary and secondary textbooks.
3. Preparing different visual-aids for teaching.
4. Framing suitable exercises on a given topic /passage.
5. Development of language games
6. Preparation of 20 test items (5 each on the LSRW skills).
7. Analyzing errors committed by students.
8. Analysis and categorization of exercises on grammar as given in the prescribed textbook of the school.
9. A write-up on the problems faced by the school students in relation to the acquisition of the receptive (listening and reading) or productive (speaking and writing) skills in English.
10. A write-up on the comparison between English and mother tongue/home language in terms of sounds and word-order.

11. Selection of materials for writing in English from the newspapers, comics, magazines, advertisements and preparation of an outline for teaching language items.

Modes of Internal Assessment Marks

Written tests	10
Assignments (selected from practicum)	15

Suggested Readings:

1. Bansal, R.K. and Harrison, J.B. (1972). Spoken English for India. Madras. Orient Longman Ltd.
2. Baruah, T.C. (1985). The English Teachers' Handbook. New Delhi. Sterling Publishing Pvt. Ltd.
3. Bright, J. A. and McGregor, G. P. (1970). Teaching English as Second Language. London. Longman.
4. Brumfit, C.J. (1984). Communicative Methodology in Language Teaching. Cambridge. Cambridge University Press.
5. Doff, A. (1988). Teaching English. Cambridge. Cambridge University Press.
6. Freeman, Diane-Larsen. (2000). Techniques and Principles in language Teaching. Oxford. Oxford University Press.
7. Gimson, A.C. (1980). An Introduction to the Pronunciation of English. London. Edward Arnold.
8. Hornby, A.S. (1968). A Guide to Patterns and Usage in English. Oxford. Oxford University Press.
9. Krishnaswamy, N. and Krishnaswamy, Lalitha. (2008). Story of English in India. New Delhi. Foundation Books.
10. Krishnaswamy, N. and Krishnaswamy, Lalitha. (2005). Methods of Teaching English. New Delhi. Macmillan.
11. Krishnaswamy, N. and Krishnaswamy, Lalitha. (2005). Teaching English: Approaches, methods and techniques. New Delhi. Macmillan.
12. Lado, R. (1971). Language Teaching. New Delhi: Tata McGraw Hill Publishing.
13. Mishra, A. K. et al. (2013). Issues in Education at Elementary Level. New Delhi. Lakshi Publishers
14. Paliwal, A.K. (2011). Methodology of Teaching English as a Second Language. Jaipur. Kalpana Publication.
15. Palmer, H.L. (1965). The Principles of Language Study. London. Oxford University Press
16. Quirk, R. and Greenbaum, S. (1973). A University Grammar of English. London. Pearson Longman
17. Raimes, Ann. (2010). Techniques in Teaching Writing. Oxford. Oxford University Press.
18. Richards, J.C. and Rodgers, T.S. (2014). Approaches and Methods in language Teaching Cambridge. Cambridge University Press.
19. Roach, Peter. (1991). English Phonetics and Phonology. Cambridge. Cambridge University Press
20. Sinclair, John. (2000). Collins Co-build English Grammar London. Harper Collins.
21. Yadav, Saryug. (2014). Challenges of Teaching English Language and Literature in the Age of Globalization. New Delhi. Lakshi Publishers.
22. Harmer, Jeremy. (2007). How to teach English. Harlow. Pearson Education Limited.
23. Brown, H. Douglas. (2007). Principles of Language Learning and Teaching. New York. Pearson Education

बी ० एड ० प्रथम वर्ष
Group B: Pedagogy Courses
पी ० सी ० 1 हिंदी भाषा शिक्षण
भाग I

शिक्षण समय : 4 कालांश प्रति सप्ताह (सैद्धांतिक)	अधिकतम अंक : 100
2 कालांश प्रति सप्ताह (व्यावहारिक)	आंतरिक मूल्यांकन: 25
परीक्षा अवधि: 3 घंटे	बाह्य मूल्यांकन: 75

पाठ्यक्रम के विशेष उद्देश्य:

- भाषा की अलग-अलग भूमिकाओं को जानना
- भाषा के स्वरूप और व्यवस्था को समझना
- भाषा सीखने के तरीके और प्रक्रिया को जानना और समझना
- पाठ्यचर्या पाठ्यक्रम और पाठ्यपुस्तक का विश्लेषण कर कक्षा विशेष और बच्चों की समझ के अनुसार ढालना।
- भाषा और साहित्य के संबंध को जानना
- हिंदी भाषा के विविध रूपों और अभिव्यक्तियों को जानना
- भावों और विचारों की स्वतंत्र अभिव्यक्ति करना
- भाषायी बारीकियों के प्रति संवेदनशील होना
- विद्यार्थियों की सर्जनात्मक क्षमता को पहचानना
- भाषा के मूल्यांकन की प्रक्रिया को जानना
- भाषा सीखने और सिखाने के सर्जनात्मक दृष्टिकोण को समझना।

Course outline:

इकाई -I भाषा की प्रकृति

- भाषा, भाषा की प्रकृति, भाषा की विशेषताएँ, भाषा के प्रकार (मौखिक और लिखित) तथा कार्य।
- भाषा एक नियम संचालित तंत्र के रूप में
- भाषा और लिंग, भाषा और सत्ता, भाषा और अस्मिता, भाषा और वर्ग (समाज)
- माध्यम भाषा

इकाई - II भाषा संप्राप्ति और अधिगम

- संप्राप्ति बनाम अधिगम
- मातृभाषा
- प्रथम भाषा, द्वितीय भाषा, तृतीय भाषा
- भाषा और अधिगम
- समस्त पाठ्यक्रम में भाषा का उपयोग
- भाषा और साहित्य

- हिंदी साहित्य की विविध विधाएँ (गद्य, पद्य, नाटक इत्यादि)

इकाई – III भारत में हिंदी की स्थिति और भाषा शिक्षा नीति

- स्वतंत्रता से पहले और स्वतंत्रता के बाद हिंदी की भूमिका ज्ञान की भाषा के रूप में।
- हिंदी, प्रथम, द्वितीय और तृतीय भाषा के रूप में।
- हिंदी पढ़ने-पढ़ाने की चुनौतियाँ।
- त्रिभाषा सूत्र की विशेषताएँ।
- संविधान और शिक्षा समितियों की रिपोर्ट में भाषा- भाषाओं की स्थिति (धारा 343-350-351) कोठारी कमीशन (1964-66) राष्ट्रीय शिक्षा नीति 1986 पी। ओ। ए।- 1992, राष्ट्रीय पाठ्यचर्चा 2005

इकाई – IV भाषायी दक्षताएँ

- सुनना और बोलना: कहानी कथन, संवाद, बातचीत, भूमिका निर्वाह
- पढ़ना: मुखर और मौन वाचन, व्यापक और गहन पठन पठन दोष और उनका निराकरण
- लिखना: लिखने के चरण, सर्जनात्मक लेखन, औपचारिक और अनौपचारिक लेखन (कहानी, कविता, संवाद, डायरी, पत्र, रिपोर्ट, समाचार इत्यादि)
- हिंदी देवनागरी लिपि का मानकीकरण

इकाई – V भाषा शिक्षण की प्रचलित विधियाँ/प्रणालियाँ

- व्याकरण अनुवाद प्रणाली/विधि
- प्रत्यक्ष प्रणाली, ढाँचागत प्रणाली
- संप्रेषणात्मक प्रणाली, निर्मितवादी प्रणाली
- पाठ योजना: प्रकृति उद्देश्य और आवश्यकता
- विभिन्न पाठ योजनाएँ (गद्य, पद्य, नाटक, कहानी, व्याकरण)

अधिगम विधियाँ: व्याख्यान के साथ-साथ परिचर्चा छात्रों द्वारा स्वयं करके सीखना उनकी सहभागिता द्वारा शिक्षण।

Language Across the Curriculum Activities: As an integral part of teaching-learning process, relevant activities should be carried out to enhance and promote language skills (LSRW) and proficiency based on the rationale of Language Across Curriculum. The activities in this regard are language centered and, therefore, the focus of learning and teaching activities should be on language skills not necessarily on the content. The activities in this regard may be designed/improvised according to the context. Some of the exemplar activities may include:

- Presentation (Oral and Written) based on themes from the content area
- Debate on themes from the content area
- Panel discussion/Seminar/ discussion etc.
- Group discussion/group work
- Question-answer sessions
- Role play/dramatization

- Extempore speech/Elocution
- Organization of reading/reflection activities beyond the textbooks

परियोजना कार्य:

1. एक प्रश्नावली तैयार करें तथा दस व्यक्तियों का साक्षात्कार करें और साक्षात्कार के आधार पर हिंदी की स्थिति पर एक रिपोर्ट तैयार कीजिए।
2. संविधान में भारतीय भाषाओं संबंधी अनुसंधान तथा राष्ट्रीय शिक्षा नीति पी. ओ. ए. (प्रोग्राम आफ एक्शन) द्वारा संस्तुत भाषा संबंधी सिफारिशों पर एक रिपोर्ट तैयार कीजिए।
3. अपने आस पास के पाँच स्कूलों का दौरा कर यह जानकारी प्राप्त करते हुए एक रिपोर्ट तैयार करें कि त्रिभाषा सूत्र की क्या स्थिति है।
4. लिखित और मौखिक भाषा में अंतर स्पष्ट करते हुए एक आलेख तैयार करें।
5. सुनने और बोलने में असमर्थ बच्चों को ध्यान में रखते हुए हिंदी शिक्षण की दो गतिविधि तैयार करें।
6. कक्षा 9 अथवा 10 की हिंदी की पाठ्यपुस्तक का शब्दकोष तैयार कीजिए।
7. भाषा शिक्षण के माध्यम से 'राष्ट्रीय स्वच्छता अभियान' को आप कैसे छात्र छात्राओं में लोक प्रिय बनाएँगे कुछ एकटीविटी सुझाकर एक रिपोर्ट तैयार कीजिए।
8. नशा मुक्ति, जल पर्यावरण संरक्षण हेतु भाषा के पाठों द्वारा कैसे जागरूकता लाएँ कुछ एकटीविटी तैयार कर एक रिपोर्ट प्रस्तुत कीजिए।
9. हिंदी की माध्यमिक स्तर की पाठ्य पुस्तकों में भाषा और लिंग एवं शांति शिक्षा के आधार पर गतिविधियों की सूची एवं रिपोर्ट तैयार कीजिए जिसमें यह परिलक्षित हुई है।

आंतरिक मूल्यांकन	अंक
लिखित परीक्षा :	10
परियोजना कार्य :	15

संदर्भ साहित्य:

1. *राष्ट्रीय पाठ्यचर्या (2005) की रूपरेखा*, एन.सी.ई.आर.टी. प्रकाशन 2005
2. *भारतीय भाषाओं का शिक्षण आधार पत्र*, जून 2009 एन.सी.ई.आर.टी. प्रकाशन
3. *समझ का माध्यम*, एन.सी.ई.आर.टी. प्रकाशन
4. *अभिव्यक्ति और माध्यम*, एन.सी.ई.आर.टी. प्रकाशन
5. *नई शिक्षा नीति (1986)*. मानव संसाधन विकास मंत्रालय
6. निरंजन कुमार सिंह. (1994). *माध्यमिक विद्यालयों में हिंदी शिक्षण*. जयपुर. राजस्थानी हिंदी ग्रंथ अकादमी.
7. शिव कुमार शर्मा. (1998). *हिंदी साहित्य युग और प्रवृत्तियाँ*. दिल्ली. अशोक प्रकाशन.
8. राजनाथ शर्मा. (1987). *साहित्यिक निबंध*. आगरा. विनोद पुस्तक मंदिर.

B.Ed. First Year
Group B: Pedagogy Courses
PC 1 – Pedagogy of Urdu
Part I

Instructional Time: 4 periods/week (Theory)
2 periods/ week (Practicum)

Max. Marks: 100

Internal: 25

Exam. Duration: 3 Hours

External: 75

Objectives of the Course:

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

1. understand the different roles of language, relation between Literature and Language, nature and mechanics of language.
2. develop creativity among learners
3. examine authentic literary and non-literary texts and develop insight and appreciation
4. understand the use of language
5. use multilingualism
6. identify methods, approaches of teaching Urdu
7. understand constructive approach to language teaching and learning
8. plan teaching and use TLM

Course Outline:

Unit I: Nature of Language

1. Language, its nature, Characteristics, Types (verbal and non-verbal) and functions
2. Language as a rule governed behaviour and linguistic variability
3. Language and Gender
4. Language and Identity
5. Language and Power
6. Language and Society
7. Origin and development of Urdu Language

Unit II: Language Learning

1. Language Acquisition and Learning
2. Language Learning: Its objectives and different level
3. Multilingualism as Acquisition of Language
4. Language and Literature
5. Different forms of Urdu Literature: Prose, Poetry and Drama etc.

Unit III: Position of Urdu in India

1. Role of Urdu Language in India – Pre & Post Partition
2. Three Language Formula – Merit and Demerits
3. Challenges of Teaching and Learning Urdu
4. Positions of Languages in India: Constitution of India, Article 343-351,350A
5. Kothari Commission (1964-66), NPE 1986, POA 1992, NCF 2005

Unit IV: Acquisition of Language Skills

1. Listening and Speaking: storytelling, dialogues, situational conversations, role play
2. Reading: Loud & Silent Reading, Intensive and Extensive Reading
3. Punctuation
4. Reading defects and cure
5. Writing: Stages of writing, formal and informal writing

Unit V: Teaching Methods and Lesson Planning

1. Grammar Translation Method
2. Structural Approach
3. Bi-lingual Approach
4. Direct Method
5. Communicative Approach
6. Constructivist Approach
7. Lesson Planning and Unit Planning
8. Lesson Planning in Prose, Poetry, Drama etc.

Modes of Learning Engagement:

Modes of Learning Engagement will be based on eclectic approach. It includes questioning, Lecture-cum-discussion, Demonstrations, Communicative activities, Situational teaching and Learning by Doing, organizing inquiry activities/open ended activities for learning Urdu, Group work and discussion; Use of ICT related to Urdu, Group work on pedagogic analysis of content and planning lessons, and peer interaction. The emphasis will be on learner-centered teaching.

Language across the Curriculum Activities: As an integral part of teaching-learning process, relevant activities should be carried out to enhance and promote language skills (LSRW) and proficiency based on the rationale of Language Across Curriculum. The activities in this regard are language centered and, therefore, the focus of learning and teaching activities should be on language skills not necessarily on the content. The activities in this regard may be designed/improvised according to the context. Some of the exemplar activities may include:

- Presentation (Oral and Written) based on themes from the content area
- Debate on themes from the content area
- Panel discussion/Seminar/ discussion etc.
- Group discussion/group work
- Question-answer sessions
- Role play/dramatization
- Extempore speech/Elocution
- Organization of reading/reflection activities beyond the textbooks

Practicum:

1. Prepare a report on the challenges of teaching-learning process.
2. Review of three language formula in India

3. Multilingualism as a resource
4. Preparation of TLM
5. Organization of Seminar/Symposium
6. Organization of co-curricular activities
7. Preparing a scrapbook of poets, writers and other information related to Urdu Language and Literature.
8. Prepare four activities keeping in view “Constructivism in a language Classroom”
9. Preparing Question Bank based on textbook.
10. On the basis of Urdu Textbooks (VI to X), prepare a list of topics and activities given on:

(i) Language and Gender

(ii) Language and peace

Modes of Internal Assessment **Marks**

Written tests 10

Assignments (selected from practicum) 15

Suggested Readings:

1. Gian Chand Jain. (1985). Aam Lisaniyat. Delhi. NCPUL.
2. Garden D.S./KhaliluramanSaifi. (2009). Usool-e-Taleem aurAmale-e-Taleem. Delhi. NCPUL.
3. NCERT. (2008). N.C.F.2005, Urdu Edition. Delhi. NCERT.
4. Noor-ul-Hasan Naqvvi. (2004). Tareekh-e-Adab Urdu. Aligarh. Educational Book House.
5. Mirza Khaleel Ahmed Baig. (2000). Urdu Ki Lisani Tashkeel. Aligarh. Educational Book House.
6. Moinuddin, (2002). Urdu-Zaban Ki Tadrees. Delhi. NCPUL.
7. Riyaz Ahmed. (2013). Urdu Tadrees. New Delhi. Maktaba Jamia Ltd.
8. Rashid Hasan Khan. (1997). Urdu Imla. Delhi. Maktaba Jamia Ltd.
9. NCERT (2010).Position paper of Indian Languages. Delhi. NCERT.
10. Shaukat Sabzwari. (2002). Urdu Lisaniyat. Aligarh. Educational Book House.
11. Ziauddin Alvi. (2009). Usool-e-Taleem. Aligarh. Educational Book House.

B.Ed. First Year

Group B: Pedagogy Courses

PC 2: Pedagogy of Mathematics

Part I

Instructional Periods - 4 periods/week (Theory)	Maximum Marks : 100
2 periods/week (Practicum)	Internal : 25
Exam. Duration: 3 Hours	External : 75

Objectives of the Course:

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

- acquire a clear perspective of the nature of mathematics
- gain insight on the meaning, nature, scope and objective of mathematics education

- appreciate the changes in curriculum and evolve new approaches to teaching
- formulate instructional objectives for different topics of mathematics.
- appreciate mathematics to strengthen the student's resource.
- design the process of developing a concept.
- appreciate the role of mathematics in day-to-day life.
- channelize, explain, reconstruct and evaluate their thinking.
- pose and solve meaningful problems.
- appreciate the historical perspective and contribution of Indian mathematicians in development of the subject.
- appreciate and explore Technology Integrated Mathematics Module (TIMM) based on different subject specific open source software on various concepts of Geometry at secondary stage; and
- appreciate and develop dynamical digital applets with emphasis on process involved in teaching and learning of mathematics at secondary stage.

Course Outline:

Unit I: Nature of Mathematics

- Human Needs as a Basis of Growth in Mathematics
- Mathematical Statements are Unambiguous, Truth Criteria, Use of Symbols
- The role of Institution and Logic in Mathematical Thinking
- Axiomatic Framework of Mathematics: Axioms, Postulates, Undefined Terms, Defined Terms, Reasoning, Type of Reasoning, Proofs - Types of Proofs.
- Language of Mathematics

Unit II: Aims and objectives of Mathematics

- Need and Importance of Mathematics in School Curriculum
 - Social Aspects
 - Mathematical Aspects
 - Applications of Mathematics
- Aims, objectives and scope of mathematics at the secondary stage.
- Writing of objectives for each stage (Primary, secondary and Sr. secondary).
- Writing objectives in behavioral terms for each stage. Piaget's operational thinking.
- Emphasis on the use of mathematics in daily life situations
- Role of mathematics in other subject areas – Interdisciplinary approaches.
- Developing Skills in learners - Problem solving, Logical thinking, Drawing inferences, Handling abstraction, Visualising etc. in learner's personality
- History of development of mathematics and contributions of Indian mathematicians.

Unit III: Approaches of Teaching Mathematics

- Basic Principles of Methods of Teaching Mathematics-
 - Principles of Child Development and Learning
 - Problem posing / solving in Mathematics

Problem posing: Problem posing skill contextualised to recognition of pattern, Extension of pattern, Formulation of conjecture and generalisation through several illustrations drawn from learners immediate environment, Skill development of Process Questioning, can stimulate discussion of an idea, leading to further exploration and use of oral language to explain and justify a thought.

Problem solving: Understanding of Problem, Splitting the Problem in known and unknown parts, Symbolization and mathematical formulation, Solving problem with multiplicity of approaches- exploration of alternative methods through Probing questions and concrete analogies, Attitude build up of internal questioning – learn to ask themselves key questions before, during and after the solution process.

- Methods of Teaching Mathematics
 - Induction and Deduction
 - Analytic and Synthetic Methods
 - Heuristic or Discovery Method

Unit IV: Construction of concepts and Techniques of Teaching Mathematics

- Trends in Organizing Content
- Recall and consolidation of various concepts with varied examples and illustrations in teaching of Arithmetic, Algebra, Co-ordinate Geometry, Geometry, Trigonometry, Mensuration, Statistics and Probability using Inductive and Deductive, Analytic and Synthetic, Heuristic, Project and problem solving methods.
- Analysis of concepts coherently in graded way.
- Misconception and common errors

Unit V: Planning for Classroom Transaction

Planning Classroom Strategies:

Analysis of textual and supplementary print materials, connecting lab/field experiences and suitable planning for classroom interaction.

