

COURSES OF STUDIES

for

Four Years Integrated B.A. B.Ed and B.Sc B.Ed

(Semester System)

Session 2016-2017 onwards



**GANGADHAR MEHER UNIVERSITY
SAMBALPUR, ODISHA-768004**

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EF 2 : School Exposure(Multicultural Placement)		
EF 3 : <i>School Internship</i>		
EF 4 : Working with Community		

Bachelor of Education (B.Ed.) Programme

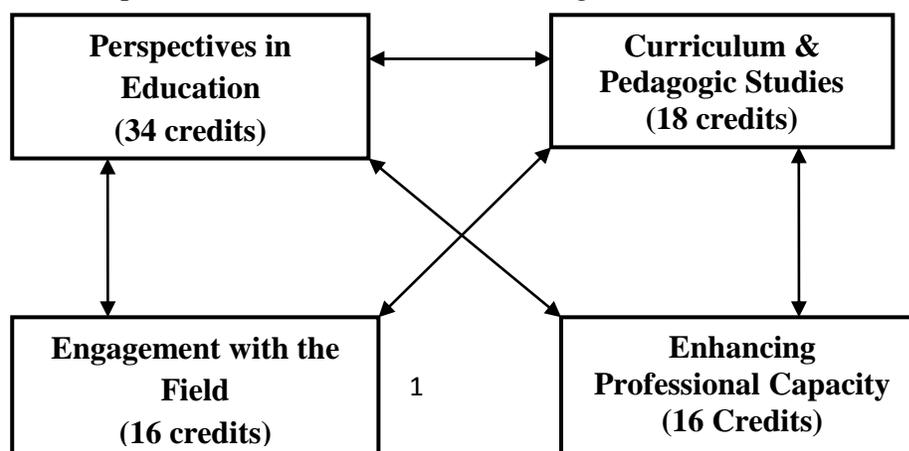
I. Introduction

Keeping pace with the diversity existing in our society, the teacher has to deal with the heterogeneous classroom. The aspiration level of the students has changed considerably under the influence of technological revolution and globalization. In this context, the teacher needs to understand that learners have to be provided with opportunities to share, discover and participate actively in the learning process. Teacher has to understand the process of learning, create conducive environment for learning and provide varied opportunities for the students to observe, experiment, reflect and question.

In order to respond to the demands of changing school curricula, the National Council for Teacher Education (NCTE) has brought out Teacher Education Curriculum Frameworks from time to time. The latest curriculum framework, NCFTE-2009 tried to address mismatch of theory and practice in teacher education programmes. It has suggested for incorporating the socio-cultural contexts of education, giving more emphasis on the field experience of student teachers in all courses through practicum, visits to innovative centers of pedagogy and learning, classroom based research, and internship of longer duration. The need for developing competencies for lesson design and maintaining, reflective journals has also been emphasized.

The Justice Verma Commission (JVC) appointed by the Government of India submitted its report in 2012 recommended for revamping the system of teacher education in the country, such as introducing integrated teacher education programs of longer duration and upgrading the status of teacher education by making the entire system as part of higher education. The commission recommended the establishment of inter-university centers of teacher education to ensure continuing professional development of teacher educators, re-orientation of teacher education curriculum to enhance the quality of teacher preparation, strengthen the regulatory and monitoring mechanisms and establishment of performance appraisal system for teacher education institutions, teacher educators and school teachers. Thus, the Commission presented a holistic vision of teacher education in the country from the perspective of quality as well as regulation.

To translate the vision of JVC into reality, the National Council for Teacher Education (NCTE) revisited its regulations, norms and standards for various teacher education programs and notified new Regulations in December, 2014. As per the Regulations, the duration of the regular B.Ed. programme after Graduation has been two years and integrated B.A. /B. Sc B. Ed programme has been four years. Both in 2 year B. Ed. & 4 year integrated B. A. / B. Sc programme, the curriculum follows broad based curricular areas such as perspectives in education, curriculum and pedagogic studies, enhancing professional capacities and engagement in the field. All these areas focus towards reducing the gap between theory and practice as engagement with the field is extended throughout the four semesters (B. Ed) and eight semesters (Integrated B,A./B. Sc. B.Ed. In addition, each course has ample scope which link to experiences in the school. The course is an attempt to actualize all the pertinent issues raised in the new regulations.





II. Course Details

As represented in the above diagram the course comprises of four components i.e. (i) Perspectives in Education(ii) Curriculum and Pedagogic Studies(iii) Engagement with the Field/Practicum and (iv) Enhancing Professional Capacities.

(i) Perspectives in Education

Perspectives in Education includes courses on basics in education, child development and adolescence, learning and teaching, assessment for learning, knowledge and curriculum, schooling and socialization, vision for Indian education, educational planning and management and inclusive education.

(ii) Curriculum and Pedagogic Studies

These courses intend to facilitate student teachers to recognize the nature of knowledge in various subject areas (Science-Biological/Physical/Mathematics/Social Science/Languages–Hindi/English/Odia/ Bengali), and pursue to keep themselves abreast with advancements in their areas of specialization. Each student teacher will take up two subject areas as per their choice. In view of the requirement of hands on experiences, each of the courses is designed as Part I and II — to be spread over two semesters. Part I will help in developing understanding of and competence to render disciplinary knowledge into forms relevant to stage specific objectives and their pedagogic requirements. Part II will provide a comprehensive understanding of the teaching learning situations gained through intensive study of conceptual explanations, observation and analysis of real life classroom situations, simulations as well as on hands on experiences.

(iii) Engagement with the Field/Practicum

The B.Ed. Programme shall provide sustained engagement with the self, the child, the community and the school, at different levels and through establishing close connections between different curricular areas. These curricular areas would serve as an important link between the perspective and curriculum and pedagogic studies and enhancing professional capacities in the form of tasks and assignments and internship.

School Internship would be a part of this broad curricular area and shall be designed to lead to develop broad repertoire of perspectives, professional capacities, teacher sensibilities and skills. The curriculum of integrated B.A. /B. Sc B.Ed. shall provide for sustained engagement with learners and the school. Student-teachers shall be equipped to cater to diverse needs of learners in schools. After the completion of each field exposure including internship, the student teachers will consolidate and reflect on their experiences and share the same with their peers and teachers.

(iv) Enhancing Professional Capacities

Running across the semesters, specialized courses on learning to function as teachers, ICT and its application, health and yoga, understanding self, arts in education, library resources and reading and reflecting on texts are offered to enhance the professional capacities of the student teachers. All these courses are internally assessed. These courses act as curricular resources, developing personal and professional self and provide inputs on arts and aesthetics, yoga. These courses are focused on developing reflection, issues of identity (both personal and professional), interpersonal relations all in the context of school. The field related experience guides the student teachers to view schools as sites for social change, it develops sensitivity to the fellow citizens through listening and empathizing.

The Integrated B.A . /B. Sc. B. Ed programme has been designed with the following objectives

1. Prepare teachers equipped with knowledge and competencies to conduct as professionals to handle the challenges of the present day classroom.
2. Prepare teachers with sound background in perspectives of education along with hands on experience based on field exposure.
3. Develop a rational conceptualization of pedagogical knowledge and to incorporate it into the specific content areas.
4. Develop teachers with a deep and critical awareness of professional ethics and an ability to critically engage in reflective practices.

The course structure and semester wise distribution of courses along with time required for their transaction and the total marks, midterm assessment marks, end term assessment marks, practicum marks and grades, and credits assigned to each course are given below. Each semester consists of 90 working days and one credit hour is 10 hours for under graduate course as per CBCS guide line. While designing course for Integrated B.A/B.Sc B.Ed., the UGC guide line on CBCS has been followed.

III- Choice Based Credit System (CBCS)

Choice Based Credit Courses have been offered across the departments and within the department. As the programme intends to enrich the students with added professional inputs the choice based credit courses would offer relevant courses to enhance their professionalism. Each course would comprise of four classes per week for at least 12 weeks which would lead to accumulation of four credits at the end of the semester. The students can select the course in the beginning of semester-II and can complete it before the end of semester-IV. Examinations will be conducted during every semester along with the semester end examination onwards.

The norms and regulations prescribed from time to time by the NCTE will also apply to the programme.

IV-Detailed Syllabus

The curriculum of four –year Integrated B. A/ B.Sc. B. Ed. will comprise of the following components-

Major components	Areas Covered	Description	Credit Allocation	Total Credit
Courses	Perspectives in Education (PE)	PE 1: Basics in Education PE 2: Childhood and Growing Up PE 3: Learning and Teaching PE 4: Assessing Learning PE 5: Schooling, Socialisation and Identity PE6 :Vision for Indian Education PE 7: Creating an Inclusive Classroom PE 8 Educational Planning, Management and Leadership PE 9 Knowledge and Curriculum	4 Credits 4 Credits 4 Credits 4 Credits 4 Credits 4 Credits 2Credits 4Credits 4Credits	34
	Curriculum and Pedagogic study (CPS)	CPS 1 :Language across the Curriculum CPS 2: Pedagogy of School Subject-1 – Part I CPS 3: Pedagogy of School Subject-2 –	2 Credit 4 Credit	18

		Part I CPS 2: Pedagogy of School Subject-1– Part II	4 Credits	
		CPS 3: Pedagogy of School Subject-2 – Part II	4 Credits	
Engagement with the field	Enhancing professional capacities (EPC) and	EPC-1 Learning to Function as a Teacher EPC 2 Understanding ICT and Its Application EPC 3: Health, Yoga and Physical Education EPC 4 : Understanding the Self EPC 5 : Arts in Education EPC 6 : ICT Practicum EPC 7: Library resources EPC 8 : Reading and Reflecting on Texts	2 Credits 2 Credits 2 Credits 2 Credits 2 Credits 2 Credits 2 Credits	16
	Engagement with field	EF 1 : School Exposure (Grade)* EF 2 : School Exposure(Multicultural Placement) EF 3 : <i>Internship</i> EF 4 : Working with Community(Grade)*	2 Credits* 2 Credits 10 Credits 2Credits*	12 + 4*
		Total	80+ 4* Credits	80+ 4* Credits