- Desirable Characteristic of a Good Instructional Programme in Mathematics
- Identifying desired outcome, designing essential questions guiding teaching/ learning.
- Determining acceptable evidences that show students understanding.
- Integrating learning experiences and instructions – sequence of teaching /learning experiences that enable students to develop / demonstrate desired understanding.

Developing unit plan and lesson plan for teaching of mathematics:

- Learning Objectives
- Introduction of the topic
 - Some thought-provoking questions
 - Flow of chapter
- Examples
- Hands on activities
 - Self exploratory experiments (if any)
 - Daily life application
 - Application (Problem Solving)
 - Interdisciplinary Applications / Problems
 - HOTS questions
- Extension activities
 - External Web resources for the content
 - Suggested Readings

Suggested Readings:

1. Roy Dubisch. (1963). The Teaching of Mathematics. New York and London. John Wiley and Sons INC,
2. Butler and Wren. (1960). Teaching of Mathematics. New York and London. McGraw Hill Book Company, INC.
3. Claude H. Brown. (1953). The Teaching of Secondary Mathematics. New York. Harper & Brothers, Publishers.
4. George Polya. (1962), (I), (1965), (II). Mathematical Discovery (Volume I and II). New York and London. John Wiley & Sons, INC.
5. C. G. Corle. (1964). Teaching Mathematics in Elementary School. New York. The Ronalal Press Company.
6. NCTM, USA. (1999). Activity for Junior High School and Middle School. USA. Mathematics, Volume – II, NCTM.
7. J.L. Heilborn. (2000). Geometry - History, Culture and Techniques, Oxford University Press,
8. NCERT. (2010). A textbook of Content-cum-Methodology of teaching. New Delhi. Mathematics, NCERT.
9. NCERT. (2005). Position Paper of NFG on Teaching of Mathematics. New Delhi. NCERT.
10. Johnston-Wilder, S. & Pimm, D. (Eds.) (2004). Teaching Mathematics with ICT, London. Open University Press / McGraw-Hill.
11. Capel, S., Leask, M. & Turner, T. (Eds.) (2009). Learning to Teach Mathematics in School. New York. Routledge. New York.
12. Law, N., Pelgrum, W.J., & Plomp, J. (Eds.) (2008). Pedagogy And ICT Use In Schools Around The World Findings From The IEA Sites 2006 Study. New York Springer.
13. Joubert, M. (2012). ICT in mathematics. Mathematical knowledge in teaching. seminar series. Cambridge. UK. University of Cambridge. Available online at www.maths-ed.org.uk/mkit/Joubert_MKiT6.pdf
14. Glazer, E. M. (2001). Using Internet Primary Sources to Teach Critical Thinking Skills in Mathematics. Santa Barbara. CA. Libraries Unlimited Press.
15. Prichard, A. (2007). Effective Teaching with Internet Technologies Pedagogy and Practice. Thousand Oaks, CA. Sage Publications.

B.Ed. First Year**Group B: Pedagogy Courses****PC 2: Pedagogy of Biological Science****Part I****Instructional Time: 4 periods/week (Theory)****2 periods/week(Practicum)****Exam. Duration : 3 Hours****Max. Marks : 100****Internal : 25****External : 75****Objectives of the Course:**

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

- develop insight on the meaning, nature, and effective use of different activities/experiments/demonstrations/ laboratory experiences for determining aims and strategies of teaching-learning of biological science;
- prepare and use of lesson plans and unit plans required for instructional purposes;
- integration with other school subjects and to identify and relate everyday experiences with learning of biological science;
- explore the curricular processes and skills in science at secondary level and laboratory in teaching– learning;
- formulate meaningful inquiry episodes, problem-solving situations, investigatory and discovery learning projects based on upper primary, stages during teaching-learning of biological science

Course Outline:

Unit I: Aims, Objectives and Pedagogy of Biological Science

- Developing scientific attitude and scientific temper : Nurture the natural curiosity, aesthetic senses and creativity in biology,
- Acquire the skills to understand morphology, taxonomy, genetics, cell biology, development biology etc.
- Understanding biology in relation to society and human welfare,
- Imbibe the values of honesty, integrity, cooperation, concern for life and preservation of environment;
- Solving problems of everyday life;
- Know the facts and principles of biology and its applications consistent with the stages of cognitive development of learners;
- Specific objective of different content areas in biology.

Unit II: Nature and Scope of Biological Science

- Science as a domain of enquiry, dynamic body of knowledge and as a process of constructing knowledge;
- Biological Science for environment and health, History of biological science, its nature and knowledge of biological science independent of human application;
- Origin of life and evolution, biodiversity, observations and experiments in biological sciences;
- biological sciences and society.

Unit III: Exploring Biology

- Motivating learner to bring his/her previous knowledge in science/biology gained through classroom/environment/parents and peer group;
- Cultivating in teacher-learner the habit of listening to child;
- Generating discussion, involving learners in teaching-learning process,
- encouraging learners to raise questions,

- appreciating dialogue amongst peer groups,
- encouraging learners to collect materials from local resources and to develop/fabricate suitable activities in biological science (individual or group work);
- Understanding the role of learners in negotiating and mediating learning in biology.

Unit IV: School Science Curriculum (Biological Science)

- Trends in Science curriculum; Consideration in developing learner-centred curriculum in biology
- Concept of curriculum, historical background of Biology curriculum and its studies. Biological sciences curriculum study project.
- Principles of curriculum construction, curriculum development process, techniques of structuring and restructuring of curriculum, trends in curriculum development in Biology, analysis of existing Biology syllabi and study of recent trends/innovations in biological sciences.
- Pedagogical analysis of – different types of natural resources; food resources and enriched food habits; diversity in plants and animals; hierarchical organization of life.

Unit V: Approaches and Strategies of Learning Biological Science

- Pedagogical shift from science as fixed body of knowledge to process of constructing knowledge, scientific method - observation, enquiry, hypothesis, experimentation, data collection, generalization (teacher- educator will illustrate taking examples from different stage-specific content areas keeping in mind the variation, e.g. structure and function, interaction between living and non-living, biodiversity, etc.);
- Communication in biological sciences;
- Problem solving, investigatory approach, concept mapping, collaborative learning, and experiential learning in biological science (teacher-learner will design learning experiences using each of these approaches);
- Facilitating learners for self- study
- Lesson plan format for learning objectives, preparation and use of teaching aids, time management, recapitulation and evaluation strategies for learners and presentation of lesson plan in biological sciences in class-room transaction.

Modes of Learning Engagement:

Constructivist approach, Activity based learning experimentation, Interactive learning, Group work, Peer learning, Project work, Assignments followed by presentation, Discussion, Inquiry approach, Concept mapping etc.

Language Across the Curriculum Activities: As an integral part of teaching-learning process, relevant activities should be carried out to enhance and promote language skills

(LSRW) and proficiency based on the rationale of Language Across Curriculum. The activities in this regard are language centered and, therefore, the focus of learning and teaching activities should be on language skills not necessarily on the content. The activities in this regard may be designed/improvised according to the context. Some of the exemplar activities may include:

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- Debate on themes from the content area
- Panel discussion/Seminar/ discussion etc.
- Group discussion/group work
- Question-answer sessions
- Role play/dramatization
- Extempore speech/Elocution
- Organization of reading/reflection activities beyond the textbooks

Practicum:

Activities based on Science syllabus at secondary level.

1. Preparation of teaching aids: charts, models, Preparation of one working model.
2. Preparation of a model lesson plan followed by seminar/ presentation before the whole group.
3. Preparation of kit for teaching learning of a topic along with write up (name of unit, name of the theme/topic, material used, procedure, learning outcomes)
4. Construction of an achievement test, its administration on one section of a class and analysis of results.
5. Tools and Technique in Biological Science
6. Perform experiments to detect presents of carbohydrates, lipids and proteins in food by qualitative test
7. Different types of Microscopes and their principle
8. Experiments on Diffusion and osmosis
9. Evolution of CO₂ and heat in respiration
10. Evolution of O₂ in photosynthesis
11. Observation of stages of mitosis and meiosis/animal tissues.

Modes of Internal Assessment	Marks
Written Tests	10
Any three of the prescribed Practicum activities	15

Suggested Readings:

1. NCERT. (2005). National Curriculum Framework. New Delhi. NCERT.
2. NCERT. (2005). Position Paper of NFG on Teaching of Science. New Delhi. NCERT.
3. NCERT. (2005). Position Paper of NFG on Habitat and Learning. New Delhi. NCERT.

4. Vaidya, N. (2004). Science Teaching for 21st Century, Deep & Deep Publications. (1999). Dat Poly, Encyclopedia of Teaching Science. New Delhi. Sarup & Sons.
5. Sutton, CR and Hayson J.H. (1974). The Art of the Science Teacher. McGraw Hill Book Company Ltd.
6. Their, DH. (1973). Teaching Elementary School Science. A Laboratory Approach, Sterling Publication Pvt. Ltd.
7. Science Teacher. (Peer reviewed journal for science teachers).
8. Journal of Research in Science Teaching. (Wiley-Blackwell).
9. Ameeta, P. (2008). Methods of Teaching Biological Science. Neelkamal Publications Pvt. Ltd. Educational Publishers.
10. Sharma, R.C. (1987). Modern Science Teaching. New Delhi. Dhanpatarai & Sons.

Web Sites

1. <http://www.tc.columbia.edu/mst/science.ed/courses.asp>.
2. <http://www.edu.uwo.ca>

**B.Ed. First Year
Group B: Pedagogy Courses
PC 2 – Pedagogy of Social Science
Part I**

**Instructional Time: 4 periods/week (Theory)
2 periods/week (Practicum)**

Max. Marks: 100

Internal: 25

Exam. Duration: 3 Hours

External: 75

Objectives of the Course:

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

- develop an understanding of the nature and scope of social sciences and its relationship with natural and social sciences.
- acquaint student teachers with nature of different disciplines within and their interrelationship concerns with society.
- acquaint student teachers with different approaches to pedagogy of social sciences.
- examine the different ways in which learning situations can be created to learn concepts in social sciences.
- examine different pedagogical issues in learning social sciences.
- enable student teachers to become reflective practitioners capable of transacting theoretical knowledge into practices through innovative strategies.
- plan lessons based on different approaches to facilitate learning of social sciences.
- develop learning materials on selected units to facilitate learning in social sciences.

- realize her/his role as facilitator in enhancing social sciences learning in the real classroom situation.
- develop competence in using different forms of assessment.
- develop professional outlook and humane approach among student teachers.

Unit I: Social Sciences as an Integrating Area of Study: Context And Concerns:

- Distinguish between Natural and Social Sciences.
- Social Sciences and Social Studies- What is social about various social sciences?
- Major Social Sciences Disciplines in Schools- Place of Social Sciences in the School Curriculum. Need for strengthening teaching of social sciences.
- Uniqueness of disciplines vis-a vis interdisciplinarity.
- The values inherent in social sciences: aesthetic, moral, utilitarian, intellectual and environmental.
- Scope of Social Sciences: Linking child's natural curiosity with natural phenomena; spatial and temporal context; important social and economic issues and concerns.

Unit II : Approaches to Teaching Learning and Pedagogical Issues in Social Sciences

- Multiple perspectives/ plurality of approaches for constructing explanations and arguments.
- **Approaches to teaching/learning of social sciences:** Observation, project method, field trip, role-play, dramatization, problem solving, exploratory, concept mapping, self learning strategies, map based learning, multimedia, interactive learning, interdisciplinary approach-features.
- **Pedagogical Issues:** Creating an interactive environment, opportunities for learning together, encouraging participatory learning, utilizing community resources, moving beyond the text book, bringing inclusiveness in learning, connecting local knowledge with the text book, primacy of the learner.

Unit III: Teaching Learning Resources and Pedagogical Planning In Social Sciences

- **Teaching- Learning Resources:** People as resource: The significance of oral data; Types of Primary and Secondary Sources- Data from field, textual material, journals, magazines, newspapers etc; Using the library for sources and reference material; various contextual learning aids; audio-video material- charts, models, maps, atlas, graphs,, visuals, realia and diorama, ICT in learning social sciences- multimedia and internet.
- **Pedagogical Planning:**
 - (A)**Lesson Planning:** Writing teaching points, formulating objectives, selecting teaching learning materials, deciding the approach to teaching learning, writing lesson plan through creating learning situations.
 - (B)**Teacher as a facilitator:** Creating multiple learning contexts, engaging the learner in the learning process, designing activities, questioning, valuing learner's experiences, and encouraging learner's enquiring abilities.

Planning for social science exhibition, quiz competition, field trips, celebration of important days like (Earth Day, World population day, Environment Day etc.). Planning and organization for social sciences fair and field visit.

Unit IV: Assessment for Learning in Social Sciences

- Characteristics of Assessment in Social Sciences; typology of the questions best suited for examining/ assessing/understanding different aspects of social sciences.
- Development of objective based and different types of test items, short answers and essay type questions in social sciences. Evaluating and recording procedures to assess student's performance. Group Assessment, Peer Assessment and Project Work.
- Use of Rubrics and Portfolios in assessment of learning social sciences- providing feedback to learner,
- Open Book Tests: Strengths and limitations
- Continuous and Comprehensive Evaluation in Social Sciences (CCE)

Unit V: Content for Pedagogical Analysis in Social Sciences (Major Concepts and Themes)

- **Economics:** Sustainable Development; Economic Growth and Economic Development; Gross Domestic Product; Poverty; Food Security; Price Rise; Scarcity & Choice; Opportunity Cost; Productivity; Demand, Supply; Market Mechanism; Division of Labour and Specialization; Classification of Production Activities.
- **Geography:** Globe and Map- Elements of Maps; Latitude and Longitudes, Important Parallel and Meridians, Hemisphere, Heat Zones of the Earth, Sub-Continent.
India- Locational Settings; Physiography; Drainage; Climate and Natural Vegetation
- **History:** Primary Sources and Construction of History; Different Social formations in History and Periodization of World History; Periodisation of Indian History- Ancient, Medieval, Modern and Contemporaries; Capitalism, Democracy and Citizenship (American and French Revolution); Fascism and Dictatorship; Culture, Social Stratification and Social Change in India; Shared religious cultures and conflict between religious communities
- **Political Science:** Elements of State: Population, Government, Territory and Sovereignty; Forms of Government-Democratic (Liberal and Social); Non-Democratic; Rule of Law, Authority, Power, Legitimacy, Civil Society, Citizenship, Rights and Separation of Powers.

Modes of Learning Engagement: Lectures, organizing inquiry activities/open ended activities for learning social sciences, Group work and discussion; Use of ICT related to Social Sciences, Group work on pedagogic analysis of content and planning lessons, school visit, field trips and social science tours, peer interaction.

Language Across the Curriculum Activities: As an integral part of teaching-learning process, relevant activities should be carried out to enhance and promote language skills (LSRW) and proficiency based on the rationale of *Language Across Curriculum*. The activities in this regard are language centered and, therefore, the focus of learning and teaching activities should be on language skills not necessarily on the content. The activities in this regard may be designed/improvised according to the context. Some of the exemplar activities may include:

- Presentation (Oral and Written) based on themes from the content area
- Debate on themes from the content area
- Panel discussion/Seminar/ discussion etc.
- Group discussion/group work
- Question-answer sessions
- Role play/dramatization
- Extempore speech/Elocution
- Organization of reading/reflection activities beyond the textbooks

Practicum:

1. Selecting any one theme and identifying integration of elements of social sciences.
2. Writing exemplar materials on different approaches to teaching social sciences.
3. Interacting with the school teachers to understand pedagogical issues and practices.
4. Planning of Lessons on the social sciences units/themes for class VII, IX and X.
5. Writing Reflective Journals based on teaching experiences- simulated.
6. Project Work using ICT on any social science lesson.
7. Field Visit
8. Construction of Test Items- objective based.

Mode of Internal Assessment	Marks
Written tests	10
Selected Projects and Assignments given under Practicum	15

Suggested Readings:

1. Agarwal, J.C.(1993), Teaching of political science- A practical approach, New Delhi. Vikas Publishing house.
2. Arora & Awasthy (2003), Political theory, Haranand Publication Pvt. Ltd. New Delhi.
3. Batra, Poonam (2010) Social Science Learning in Schools- Perspectives and Challenges, New Delhi. Sage Publication Private limited, India,
4. Dhamija, Neelam (1993), Multimedia Approaches in Teaching Social Studies, New Delhi. Harman Publishing House,

5. Kochhar, S.K. (1985), Methods and Techniques for teaching, New Delhi. Sterling Publishers Pvt. Ltd,
6. Martorella, Peter H. (1996), Teaching social studies in middle and secondary schools, Englewood Cliffs, N. J: Prentice Hall.
7. Nachmias, D., Nachmias, C. F. (1996), Research methods in social science, New York. St. Martin's Press, Inc,
8. National Curriculum Framework (2005), New Delhi. NCERT,
9. NCERT (2005) Position Paper on 'Teaching of Social Sciences', New Delhi, NCERT,
10. Savage, Tom V. and Armstrong, David G. (1992) Effective teaching in elementary social studies, New York. Macmillan Publishing Co.,
11. UNESCO, New Source Book for Teaching of Geography, UNESCO 2005.

B.Ed. First Year
Group B: Pedagogy Courses
PC 3: Learning to Function as a Teacher

Duration: Four weeks

Max. Marks: 50

Internal: 50

Objectives of the Course:

On completion of the Course, the student teachers will be able to:

- understand about the activities to be carried out during school internship programme.
- observe classroom teaching, various school activities and gain a feel of the multiple roles of a teacher.
- develop skill in content analysis, preparing TLM and observing classroom processes.
- plan and implement teaching learning activity for peers and actual classroom.

Pre-Internship Tasks:

(The Internship Committee formulated by the Institute will prepare a Schedule for execution of Pre- Internship Tasks)

During the four week duration, the student teachers are oriented to the school internship programme.

For the first two weeks, they will be provided training in core teaching skills, content analysis, preparing Teaching Learning Material (TLM), writing observation records, Reflective Journals, conducting Action Research and Case Study, organizing school activities and their reporting, developing Achievement Tests, administering and analyzing. Student teachers will also write lesson plans and take up peer teaching.

For the next two weeks, student teachers will be placed in the schools. They will observe the classes being handled by the regular teachers as well as their peers. Every student teacher will teach at least one lesson in each teaching subject and reflect on the teaching.

Modes of Learning Engagement:

Pre internship will be carried out both in the Institute and the School.

First two weeks they will be exposed to theoretical knowledge about internship and receive information on various activities that are required to be carried out by the student teachers. Student teachers will get hands on experience on performing certain tasks which they are expected to perform in the school.

In the beginning they learn to teach in a simulated condition by teaching their peers.

Next two weeks, student teachers are attached to the school on full time basis, observe the teaching by the regular classroom teacher, teach at least one lesson in each teaching subject, involve in all the activities of the school and learn to understand the school.

Student teachers keep a record of all the work carried out by them in the school (Details to be worked out).

Modes of Assessment:

The assessment of the student teachers will be carried out on the basis of their day to day participation and performance by a group of teacher educators. The details of activities and the marks allotted are given below.