*Non numerical credits

Course Structure of Four years Integrated B.Sc/B.A.B.Ed of G.M.University

Sl No	Subject/Semester	Marks	I (Th + Pr)	II (Th + Pr)	III (Th + Pr)	IV (Th + Pr)	V (Th + Pr)	VI (Th + Pr)	VII (Th + Pr)	VIII (Th + Pr)	Total Credits	Total Marks
	Perspective in Education											
1.	PE-1: Basics in Education	100	PE-1									
2.	PE-2: Childhood and Growing up	100	PE-2									
3.	PE-3: Learning and Teaching	100		PE-3								
4.	PE-4: Assessing learning	100		PE-4								
5.	PE-5: Schooling, Socialization and Identity	100			PE-5							
6.	PE-6: Vision for Indian Education	100				PE-6						
7.	PE-7: Creating an inclusive Classroom	50					PE-7					
8.	PE-8: Educational planning, Management and Leadership	100					PE-8					
9.	PE-9: Knowledge and Curriculum	100						PE-9				
	Total marks/Total Credits (PE)	850/34										
	Curriculum and Pedagogic studies											

1.	CPS-1: Language across the curriculum	50							CPS-1			
2.	CPS-2: Pedagogy of school subject-1, Part-I: Language (Odia/ English); Mathematics, Biological Science	100							CPS-2 Part -1			
3.	CPS-3: Pedagogy of School subject-2-Part-I: Social Science; Physical Science	100							CPS-3 Part -1			
4.	CPS-2: Pedagogy of school subject-1, Part-II Language (Odia/ English); Mathematics, Biological Science	100							CPS-2 Part -2			
5.	CPS-3: Pedagogy of School subject-2-Part-II Social Science; Physical Science	100							CPS-3 Part -2			
	Total Marks/ Total Credits(CPS)	450/18										
	Enhancing Professional Capacities											
1.	EPC 1: Learning to Function as a Teacher	50							EPC 1			
2.	EPC 2: Understanding ICT and its Application	50							EPC 2			
3.	EPC 3: Health, Yoga and Physical Education	50							EPC 3			
4.	EPC 4: Understanding the Self	50								EPC 4		
5.	EPC 5: Arts in Education	50								EPC 5		
6.	EPC 6 : ICT Practicum	50								EPC 6		
7.	EPC 7 : Library Resources	50								EPC 7		
8.	EPC 8 :Reading and Reflecting on Texts	50								EPC 8		
	Total Marks/ Total Credit(EPC)	400/16										
	Field Engagement											
1.	FE 1: School exposure (Grade)									FE 1		
2.	FE 2: Multicultural Placement	50									FE 2	
3.	FE 3: Internship	250									FE 3	
4.	FE 4: Community work (Grade)										FE 4	
	Total Marks/Total Credit(FE)	300/12										
	Total Marks	2000+ Grade	200	200	100	100	150	150	550	550+ Grade		
	Total Credit	80+Grade	6	6	8	8	10	8	16	18		
❖ 1 Credit Theory = 10 hours in a semester ❖ 1 Credit Practicum = 32 hours in a semester ❖ 1 Credit Theory = 25 Marks												

SEMESTER-I

PE 1: Basics in Education

Total Marks:100 (Mid Term:15 + End Term:60 + Practical:25)

Credits-4

Objectives

The course will enable the student teachers to;

- Analyse and understand educational concepts, their premises and contexts that are unique to education.
- Understand meaning, nature and process of education from oriental and western perspectives
- Develop understanding on philosophical, sociological and psychological foundations of education
- Understand and appreciate educational thoughts of Indian and Western philosophers
- Understand education as sub system of social system and influence of urbanization, culture and privatization
- Make understand dimensions and indicators of national development and role of education for inclusive development.

UNIT-I: Education: Meaning, Process and Purpose

- Education: derivational meaning, broad and narrow meanings, Oriental and western views on education
- Nature and process: Bipolar, tri-polar and multi-polar; Schooling and life-long process
- Modes: Formal, Informal and Non formal
- Purpose: individual and social; determinants of aims of education; aims of education as per the SEC (1952-53), Education Commission (1964-66) and NPE,1986

UNIT-II: Foundation of Education

- Philosophical: Meaning and relationship between philosophy and education; Impact of philosophy on aims, curriculum, school organisation and pedagogy with reference to Idealism, Naturalism and Pragmatism.
- Sociological: Meaning and relationship between sociology and education; Impact of sociology on aims, curriculum, school organisation and pedagogy.
- Psychological: Meaning and relationship between psychology and education; Impact of psychology on aims, curriculum, school organisation and pedagogy.

UNIT-III: Educational thinkers and their contributions

- Educational thoughts of Mahatama Gandhi, Rabindranath Tagore, Swami Vivekananda and Shri Aurobindo: their contributions to the present system of Education in India
- Educational thoughts of Rousseau, Plato and Dewey: their contributions to the present system of Education

UNIT-IV Education, Society and Culture

- Social system: education as sub system of social system and their inter relationship. Social change; Meaning, dimensions and role of education for social change

- Education and Modernization: Meaning, nature and role of education for modernization
- Education and culture: Meaning and role of education for conservation, transmission and promotion of culture. Education as process of acculturation and enculturation
- Privatization in education: Concept and types; Its impact on education

UNIT-V: Emerging issues in education

- Constitutional provisions for education in India and their implications for education
- Education for National Development: Dimensions and indicators; role of education for National Development
- Education for development of Human Resources: indicators of quality human resource and role of education
- Education for inclusive development: Meaning and dimensions(social, economic, cultural ,political, technological and spatial);Addressing challenges of inclusive development

Practical

Full Mark-25

Each student will carry out any one of the activities, submit a report and face viva exam. to be conducted by both internal and external examiners.

Suggested Activities

- List different non-formal agency of education available in your locality and prepare report on objectives, process and relevance for school education.
- Reflect on the aims of education as per the report of Secondary Education Commission, Indian Education Commission, National Policy on Education (1986).
- Prepare a report on reflections of philosophical, sociological and psychological foundations on school curriculum, organization, textbook, methods of teaching.
- Reflect on similarity and differences between educational ideas of Indian philosopher and Western philosophers.
- Observe society (rural and urban) and prepare report on cultural influence on educational practice
- Critically analyse nearby locality on criteria of inclusive development and suggest strategy for it.

Suggested Readings

- Agrawal, A (1995). *Dismantling the Divide Between Indigenous and Scientific Knowledge : Development and Change*, 26:413-39.
- 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.
- Butchvarov, P. (1970), *The Concept of Knowledge*, Evanston, Illinois: North Western University Press.
- Chomsky, N. (1986). *Knowledge of Language*, Prager, New York.
- Datta, D.M. (1972). *Six ways of Knowing*. Calcutta University Press, Calcutta.
- Dewey, J. (1997).My Pedagogic Creed’, in D.J. Flinders and S.J. Thorton(eds.) *The Curriculum Studies Reader*, Routledge: New York.
- Dewey, J. (1997) *Experience and Education*, Touchstone: New York.
- Dewey, J. (1956). *The Child and the Curriculum and School and Society*, University of Chicago Press, Chicago, Illinois: U.S.A.
- Keddie, N.(1971). *Classroom Knowledge*, in. M.F.D Young.
- Krishna Murthy, J. (1947).*On Education*, Orient Longman: New Delhi.

- Kumar, Krishna (1996). *Learning From Conflict*, Orient Longman: New Delhi.
- Peters, R.S. (1967). *The Concept of Education*, Routledge: UK.
- Margaret, K.T. (1999). *The open Classroom*, Orient Longman: New Delhi.
- NCERT (2014). *Basics in Education: Textbook for B.Ed Course*. NCERT, New Delhi.
- Prema, Clarke. (2001). *Teaching & Learning: The Culture of Pedagogy*, Sage Publication: New Delhi.
- Phenix, P.H. (1964). *Realms of Meaning*. MacGraw-Hill: New York.
- Steven, H. C. (1970). *The Philosophical Foundation of Education*, Harper & Row Publishers: New York.
- Sykes, Marjorie. (1998). *The Story of NaiTaleem*,NaiTaleemSamiti: Wardha.
- Thapan. M. (1991). *Life at School: An Ethnographic Study*. Oxford University Press, Delhi.
- Taneja, V.R (1978). *Educational Thought and Practice*. Sterling Publishers Pvt Limited, New Delhi.

PE 2: Childhood and Growing Up

Total Marks:100 (Mid Term:15 + End Term:60 + Practical:25)	Credits-4
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Objectives

The course will enable the student teachers to -

- To understand concept of growth and development, factors influence development and individual difference in individuals
- Develop understanding of the role of socio-cultural context in shaping human development, especially with respect to the Indian context.
- Develop theoretical perspectives and understanding of dimensions and stages of human development and developmental tasks.
- Develop understanding on stages and dimensions of development, views of Erickson, Piaget and Vygotsky on development
- Conceptualise nature of memory, transfer of learning, motivation and creativity and process of its development during growing up
- Understand nature of adolescence and life skills education and role of teacher counselor and parents in dealing with adolescence problems.
- Understand the nature of child abuse, substance abuse, peer pressure and its bearing on childhood and adolescence

Unit 1: Learner as a Developing Individual

- Growth and Development: concept, principles and characteristics; Relationship between development and maturation.
- Factors Influencing Development: Development as a result of interactions between individual potential and external environment (physical, socio-cultural, ecological, economic and technological).
- Cognitive and Affective processes influencing learner development and their applications in classroom teaching.
- Individual differences: Concept and Types (intra and inter); Implications of individual differences (biological, physical, emotional, cognitive, social and moral)

for organizing educational programmes (Curricular, Other Curricular, School and Classroom climate building)

Unit 2: Development during Childhood and Adolescence

- Stages and Dimensions of Development: Stages- Childhood and adolescence (early and late); Dimensions- physical, social, emotional, cognitive and moral development;
- Developmental tasks during different stages facilitating holistic development (individual and social).
- Erickson's views on psychosocial development and Kohlberg's views on moral development
- Cognitive and language development: cognitive developmental stages of Piaget; Vygotsky's theory of concept and language development; language development theory of Chomsky

Unit-3: Memory, Motivation and Creativity during Growing up

- Memory: Meaning, Types; Sensory , working and long term, strategy for developing memory
- Transfer of learning; Meaning, nature, types and role of teacher for promoting positive transfer of learning
- Motivation; Meaning, nature and techniques of motivating learners. Developing self-motivation.
- Creativity: Meaning, nature and strategies for nurturing creativity

Unit 4: Understanding Adolescence education

- Adolescence Education: Concept, Nature and Importance
- Life skills education for adolescents: Meaning, importance, different life skills and strategy for developing life skills
- Relevance of Socio-Cultural diversity (family, school environment, community, peer group) and life experiences/learners' voice- their relevance to adolescence education
- Role of teacher, counselor and parents in dealing adolescence problems

Unit 5: Addressing the Issues of Childhood and Adolescence

- Child abuse: Types, causes and effect and strategies
- Substance abuse: Meaning, categories, causes and strategies
- Peer pressure: Meaning, importance, effects and strategies
- Behaviour disorder: Meaning, types, effects and strategies for dealing

Practical

Full Mark-25

Each student will carry out any one of the activities, submit a report and face viva exam. to be conducted by both internal and external examiners.

Suggested Activities

1. Observe children during their playtime in your practicing school (or nearby school) for a week; observe their play activities, relationships, communication with their peers. On the basis of that prepare a report about understanding childhood.
3. Observe and interact with ten adolescent children living in different contexts (rural areas, urban slum, dalit household, urban area, and working/street people) and compare their lifestyle and problems.
4. View any two movies out of the following: 1. Smile Pinky (2008), 2. Born into Brothels (2014), 3. Salaam Bombay (1988), 4. Slumdog Millionaire (2009), 5. Gippie (2013) and 6. Mehek (2007). Discuss their content, picturization, characters and messages in the context of issues and concerns of childhood/adolescence

5. Collect five folk tale/stories/indigenous games from children told by elders from nearby community. Discuss them in your class.
6. Compile a status of Adolescence population and academic profile for the last 5(five) years and make a presentation in a seminar mode (focus area can be chosen from any specific component such as: disability, girl student, tribal, Muslim girls etc).

Suggested Readings

- Cole, M and Cole, S (1989). *The Development of Children*, Scientific American Books, New York
- Hurlok, E.B. (2003). *Child Growth and Development*, Tata McGraw Hill
- Kakkar, S (1978). *The Inner World: A Psychoanalytic Study of Childhood and Society in India*. Oxford University Press, New Delhi
- NCERT: Module on Adolescence Education
- Mishra, A (2007), Everyday Life in a Slum in Delhi. In D.K. Behera (Ed.0. *Childhood in South Asia*. New Delhi: Pearson Education India
- Nambissan, G.B. (2009). *Exclusion and Discrimination in Schools: Experiences of Dalit Children*. Indian Institute of Dalit Students and UNICEF
- Parry, J. (2005). Changing Childhoods in Industrial Chattisgarh. In R. Chopra and P. Jeffery (Eds), *Educational regimes in Contemporary India*. Sage
- Piaget, J. (1997). Development and Learning. In M. Gauvain and M. Cole (Eds), *Readings on the development of children*. New York: WH Freeman and Company
- Saraswathi, T.S. (1999). Adult-Child Continuity in India: Is Adolescence a myth or an emerging reality? In T.S. Saraswathi (Ed), *Culture, Socialisation and Human Development: Theory, research and applications in India*. New Delhi. Sage
- Sharma, N (2011). *Understanding Adolescence*, MBT India
- Singh, A (Ed), (2015). *Human Development: A Life Span Approach*. Orient Black Swan, Delhi
- Woolfolk, A. (2008). *Educational Psychology*. Pearson Education.

SEMESTER-II

PE 3: Learning and Teaching

Total Marks:100 (Mid Term:15 + End Term:60 + Practical:25)

Credits-4

Objectives

The course will enable the student teachers to -

- Develop an understanding about the differential learning needs of the learners with regard to abilities, learning styles, socio-cultural differences, language, and learning difficulties.
- Differentiate learning as transmission and reception Vs. learning as construction
- Understand different theoretical perspectives of learning including the constructivist perspective
- Make understand nature and strategy of meaningful and concept learning, role of multiple intelligence in it.
- Develop understanding about teaching as profession

Unit I: Understanding Learning

- Meaning, nature; learning as process and as outcome
- Understanding characteristics of learning styles of students at elementary and secondary levels; matching the teaching style with the learning style.
- Different viewpoints on learning and their classroom implications: Behaviourist (Skinner), Cognitivist (Piaget), Humanist (Roger) and Constructivist (Vygotsky)
- Factors affecting learning: individual differences, conditions of learning and methods.

Unit II: Learning in ‘Constructivist’ Perspective

- Learning as ‘construction of knowledge’ and learning as ‘transmission and reception of knowledge’-differences
- Understanding processes facilitating ‘construction of knowledge’: Experiential learning and Reflection, Social mediation, Cognitive negotiability, Situated learning and Cognitive apprenticeship, Meta-cognition.
- Facilitative learning environments: teachers’ attitudes, expectation- enhancing motivation, positive emotion, self-efficacy, collaborative and self-regulated learning.

Unit III: Meaningful and Concept Learning

- Meaning, nature and characteristics of meaningful learning, Facilitating meaningful learning in and outside school-strategy and role of teacher
- Implications of Gardner theory of multiple intelligence for meaningful learning
- Learning as meaning making: concept, process, learner as meaning maker- characteristics of the learner; role of inquiry in meaning making
- Concept Learning: Meaning, prototypes and exemplars , concepts and schemas, strategies for teaching concepts

UNIT-IV: Teaching for Meaningful and Concept Learning

- Nature of teaching: Teaching as Instructing Vs. Teaching as facilitating learning, teaching as empowering learners; Phases and levels of teaching, Modes of teaching learning: Face to face, distance mode, oral- aural and digital, individualized and group based
- Teaching skills: communicating, introducing, explaining, using blackboard, questioning, reinforcing, using aids/ICT and managing classroom
- Bruner’s models of teaching for meaningful learning-process and implications for classroom instructions.
- Concept attainment model and concept mapping for teaching.

Unit IV: Teaching as a Profession

- Teaching profession-importance and characteristics; characteristics of effective teacher-Teacher as a critical pedagogue, Humane and professional teachers, Teacher as facilitators of knowledge, Skills and competencies of teacher
- Requisites for effective teacher: content knowledge, pedagogical knowledge and technological knowledge- their relationships.
- Teacher preparation: Need, components and modes at different levels; Continuing Professional development of teacher: concept, process and strategies
- Teachers professional ethics and accountability-meaning, importance and dimensions: recommendations of NPE 1986/92; strategy for ensuring teacher accountability

Practical

Full Mark-25

Each student will carry out any one of the activities, submit a report and face viva exam. to be conducted by both internal and external examiners.

Suggested Activities

- Go to nearby schools (at least four different schools). Observe teaching learning process in some classrooms for few days. Make records and prepare a presentation highlighting various kinds of learning and teaching which you observed there.
- Observe a class in your practising school for few days and prepare a note highlighting how teachers addressed the learning needs of different learners. Give examples with respect to gender, inclusion, culture and language.
- Prepare concept maps on pedagogy subject, teach in school and write a reflective note on how it helps learner.
- Read few diaries written by teachers, analyse their text in the context of teaching activities.
- Interact with your peers and few teachers. Discuss whether teaching is a profession and prepare a report on the basis of their perception.
- Interact with few teachers in a nearby school and discuss with them the relevance of training they received with respect to the classroom teaching.

Suggested Readings

- Bhutt, H. *The diary of a school teacher: An AzimPremji University publications*, [www.arvindguptatoys.com/arvindgupta/diary - school teacher- eng.pdf](http://www.arvindguptatoys.com/arvindgupta/diary-school-teacher-eng.pdf)
- Burden, Paul R; Byrd, David. M. (1999). *Methods for Effective Teaching* (Sec Edition), Allyn and Bacon.
- Carr, D (2005), *Making sense of education: An introduction to the philosophy and theory of education and teaching*, Routledge.
- Delpit, L (2006). *Other people's children, cultural conflict in the classroom*. The New press.
- Dhar, T.N. (Ed). 1996. *Professional status of Teachers*, NCTE, New Delhi.
- Kauchak, D. P and Eggen, P. D (1998). *Learning and Teaching, : Research based methods*, Boston: Allyn and Bocan
- Ladsen – Billings, G (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32 (3), 465-491.
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PE 4: Assessing Learning

Total Marks:100 (Mid Term:15 + End Term:60 + Practical:25)	Credits-4
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Objectives

The course will enable the student teachers to -

- Understand the nature, purpose and types of educational assessment and evaluation.
- Develop and use different types of tools and techniques for continuous and comprehensive assessment of learning in the school situation.
- Explain the importance of assessment for learning and its processes for enhancing the quality of learning and teaching
- Analyze the trends and issues in learning and learner assessment.
- Analyze and interpret results of the assessment using elementary statistical methods.

UNIT-1: Assessment, Evaluation and Learning

- Assessment and Evaluation: Meaning, purpose of assessment (improving learning and teaching); purpose of evaluation (placement, diagnosis, promotion, certification, providing feedback); Interrelationship between assessment and evaluation
- Classification of Assessment based on Purpose (Placement, Formative, Diagnostic, and Summative), Scope (Teacher-made, Standardized), Attributes Measured (Achievement, Attitude, Aptitude etc.), Nature of Information gathered (Qualitative, Quantitative), Mode of Response (Oral, Written and Performance), Nature of Interpretation (Norm-referenced and Criterion-referenced), and the Context (Internal, External).
- Continuous and Comprehensive Assessment: Meaning, Importance and Scope; Learning and Assessment: Assessment of Learning, Assessment for Learning, and Assessment as Learning; CCA vs CCE

UNIT-2: Assessment for/ of/as Learning

- Meaning, importance and purpose; nature-formative, continuous, comprehensive, culture responsive, relevance for CCE
- Tools and techniques: Formal (testing, observation schedules, video recording etc.), Informal (taking notes, Interviewing, Participant observation etc.) methods, use of testing devices (achievement test, diagnostic test, proficiency test etc) and non-testing devices (assignment, projects, reflective journals, portfolio etc), use of multiple methods and tools (situation specific combinations)
- Self and peer assessment techniques: FGD and rubrics
- Feedback mechanism-Feedback for students and parents-need and modes, feedback for teachers, role of community in CCE for assessment of learning

UNIT-3. Construction of Test and Use

- Planning the test: Development of table of specifications (blueprint)
- Preparing the test: principles of preparing test items-objective based items-Extended and Restricted response types, Objective type items (free response type-short answer and completion; fixed response type- matching, forced/alternate choice, multiple choice); Assembling and editing the items
- Administration of the test and analysis of students' performance; Preparation of report and its use in enhancing learning.