Activity	Marks
a. Content Analysis in each teaching subject	10
b. Preparation and use of TLM during Peer Teaching in each teaching subject	10
c. Observation Record	
Five classes of regular classroom teacher	05
Five classes of peer	05
d. Actual classroom teaching	
One lesson in each teaching subject	20
Total	50

B.Ed. First Year

Group B: Pedagogy Courses PC 4 - Assessment for Learning

Instructional time: 4 periods /week

Exam. Duration: 3 Hours

Max. Marks: 100

Internal: 25

External: 75

Objectives of the Course:

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

- gain a critical understanding of issues in assessment and evaluation
- become cognizant of key concepts such as test, measurement, examination, formative and summative assessment, and evaluation
- understand different kinds and forms of assessment that aid student learning
- use a wide range of assessment tools, learn to select and construct them appropriately

- evolve realistic, comprehensive and dynamic assessment procedures that are able to keep the whole student in view
- understand the use of action research in solving problems

Course Outline:

Unit I: Overview of Assessment and Evaluation

- Perspective on assessment and evaluation of learning in a constructivist paradigm
- Distinction between ‘assessment of learning’ and ‘assessment for learning’
- Purposes of assessment in a ‘constructivist’ paradigm:
 - engage with learners’ minds in order to further learning in various dimensions
 - promote development in cognitive, social and emotional aspects
- Critical review of current evaluation practices and their assumptions about learning and development
- Meaning and Objectives of :
 - test, measurement, examination, and evaluation
 - formative and summative evaluation
 - continuous and comprehensive evaluation
 - grading and its types

Unit II: School-Based Assessment and Evaluation: Policies, Practices and Possibilities

- Impact of examination-driven schooling
- On Pedagogy: content-confined, information focused testing; memory- and activity centric teaching and testing
- De-linking school-based assessment from examinations: some possibilities and alternative practices
Contexts of assessment: subject- related and person- related

Unit III: Efforts towards Examination Reforms

- Efforts towards examination reforms in India based on: NPE,1986; POA, 1992; NCF, 2000 and 2005 and National Focus Group Position Paper on Examination Reforms (Discussion should cover analysis of recommendations, implementations and the emerging concerns)
- Management of Examination in Schools
- Role of ICT in examination
- Action Research in improving classroom practices: concept, need and steps of action research, action research as an approach to improve class and school practices. Development of an Action Research Plan.

Unit IV: Teacher competencies in evolving appropriate assessment tools

- Teacher competencies

- Visualizing appropriate assessment tools for specific contexts, content, and student
- Achievement test: meaning, need, steps and blue print.
- Evolving suitable criteria for assessment
- Organizing and planning for student portfolios and developing rubrics for portfolio assessment
- Using assessment feedback for further learning

Unit V: Data Analysis, Feedback and Reporting

- Statistical tools- percentage, graphical representation, frequency distribution, central tendency, variation, normal distribution
- Feedback as an essential component of formative assessment
 - use of assessment for feedback; for taking pedagogic decisions
 - Types of teacher feedback (written comments, oral); peer feedback
 - Place of marks, grades and qualitative descriptions
- Developing and maintaining a comprehensive learner profile
- Purposes of reporting: to communicate
 - progress and profile of learner
 - basis for further pedagogic decisions
- Reporting a consolidated learner profile

Modes of Learning Engagement:

Some suggested modes of learning engagement are:

- Lecture-cum-discussion
- Readings and presentations
- Group discussions
- Analysis of a range of assessment tools
- Developing worksheets and other tasks for learning and assessment in one's specific subject area
- Maintaining a portfolio related to the course-work and devising rubrics for assessment
- Constructing a test or an examination paper in one's subject area; critical review of these
- Observing, interviewing and writing comprehensive profile of a student
- Simulated exercises in 'marking' and giving feedback to fellow student-teachers (on a written task); critical review of feedback
- Simulated exercise in marking an examination paper in one's subject area; critical review of marking

Practicum:

1. Compare different forms of assessment.
2. Presentation of different kinds of grading with advantages and disadvantages.
3. Focus group discussion on examination driven teaching and learning.

4. Critical evaluation of examination reforms suggested and implemented based on NPE-1986; POA-1992; NCF-2000; and NCF-2005.
5. Developing Action Research proposal following the established steps of Action Research.
6. Organizing student Portfolio assessment and developing rubrics for portfolio assessment.
7. Developing Achievement Test and practicing method of finalizing the test.

Modes of Internal Assessment	Marks
Written tests	10
Assignments and Projects (selected from Practicum)	15

Suggested Readings:

1. Baker, B, Costa, A. & Shalit, S. (1997). The norms of collaboration. Attaining communication competence. In A. Costa & R. Liebmann (Eds.), *The process-centered school. Sustaining a renaissance community* (pp. 119-142). Corwin. Thousand Oaks, CA.
2. Black, P. Harrison. C., Lee, C., Marshall, B, & William, D. (2004). Working inside the black box Assessment for learning in the classroom. *Phi Delta Kappan*, 86 (1), 8-21.
3. Bransford, J. Brown, A.L., & Cocking, R.R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school*. Washington. DC. National Academy Press.
4. Burke, K. (2005). *How to assess authentic learning* (4th Ed.). Thousand Oaks, CA. Corwin. Burke, K. Fogarty, R. & Belgrad, S (2002). *The portfolio connection Student work linked to standards* (2nd Ed.) Thousand Oaks, CA. Corwin.
5. Carr, J.F. & Harris, D.E. (2001). *Succeeding with standards. Linking curriculum, assessment, and action planning*. Alexandria, VA: Association for Supervision and Curriculum Development.
6. Danielson, C. (2002). *Enhancing student achievement: A framework for school improvement*. Alexandria, VA: Association for Supervision and Curriculum Development.
7. Gentile, J.R. & Lalley, J.P. (2003). *Standards and mastery learning: Aligning teaching and assessment so all children can learn*. Thousand Oaks. CA. Corwin.
8. Guskey, T.R., & Bailey, J.M. (2001). *Developing grading and reporting systems for student learning*. Thousand Oaks. CA. Corwin.
9. NCERT (1985). *Curriculum and Evaluation*. New Delhi. NCERT.
10. NCERT (2005). *National Curriculum Framework*. New Delhi. NCERT.
11. NCERT (2005). *National Focus Group Position Paper on Examination Reforms*. New Delhi. NCERT.
12. Norris N. (1990). *Understanding Educational Evaluation*. Kogan Page Ltd.
13. Natrajan V.and Kulshreshta SP. (1983). *Assessing non-Scholastic Aspects-Learners Behaviour*. New Dlehi. Association of Indian Universities.
14. Newman, F.M. (1996). *Authentic achievement: Restructuring schools for intellectual quality*. San Francisco. CA. Jossey-Bass.
15. Nitko, A.J. (2001). *Educational assessment of students* (3rd ed.). Upper Saddle River. NJ. Prentice Hall.

16. Singh H.S. (1974) Modern Educational Testing. New Delhi. Sterling Publication.
17. Thorndike RL and Hagen. (1977). Measurement and Evaluation in Psychology and Education.

B.Ed. First Year
Group C: Developing Teacher Sensibilities
Section I: Experiences for Teacher Enrichment
ETE 1 –Strengthening Language Proficiency

Instructional Time: 2 periods/week
Exam. Duration: 3 Hours

Max. Marks: 50
Internal: 50

Objectives of the Course:

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

- read and reflect in the language of instruction.
- discuss and communicate in the language of instruction.
- write in the language of instruction.
- develop a taste in reading and making meaning of different kinds of texts.
- learn to engage with ideas and appreciate different kinds of writing.
- communicate these ideas in different contexts.

Course Outline:

Unit I : Engaging with Narrative and Descriptive Accounts

- Reading and Comprehending
- Narrating/describing an event
- Interpreting and discussing a text
- Points of view
- Writing based on a text: summary, extrapolation and conversion etc.

Unit II: Engaging with Popular Subject-Based Expository Writing

- Reading to extract information (subject knowledge)
- Identifying major concepts and ideas
- Interpreting flow diagram, tree diagram etc.
- Explaining the gist of the text/topic to others.
- Attending the writing style, subject-specific vocabulary etc.
- Re-presenting the ideas interpreted from a text
- Writing a review or a summary of the text

Unit III : Engaging with Journalistic Writing

- Using reading strategies for extracting information
- Scanning/skimming/reading a text
- Analysis of structure of journal articles
- Identifying elements of articles: sub-headings, keywords, sequencing of ideas etc.

- Critical reading of articles
- Researching and writing articles on topics of local interest

Unit IV : Engaging with subject-related Reference Books

- Selecting the topic for research
- Articulating research questions
- Searching and locating relevant reference books
- Extracting relevant information from the reference books
- Making notes from reference books
- Collating notes and organizing information under various subheadings
- Planning a presentation – with display and oral components
- Making presentations to whole subject group, fielding questions.

Unit V : Engaging With Educational Writing

- Reading for discerning the theme(s) and argument
- Analyzing the structure of the argument—
Identifying main ideas,
Understanding topic sentences of paragraphs,
Identifying main supporting ideas and examples,
Identifying main terms used as connectors and transitions
- Discussion of the theme, sharing responses and point(s) of view
- Writing a response paper
- Presentations of selected papers, questions and answers

Modes of Learning Engagement:

There are two periods per week to involve the students in performing the activities related to their pedagogy courses. Each pedagogy course teacher will engage one period per week and he/she will submit the marks of assessment for the weightage of 05+20 marks at the end of the session.

Activities:

As an integral part of teaching-learning process, relevant activities should be carried out to enhance and promote language skills (LSRW) and proficiency based on the rationale of Language Across Curriculum. The activities in this regard are language centered and, therefore, the focus of learning and teaching activities should be on language skills not necessarily on the content. The activities in this regard may be designed/improvised according to the context. Some of the exemplar activities may include:

- Presentation (Oral and Written) based on themes from the content area
- Debate on themes from the content area
- Panel discussion/Seminar/ discussion etc.
- Group discussion/group work
- Question-answer sessions
- Role play/dramatization
- Extempore speech/Elocution

- Organization of Quiz
- Report writing on different activities/events
- Organization of reading/reflection activities beyond the textbooks

Modes of Internal Assessment	Marks
Written tests	10
Any four of the above activities	40

Suggested Readings:

1. Jain, Jasbir (Ed.). (2001). The Many World of Literature. New Delhi. Macmillan.
2. Kalam, A.P.J. & Arun Tiwari. (1999). Wings of Fire. New Delhi. Universities Press.
3. Gandhi, M.K. (2012). An Autobiography or the Story of My Experiments with Truth. Ahmedabad. Navjivan Trust.
4. Anna, Kurian. (Ed.) (2006). Texts and Their Worlds I Literatures of India- An Introduction. New Delhi. Foundation Books.
5. Chandran, K. Narayana. (Ed.). (2005). Texts and Their Worlds II. New Delhi. Foundation Books.

B.Ed. First Year

Group C: Developing Teacher Sensibilities

Section I: Experiences for Teacher Enrichment

ETE 2: Enriching Learning through Information and Communication Technology

Instructional Time: 2 periods/week

Max. Marks: 50

Exam. Duration: 3 Hours

Internal: 50

Objectives of the Course:

On the completion of the Course, the student teacher will be able to

- recognize, understand and appreciate ICT as an effective learning tool for learners and as an enormous functional support to teachers.

Course Outline:

Unit I: Relevance of ICT in education (Radio, Television, Computers)

- Role of information technology in construction of knowledge
- Possible uses of audio-visual media, computers, internet, subject specific software.
- Technological Pedagogical Content Knowledge (TPCK)

Unit II: Visualizing Learning situation using Multimedia

- Use of radio and audio media: Script writing, storytelling, songs, etc.
- Using appropriate software (single and multiple media animations and simulation)

- Exploring ICT for teaching-learning, curriculum analysis to determine methods of transacting
- Classroom organization for ICT infused lessons (Teacher led instruction, Self-learning and group activities)

Unit III: Visualizing technology-supported Learning Situations

- Preparation of learning Schemes.
- Interactive use of Digital content.
- Focusing on enhancing learning-appropriate technology.
- Developing PPT slide show for classroom use.
- Use of available software or CDs with LCD projection, smart board for subject learning interactions.
- Generating subject- related demonstration using computer software.

Unit IV: Internet Based Tools

- Web 2.0 Tools
- Engaging in professional self-development.
- Collaborative learning tasks.
- Interactive use of ICT: Participation in Google / Yahoo groups, creation of blogs, etc.
- Innovative usage of technology: some case Studies.
- Use of technology integration in resource-plenty as well as resources-scare situations.
- Critical issues in internet usage - authenticity of information, addiction, plagiarism, downsides of social networking group.

Unit V: ICT for Evaluation

- Evaluation and ICT for Evaluation-purposes
- Exploring software tools for evaluation
- Focusing on enhancing Learning-tracking and managing students.
- Exhibition and peer evaluation of project lessons. Portfolio submissions and evaluation.

Modes of Learning Engagement:

- Providing opportunities for group activities.
- Group/Individual Presentation.
- Providing opportunity for sharing idea.
- Exploring to exemplar constructivist-learning situation.
- Designing and setting up learning models.
- Audio- Visual Presentation followed by its analysis and discussion.

Practicum:

1. Functional knowledge of operating computers-on/off, word processing, use of PowerPoint, excel.
2. Computer as a learning tool
3. Effective browsing of the internet for discerning and selecting relevant information.
4. Survey of educational sites based in India.
5. Downloading relevant material.
6. Cross collating knowledge from varied sources.
7. Competencies in developing original software.
8. Practical exercise on windows and office package.
9. Trouble shooting and seeking help.
10. Installing hardware and software.
11. Synchronous communication on the web.
12. Project using Web 2.0 Tool.
13. Use of Smart board / interactive board.

Modes of Internal Assessment**Marks**

Written tests	10
Presentation and Communication skills in subject specific matters	10
Designing innovative learning situations	10
Performance in-group activity	10
Reflective written Assignments	10

Suggested Readings:

1. Imran R. Shaikh. Introduction to Educational Technology & ICT McGraw Hill Education (India) Private Limited (21st August, 2013).
2. Chris Abbott. (2001). ICT Changing Education. Psychology Press (2nd September, 2003).
3. Saxena. (2009). ICT in Professional Education. New Delhi. APH Publishing Corp.
4. Gwen Solomon, Lynne Schrum. Web 2.0 New Tools, New Schools. International Society for Technology in Education (15th October, 2007) .
5. Gwen Solomon, Lynne Schrum. Web 2.0 How -To for Educators. International Society for Technology in Education (15th October, 2010).
6. Debra Geoghan. Visualizing Technology, Introductory(3rd Edition). Prentice Hall(18th May, 2014).
7. Laxman Mohanty and Neharika Vohra. ICT Strategies for schools. New Delhi. SAGE Publication, (6th October, 2006).
8. Ed Bott, carl Siechert, Craig Stinson. Windows 7 inside Out. New Delhi. PHI Learning Private Limited, (3rd October, 2009).
9. David J Emberton & J Scott Hamlin. Flash 4 Magic. New Delhi. Techmedia, (11th January, 2000).

10. Andy Rathbone. Windows 8 for dummies. John Wiley & Sons (23rd November, 2012)
11. Beth Melton. (2013). Microsoft Office Professional step by step. Microsoft Press(14th June, 2013).
12. Douglrs E Corner. The Internet Book , Everything you need to About Computer Networking and Now the Internet works (4th Edition) Addison- We sky (29th August 2006)
13. Preston Gralla. How the Internet Works (8th Edition) Que Publishing (1st December 2006)
14. J. Michael Stracz ynski. The Complete Book of scriptwriting. Writer Digest Books (1st July, 2002)
15. Ze-Nian Li and Marks S, Drew. Fundamentals of Multimedia, Ist Edition. Prentice – Hall (1st November,2003)

B.Ed. First Year
Group C: Developing Teacher Sensibilities
Section I: Experiences for Teacher Enrichment
ETE 3: Health and Well being

Instructional time: 2 periods/ week

Max. Marks: 50

Exam. Duration: 3 Hours

Internal: 50

Objectives of the Course:

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

- understand the importance of games, sports and yoga for development of holistic health.
- know the status, identify health problems and be informed of remedial measures.
- know about safety and first aid.
- acquire the skills for physical fitness.
- practice yogasanas, meditation and relaxation.
- understand various policies and programmes related to health, physical education and yoga.

Course Outline:

Unit I: Concept of Health, Body and First Aid

- Concept of health, importance, dimensions and determinants of health, health needs of children and adolescents including differently abled children.
- Understanding of the body system – skeleton, muscular, respiratory circulatory and digestive in relation to health.
- Common health problems and diseases- causes, prevention and cure, immunization and first aid.

Unit II: Food - habits, hygiene, diseases and their prevention

- Food and nutrition, food habits, nutrients and their functions.
- Preservation of food value during cooking, indigenous and modern ways of preserving food.
- Practices related to food hygiene, malnutrition, obesity, food and waterborne and deficiency diseases and prevention.

Unit III: Safety, security and physical fitness

- Safety and security – disasters in and outside schools, ways of prevention.
- Safety from snake and dog bites, animal attacks, prevention and treatment.
- Physical fitness, strength, endurance and flexibility, its components, sports skills and self defence activities.

Unit IV: Athletics and Games

- Athletics – general physical fitness exercises.
- Games – lead up games, relays and major games.
- Rhythmic activities, gymnastics and their impact on health.

Unit V: Yoga, Policies and Programmes for Health

- Yogic practices – importance of yoga, yogasanas and pranayamas
- Role of institutions in developing healthy individuals- family, school and sports
- Health services, policies and health and physical education related programmes, blood banks and role of media

Modes of Learning Engagement:

Interactive discussions, group work, sharing experiences, organizing activities, analyzing topics on health related issues, demonstrations, observations, field visits, preparing work books, maintaining diary, participating in school health check up, practical classes of first aid, projects and assignments. Playing games and sports and performing Asanas and Pranayamas

Practicals –Games, Sports and Yoga

Rules regulations related to games, sports and yoga.

Playing Volleyball, Basketball, Badminton and recreation games.

Performing Suryanamaskara and selected yogasanas, mudras and pranayamas.

- Standing Asanas- Konasana, Trikonasana, Vrikshasana, Veerebhadrasana
- Sitting Asanas – Vajrasana, Gumukhasana, Navasana, Veerasana
- Lying on the stomach – Bhujangasana, Dhanurasana
- Body twisting asanas – Ardha Matsyendrasana, Vakrasana
- Back bending – Ushtrasana
- Mudras – Arham, Ananda Mudra
- Pranayama – Anuloma viloma, Bhramari

Modes of Internal Assessment	Marks
Written tests	20
Performance – Games, Sports and Yoga –	30

Suggested Readings:

1. Pande, P. K. (1988). Sports Medicine. Delhi. Khel Sahitya Kendra.
2. Larry G. Shaver. (1982). Essentials of Exercise Physiology. Delhi. Surjeet Publications.
3. Kanabur, Vyjayanthi V. (2007). Sports Nutrition the Scientific Facts. New Delhi. Kanishka Publishers.
4. Dheer. S. Kamal Radhika (2002). Organization and Administration of Physical Education. Friends Publications.
5. Chandler Timothy, Mohin Mike, Vampew Wary (2007). Sports and Physical Education. London. Routledge Taylor Francis Group.
6. Verma, Veena (1999) Sports Psychology. Delhi. Sports Publication.
7. Prakash, Agam (1999) A Textbook of Health Education. Delhi. Sports Publication.
8. Uppla AK. (1996). Physical Fitness. New Delhi. Friends Publication.
9. Thani Lokesh (2003) Rules of Games and Sports. New Delhi. Sports Publication.
10. Sonkar Sathish. (1998). Methods, Measurement and Evaluation in Physical Education. Jaipur, Book Enclave.
11. NCERT, Position Paper, FGR (2006). Health and Physical Education. New Delhi. NCERT.
12. Seetharam AR (1996) Yoga for Healthy Living. Mysore. Paramahansa Yogashrama.
13. Ganguly, S.K., Bera, T.K., Gharote, M.L.(2003) Yoga in relation to Health related physical fitness and academic achievement of school boys. In Position Paper, FGR (2006). Health and Physical Education. New Delhi. NCERT.
14. Gharote, M.L. (1976). Physical Fitness in relation to the practice of selected yogic exercises. In Position Paper, FGR (2006). Health and Physical Education. New Delhi. NCERT.
15. Kulkarni,D.D. (1997).Yoga and Neurophychology. In Position Paper, FGR (2006). Health and Physical Education. New Delhi. NCERT.
16. शर्मा, ओ. पी., (2004). 'खेल के मैदानों की माप एवं निर्माण की विधि नई दिल्ली. खेल साहित्य केन्द्र ।
17. पसरीजा मीनू, सपरा चारु, (2004). 'खेल चिकित्सा ज्ञान कोश नई दिल्ली. स्पोर्ट्स पब्लिकेशन्स ।
18. खान, एराज अहमद, वर्मा, उमाशंकर (1988). 'फुटबाल' पटना. भारती भवन पब्लिशर्स एंड डिस्ट्रीब्यूटर्स ।

B.Ed. First Year

Group C: Developing Teacher Sensibilities Section I: Experiences for Teacher Enrichment ETE 4 : Exploring Library and other Learning Resources

Instructional Time: 2 periods/week

Max. Marks: 50

Exam. Duration: 3 Hours

Internal: 50

Objectives of the course:

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

- develop a sense of initiative, imagination and discernment of learning potential of the resources available in their surroundings.
- take some initiative in pursuing interests outside the formal course work from a range of available resources -the institute library, websites on the internet, local events and facilities, as well as local issues (in the neighbourhood or town), members of local community and visiting resource persons.