UNIT-4: Issues in Assessment and Policy Provisions

- Current practices: Over-emphasis on Summative Assessment(Periodic and common/high-end examinations) and marking; competitive examination-its adverse effects on learners, education system and society
- Issues and Problems : Marking vs. Grading, objectivity vs. subjectivity, Close-ended vs. Open-ended test items, relative neglect of non-cognitive aspects, non-use of diverse methods and tools for assessing diverse learners
- Policy perspectives: Recommendations of NPE1986/92, NCF–2005, RCFCE Act 2009; Non-detention policy and its implications for assessment and quality of learning
- Emerging practices in assessment – online assessment, participatory assessment

UNIT-5. Elementary Statistics in Evaluation

- Raw score
- Tabulation and Frequency distribution
- Graphical representation of data
- Measures of central tendency, dispersion and its uses in evaluation
- Standard scores; T score, Z score, percentile and its uses
- Correlation: Meaning, types and uses

Practical

Full Mark-25

Each student will carry out any one of the activities, submit a report and face viva exam. to be conducted by both internal and external examiners.

Suggested Activities

- Preparation of 50 objective-based items, at least 5 from each type of test items in any school subject.
- Construction of an achievement test on any topic(carrying 25 marks), its administration and interpretation of the results.
- Preparation of a plan for CCA activities for any class during an academic session.
- Appraisal of current CCA practices in the secondary schools.
- Analysis of examination marks obtained by the students in any subject in a class and preparation of a report for sharing.

Suggested Readings

Anderson, L.W.(2003). *Classroom assessment: Enhancing the quality of teacher decision making*. Mahwah, New Jersey: Lawrence Erlbaum Associates.

Burke, K.(2005). *How to assess authentic learning*(4th Ed.). Thousand Oaks, CA: Corwin.

Cooper, D.(2007). *Talk about assessment: Strategies and tools to improve learning*. Toronto, Ontario: Thomson Nelson.

Danielson, C.(2002). *Enhancing student achievement: A framework for school improvement*. Alexandria, VA: Association for Supervision and Curriculum Development

Garrett, H.E.(1973). *Statistics in psychology and education*(6th ed.). Bombay: Vakils, Feffer & Simon.

Gronlund, N.E. & Linn, R.L.(2009). *Measurement and assessment in teaching*(10th Edn). Upper Saddle River, NJ: Pearson Education, Inc.

Newman, F.M. (1996). *Authentic achievement: Restructuring schools for intellectual quality*. San Francisco, CA: Jossey-Bass.

- Nitko, A.J. (2001). *Educational assessment of students* (3rd ed.). Upper Saddle River, NJ: Prentice Hall.
- Popham, W.J. (1993). *Modern educational measurement*. Englewood Cliffs, N.J.: Prentice Hall.
- Popham, W.J. (2010). *Classroom assessment: What teachers need to know* (6th ed.). New York: Prentice Hall.
- Shepard, L.A. (2000). The role of assessment in learning culture. *Educational Researcher*, 4-14.
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SEMESTER-III

PE 5: Schooling, Socialization and Identity

Total Marks:100 (Mid Term:15 + End Term:60 + Practical:25)	Credits-4
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Objectives

The course will enable the student teachers to -

- 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 in out of school situations
- 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
- Develop basic understanding and familiarity with key concepts-gender, gender bias, gender stereotype, empowerment, gender parity, equity and equality, patriarchy and feminism and transgender
- Understand the need to address gender based violence in all social spaces and evolve strategies for addressing it.
- Critically aware of 'self' and 'identity' and 'free' oneself through self-understanding, from tendencies that lead to crystallizing and limiting of one's identity as a teacher and a human being.
- 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'.

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
- Various dimensions of self and the impact of socialization on development of self

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'.
- Gender based identity
- Determinants of identity formation in individuals and groups: Social categories such as caste, class, gender and religion
- The influence of peer group, media messages, technology, and globalization on identity formation in contemporary society

Unit III: Socialization Processes: Gender, School and Society

- Concept of Gender, Sexuality, Patriarchy, Masculinity and Femininity
- Gender Bias, Gender Stereotyping and Empowerment
- Equity and Equality in Relation with Caste, Class, Religion, Ethnicity, Disability and Region.
- Gender Identities and Socialization Practices in different types of families in India.
- Gender Issues in Curriculum: Issues and Concerns of Transgender

Unit IV: Coping with social complexities: role of education

- Expanding human activities and relations; increasing complexity, homogenization of culture vs. preservation of distinctive identities; competition, uncertainty and insecurities and the resultant identity conflicts
- Assertion of identities, oppression, conflict and violence – relevance of education for peace
- Addressing sexual abuse in family, Neighborhood and School and in other formal and informal institutions.
- Agencies Perpetuating Violence: Family, School, Work place and Media (Print and Electronic).

Unit V: Evolving identity as a teacher

- Teacher’s ‘professional identity; Meaning and various dimensions
- Choosing to be a teacher: Role of family, community, schooling
- Teacher identity formation: Role of pre-service and in-service teacher education programmes
- 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’

Practical

Full Mark-25

Each student will carry out any one of the activities, submit a report and face viva exam. to be conducted by both internal and external examiners.

Suggested Activities

- Group work and discussion on the influence of peer group, media message, technology, and globalization on identity formation in contemporary society
- Group work and discussion on the factors that contribute positively and negatively in the development of teacher identity
- Organize Debates on Equity and Equality cutting across Gender, Class, Caste, Religion, Ethnicity Disability and Region.
- Prepare a project on Issues and Concerns of Transgender.

- Collection of Folklores reflecting Socialization Processes and its Influence on Identity formation.
- Project on Women Role Models in various fields with Emphasis on Women in Unconventional Roles.
- Visit to organizations connected with peace and inter cultural harmony and aesthetic appreciation to experience peace as reality and submission of report.
- Developing action plan for peace in self, home, school and community.

Suggested Readings

- Amalendu Misra, (2004). Identity and Religion Foundations of Anti-Islamism in India. Sage Publications, New Delhi
- Butler, J. (1990). *Gender Trouble: Feminism and the subversion of Identity*. New York; Routledge.
- Chap. 6: Parents and Teachers
- Desai, Neera and Thakkar, Usha. (2001). Women in Indian Society. National Book Trust, New Delhi
- Dipankar Gupta (Ed.) (2004). Caste in question Identity or Hierarchy. Sage Publications, New Delhi.
- Dunne, M. et al. (2003). Gender and Violence in Schools. UNESCO.
- Kamala Ganesh & Usha Thakkar (Ed.) (2005). Culture and Making of Identity in India, Sage Publications, New Delhi.
- Kirk Jackie e.d. , (2008), Women Teaching in South Asia, SAGE, New Delhi
- Krishnamurti, J., Education and the Significance of Life, KFI Publications
- Kumar Krishna (2004), What is Worth Teaching? 3rd edition, Orient Longman
- Kumar, K.(2001) *Prejudice and Pride: School Histories of the Freedom Struggle*. New Delhi: Viking/Penguin.
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- National Curriculum Framework 2005: Position Paper, National Focus Group on Gender Issues in Education, 3.2, NCERT, 2006.
- Nayar, Sushila and Mankekar Kamla (ed.) 2007, 'Women Pioneers in India's Renaissance, National Book Trust, New Delhi, India.
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- Saraswati, T.S. (Ed.) (1999). Culture, Socialization and Human Development. Theory: Research and Applications in India, Sage Publication, New Delhi.
- Sen Amartya (2006). Identity and Violence. The Illusion of Destiny. Allen and Lane: Penguin Books India Pvt. Ltd. New Delhi.
- Sharma, R & E. Annamalai. (2003). *Indian Diaspora: In Search of Identity*. Mysore: CIIL.
- Shashi Tharoor (2007). The Elephant, the Tiger & the Cell phone. (Particularly part two of the book). Penguin Viking, New Delhi.
- Sherwani, Azim. (1998). the girl child in crisis. Indian Social Institute, New Delhi.
- Srinivas M.N., (1986). Social Changes in Modern India, Allied Publishers, Bombay.
- Srivastava Gouri, (2012), Gender and Peace in Textbooks and Schooling Processes, Concept Publishing Company Pvt. Ltd, New Delhi
- UNICEF (2005). 2005 and Beyond – Accelerating Girls' Education in South Asia. Meeting Report.
- Unterhalter, Elaine. (2007). Gender, Schooling and Global Social Justice, Routledge.
- Vidyathan, T.G. (1989), 'Authority and Identity in India', in 'Another India' Daedalus, Fall, 118 (H): 147-69.

SEMESTER-IV

PE-6 Vision for Indian Education

Total Marks:100 (Mid Term:15 + End Term:60 + Practical:25)	Credits-4
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Objectives

The course will enable the student teachers to -

- Understand evolution of education in India from Vedic period to post Independence era.
- Develop understanding on issues and concerns relating to Elementary education and implementation of the RTE Act 2009.
- Develop understanding on issues and concerns relating to secondary/sr. secondary education and implementation of the RMSA and other schemes
- Understand school education in India with reference to global educational development and role of International organizations for promoting education
- Formulate vision for school education on basis of new social order and technological advancement

UNIT 1 - Development of Education in India: Historical perspectives

- Evolution of education in India in Vedic and Post Vedic period: its relevance to present education
- Educational development in the Pre-independence period-Macaulay's minutes, Woods Dispatch, Hunter Commissions; Sargent Report, Basic education, Nayee Talim;
- Education in Post-Independence Period: University Education Commission (1948) Secondary Education Commission(1952) Education Commission (1964-66);NPE 1968;NPE 1986 and its modified version 1992;

Unit 2: Elementary Education; concerns and issues

- Universalization of Elementary Education: Structure, aims and Its importance for national development
- Right to Education: Issues of Universal access, Universal enrollment, Universal retention, Universal Participation and success
- Policy initiatives for universalizing elementary education: DPEP, SSA, RTE Act 2009, Padhe Bharat Badhe Bharat,National Reading Initiative,
- Issues of quality and equity in elementary education with specific reference to physical, economic, social and cultural access particularly to girl child and weaker sections as well as differently abled children

Unit-3: Secondary and Senior Secondary Education; Concerns and Issues

- Secondary education: Structure, aims and Its importance for national development
- Policy initiatives for secondary education: RMSA, ICT @ school, Rashtriya Avishkar Abhiyan,
- Issues of quality and equity in secondary and sr secondary education with specific reference to physical, economic, social and cultural access particularly to girl child and weaker sections as well as differently abled children
- Vocationalisation of secondary education; process, strategy and policy initiatives

Unit-4: Global Perspectives in School Education

- Elementary education in developed countries with reference to aims of education, curriculum, methods of teaching and school organization
- Secondary education in developed countries with reference to aims of education, curriculum, methods of teaching and school organization

- Role of UNESCO, UNICEF and Indian National Commission for Cooperation with UNESCO (INCCU) for school education
- World Education report 2015 and its relevance for school education in India

Unit 5: Developing Vision for Education

- Formulating vision and mission for a new social order: Conceptualizing future school, teacher, curriculum, methods and evaluation
- Critical analysis from political, Economic and Socio-cultural Point; Understanding educational system, Determining aims and objectives of education, Determining Teaching and Learning Strategy, Determining the indicators of quality of Education and Determining the Process of Evaluation
- Promoting Innovation for quality school education in the areas like Curriculum/Methods of Teaching/Management and Administration/ Examination.