Course Outline:

Unit I: Knowing ones Library

Knowing your library; Layout of the Library; Library Procedures- Cataloguing, Locating a book/material in the library, Library Management and Library Automation.

Unit II: Library as a resource

Library as a resource of learning, pleasure and concentration;
School Library as an intellectual space for students and teachers.

Unit III: Arrangement of a library

Types of books and other materials used by different readers.
Techniques of keeping the books and materials.

Unit IV: Infrastructure and rules

Library Infrastructure and School Library standards
Library Rules

Unit V: Library for career development

Locating information and using it for one's own career development
Resources helpful in providing information for career development: Newspaper, Magazines, Websites, Learning guides, Members of local community, Resource persons, Websites.

Modes of Learning Engagement:

Learning engagement includes lecture, discussion, observation, field visits and assignments.

Practicum:

Each student teacher is expected to:

1. Maintain a list of books and journals that have been read
2. Make a dossier with relevant websites and notes on their learning potential

3. Write reviews of at least two books of his/her own interest
4. Make a plan for setting up of a school library and discuss it with the school he/she has attached with and write a programme-evaluation report.
5. A small survey to collect information about different kinds of libraries in the city.
6. A project to discern the present status of libraries in schools. In addition, each student-teacher should also undertake any one of the following:
7. Discern learning opportunities in the local environment, and create an occasion and/or a strategy for some significant learning for fellow students
8. Interview resource persons/member of local community and/or organize a 'learning encounter' with any of them for their fellow students

Modes of Internal Assessment	Marks
Written tests	20
Preparation of Bibliography	10
Evaluation or Review of one book	10
An analytical study of a school library	10

Suggested Readings:

1. Krishna Kumar (2009). Library Organization. New Delhi. Vikas Publishing House.
2. Krishna Kumar (2000). Reference Service. New Delhi. Vikas Publishing House.
3. Krishna Kumar (2009). Library manual. New Delhi. Vikas Publishing House.
4. Krishna Kumar (2009). Library Administration and Management. New Delhi. Vikas Publishing House.
5. Roshan Lal Mittal (1978). Library Administration. New Delhi. Metropolitan Book.
6. CBSE (2006). Organizing School Library Guidelines. Delhi. CBSE.
7. William O. Scheeren (2010). Technology for the School Librarian-Theory and Practice. ABC-CLIO.

B. Ed. First Year

Group C: Developing Teacher Sensibilities

Section II: Experiences for Social and Environmental Sensitivity

SES 1: Education for Peace

Instructional Time: 2 periods/week

Exam. Duration: 2 Hours

Max. Marks: 50

Internal: 20

External: 30

Objectives of the Course:

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

- acquire knowledge, attitudes, values, skills and competencies to:
- become aware of role of education in building peace as dynamic social reality.
- understand and resolve conflicts within, and mediate others'.
- empower themselves and transcend barriers of identity.

- use pedagogical skills and strategies in and out of classroom for promoting peace at school level.
- act as agency to promote peace in the local community influencing school.

Course Outline:

Unit I: Understanding Education for peace

Meaning, aims and objectives of Peace and Peace education.
Need and Importance of Peace education.
Peace promoting values: compassion, cooperation and love.

Unit II: Empowerment for Peace

Empowerment of self through critical self reflection.
Increasing awareness: Justice, Equality, Socialism.
Reducing prejudices and nurturing ethical behavior.

Unit III: Education for peace building

Factors responsible for disturbing Peace: unemployment, terrorism and Exploitation.
Cognitive, moral and social development of Adolescence.
Awareness of pedagogical skills for removing tension and examination fear

Unit IV: Pedagogy of Peace

Conflict Resolution.
Brain storming.
Problem Solving Model.

Unit V: Understanding conflicts and their peaceful resolution

Nature of conflict Incompatibility of needs, aspirations and resulting conflicts at different levels in society.
Understanding the role of social conditions and processes that sustain conflict.
Developing capabilities for dealing with conflicts and their peaceful resolution.

Modes of Learning Engagement:

The course material should be made available to teacher trainees with instructions to read material before hand for participation in the discussion in class. The sources could be relevant portions of textbooks with chapters on peace education, and non-violence, selected portions from Gandhian literature.

A few selections from work and films on prominent philosophers and educators of peace like Gandhi. Krishnamurthy, Aurobindo, Vivekananda, Rabindranath Tagore, Gijubhai Badheka, the Dalai Lama could be used to initiate discussion and dialogues followed by assignment on one or two.

Practicum:

1. Experiential learning sessions on yoga, meditation, communication skills, conflicts their resolution, media influence, cooperative competitive strategies, use of meditation, art, drama, nature to experience harmony.

2. Reflective journal to record experiences of the day and reflections thereon during the training programme, sharing and discussing self expression of change during the training.
3. Visits to organizations connected with peace and intercultural harmony, and aesthetic appreciation to experience peace as reality submission of reports on experiences.
4. Assignments
5. Films clips displaying, concerns of peace, good intercultural relationships, environmental presentation and other key ideas and discussions thereon, like –Doha Debates, Sadako etc.
6. Preparation of collages from newspapers etc. to highlight issues and challenges to peace or positive response to them
7. Developing an action plan for peace in school and local community.
8. Visiting websites on peace education to become familiar with national and international initiatives, approaches and strategies of peace, case studies of conflict in the region.

Modes of Internal Assessment	Marks
Written tests	10
Any two activities given under Practicum	10

Suggested Readings:

1. Dalai, Lama (1980). Universal Responsibility and the Good Heart. Library of Tibetan Works & Archives. H.P. Dharamshala, Dist. Kangra.
2. Dalai, Lama (2000) *Transforming the Mind*, translated by Dr. Thupten Jinpa, edited by Dominique Side & Dr. Thupten Jinpa. London. Thorsons.
3. Gangrade K.D (2001). Religion and Peace, A Gandhian Perspective. New Delhi. Gandhi Smriti and Darshan Samiti.
4. Harris, I.M. (1998). Peace Education. McFarland, North Carolina. New Delhi. NCERT.
5. Kaur, B. (2006). Teaching of Peace and Conflict and Pride - School Histories of the Freedom Struggle in India. New Delhi. Penguin Books India Pvt, Ltd.
6. Kumar, K. (2006). Peace Lines. New Delhi. Penguin Publications. (In Press).
7. Kumar, K. (2007). Shanti Shiksha Aur Gandhi. (in Hindi). Delhi University. Maharishi Valmiki College of Education.
8. Krishnamurti, J. (1997). The Flame of Attention. London. Krishnamurti Foundation Trust Ltd.
9. Ministry of Human Resource Development. (1993). Learning without Burden A Report of the Advisory Committee, (MHRD). New Delhi. Department of Education.
10. NCERT (2005). National Curriculum Framework. New Delhi. NCERT.
11. Prasad, D. (2005). Education for Living Creatively and Peacefully. AP. Spark India Hyderabad.
12. Hant, T. N. (2004). Being Peace. New Delhi. Nice Printing Press.
13. UNESCO (2001). Learning the Way to Peace - A Teacher's Guide to Peace Education. A.S. Balasooriya. New Delhi. UNESCO.

14. UNESCO (2002). Learning to Be A Holistic and Integrated Approach to Value. Bangkok. Education for Human Development.
15. Valson, T. (2006). Living in Harmony: A Course on Peace and Value Education. New Delhi. Oxford.

Journals

Journal of the Krishnamurti School. Krishnamurti Foundation of India, 124-126, Green ways Road, RA Puram, Chennai-600028.
Awakening Ray, by Gnostic Centre

B.Ed. First Year

Group C: Developing Teacher Sensibilities

Section II: Experiences for Social and Environmental Sensitivity

SES 2: Environmental Education

Instructional Time: 2 periods / week

Max. Marks: 50

Exam. Duration: 2 Hours

Internal : 20

External : 30

Objectives of the Course:

The Course 'Environmental Education' aims to orient student-teachers to analyze and understand environment concerns through the process of inquiry, critical analysis, intellectual discourse and essential projects.

Course Outline:

Unit I : Importance and Scope of Environment

Importance need and scope of Environmental Conservation and Regeneration, Structure and functions of different ecosystems, India as a mega biodiversity nation, Role of individual in conservation of natural resources: water, energy and food, Equitable uses of resources for sustainable livelihoods, Environmental legislation: awareness and issues involved in enforcement.

Unit II : Natural Resources

Community participation in natural resource management- water, forests etc, Deforestation in the context of tribal life, Sustainable land use management, Traditional knowledge and biodiversity conservation, Developmental projects including Government initiatives and their impact on biodiversity conservation.

Unit III : Practices in Environment Management

Consumerism and waste generation and its management, Environmental degradation and its impact on the health of people, Organic farming, Agricultural waste: their impact and management, Rain water harvesting and water resource management, Biomedical waste management.

Unit IV : Sustainable Environment in Global World

Environmental conservation in the globalised world, Alternative sources of energy, Impact of natural disaster/man-made disaster on environment, Biological control for

sustainable agriculture, Heat production and green house gas emission, Impact of industry/mining/transport on environment, Sustainable use of forest produces.

Unit V : Environment Laws & Hazards

Role of women in conservation, Female foeticide/ infanticide and skewed sex ratio, Development of slum area and their inhabitants, Child mortality and maternal health, HIV/AIDS, Malaria-status, measures undertaken for their control/ eradication,

Modes of Learning Engagement:

- Case studies and success stories (involve local material).
- Problem solving and enquiry methods
- Small assignments which may include observation of important relevant days, preparation of bulletin board material, games, crossword puzzles, worksheet etc.
- Setting up of Eco-clubs.
- Conducting a seminar and developing a seminar document
- Project work and writing of project report
- Discussion of activities pertaining to two different classes and subjects.
- Activities on infusion of appropriate concerns

Practicum:

1. The students on completion of each topic of Unit-I will submit a small assignment in the form of an activity. This may include observation of importance of relevant season, preparation of bulletin board material, wall games, crossword puzzles, worksheet etc.
2. The class can also form an environment club. The activity has to be on some local specific issue pertaining to the native place of the students.
3. From the wide range of topics suggested in Units II, III, IV and V, the student will be assigned one topic. The student will develop a seminar document, which will be submitted after the seminar.

Modes of Internal Assessment:

	Marks
Written tests	10
Any two activities given under Practicum	10

Suggested Readings:

1. NCERT (1981) Environmental Education at School Level. New Delhi. NCERT.
2. Odum, E.P (1971). Fundamental Ecology. London. W.B. Saunders Company.
3. Palmer, Joy A. (1998). Environmental education in the 21st Century. London. Routledge.
4. Sharma R. C and Tan, Marle C (Eds.) (1990). Resource Book in Environmental education for school lectures. Bangkok. UNESCO.
5. Sharma, R.C. (1981). 'Environmental Education. New Delhi. Metropolitan Publishers.
6. हरिश्चन्द्र व्यास (2001). पर्यावरण शिक्षा, नई दिल्ली. विद्या विहार।
7. सक्सेना हरिमोहन (2003). पर्यावरण अध्ययन, श्रीगंगानगर. अग्रवाल साहित्य सदन।
8. पंकज श्रीवास्तव (1998). 'पर्यावरण शिक्षा'. भोपाल. मध्यप्रदेश हिन्दी ग्रंथ अकादमी।

9. सक्सेना ए.बी. (1998). पर्यावरण शिक्षा. नई दिल्ली. आर्य बुक डिपो।
10. UNESCO (1990). Sourcebook in Environmental Education for School Teachers. Bangkok.
11. CEE (1995). Joy of learning handbook of environmental education activities. Vol.I-3 to 5.—Ahmedabad. Centre for Environment Education,
12. CEE (1996) Joy of learning. handbook of environmental education activities. Vol.II-6 to 8.-- Ahmedabad: Centre for Environment Education
13. Pandya (1999). Mamata Guide to green material: experiences and learnings in developing effective environmental education material. Ahmedbad. Centre for Environment Education,
14. Sharma, R. C. (1981). Environmental Education. Delhi. Metropolitan.
15. Reddy, K. Purushotham. (2007). Environmental education. New Delhi. Neelkamal Publications Pvt. Ltd.
16. NCERT (2009). Project book in Environmental Education for class VII, VII, IX and X. New Delhi. NCERT.
17. NCERT (2011). Teachers' Handbook on Environmental Education for the higher secondary stage. New Delhi. NCERT.
18. NCERT (2013). Project book in Environmental Education for the higher secondary stage. New Delhi. NCERT.

B.Ed. First Year

Group C: Developing Teacher Sensibilities

Section II: Experiences for Social and Environmental Sensitivity

SES 3: Work Experience: Agricultural Practices

Instructional time: 1 period/week (Theory)

Max. Marks: 50

2 periods/ week (Practicum)

Internal: 50

Exam. Duration : 3 Hours

Objectives of the Course:

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

- identify commonly spreading tree species and their importance for common people,
- know the importance of traditional medicinal plants
- use qualitative seeds for sowing,
- identify important hedges creepers and weeds
- develop a nursery
- appreciate the various irrigation and drainage methods and systems

Course Outline:

Unit I: General Agriculture

Meaning, definition, scope, branches of agriculture, Definition of soil and soil

profile, Concept of water shed management, principles and objectives, Agro - climatic zones of India, Systems of irrigation, Characteristics of a good seed for sowing, Calculation of germination percentage of seeds, Planting and transplanting practices, Raising seedlings in a nursery, Seed bed preparation,

Unit II: Horticulture

Definition and branches of horticulture, Vegetative propagation methods like, cutting, budding, grafting, layering, tissue culture, Planning, planting and maintaining lawns, Identification of summer flowers, Identification of winter flowers .

Unit III: Agricultural Practices

Preparation of land, Selection of seeds, Sowing of seeds, Thinning, hoeing and weeding, Plant protection measures, Harvesting and storage, Important manures, Important fertilizers, Common agricultural tools.

Unit IV: Project Preparation on Fruit Crops

Mango and Banana, Citrus fruits, Papaya and Sapota, Pomegranate and Ber, Awala and Datepalm .

Unit V: Herbal Gardening of Medicinal Crops

Ashwagandha, Guarpatha, Satawari, Yellow kachnar, Amaltas,

Modes of Learning Engagement :

Hands on Experiences, Activity based Learning, Experimentation, Interactive engagement. Group Work, Peer Learning, Project Work.

Practicum :

- (a) Identification of agricultural practices of the following crops.
Wheat, Bajra, Maize, Rose and important crops of the Area.
- (b) Agricultural Processes
Seed Bed preparation, Nursery Management. Irrigation, Training and Pruning, Hoeing and Weeding.

Modes of Internal Assessment

	Marks
Written Tests	10
Practical Exam. records and viva	40

Suggested Readings:

1. Jitendra Singh (2012). Basic Horticulture. New Delhi. Kalyani Publishers.
2. Rajveer Singh and Rajput O.P. (2008). Principles of Agronomy. Scientific Crop Production Kushal Publications and Distributors Varanasi.
3. K.N. Dubey Rama (2008). Fruit Production in India. Publishing House Meerut.

Unit IV: Electrical Components and Appliances

Resistor, Colour Coding, Capacitor, its use in electrical appliances, Inductor and its use in Transformer, Use of Transformer.

Electrical appliances: Electric iron, Room heater, Immersion heater, Geyser, Electric bell, emergency light, Refrigerator etc. making Resistance and Capacitor boxes, use of making testing board and extension boards for labs.

Unit V : Electronic Components and Their Use

Semiconductor materials, Semiconductor diode, Diode testing, Zener diode, LED, Photo diode, Solar cell, Rectification by diodes, Voltage multiplication by diodes, Transistor action, Amplification by transistor, Basic idea of integrated circuits.

Modes of Learning Engagement:

Constructivist Approach: Hands on Experiences, Activity based Learning, Experimentation, Interactive engagement. Group Work, Peer Learning Project Work.

Practicum :

Preparation of Projects/Models based on the following:

1. Clap switch
2. IR Remote switch (fan, tube light)
3. Remote operated musical bell
4. Alarm for luggage security
5. Mobile cell-phone charger using cell
6. Power supply failure alarm
7. Blown fuse indicator
8. Rectifier
9. Voltage Multiplier
10. Transistor Amplifier

Modes of Internal Assessment	Marks
Written Tests	10
Exam. and Projects	40

Suggested Readings :

1. Electrician – I Year Trade Theory (2007). Chennai. National Instructional Media Institute.
2. Electrician – II Year – Trade Theory (2007). Chennai. National Instructional Media Institute.
3. P.S. Bhimbhara (2007) Electrical Machinery. Delhi. Krishna Publisher
4. N.N. Bhargava, D.C. Kulshreshtha and S.C. Gupta (2000). Basic Electronics and Linear Circuits. New Delhi. Tata McGraw Hill Ltd.
5. B.L. Theraja (2005). Basic Electronics. New Delhi. S. Chand.

B.ED. First Year
Group C: Developing Teacher Sensibilities
Section II: Experiences for Social and Environmental Sensitivity
SES 4: Working with the Community

Duration: 10 days/year

Evaluation: 5 point grade scale

Objectives of the Course:

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

- acquaint themselves with the factors working in the society/community i.e. knowledge of social realities.
- develop the dignity of labour among them.
- arouse their interest in the social and economic reconstruction of the country.
- make themselves aware of the educational problems and needs of this society.
- enable themselves for preparing youth for sustainable development.
- develop their personality through community service.

Methodology: The students will spend 10 days at a stretch during the academic year in the identified village. Separate activities will be undertaken every year out of the following or given by the Institute.

Suggested Activities:

1. Shramdaan and beautification
2. Study of educational scenario of a community. Reporting the profile of each Institution/NGO/social organization, which is directly or indirectly concerned with educational/literacy programme.
3. Micro planning exercises for assessing the educational status of the community.
4. Organization of "Nukad Natak" "Cultural Programmes", "Rallies" etc. for motivating the villagers for sending their wards to schools.
5. School mapping exercises for assessing the educational need of the community.
6. Study of enrolment, stagnation and dropout problems.
7. Exploring the community resources and finding means and ways of using them for betterment of school.
8. Adopting a community and implementation of the Lab Area Concept in adopted community.
9. Survey of nearby community (adopted community) and assessing its educational needs, social needs etc.
10. Conducting awareness programmes in the community- like Environment conservation, tree plantation, watershed management, health programmes like vaccination, polio drop etc. AIDS awareness, electoral awareness, road safety, human rights, women rights etc.
11. Organization of Literacy programmes in the community
12. Cleanliness drives in the community and awareness about their needs.

13. Character building programmes
14. Developing healthy food habits among the community
15. Conducting Vocational training programmes for self employment.
16. Promoting peace oriented values in the community.
17. Remedial teaching work for poor and needy in the community.
18. Action Research regarding local problems in consultation with the community.
19. Promoting peace oriented values in the community.
20. Conducting Adult Education programmes
21. Assistance and working with local community in actual relief work whenever needed.
22. Training of community in First Aid.
23. Helping the children with special needs.
24. Conducting Vocational training programmes for self employment.

Modes of Learner Engagement:

Proposed activities of the programme will be organized keeping in view the budgetary provision and the time of duration along with the required available facilities at the time of organization of the programme.

Modes of Internal Assessment:

- Internal assessment of Punctuality, Regularity, Discipline, Cooperation and Performing Arts will be done through observation of the students and viva will be conducted on their experiences and Written report prepared by the student teachers.

B. Ed. Second Year
Group A: Core Courses
CC 4: Schooling, Socialization and Identity

Instructional Time: 6 periods/week

Max. Marks: 100

Exam. Duration: 3 Hours

Internal: 25

External: 75

Objectives of the Course:

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

- become aware of the processes of socialization at home and school that act as shaping factors in identity formation of the school going child (in Indian contexts)
- reflect critically on factors that shape identity formation and influence sense of self of the growing 'student' as well as 'teacher' in school as well as out of school.
- understand the processes that have shaped/continue to shape one's own sense of identity as 'student' and a 'person' located in multiple social contexts and roles
- reflect on one's aspirations and possibilities in order to develop a growing sense of agency as a 'teacher', a 'professional', as well as a 'human being'.

Course Outline:

Unit I: Socialization and Development of Self

- Understanding the nature and processes of socialization
At home: family as a social institution; impact of parenting style/child rearing practices; transmission of parental expectations and values;
In the community: neighbourhood, extended family, religious group and their socialization functions
At school: impact of entry to school; school as a social institution; value-formation in the context of schooling;
- Understanding interface between home, community and school; inter-linkages within wider socio-cultural context

Unit II: Emergence of 'person' and 'identity'

- Understanding 'identity formation'; emergence of multiple identities in the formation of a person placed in various social and institutional contexts; the need for inner coherence; managing conflicting 'identities'.
- Determinants of identity formation in individuals and groups: such as caste, class, gender and religion
- The influence of peer group, media messages, technology, and globalization on identity formation in contemporary Indian society

Unit III: Schooling and identity formation

- Schooling as a process of identity formation: ascribed, acquired and evolving
- School as a site of identity formation in teacher and students: school culture and ethos, teaching-learning practices and teacher discourse in the classroom,
- Potential role of school in developing national, secular and humanistic identities

Unit IV: Coping with social complexities: Role of education

- Expanding human activities and relations; decreasing unhealthy competition, uncertainty and insecurities and the resultant identity conflicts
- Indian concept of 'vasudhaiva kutumbakam' and 'sarvadharm sambhava'.
- Relevance of education for peace oriented values and peaceful living

Unit V: Evolving a 'holistic identity' as a teacher

- The impact of one's own socialization processes; awareness of one's own shifting identities as 'student', 'adult' and 'student teacher', and influences that have acted/continue to act on oneself
- Reflections on one's own aspirations and efforts in becoming a 'teacher'
- Evolving an identity as a teacher, which is progressive and open to re-construction
- Teachers' professional identity and Teachers' professional ethics.

Modes of Learning Engagement:

- Introductory lectures-cum-discussion, to introduce key themes of the course – socialization, identity formation, sociological notions and experiential sense of 'self' etc
- Observations of schools and classrooms through the lens of course themes; interviews with teachers; making field notes
- Group discussion and exploration, around selected readings and key questions
- Viewing selected documentaries and film clippings
- Writing critical reviews of readings and films viewed
- Presentations of reviews
- Reflective, autobiographical writing, towards self-understanding, on given topics
- Journal writing, on course experiences (to be initiated with this course; to be continued through the year, with occasional sharing with a 'mentor')

Practicum:

1. Visit to a school and studying the role of school in socialization of the child.
2. Preparing notes on ways of managing conflicting identities with illustrations.
3. Studying the school activities which enhance secular identity in children.
4. Observing school processes that contribute to peaceful living of teachers and students.
5. Describing ones' own process of socialization quoting some experiences.

Modes of Internal Assessment**Marks**

Written tests

10

Selected few of the following

15

Presentations based on readings and film reviews

Reflective written assignments (towards critical awareness of issues, for self-understanding and formulating aspirations as a teacher)

Journal writing

Notes from field observations/interviews and linking these with course themes

Suggested Readings:

1. Pathak, Avijit (2002). Social Implications of Schooling. New Delhi. Rainbow Publishers.
2. Kumar Krishna (2004). What is Worth Teaching? 3rd edition, Orient Longman.
3. Krishnamurti, J. Education and the Significance of Life. KFI Publications.
4. Butler, J. (1990). Gender Trouble Feminism and the subversion of Identity. New York. Routledge.
5. Sharma, R&E. Annamalai. (2003). Indian Diaspora In Search of Identity. Mysore. CIIL.
6. Kumar, K. (2001). Prejudice and Pride School Histories of the Freedom Struggle. New Delhi. Viking/Penguin.
7. Amalendu Misra (2004). Identity and Religion Foundations of Anti-Islamism in India. New Delhi. Sage Publications.
8. Dipankar Gupta (Ed.) (2004). Caste in question Identity or Hierarchy. New Delhi. Sage Publications.

9. Kamala Ganesh & Usha Thakkar (Ed.) (2005). Culture and Making of Identity in India. New Delhi. Sage Publications.
10. Saraswati, T.S. (Ed.) (1999). Culture, Socialization and Human Development. Theory Research and Applications in India. New Delhi. Sage Publication.
11. Sen Amartya (2006). Identity and Violence. The Illusion of Destiny. New Delhi. Allen and Lane Penguin Books India Pvt. Ltd.
12. Shashi Tharoor (2007). The Elephant, the Tiger & The Cell phone. (Particularly part two of the book). New Delhi. Penguin Viking.
13. Srinivas M.N. (1986). Social Changes in Modern India. Bombay. Allied Publishers.
14. Vidyanathan, T.G. (1989). 'Authority and Identity in India', in 'Another India.' Dae dalus, Fall, 118 (H): 147-69.

B. Ed. Second Year

Group A: Core Courses

CC 5: Vision of Education in India: Issues and Concerns

Instructional Time: 6 periods/week

Exam. Duration: 3 Hours

Max. Marks: 100

Internal: 25

External: 75

Objectives of the Course:

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

- understand determinants of the purposes and processes of education.
- understand the role of education as an agency of social transformation.
- reflect critically on concerns and issues of contemporary Indian schooling.
- develop their insight as future concerns of education.
- analyze development of education in light of socio, economic, political and cultural development.

Course Outline:

Unit I: Vision of Indian Education

- Aims and purposes of education drawn from the Ancient Intellectual tradition of India
- Determinants of purpose and process of Education: Communities, Religion, State and Market.
- Constitutional provisions on education that reflect national ideals: Democracy, Equality, Liberty, Secularism and Social Justice.

Unit II: Vision of Education: Four Indian Thinkers

An overview of salient features of the 'philosophy and practice' of education advocated by these thinkers

- Rabindranath Tagore: Liberationist pedagogy
- M.K.Gandhi: Basic education OR Education for self sufficiency
- Aurobindo Ghosh: Integral education
- J. Krishnamurthi: Education for individual and social transformation

Unit III: Contemporary Indian Schooling: concerns and issues

- Universalization of School Education
- Right to Education and Universal access:
 1. Issues of a) Universal enrollment b) Universal retention c) Universal success:
 2. Issues of quality and equity
(The above to be discussed with specific reference to physical, economic, social and cultural access particularly to girl child and weaker sections as well as differently abled children)
- Equality of Educational Opportunity:
 - Meaning of Equality of educational opportunity and Constitutional Provisions
 - Prevailing nature and forms of Inequality including Dominant and Minor groups and the related issues
 - Types of Schooling: Public- private schools, Rural-urban schools, single teachers' schools and other types of school systems; and the processes leading to disparities
 - Differential quality in Schooling: variations in school quality
- Idea of 'common school' system

Unit IV: Future Concerns in Education

- Issues and concerns of Indian education.
- Impact of globalization, liberalization and privatization on Indian society and education.
- Rights of Girl Child.
- Education as Fundamental Right of Children: Right to Education Act and its provisions.
- Right to Education and changing scenario of Indian society.
- Education for National Integration and International Understanding.
- Education for promoting duty consciousness and citizenship.

Unit V: Education and Development- an Interface

- Emerging trends in the interface between:
 - Political process and education
 - Economic developments and education
 - Socio-Cultural changes and education
 - Education and skill development with reference to vocational education.
 - Educational development through community participation, Govt. and Non-Govt. agencies.

Modes of Learning Engagement:

- Sourcing and studying relevant portions of documents relevant to the themes.
- Presentations based on readings (including original writing of at least one educational thinker).
- Conduct surveys of various educational contexts (eg. Schools of different kinds) and make interpretative presentations based on these.
- Study writings on analysis of education-development interface and make presentations.
- Group discussions, debates and dialogue on the themes.

Practicum:

1. Preparing an assignment on Constitutional Provisions on Education.
2. Preparing a brief summary of Educational writers/books contributed by any of the Indian Thinkers.
3. Reporting on Practice of Rights of the Child with special reference to Girl Child.
4. Comparative analysis of different types of schools.

Modes of Internal Assessment**Marks**

Written tests

10

Any three of the following

15

- Conducting surveys and presentations based on afore said units.
- Interpretation of field studies and experiences in terms of the course themes
- Comprehension of ideas of thinkers and presenting them in groups.
- Extent of innovative ideas and sensitivity in visualizing project on 'peace' or 'environmental concerns'

Suggested Readings:

1. Agrawal, J.C. & Agrawal S.P. (1992). Role of UNESCO in Educational. New Delhi. Vikas Publishing House.
2. Anand, C.L. et.al. (1983). Teacher and Education in Emerging in Indian Society. New Delhi. NCERT.
3. Govt. of India (1986). National Policy on Education. New Delhi. MHRD.
4. Govt. of India (1992). Programme of Action (NPE). New Delhi. MHRD.
5. Mani, R.S. (1964). Educational Ideas and Ideals of Gandhi and Tagore. New Delhi. New Book Society.
6. Manoj Das (1999). Sri Aurobindo on Education. New Delhi. National Council for Teacher Education.
7. Mistry, S.P. (1986). Non-formal Education-An Approach to Education for All. New Delhi. Publication,
8. Mohanty, J. (1986). School Education in Emerging Society. sterling Publishers.
9. Mukherji, S.M. (1966). History of Education in India. Baroda. Acharya Book Depot.
10. Naik, J.P. & Syed, N. (1974). A Student's History of Education in India. New Delhi. MacMillan.
11. NCERT (1986). School Education in India – Present Status and Future Needs. New Delhi. NCERT.
12. Ozial, A.O. 'Hand Book of School Administration and Management'. London. Macmillan.
13. Radha Kumud Mookerji (1999). Ancient Indian Education (Brahmanical and Buddhist). New Delhi . Cosmo Publications.
14. Sainath P. (1996). Everybody loves a good drought. New Delhi. Penguin Books.
15. Salamatullah. (1979). Education in Social context. New Delhi. NCERT.
16. Sykes, Marjorie (1988). The Story of Nai Talim. Wardha. Naitalim Samiti.
17. UNESCO (1997). Learning the Treasure Within.
18. Vada Mitra. (1967). Education in Ancient India. New Delhi. Arya book Depot.

19. National Policy on Education (1986). Ministry of HRD. New Delhi. Department of Education.
20. NCERT (2002). Seventh All India School Education Survey. New Delhi. NCERT.
21. UNESCO. (2004). Education for All. The Quality Imperative. EFA Global Monitoring Report. Paris.
22. Varghese, N.V. (1995). School Effects on Achievement. A Study of Government and Private Aided Schools in Kerala. In Kuldip Kumar (Ed.) School effectiveness and learning achievement at primary stage: International perspectives. New Delhi. NCERT.
23. World Bank (2004). Reaching The Child: An Integrated Approach to Child Development. New Delhi. Oxford University Press.

B.Ed. Second Year
Group B : Pedagogy Courses
PC 1: Pedagogy of Science
Part II

Instructional time: 6 periods/week(Theory)

Max. Marks: 100

3 periods/ week (Practicum)

Internal: 25

Exam. Duration: 3 Hours

External: 75

Objectives of the Course:

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

- gain the knowledge and comprehend the principles of curriculum and analyse the organization of science content at secondary level.
- select and use the relevant methods, strategies and approaches in science class and laboratory.
- develop skills in organizing, using and maintaining the available resources in teaching science.
- transfer the fundamental experimental skills to the pupils and organize different activities related with science processes/skills to the pupils.

Course Outline:

Unit I: Curriculum Development and Science Curriculum

Curriculum development: need and salient features of curriculum, strategy and principles of curriculum, development of curriculum for the secondary level, salient features of NCF – 2005.

Science curriculum: common characteristics of science curriculum, curricular projects and their shortcomings, science curriculum in India, basic criteria of validity of a science curriculum in the light of NCF - 2005, a critical study of

syllabus of IX and X Classes.

Unit II: Learning Resources and strengthening Science

Learning Resources: identification and use of learning resources in science from immediate environment such as natural pH indicators, common salts, fruits, lenses and mirrors, inter-conversion of one form of energy to other, exploring alternative sources of energy, improvisation of apparatus, audio-visual materials; multimedia–selection and designing; use of ICT in learning physical science.

Strengthening of learning physical science: organisation of practicals in laboratory, use of science kits, investigatory project, field trips, science clubs, science fairs relationship between science and other subjects, development of values through science education, concept mapping and its use, co-operative learning, application of constructivist approach in teaching learning of science concepts such as chemical, electrical and nuclear energy.

Unit III: Planning and Pedagogic Aspects for Teaching - Learning of Science

Planning and pedagogic aspects– lesson planning and learning of science concepts such as Nutrition in amoeba and hopper, digestive and respiratory system in animals, control and coordination in animals, reproduction in animals.

Photosynthesis, factors affecting the process of photosynthesis, respiration in plants, transportation in plants, asexual and sexual reproduction, pollination, fertilization and partheno-genesis in plants. Heredity and variations, structure of chromosome, DNA.

Unit IV: Exploring Learning of Science

Exploring learning of science concepts such as electric circuits, series and parallel combination of circuits, electric current, measurement of current and potential difference, ohm's law, resistance, factors effecting resistance, electrical energy, capacity, inductance, elementary ideas about a.c. and d.c. motors. Characteristics of metals, metallurgical operations-dressing of the ore, calcinations, roasting, smelting and refining, concept of electrode potential and electrochemical series, reactivity of metals and non-metals, extraction of metals like iron, copper and aluminium.

Unit V: Tools and Techniques of Assessment for Learning Science

Tools and Techniques of Assessment: development of learning indicators, Performance-based assessment, learners' records of observations, field diary, oral presentation of learners work, portfolio, assessment of project work, construction of test items and administration of tests, exploring content and assessments of learning based on content mentioned in unit III and IV, continuous and comprehensive evaluation for overall development of child.

Modes of Learning Engagement:

Constructivist approach: Activity based learning experimentation, Interactive learning, Group work, demonstration method, Peer learning, Project work, Assignments followed by presentation, Discussion, Inquiry approach, Concept mapping, field visit etc.

Practicum:

Activities based on Science syllabus at secondary level.

1. Preparation of one working model.
2. Preparation of a model lesson plan followed by presentation/seminar of the whole group.
3. Preparation of kit for teaching learning of a topic along with write-up (name of unit, material used, procedure, learning outcomes)
4. Construction of an achievement test, its administration on one section of a class and analysis of results.
5. Check adulteration in food items.
6. Study nature of soft and hard water from a given water sample and its removal.
7. Demonstration of interaction between a magnet and current
8. Determination of given resistance and specific resistance of a material using wheat stone bridge and post office box.
9. Examine bacteria from curds and milk under microscope.
10. Examine the water samples for qualitative analysis of phytoplankton and zooplankton.

Modes of Internal Assessment	Marks
Written Tests	10
Any three activities given under Practicum	15

Suggested Readings:

1. UNESCO (1985). Science Teachers and Educators. Bangkok. UNESCO.
2. NCERT (1978). Teacher Education Curriculum Framework. New Delhi. NCERT.
3. Du RC (1985). Science Teaching In Schools. Sterling Publication.
4. NCERT (2009) Science Textbook for Class IX and X. New Delhi. NCERT.

Web Sites

3. <http://www.tc.columbia.edu/mst/science.ed/courses.asp>.
4. <http://www.edu.uwo.ca>

B.Ed. Second Year
Group B: Pedagogy Courses
PC 1: Pedagogy of Physical Science
Part II

Instructional Time: 6 periods/week (Theory)	Max. Marks: 100
3 periods/ week (Practicum)	Internal: 25
Exam. Duration: 3 Hours	External: 75

Objectives of the Course:

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

- gain insight the salient features of curriculum, strategy and principles of curriculum and science curriculum for the secondary level.
- comprehend the objectives of teaching science at secondary level.
- apply the principles of learning processes in the teaching of science.
- teach a topic in science effectively by adopting appropriate teaching strategy.
- construct test items to measure objectives belonging to various cognitive levels.
- use effectively the teaching aids in teaching science.

Course Outline:

Unit I: Curriculum Development and Science Curriculum

Curriculum development: need and salient features of curriculum, strategy and principles of curriculum, development of curriculum for the secondary level, salient features of NCF – 2005.

Science curriculum: common characteristics of science curriculum, curricular projects and their shortcomings, science curriculum in India, basic criteria of validity of a science curriculum in the light of NCF - 2005, a critical study of syllabus of IX and X Classes.

Unit II: Learning Resources and strengthening Science

Learning Resources: identification and use of learning resources in science from immediate environment such as natural pH indicators, common salts, fruits, lenses and mirrors, inter-conversion of one form of energy to other, exploring alternative sources of energy, improvisation of apparatus, audio-visual materials; multimedia–selection and designing; use of ICT in learning physical science.

Strengthening of learning physical science: organisation of practicals in laboratory, use of science kits, investigatory project, field trips, science clubs, science fairs relationship between science and other subjects, development of values through science education, concept mapping and its use, co-operative learning, application of constructivist approach in teaching learning of science concepts such as chemical, electrical and nuclear energy.

Unit III: Planning and Pedagogic Aspects for Teaching - Learning of Science

Planning and pedagogic aspects– lesson planning and learning of science concepts such as Charge, electrostatic force, quantization of charge, capacitance, potential and potential difference, Ohm's law, series and parallel connections of resistances and capacitances, electric power, magnetic effect, heating effect of current, Faraday's law of induction Lenz Law, motor and generators, oscillations and waves, periodic and non-periodic motion, sound as wave motion, longitudinal and transverse waves.

Unit IV: Exploring Learning of Science

Exploring learning of Science concepts such as chemical reactions, type of chemical reactions - combination, decomposition, displacement reactions, endothermic and exothermic reactions, concept of oxidation, reduction, redox reactions, rate of reaction, factors affecting the rate like concentration, temperature, pressure and catalyst.

Unit V: Tools and Techniques of Assessment for Learning Science

Tools and Techniques of Assessment: development of learning indicators, Performance-based assessment, learners' records of observations, field diary, oral presentation of learners work, portfolio, assessment of project work, construction of test items and administration of tests, exploring content and assessments of learning based on content mentioned in unit III and IV, continuous and comprehensive evaluation for overall development of child.

Modes of Learning Engagement:

Constructivist approach: Activity based learning, experimentation, interactive learning, group work, peer learning, project work, assignments followed by presentation, discussion, inquiry approach, concept mapping, etc.

Practicum:

Activities based on Science syllabus at secondary level.

1. Preparation of one working model.
2. Preparation of a model lesson plan followed by seminar/presentation before the whole group.
3. Preparation of a kit for teaching learning of a topic along with write-up (name of unit, theme/topic, material used, procedure, learning outcomes).
4. Construction of an achievement test, its administration on one section of a class and analysis of results.
5. Demonstration of laws of electromagnetic induction
6. Determination of specific resistance
7. Study heating effect of current
8. Qualitative chemical test for some common food stuffs
9. Preparation of Chlorine (Cl_2) and Ammonia (NH_3) and Study of their properties
10. Study nature of soft and hard water.

Modes of Internal Assessment	Marks
Written Tests	10
Any three activities given under Practicum	15

Suggested Readings :

1. Lewis, I. (1972). Teaching of School Physics. Penguin Book, UNESCO.
2. Anderson, Hans O and Koutnik Paul G. (1912). Towards more Effective Science Instruction in Education. The Macmillan Co. London. New York and Courier Macmillan.
3. Das, RC. (1984). Curriculum and Evaluation. New Delhi. National Council of Educational Research and Training.
4. Driver, R. (1983). The pupil as scientist? Buckingham. Open University Press.
5. Saxena, A.B. (1988). Vigyan Shikshan Ka Ayonjan. Agra. Har Prasad Bhargava & Sons.
6. NCERT (2009). Science Textbook for class IX and X . New Delhi. NCERT.
7. NCERT (2005). National Curriculum Framework. New Delhi. NCERT.