Practical

Full Mark-25

Each student will carry out any one of the activities, submit a report and face viva exam. to be conducted by both internal and external examiners.

Suggested Activities

- Prepare report on relevance of Vedic/ Buddhist/ Islamic educational ideas for present school education by studying original literature.
- Conduct surveys in the local area for examining status of implementations of the RTE Act 2009
- Visit five secondary schools nearby and prepare report on quality of teaching and learning as the RMSA guidelines.
- Read any educational project sponsored by the UNESCO and present to the class
- Study writings on analysis of education-development from news papers and make presentations

References

- Arial, J.C. & Agrawal S.P. (1992). Role of UNESCO in Educational, Vikas Publishing House, Delhi.
- Anand, C.L. et.al. (1983). Teacher and Education in Emerging in Indian Society, NCERT, New Delhi.
- Govt. of India (1986). National Policy on Education, Min. of HRD, New Delhi.
- Govt. of India (1992). Programme of Action (NPE). Min of HRD.
- Mani, R.S. (1964). Educational Ideas and Ideals of Gandhi and Tagore, New Book Society, New Delhi.
- Mistry, S.P. (1986). Non-formal Education-An Approach to Education for All, Publication, New Delhi.
- Mohanty, J., (1986). School Education in Emerging Society, sterling Publishers.
- Mukherji, S.M., (1966). History of Education in India, Acharya Book Depot, Baroda.
- Naik, J.P. & Syed, N., (1974). A Student's History of Education in India, MacMillan, New Delhi.
- NCERT (1986). School Education in India – Present Status and Future Needs, New Delhi.
- Ozias, A.O. 'Hand Book of School Administration and Management', London, Macmillan.
- RadhaKumudMookerji. Ancient Indian Education (Brahmanical and Buddhist), Cosmo Publications, New Delhi – 1999.
- Sainath P. (1996). Every body loves a good drought. Penguin Books New Delhi.

- Salamatullah, (1979). Education in Social context, NCERT, New Delhi.
- Sykes, Marjorie (1988): The Story of Nai Talim, Naitalim Samiti: Wardha.
- UNESCO; (1997). Learning the Treasure Within.
- Dr. Vada Mitra. Education in Ancient India, Arya book Depot, New Delhi – 1967
- Ministry of Education. 'Education Commission "Kothari Commission"'. 1964-1966.
- Education and National Development. Ministry of Education, Government of India 1966.
- Learning without Burden*, Report of the National Advisory Committee. Education Act. Ministry of HRD, Department of Education, October, 2004.
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- Seventh All India School Education Survey, NCERT: New Delhi. 2002
- UNDP. *Human Development Reports*. New Delhi. Oxford: Oxford University Press.
- UNESCO. (2004) *Education for All: The Quality Imperative. EFA Global Monitoring Report*. Paris.
- 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. NCERT. New Delhi.
- World Bank, (2004). *Reaching The Child: An Integrated Approach to Child Development*. Oxford University Press, Delhi.

SEMESTER-V

PE 7: Creating an Inclusive Classroom

Total Marks:50 (Mid Term:10+EndTerm:40)	Credit-2
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Objectives

The course will enable the student teachers to –

- Understand the meaning and significance of Inclusive education
- Gain knowledge on Policy and legislative frameworks promoting inclusion
- Learn to create inclusive classrooms using inclusive pedagogy (teaching strategies, CCE)
- Understand the linkages and collaborations for resource mobilization.

Unit 1: Understanding Inclusion in Education

- Children with special Needs
- History of inclusion –paradigm shift from segregation to inclusion
- Policy perspective: Initiatives to promote inclusive education- equity and equality
 - International Focus: Salamanca 1994, UNCRPD, EFA (MDG)
 - National Focus: Constitutional obligations for education of diverse groups, RTE 2009, NPE, 1986-92, PWD Act 1995 and revised PWD Bill 2012, NCF 2005 and NFG paper, SSA, RMSA, National Commission on Minority Education Institutions (NCMEI), National Commission for Education of SC, ST
 - Educational concessions, facilities and provisions.

Unit 2: Understanding diversity for inclusive education

- Diversity due to disability (Nature, Characteristic and Needs)
 - Special needs of children with sensory disabilities,
 - Special needs of children with cognitive disabilities
 - Special needs of children with physical disabilities

- Girls with disabilities, multiples disabilities
- Diversity due to socio- cultural and economic factors
 - Special needs of children arising due to language difference, gender, class, caste, religion and other factors
- Discrimination - stereotyping, prejudices; issues, concerns and intervention

Unit 3: Addressing Learners' Diversity

- Curricular Issues
 - Content, Relevance and contextualization
 - Curriculum adaptation/ modifications
 - Gender issue in curriculum
 - Assessment and Evaluation-- Continuous Comprehensive Evaluation (CCE), Alternative means for assessment and evaluation in inclusive education/practices
- Learning and learner support--assistive and adaptive devices, ICT
- Universal Design for Learning (UDL)

Suggested Readings

- Ainscow, M. and Booth, T (2002) *Index for Inclusion: Developing Learning and Participation in Schools*. Bristol: CSIE.
- Ainscow, M., Dyson, A. and Booth, T. (2006) *Improving Schools, Developing Inclusion*, London: Routledge.
- Hegarty, S. and Mithu Alur (2002) *Education and Children with Special Educational Needs- Segregation to Inclusion*, New Delhi: Sage Publication India Pvt. Ltd
- Julka, A, *Index of Incusion* (2012) NCERT, New Delhi.
- Jha, M. (2002) *Inclusive Education for All: Schools Without Walls*, Heinemann Educational publishers, Multivista Global Ltd, Chennai
- Julka, A (2006) *Meeting special needs in schools" A manual*, NCERT, New Delhi
- UNICEF(2003) *Examples of Inclusive Education*, UNICEF ROSA, Kathmandu
- World Bank (2003) *Inclusive Education: Achieving Education for All including those with Disabilities and Special Educational Needs*.
- Ysseldyke, J.E. and Algozzine, B. (1998) *Special Education A Practical approach for Teachers*, New Delhi: Kanishka Publishers Distributors.
- Julka, A. (2014) *Including Children with Special Needs: Primary Stage*
- Julka, A. (2015) *Including Children with Special Needs: Upper Primary Stage*
- Julka, A. (2014) *Teachers Creating Inclusive Classrooms: Issues and Challenges – A Research Study*
- NCERT(2006), *Position Paper : National Focus Group on Education of children with Special Needs*, NCERT; DEGSN, New Delhi
- NCERT(2006), *Position Paper: National Focus Group on Problems of Scheduled Castes and Scheduled Tribe Children* NCERT, DEGSN, New Delhi.
- MHRD (2009), *The Right of Children to Free and Compulsory Education Act, 2009*. Ministry of Human Resource Development, New Delhi

PE 8: Educational Planning, Management and Leadership

Total Marks:100 (Mid Term:15+ End Term:60+ Practical:25)

Credits-4

Objectives

The course will enable the student teachers to-

- Understand Concepts, types and approaches of educational planning
- Develop institutional plan and school development plan
- Understand recommendations of different five year plans relating to school education
- Develop understanding about educational decentralization in India and district planning practices
- Understand concept, nature and approaches of educational management
- Develop understanding and skills in managing material and human resources of school
- Understanding the skills of using different managerial and leadership styles for effective management of a school.

Unit-1 Understanding Educational Planning

- Educational planning: Meaning, Nature, purpose
- Traditional educational planning and strategic educational planning-steps and benefits
- Approaches to educational planning: Social demand, manpower requirement and cost benefits
- Planning for human resource development in school: Manpower forecasting and Manpower planning
- Institutional Planning: School development plan as per the RTE Act 2009

Unit-2 Educational Planning in India

- Beginning of five year Plans: its historical background; Main features of five year plans with special reference to education, Impact of five year plans on education.
- 12th Five year plan: Major recommendations relating to school education(elementary and secondary education)
- Educational decentralization in India: legal provisions and institutional framework and planning machinery
- District planning under the on-going country-wide education development programmes like the SSA and the RMSA
- Financing school education in India, fund flow and related issues

Unit-3 Educational Management: Concept, Processes

- Concept of educational management: Concept and Process; Planning, organization, control ,decision making and evaluation
- Approaches to management: Classical, Human relation and system
- Management of material resources: General class room equipments; school building, library, laboratory ,assembly hall play ground and surroundings of school
- Management of human resources: organizational climate in school, Professional development of teachers-Self learning, reflective practices, orientation, seminars and colloquium
- Total quality management
- Structure of education management in India and in states

Unit-4 Management of Teaching Learning Activities

- Office management: Maintenance of record

- Time management: School Calendar, Preparation of school time table, factors affecting preparation of time table
- Management of co-scholastic activities in school-cultural, physical, social and creative and recreational activities, school assembly
- Management of Examinations: Roles and responsibilities of centre superintendent, Invigilators

Unit-5 Leadership: Concepts, Traits and Styles

- Leadership: Concept, types-administrative and instructional
- Leadership traits : responsible, self disciplined, innovative, imaginative, good at organization, correct in judgment, visionary etc.
- Educational administration leadership skills: Decision making, Planning and Co-Ordinating, Communicating, Evaluating and Feedback
- Styles of educational leadership: autocratic, Laissez-faire and democratic

Practical

Full Mark-25

Each student will carry out any one of the activities, submit a report and face viva exam. to be conducted by both internal and external examiners.