Web Sites

1. <http://www.tc.columbia.edu/mst/science.ed/courses.asp>.
2. <http://www.edu.uwo.ca>

B.Ed. Second Year
Group B: Pedagogy Courses
PC 1 - Pedagogy of English
Part II

Instructional Time: 6 periods/week (Theory)	Max. Marks: 100
3 periods/ week (Practicum)	Internal: 25
Exam. Duration: 3 Hours	External: 75

Objectives of the Course:

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

- acquire knowledge about the role, status, objectives and problems of teaching English as a second language in India
- enrich the knowledge of English vocabulary, structures, grammar and usage and to develop the ability to teach them
- improvise and use appropriate aids for teaching English
- know, compare and analyze various methods and approaches of teaching English as a second language
- plan and teach lessons in English prose, poetry, grammar and composition related to the courses prescribed by different State Boards of Education.
- use various techniques for the evaluation of learner's achievement in English identify and analyze errors and plan and execute remedial instruction

Course Outline:**Unit I: Phonetics and Phonology of English**

- Organs of Speech
- Description and classification of speech sounds: Vowels and Consonants
- Segmental features: Phoneme and allophone
- Supra-segmental features: accent, stress, intonation and rhythm
- Phonemic transcription
- Features of Indian English (GIE/Standard Indian English(SIE) and RP/BBC)

Unit II: Position of English in India

- Role and Position of English language in India
- Challenges of teaching and learning English in India
- NCF-2005 (Language Education)
- Objectives of teaching English in India: General and Specific objectives, Skill - based objectives and Competence-based objectives (linguistic and communicative competence), Linguistic and Literary objectives

Unit III : Development & Analysis of Syllabus & Textual Materials

- Curriculum, syllabus and textbook: Concept, Importance and Difference
- Features of a good textbook
- Criteria of Analysis and Evaluation of syllabi and textbook

Unit IV: Teaching-Learning Materials and Aids

- Concept, Scope and Importance
Audio-visual aids (electronic and print media), radio, TV, films, mobile phones, computer, internet, realia, pictures, flashcards, flannel board, OHP, blackboard, models, tape recorder, charts, magazines, newspapers, class libraries, language labs, CALL programmes etc.
- Planning co-curricular activities (discussion, debates, workshops, seminar etc.);
- Language labs, etc.

Unit V : Assessment and Evaluation

- Concept, Scope and Importance
- Types of Assessment and Evaluation
- Difference between Assessment and Evaluation
- Assessment of Language Skills(LSRW) and Language Content (Sounds, Vocabulary, Structure and Grammar)
- Assessment in Poetry, Prose and Drama
- Continuous and Comprehensive Evaluation: Concept, Scope and Process

- Techniques of evaluation—oral, written, portfolio; Cloze test, Self evaluation; Peer evaluation; Group evaluation.
- Type of questions and test items: Assessment Activities and tasks

Modes of Learning Engagement:

Modes of Learning Engagement will be based on eclectic approach. It includes questioning, Lecture-cum-discussion, Demonstrations, Communicative activities, Situational teaching and Learning by Doing, organizing inquiry activities/open ended activities for learning English, Group work and discussion; Use of ICT related to ELL/ELT, Group work on pedagogic analysis of content and planning lessons, and peer interaction. The emphasis will be on learner-centered teaching.

Language across the Curriculum Activities: As an integral part of teaching-learning process, relevant activities should be carried out to enhance and promote language skills (LSRW) and proficiency based on the rationale of Language Across Curriculum. The activities in this regard are language centered and, therefore, the focus of learning and teaching activities should be on language skills not necessarily on the content. The activities in this regard may be designed/improvised according to the context. Some of the exemplar activities may include:

- Presentation (Oral and Written) based on themes from the content area
- Debate on themes from the content area
- Panel discussion/Seminar/ discussion etc.
- Group discussion/group work
- Question-answer sessions
- Role play/dramatization
- Extempore speech/Elocution
- Organization of reading/reflection activities beyond the textbooks

Practicum:

1. A write-up on the pronunciation- errors committed by students in English by giving suitable suggestion for improvements.
2. Identify and analyze the challenges of teaching and learning English in the schools of the area in which the teaching practice was conducted.
3. Preparation of the following aids : 5 flashcards, 5 picture cards, 2 OHP transparencies,
4. Preparation of a ten-minutes duration CALL programme on vocabulary or grammatical items or reading/writing skills.
5. Analysis of a question paper in English prepared by the local school/board at different levels.
6. Preparation of a portfolio or a cloze test in English.
7. Action Research on a classroom-based problem of teaching English in your state /province.
8. Analysis of a prescribed textbook in English.
9. Analysis of the syllabus in English at the upper-primary stage or secondary stage.

Internal Assessment**Marks**

Written tests

10

Assignments (selected projects and activities from Practicum) 15

Suggested Readings:

1. Bansal, R.K. and Harrison, J.B. (1972). Spoken English for India. Madras. Orient Longman Ltd.
2. Baruah, T.C. (1985). The English Teachers' Handbook. New Delhi . Sterling Publishing Pvt. Ltd.
3. Bright, J. A. and Mc Gregor, G. P. (1970). Teaching English as Second Language. London. Longman.
4. Brumfit, C.J. (1984). Communicative Methodology in Language Teaching. Cambridge. Cambridge University Press.
5. Doff, A. (1988). Teaching English. Cambridge. Cambridge University Press.
6. Freeman, Diane-Larsen. (2000). Techniques and Principles in language Teaching. Oxford. Oxford University Press.
7. Gimson, A.C. (1980). An Introduction to the Pronunciation of English. London. Edward Arnold.
8. Hornby, A.S. (1968). A Guide to Patterns and Usage in English. Oxford. Oxford University Press.
9. Krishnaswamy, N. and Krishnaswamy, Lalitha. (2008). Story of English in India. New Delhi. Foundation Books.
10. Krishnaswamy, N. and Krishnaswamy, Lalitha (2005). Methods of Teaching English. New Delhi. Macmillan.
11. Krishnaswamy, N. and Krishnaswamy, Lalitha. (2005). Teaching English: Approaches, methods and techniques. New Delhi. Macmillan.
12. Lado, R. (1971). Language Teaching. New Delhi. Tata McGraw Hill Publishing.
13. Mishra, A. K. et al. (2013). Issues in Education at Elementary Level. New Delhi. Lakshi Publishers
14. Paliwal, A.K. (2011). Methodology of Teaching English as a Second Language. Jaipur. Kalpana Publication.
15. Palmer, H.L. (1965). The Principles of Language Study. London. Oxford University Press.
16. Quirk, R. and Greenbaum, S. (1973). A University Grammar of English. London. Pearson Longman.
17. Raimes, Ann. (2010). Techniques in Teaching Writing. Oxford. Oxford University Press.
18. Richards, J.C. and Rodgers, T.S. (2014). Approaches and Methods in language Teaching. Cambridge. Cambridge University Press.
19. Roach, Peter. (1991). English Phonetics and Phonology. Cambridge . Cambridge: University Press.
20. Sinclair, John. (2000). Collins Cobuild English Grammar. London. Harper Collins.
21. Yadav, Saryug. (2014). Challenges of Teaching English Language and Literature in the Age of Globalisation. New Delhi. Lakshi Publishers.
22. Harmer, Jeremy. (2007). How to teach English. Harlow. Pearson Education Limited.
23. Brown, H. Douglas. (2007). Principles of Language Learning and Teaching. New York. Pearson Education.

बी ० एड ० ,द्वितीय वर्ष
Group B: Pedagogy Courses
पी ० सी ० I हिंदी भाषा शिक्षण
भाग II

शिक्षण समय: 6 कालांश प्रति सप्ताह (सैद्धांतिक)	अधिकतम अंक: 100
3 कालांश प्रति सप्ताह (व्यावहारिक)	आंतरिक मूल्यांकन: 25
परीक्षा अवधि: 3 घंटे	बाह्य मूल्यांकन: 75

पाठ्यक्रम के विशेष उद्देश्य:

- भाषा की अलग-अलग भूमिकाओं को जानना
- भाषा के स्वरूप और व्यवस्था को समझना
- भाषा सीखने के तरीके और प्रक्रिया को जानना और समझना
- पाठ्यचर्या पाठ्यक्रम और पाठ्यपुस्तक का विश्लेषण कर कक्षा विशेष और बच्चों की समझ के अनुसार ढालना।
- भाषा और साहित्य के संबंध को जानना
- हिंदी भाषा के विविध रूपों और अभिव्यक्तियों को जानना
- भावों और विचारों की स्वतंत्र अभिव्यक्ति करना
- भाषायी बारीकियों के प्रति संवेदनशील होना
- विद्यार्थियों की सर्जनात्मक क्षमता को पहचानना
- भाषा के मूल्यांकन की प्रक्रिया को जानना
- भाषा सीखने और सिखाने के सर्जनात्मक दृष्टिकोण को समझना।

इकाई-I हिंदी उच्चारण शिक्षण

- उच्चारण अवयव/स्थान
- हिंदी की मानक ध्वनियाँ एवं वर्गीकरण (स्वर व्यंजन)
- बलाघात, स्वराघात, अनुतान
- अशुद्ध उच्चारण के कारण, उनके प्रकार एवं सुधार के उपाय

इकाई -II हिंदी शब्द और शब्द-रचना

- शब्द और उसके प्रकार:
 - (क) अर्थ की दृष्टि से (एकार्थी अनेकार्थी पर्यायवाची विलोम)
 - (ख) प्रयोग की दृष्टि से (सामान्य, तकनीकी)
 - (ग) इतिहास की दृष्टि से (तत्सम, तद्भव, देशज और विदेशी)
- शब्द रचना: उपसर्ग, प्रत्यय, संधि और समास की अवधारणा और शब्द रचना में इनकी भूमिका
- शब्द शक्तियाँ , मुहावरे और लोकोक्तियों का भाषा शिक्षण में महत्व।

इकाई - III पाठ्यक्रम पाठ्य सामग्री का निर्माण और विश्लेषण

- पाठ्यचर्या , पाठ्यक्रम तथा पाठ्य पुस्तकों का संबंध

- पाठ्यक्रम का निर्माण एवं पाठ्यपुस्तक का विकास (माध्यमिक स्तर पर)
- भाषा की पाठ्य पुस्तक की विशेषताएँ
- पाठ्यक्रम एवं पाठ्यपुस्तक का विश्लेषण एवं मूल्यांकन
- रटंत प्रणाली से निर्मितवादी उपागम की ओर

इकाई – IV शिक्षण अधिगम सामग्री

- प्रिंट मीडिया एवं अन्य पठन सामग्री।
- पत्रिकाएँ समाचार पत्र, कक्षा पुस्तकालय, सूचना प्रौद्योगिकी एवं श्रव्य-दृश्य सामग्री रेडियो, दूरदर्शन, फिल्म।
- पाठ्य सहगामी क्रियाएँ (साहित्य परिषद् परिचर्चा, वाद विवाद, कार्यगोष्ठी, सेमिनार इत्यादि)।
- भाषा प्रयोगशाला।

इकाई – V मूल्यांकन - इसकी भूमिका और महत्व

- भाषा विकास की प्रगति और मूल्यांकन
- सतत और व्यापक मूल्यांकन
- मूल्यांकन की प्रविधियाँ- मौखिक, लिखित, स्वमूल्यांकन,
- आपसी मूल्यांकन, समूह मूल्यांकन
- प्रश्नों का स्वरूप- खुले प्रश्न, बहुविकल्पीय प्रश्न, सत्य असत्य प्रश्न इत्यादि।

अधिगम विधियाँ: व्याख्यान के साथ-साथ परिचर्चा छात्रों द्वारा स्वयं करके सीखना उनकी सहभागिता द्वारा शिक्षण।

Language across the Curriculum Activities: As an integral part of teaching-learning process, relevant activities should be carried out to enhance and promote language skills (LSRW) and proficiency based on the rationale of Language Across Curriculum. The activities in this regard are language centered and, therefore, the focus of learning and teaching activities should be on language skills not necessarily on the content. The activities in this regard may be designed/improvised according to the context. Some of the exemplar activities may include:

- Presentation (Oral and Written) based on themes from the content area
- Debate on themes from the content area
- Panel discussion/Seminar/ discussion etc.
- Group discussion/group work
- Question-answer sessions
- Role play/dramatization
- Extempore speech/Elocution
- Organization of reading/reflection activities beyond the textbooks

परियोजना कार्य

1. कक्षा 6 से 8 तक की हिंदी की दो राज्यों की किसी एक पाठ्यपुस्तक की तुलना करना।
2. अपने राज्य की कक्षा 6 से 8 की हिंदी की पाठ्य पुस्तक की रूपरेखा बनाना।

3. विद्यालय पत्रिका की रूपरेखा बनाना
4. समकालीन बाल साहित्य की समीक्षा करना।
5. कक्षा 10 के हिंदी के प्रश्न पत्र की समीक्षा करना।
6. महिलाओं की किन्हीं दो पत्रिकाओं की समीक्षा करना।
7. हिंदी के किन्हीं दो दलित साहित्यकारों की किसी एक कृति की समीक्षा।
8. कक्षा 6 से 8 तक की किसी एक कक्षा के हिंदी प्रश्नपत्र का निर्माण।
9. विद्यालयी अनुभव कार्यक्रम के दौरान भाषा शिक्षण को लेकर आने वाली कठिनाइयों पर क्रियात्मक शोध।
10. अपने क्षेत्र में प्रचलित लोककथा लोकगीतों का संकलन तैयार करना।

आंतरिक मूल्यांकन	अंक
लिखित परीक्षा :	10
परियोजना कार्य :	15

संदर्भ साहित्य:

1. सतत एवं व्यापक मूल्यांकन, एन.सी.ई.आर.टी. प्रकाशन।
2. भोला नाथ तिवारी, (1967) भाषा विज्ञान, इलाहाबाद] किताब महल ।
3. एम० एम० भाटिया और सी० एल० नारंग, (1984) आधुनिक हिंदी शिक्षण विधियाँ, लुधियाना] प्रकाश ब्रदर्स।
4. माता बदल जायसवाल, मानक हिंदी का ऐतिहासिक व्याकरण, इलाहाबाद] महामति प्रकाशन।
5. रमन बिहारी लाल, (1992-93). हिंदी शिक्षण, मेरठ] रस्तोगी पब्लिकेशनA
6. द्वारिका प्रसाद सक्सेना, (2000) भाषा विज्ञान के सिद्धांत और हिंदी भाषा, मेरठ] मीनाक्षी प्रकाशन।
7. भाई योगेंद्र जीत (1994) हिंदी भाषा शिक्षण, आगरा] विनोद पुस्तक मंदिर।
8. डॉ. जयपाल तरंग, (2003) हिंदी शिक्षण की नई दिशा, नई दिल्ली, सौम्या प्रकाशन ।

B.Ed. Second Year
Group B: Pedagogy Courses
PC 1 – Pedagogy of Urdu
Part II

Instructional Time: 6 periods/week (Theory)	Max. Marks: 100
3 periods/ week (Practicum)	Internal: 25
Exam. Duration: 3 Hours	External: 75

Objectives of the Course:

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

- understand the different roles of language, relation between Literature and Language, nature and mechanics of language.
- develop creativity among learners
- examine authentic literary and non-literary texts and develop insight and appreciation

- understand the use of language
- use multilingualism
- identity methods, approaches of teaching Urdu
- understand constructive approach to language teaching and learning
- plan teaching and use of TLM

Course Outline:

Unit I: Phonetics and Phonology of Urdu

1. Organs of speech
2. Standard sounds of Urdu – Vowel sounds, Consonants sounds
3. Stress and Intonation
4. Haroof-e-shamsi and Haroof-e-Qamari
5. Improvement in Pronunciation

Unit II: Usage of words and Urdu Grammar Teaching

1. Words, kind of words: simple words, compound words, prefix, suffix, synonyms and antonyms
2. Original and borrowed words (Dakheel and Mustaer)
3. Idioms and proverbs
4. Using a Dictionary and its abbreviations.

Unit III: Development and Analysis of Syllabus & Textual Materials

1. Understand the relationship between curriculum, syllabus and Textbook.
2. Designing syllabi and development of Textbook at secondary level
3. Analysis and evaluation of syllabi and Textbook
4. Features of Good Language text book
5. Moving away from rote learning to constructivism

Unit IV: TLM and Aids

1. Print media and other reading material such as learner chosen texts.
2. Magazines, Newspapers, Class Libraries
3. ICT-Audio-Visual aids
4. Radio, TV, Films, smart classroom
5. Planning co-curricular activities (Discussion, debates, workshops, seminar etc.)
6. Language Lab etc.

Unit V: Assessment - Its role and importance

1. Progress and Assessment of development of language
2. Continuous and Comprehensive evaluation
3. Techniques of Evaluation – Oral, Written, self evaluation, peer evaluation, Group evaluation
4. Typology of Questions: Open added questions, MCQ, true-false etc.

Modes of Learning Engagement :

Modes of learning engagement will be based on eclectic approach. It includes questioning, Lecture-cum-discussion, Demonstrations, Communicative activities, Situational teaching and Learning by Doing, organizing inquiry activities/open ended activities for learning Urdu, Group work and discussion, Use of ICT related to Urdu, Group work on pedagogic analysis of content and planning lessons and peer interaction. The emphasis will be on learner-centered teaching.

Language across the Curriculum Activities: As an integral part of teaching-learning process, relevant activities should be carried out to enhance and promote language skills (LSRW) and proficiency based on the rationale of Language Across Curriculum. The activities in this regard are language centered and, therefore, the focus of learning and teaching activities should be on language skills not necessarily on the content. The activities in this regard may be designed/improvised according to the context. Some of the exemplar activities may include:

- Presentation (Oral and Written) based on themes from the content area
- Debate on themes from the content area
- Panel discussion/Seminar/ discussion etc.
- Group discussion/group work
- Question-answer sessions
- Role play/dramatization
- Extempore speech/Elocution
- Organization of reading/reflection activities beyond the textbooks

Practicum:

1. Prepare a list of idioms and proverbs in Urdu
2. Do a comparative study of one textbook of Urdu from any class (VI to VIII) developed by any two state.
3. Prepare an outline for the development of the textbook for the same class for your state
4. Prepare an outline of a school magazine.
5. Review contemporary children's Literature
6. Review any two magazines for women
7. Analyze the question papers of Urdu language (previous three years of class X any Board)
8. Develop a question paper from the class VI to VIII to assess all the aspects of Language learning.
9. Analyze the textbook of Urdu at secondary level
10. Prepare a small dictionary based on (from any Board) Urdu Text Book.

Modes of Internal Assessment**Marks**

Written tests

10

Assignments (Projects and Activities selected from Practicum) 15

Suggested Readings:

1. Gian Chand Jain. (1985). Aam Lisaniyat. Delhi. NCPUL.
2. Garden D.S./KhaliluramanSaifi. (2009). Usool-e-Taleem aurAmale-e-Taleem. Delhi. NCPUL.
3. NCERT. (2008). N.C.F.2005, Urdu Edition. Delhi. NCERT.
4. Noor-ul-Hasan Naqvvi. (2004). Tareekh-e-Adab Urdu. Aligarh. Educational Book House.
5. Mirza KhaleelAhmed Baig. (2000). Urdu Ki LisaniTashkeel. Aligarh. Educational Book House.
6. Moinuddin, (2002). Urdu-Zaban Ki Tadrees. Delhi. NCPUL.
7. Riyaz Ahmed. (2013). Urdu Tadrees. New Delhi. Maktaba Jamia Ltd.
8. Rashid Hasan Khan. (1997). Urdu Imla. Delhi. Maktaba Jamia Ltd.
9. NCERT (2010).Position paper of Indian Languages. Delhi. NCERT.
10. Shaukat Sabzwari. (2002). Urdu Lisaniyat. Aligarh. Educational Book House.
11. Ziauddin Alvi. (2009). Usool-e-Taleem. Aligarh. Educational Book House.

B.Ed. Second Year
Group B: Pedagogy Courses
PC 2: Pedagogy of Mathematics
Part II

Contact hours-6 periods/week (Theory)	Maximum Marks : 100
3 periods/week (Practicum)	Internal : 25
Exam. Duration: 3 Hours	External : 75

Objectives of the Course:

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

- be conversant with the nature, values, structure and scope of Mathematics.
- interpret the principles of child development for planning lessons;
- understand the principles of learning
- understand the principles, processes relationships and to design appropriate strategies for teaching.
- design appropriate activities for developing a concept.
- design mathematics laboratory.
- develop competencies in designing appropriate diagnostic and remedial tests.
- construct appropriate assessment tools for evaluating mathematics learning.
- appreciate the importance of mathematics lab in learning mathematics.
- develop the competencies in preparation of appropriate teacher aids unit plan lesson plan and test items.
- construct appropriate assessment tools for evaluating mathematics learning.
- appreciate and develop Technology Integrated Mathematics Module (TIMM) using on different subject specific open source software on various concepts of Geometry at secondary stage; and
- appreciate and develop dynamical digital applets with emphasis on process involved

in teaching and learning of mathematics at secondary stage.

- explain the meaning of evaluation
- infer the effect of evaluation on students

Course Outline:

Unit I: Exploring learners

Cultivating learner's sensitivity like listening, encouraging learner for probing, raising queries, appreciating dialogue among peer group, promoting the student's confidence.

Exploring ways of Learning Engagements

Providing opportunities for group activities, Group/individual presentation, Providing opportunity for sharing ideas, Exposing to exemplar constructivist learning situations in mathematics, Visit to district, state and national level science exhibition/ field visit, Audio visual presentation followed by its analysis and discussion, Reflective written assignments, Case studies.

Unit II : Integration of mathematical content with activities through Mathematics Laboratory

- Designing and setting up models,
- Teaching aids and activities/ laboratory work -using open source software in Mathematics Lesson (Expressive way- to create their own from scratch, as they express themselves with contentment by means of a more open application or resource)
- Identifying activity in several content areas at secondary level conducive to the comprehension level of learner. Inculcating skills in Designing, Demonstrating, Interpreting and drawing inference of digital applets/concrete models.

Unit III: Assessment and Evaluation

- Exploring ways of Assessment
Presentation and communication skills in mathematics, Posing conceptual questions from simple situations, interpretation and analysis, Designing innovative learning situations, Performance in group activity, Laboratory/ Technological experiences, Reflective written assignment, Written test on conceptual understanding of specific topics and its pedagogy, A year and summative assessment by the university.
- Informal creative Evaluation
Encouraging learner to examine a variety of methods of assessment in mathematics so as to assess creativity, problem solving and practical performance. Appreciating evaluation through overall performance of the child. Self and peer evaluation.
- Formal ways of Evaluation
Variety of assessment techniques and practices. Assessing Product vs. Process, Knowing vs. Doing. In practice midterm / terminal examination, practicing continuous and comprehensive evaluation to test regular programs / achievement of learner.

Unit IV: Developing Blue print for designing question paper

Identifying and organizing components for developing frame work of question paper at different stages of learning different types of questions and framing questions based on concepts and sub concepts so as to encourage critical thinking, promote logical reasoning and

to discourage mechanical manipulation and rote learning. Framing of open ended questions providing the scope to learners to give responses in their own words. Framing of conceptual questions from simple questions.

Unit V: Learning Styles, Learning Difficulties and Diagnostic Tests

What are the learning styles in Mathematics? - Visual Learners, Auditory Learners and Kinesthetic Learners, Identification of learning difficulties, Error Patterns, Diagnostic and Remedial Teaching, Preparation of Diagnostic tests

Modes of Learning Engagement:

- Providing opportunities for group activities.
- Group/ individual presentation.
- Providing opportunity for sharing ideas.
- Exposing to exemplar constructivist learning situations in mathematics.
- Designing and setting up models, teaching aids and activities/ laboratory work.
- Visit to district, state and national level science exhibition.
- Audio visual presentation followed by its analysis and discussion.
- Reflective written assignments.
- Case studies.

Practicum:

1. Development of a working model on a topic of Mathematics.
2. Critical analysis of CBSE/Any Board Secondary School Syllabus in Mathematics.
3. Development of plan of mathematics resource (concrete and digital) room.
4. Preparation and analysis of achievement test.
5. Action Research on a Mathematical topic.
6. Any innovative activity perform during internship in teaching program

Modes of Internal Assessment

Marks

Written tests	10
Selected Assignments and Project work from Practicum	15

Suggested Readings:

1. Roy Dubisch, (1963). The Teaching of Mathematics. New York and London. John Wiley and Sons INC.
2. Butler and Wren, (1960). Teaching of Mathematics. New York and London. Mc.Graw Hill Book Company, INC.
3. Claude H. Brown, (1953). The Teaching of Mathematics. New York. Harper & Brothers, Publishers.
4. George Polya, Mathematical Discovery (Volume I and II), 1962 (I), 1965 (II). New York and London. John Wiley & Sons, INC.
5. C. G. Corle, (1964). Teaching Mathematics in Elementary School. New York. The Ronalal Press Company.
6. NCTM, (1999). Activity for Junior High School and Middle School Mathematics. USA. Volume – II, NCTM.

7. J.L. Heilborn, (2000). Geometry- History, Culture and Techniques. Oxford University Press.
8. NCERT (2010). A text book of Content-cum-Methodology of teaching Mathematics. New Delhi. NCERT.
9. NCERT (2006). Position Paper of NFG on Teaching of Mathematics. New Delhi. NCERT.
10. Johnston-Wilder, S. & Pimm, D. (Eds.) (2004). Teaching Mathematics with ICT. London. Open University Press / McGraw-Hill.
11. Capel, S., Leask, M. & Turner, T. (Eds.) (2009). Learning to Teach Mathematics in School. New York. NY: Routledge.
12. Law N., Pelgrum, W.J., & Plomp, J. (Eds.) (2008). Pedagogy And ICT Use In Schools Around The World Findings From The IEA Sites 2006 Study. New York. Springer.
13. Joubert, M. (2012). ICT in mathematics. Mathematical knowledge in teaching seminar series. Cambridge. UK University of Cambridge.
Available online at www.maths-ed.org.uk/mkit/Joubert_MKiT6.pdf
14. Glazer, E. M. (2001). Using Internet Primary Sources to Teach Critical Thinking Skills in Mathematics. CA. Libraries Unlimited Press Santa Barbara.
15. Prichard, A. (2007). Effective Teaching with Internet Technologies Pedagogy and Practice. Thousand Oaks, CA. Sage Publications.
16. S. K. Mangal. Teaching of Mathematics. Ludhiana. Prakash Brothers.
17. A. B. Bhatnagar. New dimensions in the teaching of Mathematics. Meerut. Modern Publishers.
18. K. S. Sindhu. Teaching of Mathematics. New Delhi. Sterling Publications.
19. UNESCO. Trends in Mathematics Teaching. UNESCO.

B.Ed. Second Year

Group B : Pedagogy Courses

PC 2: Pedagogy of Biological Science

Part II

Instructional Periods :	6 periods/week (Theory)	Max. Marks : 100
	3 periods/ week (Practicum)	Internal : 25
Exam duration :	3 Hours	External : 75

Objectives of the Course:

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

- identify and relate approaches of teaching-learning of biological science with social relevance;
- explore the process skill in science and develop competency to organise laboratory facilities and equipment in teaching– learning of biological sciences;

- use effectively different activities – ICT, excursion, visits, research methodology etc for teaching–learning of biological science;
- examine different pedagogical issues in learning biological science;
- construct appropriate assessment tools for evaluating learning of biological science;
- develop ability to use biological science concepts for life skills; and
- develop professional competencies for teaching, learning of biological science.
- appreciate that science is a dynamic and expanding body of knowledge

Course Outline:

Unit I: Planning for Teaching-Learning of Biological Science

- Identification and organization of concepts for teaching-learning of biology;
- Determining acceptable evidences that show learners’ understanding.
- Understanding Constructivist Approach
- Instructional materials required for planning teaching-learning of biological science and learners' participation in developing them; Identifying and designing teaching-learning experiences;
- Planning field visits, Zoo, Sea shore life, Botanical garden, etc.;
- Organizing activities, laboratory experiences, making groups, planning ICT applications in learning biology.
- Behavioural, physical and mental changes during Adolescence.

Unit II: Learning Resources in Biological Science

- Identification and use of learning resources in biological science from immediate environmental, exploring alternative sources;
- Developing and designing science kit and biological science laboratory; Planning and organising field observation; Collection of materials, etc.;
- Textbooks, audio-visual materials, multimedia-selection and designing;
- ICT introduction, Use of ICT in teaching and learning, ICT resources to support Biology teaching and learning;
- e-learners introduction, e-learning and changing nature of classroom, challenges and drawbacks of e-learning.
- Using community resources for biology learning; Pooling of learning resources in school complex/block/ district level; Handling hurdles in utilization of resources.

Unit III: Tools and Techniques of Assessment for Learning in Biological Science

- Performance-based assessment; Developing indicators for performance assessment in biological sciences; Learners record of observations;
- Field diary, herbarium;
- Oral presentation of learners work in biological science, Portfolio; Assessment of project work in biology (both in the laboratory and in the field), Assessment of participation in collaborative learning;
- Construction of test items (open-ended and structured) in biological science and administration of tests;
- Developing assessment framework in biological science;

- Assessment of experimental work in biological science- Evidences of evolution, fitness and heredity, role of environment in day to day life.
- Exploring content areas in biological science not assessed in formal examination system and their evaluation through various curricular channels;
- Encouraging teacher-learners to examine a variety of methods of assessments in biological science;
- Continuous and comprehensive evaluation.

Unit IV: Biological Science – Life long Learning

- Nurturing natural curiosity of observation and drawing conclusion; Facilitating learning progress of learners with various needs in biology;
- Ensuring equal partnership of learners with special needs;
- Stimulating creativity and inventiveness in biology; Organising various curricular activities, such as debate, discussion, drama, poster making on issues related to science/biology;
- Organizing events on specific day, such as Earth Day, Environment Day, AIDS Day, Science Day etc.
- Planning and organizing field experiences, Science club, Science exhibition; Nurturing creative talent at local level and exploring linkage with district/state/central agencies.

Unit V: Professional Development of Biology Teacher

- Professional development programmes for science/biology teachers;
- Participation in seminar, conferences, online sharing membership of professional organization; Teachers as a community of learners;
- Collaboration of school with colleges, universities and other institutions;
- Journals and other resource materials in biology education;
- Role of reflective practices in professional development of biology teachers;
- Teacher as a researcher: Learning to understand how children learn science – action research in biological science.

Modes of Learning Engagement:

Constructivist approach, Activity based learning experimentation, Interactive learning, Group work, Peer learning, Project work, Assignments followed by presentation, Discussion, Inquiry approach, Concept mapping etc.

Practicum

Activities based on Science syllabus at secondary level.

1. Preparation of one working model.
2. Preparation of a model lesson plan followed by seminar/presentation before the whole group.
3. Preparation of a kit for teaching learning of a topic along with write-up (name of unit, theme/topic, material used, procedure, learning outcomes).
4. Construction of an achievement test, its administration on one section of a class and analysis of results.
5. Study of heredity and evolution.

6. Preparation of Herbarium and Herbarium techniques
7. Establishment of Science Laboratory
8. Respiration in plants and animals
9. Nutrition in plants and animals
10. Excretion in plants and animals
11. Movements in Plants and animals
12. Techniques of formulating science project in laboratories as per curriculum
13. Evidences of evolution
14. Principle of working of Human eye.

Modes of Internal Assessment	Marks
Written Test	10
Any three of the activities given under Practicum	15

Suggested Readings:

1. NCERT (2005). National Curriculum Framework. New Delhi. NCERT.
2. NCERT (2005). Position Paper of NFG on Teaching of Science. New Delhi. NCERT.
3. NCERT (2005). Position Paper of NFG on Habitat and Learning. New Delhi. NCERT.
4. N. Vaidya, Science Teaching for 21st Century (1999). New Delhi . Deep & Deep Publications. Dat Poly, (2004). Encyclopaedia of Teaching Science. New Delhi. Sarup & Sons.
5. Sutton, CR and Hayson JH, (1974). The Art of the Science Teacher. McGraw Hill Book Company Ltd.
6. Their, DH, (1973). Teaching Elementary School Science. A Laboratory Approach, Sterling Publication Pvt. Ltd.
7. Science Teacher. (peer reviewed journal for science teachers).
8. Journal of Research in Science Teaching. (Wiley-Blackwell).
9. Turner Tony and Wendy Di Macro. Learning to Teach School Experience in secondary school teaching. London and New York. Routledge.
10. P. Ameeta, (2008). Methods of Teaching Biological Science. Educational Publishers edition or later ed.
11. Sharma R.C., (1987). Modern Science Teaching or later edition. New Delhi. Dhanpatarai & Sons.
12. Teaching of Science Today and Tomorrow. New Delhi Docba House.

Web Sites <http://www.tc.columbia.edu/mst/science.ed/courses.asp>.
<http://www.edu.uwo.ca>

B.Ed. Second Year
Group B: Pedagogy Courses
PC 2: Pedagogy of Social Science
Part II

Instructional Time: 6 periods/week (Theory)	Max. Marks: 100
3 periods/ week (Practicum)	Internal: 25
Exam. Duration: 3 Hours	External: 75

Objectives of the Course:

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

- acquaint student teacher to understand place of social sciences in school curriculum.
- reflect on inclusive classroom in social sciences.
- realize role of facilitator in providing additional support to the learners with different abilities.
- use social science corner (resource center) to facilitate learning in social sciences.
- reflect upon her/his own experiential knowledge in the process of becoming a social science teacher.
- enhance capacity of social science teacher in analysis of text book, question paper and answer scripts
- enable student teachers to make use of different pedagogical strategies in a democratic classroom situation.
- develop professional outlook and humane approach among student teachers

Unit I: Social Science Curriculum for Schools:

- **Social Science Curriculum:** Features, Issues and Concerns in Social Sciences Curriculum as addressed in NCF 2005.
- Content and Syllabus of Social Sciences - Aims and Objectives, Content organization and presentation by different state boards;
Case Studies: *Uttar Pradesh, Rajasthan*
- Analysis of Social Science Text Books from the perspective of the Child, Gender, Peace, and Environment.

Unit II: Inclusive Social Science Classroom

- Concept of Inclusive Classroom; Discussion Based on Recorded Observations from Internship experiences on inclusive classroom.
- Planning and management of Inclusive Classroom from the perspective of children with different abilities- (lesson planning for inclusive classroom); Development of learning resources for inclusive classroom.
- Means of diagnosing learning difficulties (observation, class test, checklist); Preparation of remedial learning strategies in social sciences.

Unit III: Professional Development of Social Science Teacher

- Concept of Professional Development.
- Need for updating content and pedagogical competencies.
- Ways of Professional Development- participation in seminars and conferences, online sharing, distance learning, member of professional organizations, writing reflective journal.
- Development of audio-video material in teaching of social sciences.
- Using library resources, magazines and newspapers in teaching and learning of social sciences.

- Planning and management of social science corner (resource room) in school.

Unit IV: Analysis of Social Sciences Text Book, Question Papers and Answer Scripts

- Need for Text Book Analysis; Development of tool for textbook analysis; Parameters of textbook analysis.
- Need for question paper analysis (Class test/ Board Exam); Analysis of Question Papers in the light of subject specific requirements in terms of understanding and skills; Tool for analysis of question paper; Writing report on question paper analysis.
- Need for analysis of answer scripts; Tool for analysis of answer scripts; Reporting of findings.
- Misconceptions in teaching- learning of social sciences.
- Review of Text books, Question Paper and Answer Scripts for Capacity building of Social Science Teacher

Unit V: Content for Pedagogical Analysis in Social Sciences(Major Concepts and Themes)

- **Economics:** Indian Economy and Economic Development, Economic Reforms and Globalization, Sectors of Indian Economy, Poverty and Unemployment.
- **Geography:** Resources- types; Natural and Human Resources; Conservation of natural resources; Environment and its types; Human- Environment Interaction; Environmental Concerns and Environmental Degradation; Natural Disasters and Hazards
- **History:** Nationalism in India- Civil Disobedience Movement, Khilafat Movement, Salt Satyagraha; Movement of Peasants, Workers and Tribals; Activities of different political groups.
- **Political Science:** Organs of the Government; Legislature, Executive, Judiciary.; Constitutional vision for democratic India; Fundamental Rights ; Fundamental Duties and Directive Principles of the State Policy; Working of the Government; Elections and Political Parties; Challenges to Democracy.

Modes of Learning Engagement: Lectures, organizing inquiry activities/open ended activities for learning social sciences, Group Work and discussion, Use of ICT related to Social Sciences, Group Work on pedagogic analysis of content and planning lessons, school visit, field trips and social science tours.

Language across the Curriculum Activities: As an integral part of teaching-learning process, relevant activities should be carried out to enhance and promote language skills (LSRW) and proficiency based on the rationale of *Language Across Curriculum*. The activities in this regard are language centered and, therefore, the focus of learning and teaching activities should be on language skills not necessarily on the content. The activities in this regard may be designed/improvised according to the context. Some of the exemplar activities may include:

- Presentation (Oral and Written) based on themes from the content area
- Debate on themes from the content area
- Panel discussion/Seminar/ discussion etc.

- Group discussion/group work
- Question-answer sessions
- Role play/dramatization
- Extempore speech/Elocution
- Organization of reading/reflection activities beyond the textbooks

Practicum:

1. Analysis of Position Paper in Social Sciences, National Curriculum Framework-2005
2. Preparation of lesson plan for inclusive classroom
3. Development of multimedia learning resource.
4. Analysis of any one textbook of social sciences in terms of gender/environmental/ concerns addressed therein.
5. Development of Tools for Analysis of Question Papers and Answer Scripts.
6. Establishment and Enrichment of Social Science Resource Centre.
7. Field visit to understand the use of Community Resources in learning.

Mode of Internal Assessment

Marks

Written tests	10
Selected Projects and Assignments given under Practicum	15

Suggested Readings:

1. Agarwal, J.C.(1993), Teaching of political science- A practical approach, New Delhi. Vikas Publishing house.
2. Arora & Awasthy (2003), Political theory, Haranand Publication Pvt. Ltd. New Delhi.
3. Batra, Poonam (2010) Social Science Learning in Schools- Perspectives and Challenges, New Delhi. Sage Publication Private limited, India, Dhamija, Neelam (1993), Multimedia Approaches in Teaching Social Studies, New Delhi. Harman Publishing House, Kochhar, S.K. (1985), Methods and Techniques for teaching, New Delhi. Sterling Publishers Pvt. Ltd,
4. Martorella, Peter H. (1996), Teaching social studies in middle and schools, Englwood Cliffs, N. J: Prentice Hall.
5. Nachmias, D., Nachmias, C. F.(1996), Research methods in social science, New York. St. Martin's Press, Inc,
6. National Curriculum Framework (2005), New Delhi. NCERT,
7. NCERT (2005) Position Paper on 'Teaching of Social Sciences', New Delhi, NCERT,
8. Savage, Tom V. and Armstrong, David G. (1992) Effective teaching in elementary social studies, New York . Macmillan Publishing Co.,
9. UNESCO, New Source Book for Teaching of Geography, UNESCO 2005.

B.Ed. Second Year
Group B: Pedagogy Courses
PC 3: Learning to Function as a Teacher

Duration: Sixteen weeks
Exam. Duration: 3 Hours

Max. Marks: 350
Internal: 350

Objectives of the Course:

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

- observe the classes of regular teachers and peers and learn about teaching learning process and classroom management.
- develop skill in planning and teaching in actual classroom environment.
- reflect, learn to adapt and modify their teaching for attaining learning outcomes of students.
- maintain a Reflective Journal.
- acquire skill in conducting Action Research/ Case Study.
- inculcate organizational and managerial skills in various school activities.
- create and maintain resources for teaching and learning in internship schools.
- learn to work with the community in the interest of the learner and their learning outcomes.