Suggested Activities

- Read school development plan of elementary schools and prepare reflective notes on it.
- Prepare report after collecting views of SMC members about their contribution to school improvement.
- Critically analyze district educational planning of your district.
- Interact with five HMs/Principals of nearby schools and prepare a report management of material and human resources.
- Make a case study on a successful HM/principal of a school; Leadership quality and styles

Suggested Readings:

- Ayyar, R.V. Vaidyanatha (1993). Educational Planning and Administration in India: Retrospect and Prospect. *Journal of Educational Planning and Administration*, VII (2): 197-214.
- Blaug, Mark (1972). *An Introduction to Economics of Education*. The Penguin: London.
- Bray, Mark and N.V. Varghese (ed.) (2010): *Directions in Educational Planning: Report on an IIEP Symposium*. IIEP: Paris.
- Brown, D. (1990): *Decentralisation and School-based Management*. Falmer Press: London.
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- Bush, T., L. Bell, R. Bolam, R. Glatter and P. Ribbins (eds.) (1999). *Educational Management: Redefining Theory, Policy and Practice*. Paul Chapman: London.
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- Chau, Ta-Ngoc (2003). *Demographic Aspects of Educational Planning*. IIEP: Paris.
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- Mukhopadhyay, Marmar and R.S.Tyagi (2005). *Governance of School Education in India*. NIEPA: New Delhi.
- Mukundan, Mullikottu-Veetil and Mark Bray (2004). *The Decentralisation of Education in Kerala State, India: Rhetoric and Reality*. *International Review of Education*, Vol. 50: 223–243.
- Nanjundappa, D.M. (1995): *Approaches and Techniques of Decentralized Planning in Readings in Decentralized Planning*, B.N. Yugandhar and Amitabh Mukherjee (ed.) Concept: New Delhi.
- Pareek, Udai: ‘Institution Building: the Framework for Decision-making’, in Ravi Mathai, UdaiPareek and T. V. Rao (eds.) *Institution Building in Education and Research: From Stagnation to Self- Renewal*, All India Management Association: New Delhi.
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SEMESTER-VI

PE 9: Knowledge and Curriculum

Total Marks:100 (Mid Term:15+End Term:60 + Practical:25)	Credits-4
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Objectives

The course will enable the student teachers to-

- Understand concept of knowledge, process and sources of knowing
- Develop understanding on teacher centric and learner centric knowledge transmission.
- Understand concept, types of curriculum and differentiate between curriculum framework, curriculum and syllabus
- Apply recommendations of the NCF 2005 in school
- Understand process and principles of curriculum development
- Develop understanding in the process of curriculum transaction, evaluation and renewal.

1.Understanding the Nature of Knowledge

- Knowledge: Concept, Nature, Types, theories of knowledge
- Constituents of knowledge: Facts, Principles, Laws, Concepts and theories
- Knowing process: Sensation, perception, reason and conception
- Knowing: sources and ways of knowing in Indian and Western context

2. Construction of knowledge

- Knowledge transmission (teacher-centric) vs. Knowledge construction (learner-centric)
- Experience: Meaning, nature and role of experience in knowledge construction
- Reason: Meaning, nature and role of reasoning in knowledge construction
- Validation of knowledge: approaches and theories-correspondence, coherence, dialects and pragmatics theory

3. Understanding curriculum

- Determining epistemological basis of curriculum
- Concept of curriculum(difference between curriculum framework, curriculum, syllabus and textbook)
- Types of curriculum(subject- centered, learner-centered, experience-centered, activity-centered, hidden curriculum and core curriculum)

- Curriculum framework–Concept, principles and coverage; NCF 2005, and NCFTE 2009 –significant recommendations.
- Determining the correspondence between the teacher education curriculum and school curriculum

4. Curriculum planning and development

- Determinants of curriculum
- Principles of curriculum development
- Approaches to curriculum planning: Top down and Bottom up model
- Processes / stages of curriculum development (preparation, tryout and finalization)

5. Curriculum transaction, evaluation and renewal

- Transaction: Planning (time, space, manpower, material and scheme of lessons),Preparation of curricular materials and activities(text and support materials,learningactivities),conductingclassroomtransaction(preparation of lesson plans/notes, mode of transaction, learners’ involvement, use of TLMs, use of assessment mechanism for learning etc.
- Evaluation: Mode(internal and external),periodicity(continuous, periodic), Mechanism (research studies, on-site observation, FGD, on-line feedback)
- Renewal: Use of evaluation feedback/inputs for Immediate /long-term revision, Specific / comprehensive improvement

Practical

Full Mark-25

Each student will carry out any one of the activities, submit a report and face viva exam. to be conducted by both internal and external examiners.

Suggested Activities

- Identify concepts, facts, principles, laws and theories in any secondary class school textbook and report
- Examine your own process of knowing, prepare a report on how you are using knowing process in gaining knowledge
- Preparation of an appraisal report on any one aspect of the Systemic Reform envisaged in the NCF 2005 and its reflection in current practices.
- Identification of learning resources and designing of beyond classroomactivities for transacting a lesson.
- Preparation of a transactional blueprint of any content unit in any school subject at the secondary level.
- Preparation of an appraisal report on the curriculum renewal process during post NPE(1986) period.

Suggested Readings

Arora, G.L.(1984).Reflections on curriculum.NewDelhi: NCERT.

Dewey,John(1956).*Thechildandthecurriculum*.Chicago,Illinois:Universityof Chicago Press.

Dewey,John(1997).*Experience andEducation*.NewYork: Touchstone.

Dewey,John(1997).Mypedagogiccreed.InD.J.FlindersandS.J.Thorton(eds.),*The Curriculum studies reader*.NewYork: Routledge,Kegan&Paul.

Egan,K.(2005). *Animaginative approachto teaching*.SanFrancisco: Jossey-Bass.

- Erickson, H.L. (2002). *Concept-based curriculum and instruction*. California: Corwin Press.
- Jangira, N.K. & Singh, A. (1982). *Core teaching skills: The micro teaching approach*. New Delhi: NCERT,
- Mohapatra, J.K., Mahapatra, M. and Parida, B.K. (2015). *Constructivism: The new paradigm: From theory to practice*. New Delhi: Atlantic Publishers.
- NCERT (2005). *National curriculum framework 2005*. New Delhi: NCERT.
- NCTE (1990). *Policy perspective in teacher education*. New Delhi: NCTE
- Olivia, Peter F. (1988). *Developing the curriculum*. London: Scott and Foresman.
- Sharma, S. (2006). *Constructivist approaches to teaching and learning*. New Delhi: NCERT.
- Taba, Hilda (1962). *Curriculum development: Theory and practice*. New York: Harcourt, Brace and Wald.
- Von Glasersfeld, F. (1995). *Radical constructivism: A way of knowing and learning*. Washington D.C.: Falmer Press.
- Vygotsky, Levy (1986). *Mind in society*. Cambridge, MA: Harvard University Press.
- Taba, H (1962). *Curriculum Development: Theory and Practice*. N Y Harcourt, Brace and World.
- Taylor, Ralph W (2013). *Basic Principles of Curriculum and Instruction*. Amazon Kindle.

CPS1: Language across the Curriculum

Total Marks: 50 (Mid Term: 10 + End Term: 40)	Credit-2
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Objectives

The course will enable the student teachers to-

- Understand the language background of students.
- Understand the nature of classroom discourse.
- understand the nature and need of communication skills including reading and writing

Unit 1: Concerns for Language in Curriculum

- Varied language contexts of the learners: dialect, regional varieties and standard language
- Understanding multilingualism in the classroom : challenges and strategies
- Home language and school language;

Unit 2: Language and Curriculum Transaction

- Classroom Discourse — developing strategies for using oral language in the classroom
- Discussion as an approach for learning;
- The nature of questioning in the classroom — types of questions and teacher's role.

Unit 3: Developing Communication Competencies- reading and writing

- Reading in the content areas — social sciences, science, mathematics; nature of expository texts vs. narrative texts; transactional vs. reflexive texts; schema theory; text structures; examining content area textbooks; reading strategies — such as scanning, skimming and reading for extracting information
- Writing — based on the text, e.g. summary of the text, extrapolation of story, converting a situation into a dialogue, etc.; Process writing; analyzing students'

writings to understand their conceptions; writing with a sense of purpose — writing to learn and understand.

- Making reading-writing connections: note-making, summarizing

Suggested Readings:

- Anderson, R.C. (1984) Role of the Reader's Schema in Comprehension, Learning and Memory. In R.C. Anderson, J. Osbon & R.J. Tierney (ed) *Learning to Read in American schools: Based Readers and content texts*. Hillsdole, Lawrance Erlbaum Associates: New Jersey.
- Applying a Vygotskian Model of Learning and Development in B. Spodek (ed.) *Handbook of research on the education of young children*. Macmillan: New York.
- Armbruster, Bonnie B. (1984) The Problem of "Inconsiderate Text" In Duffy, G. G. (ed.) *Comprehension Instruction, Perspectives and Suggestions*. Longman: New York.
- Butler, A. and J. Turnbull, (1984) *Towards Reading-Writing Classroom Primary English Teaching Association Cornell University: New York*.
- Freedman S. W. and A. H. Dyson (2003) Writing in Flood J. et. al. *Handbook of Research on Teaching English Language Arts*:.Lawrence Erlbaum Associates Inc: New Jersey, USA..
- Kumar Krishna (2007) *The Child's Language and the Teacher*. National Book Trust: new Delhi.
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- Martin, Jr. B. (1987) The Making of a Reader: A Personal Narrative. In Bernice E. Cullinan, *Children's Literature in the Reading Programme*. International Reading Association: Michigan..
- Mason, J. M. and S. Sinha (1992) Emerging Literacy in the Early Childhood Years.
- Monson, R. J. (1991) Charting a New Course with Whole Language. *Edn. Leadership*.
- Pinnell, G.S. (1985) Ways to Look at the Functions of Children's Language. In A. Jaggar, M. Trika and Smith-Burke (ed.) *Observing the language learner*. International Reading Association: Newark, DE.
- Purves, Alan C. (1988). The Aesthetic Mind of Louise Rosenblatt. *Reader 20*.
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- Rhodes, L. K. and N. L. Shanklin (1993) *Windows into Literacy*. Heinemann, The University of Michigan: UK.
- Rothleen, L. and A. M. Meinbach (1991) *The Literature Connection: Using Children's Books in Classroom*. Good Year Books: Tucson, USA.
- Sinha, S. (2000) Acquiring Literacy in Schools. *Redesigning Curricula: A symposium on working a framework for School education Seminar*.
- Sinha, Shobha. (2009). Rosenblatt's Theory of Reading: Exploring Literature. *Contemporary Education Dialogue*.
- Teals, W. and E. Sulzby (1986) Introduction: Emergent Literacy as a perspective for Examining how young Children Become Writers and Readers. In W. Teals, E. Sulzby (ed.) *Emergent Literacy: Writing and Reading*. Norwood: New Jersey.

SEMESTER-VII

CPS 2: Pedagogy of First Language (Odia) (Part – I)

(Question Paper will be prepared separately for each Language)

Total Marks:100 (Mid Term:15 + End Term:60 + Practical:25)	Credits-4
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Objectives

The course will enable the student teachers to -

- understand the different roles of language;
- understand the use of language in context such as grammar and vocabulary;
- identify methods, approaches and materials for teaching English at various levels in the Indian context;
- be able to develop activities and tasks for learners including audio-video materials, ICT and Internet;
- understand the process of language assessment;

Unit 1: Language and Linguistic behavior

- Language as a system : symbols and levels (substance, forms and context) of language
- Importance, nature and functions of language
- Linguistic behaviour with reference to language skills – types (receptive Vs. productive; input vs. output) and their independence and interdependence
- First Language(Natural/Native/MT): Meaning, Importance and characteristic
- Linguistic structure and aspects of First language(Odia) – phonological, morphological, syntactic and semantic.

Unit 2: Acquisition and Learning of First Language

- Difference between language acquisition and language learning: Difference between first language acquisition and learning with reference to their meaning and process.
- Approaches/Theories of First Language Acquisition(FLA): Behaviourist(Watson & Skinner), Innatist/Mentalist(N.Chomsky) and Social Interactionist(Piaget & Vygotsky)
- Factors influencing FLA: Age, Language input, Language anxiety, Language aptitude, Language ego & motivation.
- Language context and input rich classroom environment facilitating language acquisition and language learning
- Challenges of teaching – learning of first language in Indian context.

Unit 3: Odia/Hindi/Bengali as First Language in School Curriculum

- Policies and provisions relating to languages: Article 343-351,350A; NPE-1968, NPE-1986; POA 1992; National Curriculum Framework-2005.
- Importance and place of first language at different stages in school curriculum: compulsory subject, medium of instruction and examination etc.

- Objectives of teaching first language at elementary and secondary levels with reference to NCF 2005.
- Current challenges of teaching – learning first language in schools: multi-lingual context, language background of the learners, syllabus and textbooks, classroom transaction mode and teacher quality.

Unit 4: Developing language skills in First Language(Odia): Listening and Speaking

- Listening: Sub skills and types
- Speaking: Sub skills and forms
- Activities for developing listening and speaking skills: storytelling, dialogues, situational conversations, role plays, simulations, speech, games, contexts etc.
- Materials and resource support: language laboratories, pictures, authentic materials, multi-media resource etc.
- Facilitating integration of listening and speaking skills while using first language in real life situations

Unit 5: Developing language skills in First Language(Odia): Reading and Writing

- Reading: Sub skills; kinds – reading aloud and silent reading, extensive and intensive
- Study skills: meaning, strategies for developing study skills – use of thesauruses, dictionary, encyclopedia etc.
- Writing: Mechanics of writing, methods of teaching writing at elementary and secondary levels
- Formal and Informal writing: creative writing (short story, poem), reflective writing (essay, articles), letter, diary, notices, reports, dialogue, speech, advertisement etc.
- Reference skills and Higher order skills in reading and writing.

Practical

Full Mark-25

Each student is required to select any one practicum suggested below

- Prepare a questionnaire, interview ten people and write a report on ‘English Language in India’.
- Prepare activities for listening, speaking for different levels.
- Prepare activities for reading and writing for different levels.
- Prepare a report on the challenges faced by the teachers and the learners in the teaching-learning process.
- Visit 5 schools in the neighbourhood and prepare a report on the three language formula being implemented in the schools.
- Do a comparative study of positive features and weaknesses of different methods and approaches to language learning.
- Keeping in view the needs of the children with special needs prepare two activities for English teachers.
- Prepare 4 activities keeping in view ‘Constructivism in a Language Classroom’.

Suggested Readings

- National Curriculum Framework 2005; NCERT, December 2005.
- National Curriculum Framework 2005, Position Paper, National Focus Group on Teaching of Indian languages, NCERT, 2006.

- The Right of Children to Free and Compulsory Education Act-2009, The Gazette of India, 2009.
- Brumfit. C (1984); Communicative methods in Language Teaching; Cambridge University press: Cambridge.
- Continuous Comprehensive Evaluation – Exemplar Package for Upper Primary Stage in language, National Council of Educational Research and Training, New Delhi 2015
- Cummins, J. and Swain, M. 1986. Bilingualism in Education. London: Longman.
- Krashen, Stephen. 1989. We acquire vocabulary and spelling by reading: Additional evidence for the input hypothesis. Modern Language Journal 73:4. Pp. 440-64.
- Kumar, Krishna, 2011. The Child's Language and the Teacher, a Handbook, New Delhi, National Book trust India,.
- Techniques and Principles in Language Teaching – Diane Larsen – Freeman: Oxford University Press
- S.K.Kochhar (1990).Teaching of Mother Tongue,Sterling ,New Delhi

Odia

Ryburn, W.M. Teaching of Mother Tongue, Falmer Press

Palmer, H.R. Principles of Language teaching

Nayak, B.; Mohanty, J.: Odia Bhasa O Sahitya Bhitibhumi O Shikshyadan Padhati

Pattnaik, D.P. Mother tongue and Destiny

Pattnaik, D.P. Odia Bhasa O Bhasa Bigyan

Mohapatra, B.P. Matrubhasa Odia

Hindi

Diwedy, K.D. (1991). Bhasa Vigyan and Bhasa Shastra, Viswa Vidyalaya Prakashan, Varanasi
National Curriculum Framework-2005, Position Paper on Examination Reforms, N.C.E.R.T, New Delhi

Pandey, R.S (1984). Hindi Shikshyan, Vinod Pustak Mandir, Agra

Pattnaik, D.P (1981). Multi lingualism and Mother Tongue Education, OUP, Delhi

Srivastav, R.N (1992). Bhasa Shikshan, Vani Prakashan, New Delhi

Bengali

Mishra, S. Matrubhasa Sikshyan Prasanga, Prabhu Prakashan, Calcutta

CPS 2: Pedagogy of Language (English) (Part – I)

Total Marks:100 (Mid Term:15+End Term:60+ Practical:25)
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Credits-4

Objectives

The course will enable the student teachers to -

- understand the different roles of language;
- understand the use of language in context such as grammar and vocabulary;
- identify methods, approaches and materials for teaching English at various levels in the Indian context;
- be able to develop activities and tasks for learners including audio-video materials, ICT and Internet;
- understand the process of language assessment;

Unit 1: Language and Linguistic behavior

- Language as a system : symbols and levels (substance, forms and context) of language
- Importance, nature and functions of language

- Linguistic behaviour with reference to language skills – types (receptive Vs. productive; input vs. output) and their independence and interdependence
- Factors affecting language skills in L2
- Linguistic structure and aspects of English language – phonological, morphological, syntactic and semantic.

Unit 2: Acquisition and Learning of Second Language

- Difference between language acquisition and language learning
- Psychology of language acquisition and learning – behaviouristic, cognitive and constructivist views.
- Language acquisition and language learning in L2- meaning and process
- Language context and input rich classroom environment facilitating language acquisition and language learning
- Challenges of teaching – learning of L2 in Indian context.

Unit 3: English as L2 in School Curriculum

- Policies and provisions relating to languages: Article 343-351,350A; NPE-1968, NPE-1986; POA 1992; National Curriculum Framework-2005.
- Importance of English language in India and the world today. Official language, language of judiciary, trade and commerce, press and media, communication, link language (national and international), library language, passport for employment, language of ICT etc.
- Importance and place of English in school curriculum: compulsory subject, medium of instruction and examination etc.
- Objectives of teaching English at elementary and secondary levels with reference to NCF 2005.
- Current challenges of teaching – learning English in schools: multi-lingual context, language background of the learners, syllabus and textbooks, classroom transaction mode and teacher quality.

Unit 4: Developing language skills in English: Listening and Speaking

- Listening: Sub skills and types
- Speaking: Sub skills and forms
- Activities for developing listening and speaking skills: storytelling, dialogues, situational conversations, role plays, simulations, speech, games, contexts etc.
- Materials and resource support: language laboratories, pictures, authentic materials, multi-media resource etc.
- Facilitating integration of listening and speaking skills while using English in real life situations

Unit 5: Developing language skills in English: Reading and Writing

- Reading: Sub skills; kinds – reading aloud and silent reading, extensive and intensive

- Study skills: meaning, strategies for developing study skills – use of thesauruses, dictionary, encyclopedia etc.
- Writing: Mechanics of writing, methods of teaching writing at elementary and secondary levels
- Formal and Informal writing: creative writing(short story, poem), reflective writing (essay, articles), letter, diary, notices, reports, dialogue, speech, advertisement etc.
- Reference skills and Higher order skills in reading and writing.

Practical

Full Mark-25

Each student is required to select any two practicum suggested below

- Prepare a questionnaire, interview ten people and write a report on ‘English Language in India’.
- Prepare activities for listening, speaking for different levels.
- Prepare activities for reading and writing for different levels.
- Prepare a report on the challenges faced by the teachers and the learners in the teaching-learning process.
- Visit 5 schools in the neighbourhood and prepare a report on the three language formula being implemented in the schools.
- Do a comparative study of positive features and weaknesses of different methods and approaches to language learning.
- Keeping in view the needs of the children with special needs prepare two activities for English teachers.
- Prepare 4 activities keeping in view ‘Constructivism in a Language Classroom’.