Internship Tasks:

The student teachers will be attached to a school for carrying out internship tasks. Details of the tasks are given under (a) and (b).

(a) Delivery of lessons

- The student teachers will deliver a minimum of 40 lessons including two criticism lessons (one at the end of 9th week and the other during the last week of the teaching assignment) in each teaching subject. In total they will teach 80 lessons in two teaching subjects. (Preferably 20 lessons at Upper Primary Level and 20 at secondary level in each teaching subject)
- The student teachers will visualize details of teaching learning sequences and learning path of students, keeping all considerations in view. They will also involve themselves in discussion, reflection, reconsideration and consolidation after each lesson as well as at the end of the unit.

(b) Practicum

- Preparation, administration and analysis of achievement tests in two teaching subjects.
- Conducting Action Research / Case Study.
- Observing ten lessons of a regular teacher and ten lessons of peers in each subject and preparing an Observation Record.
- Preparing and using teaching aids in each teaching subject.
- Writing a Reflective Journal.
- Organizing any two co- curricular activities and reporting.
- Preparing a suggestive comprehensive plan of action for improvement of some aspects of the school, where they have been teaching during Internship.

- Reporting on activities conducted with the community.
- (Any other activity given under Suggested School Activities can be studied after consultation with the teacher educators.)

Suggested School Activities:

- Organizing cultural, literary, sports and games activities
- Framing of time table
- Organizing Morning Assembly
- Maintenance of school discipline
- Maintenance of school records, library and laboratories
- Providing Guidance and counseling services
- Studying the role of community in school improvement
- School Mapping
- Water Resource Management in schools
- Mass awareness of social evils and taboos
- Organizing educational fair, exhibition, club activities, nature study and field trip
- (Any other activity/s decided by the Institute)

Post Internship Tasks:

- Post Internship is organized for a day mainly for reflection and review of internship programme as a whole, to facilitate the understanding of the effectiveness of various activities undertaken during the internship. The tasks include the following.
- Seeking reactions from students, teachers, Heads and teachers of cooperating schools and supervisors.
- Exhibition of the work done by the student teachers during the internship.
- Any other activity decided by the Institute.
- Inviting suggestions for improving the programme.

Modes of Learning Engagement:

- Internship tasks will be carried out as a part of the 'in-school' practice. A mentor teacher and supervising course instructor- when available- will guide the student teacher on a periodic basis.
- Student teachers will observe at least 10 lessons of regular classroom teacher and 10 lessons of their peers.
- Adequate classroom contact hours (a minimum of 40 lessons including two criticism lessons in each teaching subject preferably 20 lessons for Upper Primary Level and 20 lessons for) for subject based teaching – learning will be under taken in consultation with the school authorities.
- A Reflective Journal will be maintained by the student teacher in which, one records one's experiences, observations and reflections.
- A portfolio will be maintained by the student teachers which includes, lesson plans, resources used, assessment tools, student observations and other records.
- Student teachers will always work in liaison with the regular teachers in the schools involving themselves in all the school activities and conducting at least two activities.
- The Institute in consultation with the schools will prepare the details of the internship programme for each of the schools.

Modes of Assessment:

The assessment of the student teachers will be carried out on the basis of their day to day participation and performance by a group of teacher educators. The details of activities and the marks allotted are given below.

Activities	Marks
a. Classroom teaching	: 200
b. Criticism lessons (four lessons in total)	: 40
c. Reflective Journal (two teaching subjects):	20
d. Observation Records	
Five lessons of school teacher	: 10
Five lessons of peer	: 10
e. Achievement test- development, Administration and analysis	: 20
f. Case study/ Action Research	: 20
g. Detailed Record of any two activities organized by the student teacher	: 20
h. Teaching Aids in two teaching subjects	: 10
Total	350

B.Ed. Second Year**Group C : Developing Teacher Sensibilities****Section I : Experiences for Teacher Enrichment****ETE 5 : Arts and Aesthetics****Instructional Time: 3 periods/week****Max. Marks: 50****Exam. Duration: 3 Hours****Internal: 50****Objectives of the Course:**

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

- express freely their ideas and emotions about different aspects of life through different art forms.
- learn to appreciate different art forms and distinguish them.
- develop an insight towards sensibility and aesthetic appreciation and become more creative and conscious about the good and beautiful in their environment, including classroom, school, home and community through an integrated learning approach.
- integrate the knowledge of art with daily life through learning with different media and techniques by using creative expression and making objects of common use.
- make learners conscious of rich cultural heritage of their own region as well as that of the nation.
- get acquainted with the life and work of artists.

Course Components: This course as part of the two year B. Ed. programme should consist of theory, practical, project work and workshop. Also, the arts need to be applied in day to day

life from designing classroom materials to notice board, cultural festivals, theme based celebrations, national days, festivals etc. These occasions will be a forum for students' activities wherein all the art forms will be integrated.

Theory:

- Concepts and forms of arts and crafts- an introduction: Meaning of arts and crafts, visual and plastic art forms, performing art forms, and heritage crafts.
- Significance of art in education: Importance of art forms in learning.
- Integrating arts and crafts in school curriculum as a pedagogical support/ resource: education through arts and crafts.
- Different ways/methods to integrate arts in education: during the curriculum transaction.
- NCF-2005. and position paper on Arts on Aesthetics.
- Knowing about local art and craft forms: the diversity of India's arts and crafts and its integration in the curriculum.

Project:

- The student teacher can take a theme-based project from any of the curricular areas covering its social, economic, cultural and scientific aspects integrating various art and craft forms.
- They can do an analysis of textbooks - where they can find a scope either in the text or in the form of activities or exercises to integrate art forms.
- They can also document processes of an art or craft form from the pedagogical point of view; such as weaving or printing of textiles, making of musical instruments, folk performances in the community etc. - how the artists design their products, manage their resources including raw materials, market it, what problems do they face etc.
- A lived tradition of any artistic school devoted to traditional or folk arts can be studied by student-teachers available in their surrounding or locality.

Workshops:

A workshop for half a day for one week of working with an artist or a group to learn basics of art or craft forms and understand its pedagogical aspects is required for student teacher in each year. The forms learnt during the course should help student teacher in his/her profession, as a means of exploring different media and creative expression in drawing, painting, rangoli, clay-work/pottery, collage-making, wood-work, toy-making, theatre, puppetry, dance, music etc. including regional/ folk forms of arts and crafts, which will be helpful in imparting quality education among school children. The focus of the workshops should be on how art forms can be used as tool/ method of teaching-learning.

Modes of Learning Engagement:

- Classroom environment should be interactive and discussions should take place where student teachers can document each others' experiences as an artist and connoisseur both.
- Attending exhibitions and performances, interacting with artists and craft persons, watching and listening art related films, audio and video materials

available on different performers, regional/ folk art forms etc. may also be shown from time to time.

- Projects and assignments may be given for individual learners as well as for group work.
- Workshops may be conducted at least once in each year where student teachers can get a first hand experience of working with artists, handle different materials and media, learn about different aspects of an art form on how it relates to the society and community and can be used as pedagogical tool to transact
- A small Resource centre should be a part of all the RIEs, where materials including books, CDs, audio, video cassettes, films, software, props,

Practicum:

1. Activities related to doing arts, including application of arts in the immediate environment. Small activities, which enhances the skills including the communication and presentation skills, brings in imagination, creativity and aesthetic sensibility among the student teachers.
2. Application of aesthetic and design sensibility in the day to day life, in their profession and environment are some of the practical aspects, which needs to be taken care of. During the celebrations of festivals, functions, special days etc. this should be reflected.

Modes of Internal Assessment:

The engagement of teacher-learners in the above set of experiences should be quantitatively and qualitatively evaluated, based on observations and submissions of projects and assignments that cover : a) submission of work b) participation c) creative potential displayed d) application of aesthetic and design sensibility in campus events or in other course work.

Internal Assessment	Marks
Written tests	10
Assignment	10
Practical/Project work	10
Workshop (Participation and Report preparation)	20

Suggested Readings:

1. Arnold Berleant (2012). Aesthetics Beyond the Arts. New and Recent Essays. Ashgate Publishing.
2. Goldblatt D (2010). Aesthetics A Reader in Philosophy of the Arts. New Delhi. Pearson Education (Singapore) pte.
3. Dennis Atkinson D Atkinson (2003). Art in Education: Identity and Practice. Springer.
4. Parul Dave-Mukherji (2015). Arts and Aesthetics in a Globalizing World. UK. Bloomsbury Publishing.
5. Perry Ellen (2005). The Aesthetics of Emulation in the Visual Arts of Ancient Rome. Cambridge University Press.

6. Saxena, S. K. (2010). Aesthetics. Approaches Concepts and Problems. D.K. Printworld (P) Ltd.
7. S. S. Barlingay. (2007). Modern Introduction of Indian Aesthetic Theory. D. K. Printworld.
8. Weitz Morris (2005). Philosophy of the Arts: An Introduction to Aesthetics Routledge Chapman & Hall.

B.Ed. Second Year

Group C: Developing Teacher Sensibilities Section II: Experiences for Social and Environmental Sensitivity SES 5: Gender Issues in Education

Instructional Time: 3 periods/week

Exam. Duration: 2 Hours

Max. Marks: 50

Internal: 20

External: 30

Objectives of the Course:

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

- develop basic understanding and familiarity with key concepts - gender, gender perspective, gender bias, gender stereotype, empowerment, gender parity, equity and equality, patriarchy and feminism
- 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
- learn about gender issues in school, curriculum, textual materials across disciplines, pedagogical processes and its intersection with class, caste, culture, religion and region
- understand how Gender, Power and Sexuality relate to education (in terms of access, curriculum and pedagogy)

Course Outline:

Unit I: Gender Issues: Key Concepts

- Gender, Social construction of Gender.
- Gender Socialization, Gender Roles.
- Gender discrimination.

Unit II: Structures of gender Inequality

- Patterns of Gender inequality in terms of caste, class and Culture.
- Patterns of violence against women, Female foeticide, Female Infanticide.
- Child marriage. Dowry, Widowhood, Female commercial sex workers, Domestic violence.

Unit III: Gender and Education

- Gender Identities and Socialization Practices in: Family, Schools, Other Formal and Informal Organization.
- Gender bias in curriculum, drop out, Sex Ratio, Literacy.
- Recent trends in Women's education.

Unit IV: Issues related to marginalized Women

- Issues related to marginalized Women: ST/SC/Minorities
- Physically challenged women, victims of violence.

Unit V: Gender Jurisprudences

- The Pre-natal diagnostic Techniques Act, 1994;
- The Draft sexual Assault Law Reforms, India, 2000
- Domestic violence Act 2005
- Reservation for Women
- Child marriage Act

Modes of Learning Engagement:

Classroom will be interactive by sharing experiences, discussing day today happenings in the society, visiting centres and offices, showing films followed by discussions and priority will be given to student teachers throughout the transaction of the course.

Practicum:

1. Write a paper on efforts of the Central and State governments for Gender Jurisprudences.
2. Prepare on any one topic from any one unit with the support of Teacher Educator and present in the classroom.
3. Review one recent article on Gender Issues in Education.
4. Prepare a report on recent trends in Educational development of girl child in India.
5. Conduct an opinion survey for Gender Issues in Education.

Modes of Internal Assessment

Marks

Written tests	10
Any two of the activities given under Practicum	10

Suggested Readings:

1. Radha Kumar (1993). The History of Doing. Zubaan.
2. Sharma, Kumud, (1989). Shared Aspirations, Fragmented Realities, Contemporary Women's Movement in India, Its Dialectics and Dilemmas. New Delhi. Occasional Paper No. 12, CWDS.
3. Maithreyi Krishna Raj, (1986). Women Studies in India – Some Perspectives. Bombay. Popular Prakasham.
4. Devaki Jain and Pam Rajput (Ed) (2003). Narratives from the Women's Studies Family. New Delhi. Recreating Knowledge, Sage.
5. Bonnie G. Smith, (2013). Women's Studies: the Basics. Routledge.

6. Rege, Sharmila (2003) (ed), Sociology of Gender. New Delhi. The Challenge of Feminist Sociological Knowledge, Sage.
7. Singh, Indu Prakash, (1991). Indian Women: The Power Trapped. New Delhi. Galaxy Pub.
8. Mohanty, Manoranjan, (2004). (eds), Class, Caste, Gender. New Delhi. Sage.
9. Census Document Karve, Irawati (1961). Hindu Society: An Interpretation Poona. Deccan College.
10. Ahuja, Ram (1993/2002). Indian Social System. Jaipur. Rawat.
11. Report of the CAGE(2005) Committee on Girl's Education and the common School System New Delhi. MHRD,
12. NCERT (2005). National Curriculum Framework. New Delhi. NCERT.
13. NCERT (2006). Gender Issues in Education, Position Paper. New Delhi. NCERT.
14. Bhasin, Kamla (2000). Understanding Gender. New Delhi: Kali for Women.
15. Bhasin, Kamla. 2004. Exploring Masculinity. New Delhi. Women Unlimited.
16. MHRD(2000). Bringing Girls Centre stage: Strategies and Interventions for Girls' Education in DPEP. New Delhi. MHRD.
17. Chakravarti, Uma (2003). Gendering Caste Through a Feminist Lens, Mandira Sen for Stree, an imprint. Calcutta. Bhatkal and Sen.
18. Chanana, Karuna (1985). 'The Social Context of Women's Education in India, 1921-81, 'in New Frontiers of Education, July-September. New Delhi: 15 (3):1-36.

B.Ed. Second Year

Group C: Developing Teacher Sensibilities

Section II: Experiences for Social and Environment Sensitivity

SES 6: Addressing Special Needs in Inclusive School

Instructional Time: 3 periods/week

Exam. Duration: 2 Hours

Max. Marks: 50

Internal: 20

External: 30

Objectives of the Course:

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

- demonstrate knowledge on different perspectives in the area of education of children with disabilities;
- reformulate attitudes towards children with special needs;
- identify needs of children with diversities;
- plan need-based programmes for all children with varied abilities in the classroom;
- use human and material resources in the classroom;
- use specific strategies involving skills in teaching special needs children in inclusive school;
- plan and execute appropriate learner-friendly evaluation procedures;

- incorporate innovative practices to respond to education of children with special needs;
- contribute to the formulation of policy; and
- implement laws pertaining to education of children with special needs.

Course Outline:

UNIT 1: Paradigms in Education of Children with Special Needs

- Historical perspectives and contemporary trends
- Defining Special Needs: ways of looking of Educational Difficulties - individual deficit view vs. curriculum view.
- Approaches of viewing disabilities: The charity model, the bio-centric model, the functional model and the human rights model
- Concept of special education, integrated education and inclusive education;

UNIT II: Legal and Policy Perspectives

- Recommendations of the Salamanca Statement and Framework of Action, 1994; Educational Provisions in the UNCRPD, 2006;
- Constitutional Provisions; Persons with Disabilities Act, 1995, (PWD Act); Rehabilitation Council of India Act, 1992, National Trust Act 1999 and RTE Act, 2009. National Institutes
- National Policy - Education of Students with Disabilities in the National Policy on Education, 1986, POA 1992
- Integrated Education for PWD, Children (IEDC, 1974), Scheme for Inclusive Education for PWD (IEDC, 2000) and Education of Special Focus Groups under the Sarva Shiksha Abhiyan (SSA, 2000); Scheme of Inclusive Education for PWD at secondary School (IEDSS, 2009).

UNIT III: Concept, characteristics, classification and curriculum adaptation in inclusive school for children with various disabilities

- Visual impairment
- Hearing impairment
- Locomotor and Neuromuscular disorders
- Mental Retardation
- Specific learning disabilities

UNIT IV: Inclusive practices in schools

- Concept and philosophy of inclusive education.
- Teaching competencies required for inclusive classroom.
- Peer tutoring, Cooperative learning, social learning, system approvals
Multisensory teaching, reflective teaching.
- Supportive services required for meeting special needs in the classroom.

- Duty of educational institutions, appropriate governments and local authorities to provide, promote and facilitate inclusive education and towards creation of barrier-free environment for persons with disabilities .

UNIT V: Assessment, teaching and development of supportive services for CWSN

- Concept and techniques of assessment
- Identification and functional assessment of children with special needs.
- Implication of assessment for instructional planning and placement
- Developing lesson plan and TLM for children with special needs
- Involving community resources as source of support to Inclusive school

Modes of Learning Engagement:

- The study materials must be presented to the trainees and discussions and reflections should be encouraged
- The students should be exposed to good practices of dealing with special needs either through videos or through actual visits
- It is important to engage the participants in a lot of cooperative group work so that they start valuing alternative points of view and significance of collaboration
- The student trainees can also be asked to write their reflections on various topics.
- Presentation of case studies and discussion
- Interaction with children with disabilities studying in schools and spending quality time with them is of great help in changing attitudes and developing empathy.
- Projects on various topics can help the students to acquire in depth knowledge.
- Audio- Visual presentations and demonstrating various practices.

Practicum:

1. Critically review the New Indian Disability Act/ UNCRPD and examine how the new Act will satisfy the needs of PWD in an inclusive society.
2. Identify any one child with disability and prepare a case report.
3. Identify any one topic from the textbook and write how the given content can be adapted for children with sensory impairment. Write what teaching learning aids can be used by the teacher.
4. Conduct a survey in the local community and identify the possible changes to be brought in to remove physical, social and attitudinal barrier towards PWD.
5. Identify various types of schools available for children with disability and make a note on educational facility available for them.
6. Prepare on any one of the topics of the five units for presentation in the class.

Modes of Internal Assessment

Marks

Written tests	10
Any two of the following	10
<ul style="list-style-type: none"> • Reflective written assignments 	

- Conducting seminar on chosen topics
- Group reports
- Field visit reports/ project report
- Case studies on different disabilities

Suggested Readings:

1. Farrell, M. (2004). *Special Educational Needs: A Resource for Practitioners*. New Delhi. Sage Publications.
2. Hallahan & Kanffman J.M. (1984). *Exceptional Children*. Prentice Hall.
3. Hegarty S. & Mithu Alur (2002). *Education and children with Special need*. New Delhi. Sage Publication.
4. *The Persons With Disability Act (1995)*. Ministry of Social Justice and Empowerment. Government of India, India, MSJE.
5. Chadha, A. (1999). *A Handbook for Primary School Teacher of Children with learning Disabilities*. New Delhi. Education Consultant of India Limited.
6. UNESCO (1994). *The Solamanca Statement and Framework for Action on Special needs Education*. Paris. UNESCO.
7. Koul,V.(1993). *Early Childhood Education Programme*. New Delhi. NCERT.
8. Muralidharan, R. (1990). *Early Stimulation Activities for Young Children*. New Delhi. NCERT.
9. Panda, K., C. (1990). *Education of Exceptional Children*. New Delhi. Vikas Publications.
10. Arora, K, Dave, P & Sinclair, S. (1987). *Detection and prevention of mentally Handicapped*. New Delhi. NCERT.
11. NCERT and UNESCO (2004). *Inclusive Education: An Orientation package for Teacher Educators*. Department of Education of Groups with special needs. NCERT and UNESCO.
12. NCERT and UNESCO (2000). *Assessment of Needs for Inclusive Education. Report of the First Regional Workshop*. NCERT and UNESCO.
13. Mani, M., N., G. (2001). *Inclusive Education in Indian context*. INRDC.
14. Banine, D (1988). *Handicapped children in Developing countries: Assessment, Curriculum and Instruction - Edmonton (Alberta)*. University of Alberta.
15. Smith, D.D. (2002). *Introduction to Special Education: Teaching in an age of challenge*. Boston. Allyn and Bacon.

**MAHARSHI DAYANAND SARASWATI UNIVERSITY,
AJMER**

पाठ्यक्रम

SYLLABUS

SCHEME OF EXAMINATION

AND

COURSES OF STUDY

FACULTY OF EDUCATION

B.Ed. PROGRAMME

FIRST YEAR EXAMINATION - 2016

SECOND YEAR EXAMINATION - 2017

(Regional Institute of Education, NCERT, Ajmer)

महर्षि दयानंद सरस्वती विश्वविद्यालय, अजमेर