Suggested Readings

- National Curriculum Framework 2005; NCERT, December 2005.
- National Curriculum Framework 2005; Position Paper, National Focus Group on Teaching of English; NCERT, 2006.
- National Curriculum Framework 2005, Position Paper, National Focus Group on Teaching of Indian languages, NCERT, 2006.
- The Right of Children to Free and Compulsory Education Act-2009, The Gazette of India, 2009.
- Brumfit. C (1984); Communicative methods in Language Teaching; Cambridge University press: Cambridge.
- Chomsky (1964) in Day. E. M (2002): Identity and the young English language learner; Multilingual Matters Limited; London.
- Gardner and Lambert (1972) Attitudes and Motivation in second language learning; Rowley; Newbury house.
- Jeremy Harmer, Longman Handbooks for Language Teachers, The Practice of English Language Teaching, 1998.
- Srijan1, Creative Writing and Translation, National Council of Educational Research and Training, New Delhi 2010.
- Samajh ka Madhyum, National Council of Educational Research and Training, New Delhi 2009

- Source Book on Assessment for Classed I-V, Language English, NCERT, October 2008.
- Learning Indicators till the Elementary Stage, National Council of Educational Research and Training, New Delhi 2015
- Continuous Comprehensive Evaluation – Exemplar Package for Upper Primary Stage in English, National Council of Educational Research and Training, New Delhi 2015
- Agnihotri, R.K., Khanna, A.L. 1994. (eds.), Second Language Acquisition: Socio-cultural and Linguistic Aspects of English in India (RAL1). New Delhi: Sage Publications.
- Beaumont, M. 1996. The Teaching of Reading Skills in Second/Foreign Language. Patras: The Hellenic Open University.
- Cummins, J. and Swain, M. 1986. Bilingualism in Education. London: Longman.
- Ellis, R. 1985. Understanding Second Language Acquisition. Oxford: Oxford University Press.
- Prabhu, N.S. 1987. Second Language Pedagogy. Oxford; New York: Oxford University Press.
- Krashen, Stephen. 1989. We acquire vocabulary and spelling by reading: Additional evidence for the input hypothesis. Modern Language Journal 73:4. Pp. 440-64.
- Kumar, Krishna, 2011. The Child's Language and the Teacher, a Handbook, New Delhi, National Book trust India,.
- Techniques and Principles in Language Teaching – Diane Larsen – Freeman: Oxford University Press
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CPS 2: PEDAGOGY OF MATHEMATICS (Part-I)

Total Marks:100 (Mid Term:15 + End Term:60 + Practical:25)	Credits-4
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Objectives

After completion of this course, the student teacher shall

- Understand the nature, scope, and values of Mathematics and its place in the school curriculum'
- Specify comprehensively the objectives of teaching and learning Mathematics at the secondary and higher secondary levels of school education.
- Develop long term and short term plans along with daily lesson plans for teaching and learning mathematics at the school stage.
- Understand different approaches and methods of teaching and learning mathematics.
- Develop plans along with tools and procedures for conducting continuous and comprehensive assessment of and for students' leaning mathematics.

Unit 1 Concept and Importance of Mathematics Education

- Nature and Scope of Mathematics: Nature of Mathematical propositions, Mathematical proof, structure and logic;
- Meaning and building blocks of mathematics-undefined terms, definitions, axioms, theorems; the nature of mathematical propositions- truth values, truth tables, Open sentences, logically valid conclusions, use of quantifiers, implications - necessary and sufficient conditions, a mathematical statement and its variants—converse, inverse and contrapositive , compound propositions
- Values of Mathematics : Cultural , Disciplinary and Utilitarian values

- Place of Mathematics in School Curriculum, Correlation of Mathematics with other subjects
- Contribution of the Indian Mathematicians, Vedic Mathematics

Unit 2 Objectives of Teaching and Learning Mathematics

- Objectives of teaching Mathematics at Secondary and Higher Secondary Levels: [As recommended in various reports]
- General and Specific/ Learning Objectives of teaching Mathematics w.r.t. the taxonomy of educational objectives (Bloom's Taxonomy with Anderson's revision)
- Objectives of teaching and learning School Mathematics like Algebra, Geometry, Mensuration, Trigonometry etc.

Unit 3 Planning Teaching-Learning of Mathematics

- Content categories in Mathematics: [Facts, Concepts, Illustrations, Generalizations etc.]
- Content Analysis in Mathematics, Concept mapping in Mathematics taking sample contents from Algebra, Geometry, Trigonometry etc.
- Designing of learning experiences in Mathematics
- Yearly plan, Unit plan, Lesson plan;Elaborating specific steps of each type of plan

Unit 4 Approaches/Methods for Teaching and Learning Mathematics

- *Learning by Discovery*: Nature and purpose of learning by discovery; guided discovery strategies in teaching Mathematical concepts, Laboratory Methods
- *Teaching for Understanding Proof*: Proof by induction and deduction; proof by analysis and synthesis,
- *Problem Solving in Mathematics*: Importance of problem solving in Mathematics, Steps of problem solving in Mathematics, Problem Posing, Generating and solving real life problems using Mathematical principles, Situation model for solving word problems.
- *Constructivist approaches*: Self-learning and peer learning strategies, Projects and Collaborative strategies; 5E and ICON Models,

Unit 5 Assessing Learning in Mathematics

- Assessment *of* Mathematics learning: Unit test – Designing blue print, item construction, marking schemes,
- Assessment *for* Mathematics Learning: Assignments, Projects and portfolios in Mathematics, group and collaborative assessment in Mathematics,
- Non-testing methods of assessment *of/for* mathematics Learning: Observation of learners in action, rating of participation in various Mathematics tasks and activities,
- Diagnosis of difficulties in learning Mathematical concepts, Remediation of the difficulties, Enrichment programmes in Mathematics learning –National Mathematics Talent Search, Mathematics Olympiad.
- Planning for continuous assessment of classroom learning in Mathematics.

Transactional Strategies

- Lecture, lecture cum Discussion, Project work, Demonstration through A.V. aids like power point presentations, Action Research, Visit, Group work and Presentations
- Group work for developing different types of plans, especially lesson plans to transact different Mathematical concepts employing different approaches and methods as specified in Unit 4.

- Group and individual work in developing plans and tools for conducting CCA in Mathematics for different classes at the secondary stage of schooling.

Practical

Full Mark-25

Each student teacher is to select *any two* of the following activities and submit the reports/materials developed:

- Collection of the names of Mathematicians and preparation of a report about their contribution to Mathematics.
- Group activity for preparation of concept maps on any topic of school mathematics.
- Development of learning activities on different topics of Mathematics (at least 5 activities on any 2 topics of Algebra, 2 from Geometry and 2 from any other area.
- Preparation of Annual, Monthly and Unit Plans for teaching-learning Mathematics.
- Development of Lesson plans in Mathematics
- Reflective paper on any problem of teaching and learning mathematics in a socio-cultural context.

Suggested Readings

- Beckmann C.E ,Thompson D.R and Rubenstein,R.N.(2010).*Teaching and learning high school mathematics*.New Jersey: John Wiley and Sons Inc.,
- Britton E, Huntley M.A., Jacobs G and Weinberg A.S.(1999). *Connecting mathematics and science to workplace contexts : A Guide to Curriculum materials*, Corwin Press Inc., California
- Chambers P,(2010).*Teaching Mathematics: Developing as a reflective secondary teacher*. New Delhi: SAGE.
- Cowan, Pamela (2006).*Teaching mathematics, A handbook for primary and secondary school teachers*. London: Routledge.
- Davis D.R.(1951). *The teaching of mathematics*.London: Addison Wesley Press,
- Hollands, Roy (1990).*Development of mathematical skills*, Oxford, London: Blackwell Publishers.
- James,Anice(2005). *Teaching of mathematics*.Hyderabad: Neelkamal Publications.
- Katz, V.J. (Ed.)(2007).*The Mathematics of Egypt, Mesopotamia, China, India and Islam :A Sourcebook*. Princeton, NJ: Princeton University Press.
- Kothari, R.G., and Shelat, P.H. (2011).*Mathematical weaknesses among secondary school students*. Germany: VDM Verlag Publishers.
- Kilpatrick J, Hoyles C and Skovsmose,O. (Eds.) (2005). *Meaning in mathematics education*.New York, NY: Springer.
- NCERT (2006).*Position Paper: National Focus Group On Teaching of Mathematics*. New Delhi: National Council of Educational Research and Training.
- NCERT (2012).*Pedagogy of Mathematics: Textbook for Two-Year B. Ed Course*. New Delhi: NCERT..
- Noss R.(19988). The Computer as a cultural influence in mathematical learning. In Bishop A.J. (Ed.),*Mathematics education and culture*, London : Kluwer Academic Publishers.
- Novak,J.D. & Gowin, D.B.(1984). *Learning how to learn*. New York, NY: Cambridge University Press.
- Polya, George (1965). *Mathematical discovery*(Vol.II). London: John Wiley and sons, INC.,
- Schommel, F.J. (1965). *Diagnostic and remedial teaching in arithmetic*.London:Lever and Boyd.
- Shetty, Balkrishna(2013). *What is mathematics?* NewDelhi: National Book Trust.
- Skemp,R.R., (1971), *The Psychology of Learning mathematics*, Penguin Books

William D.(1998).A Framework for Thinking About Research in Mathematics and Science Education.In Malone J.A., Atweh B. and Northfield J.R. (Eds.),*Research and supervision in mathematics and science education*.New Jersey: Lawrence Erlbaum Associates.

CPS 2 - Pedagogy of Biological Science (Part I)

Total Marks:100 (Mid Term:15 + End Term:60 + Practical:25)	Credits-4
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Objectives

The course will enable the student teachers to-

- Developing insight about nature of Biological sciences and facilitate inculcation of scientific attitude among learners
- nurture curiosity among learners about her/his natural surroundings and relationships of every day's experience with concepts of Biological sciences
- appreciate that Biological science is a dynamic and expanding body of knowledge
- formulate appropriate and meaningful inquiry episodes, problem-solving situations and investigatory projects, based on curriculum
- Determining strategies of teaching-learning

Unit 1 Nature and Scope of Biological Science

- Biological Science as a domain of scientific enquiry: Characteristics of scientific enquiry, Nature of enquiry in Biological Science, Distinguishing characteristics of Biological Science from other domains of scientific enquiry
- Scope of Biological Science for understanding the diversity of the living world, origin of life and its evolution, environment, health and well being, sustenance of the ecosystem vis-à-vis values and ethics.
- Linkages of Biological science with other branches of science and other disciplines.

Unit 2 Aims and Objectives of Teaching and Learning Biological Science

- General and specific aims of teaching and learning Biological science in secondary and higher secondary classes.
- Development of knowledge and understanding of Biological facts, principles and its application in conformity with the developmental stages of learners.
- Acquiring skills to understand processes of studying Biology e.g. observation, exploration, experimentation; Generalisation of observations and validation of knowledge.
- Problem solving relating to Biological sciences; Relationship of Biology education with environment and its sustenance.

Unit 3 Curriculum of Biological Science at School Stage

- Place of Biological Science in school curriculum (at elementary, secondary and senior secondary levels)
- Selection and organisation of content in Biology (on the basis of forms of knowledge {viz. declarative, procedural and situational}and themes)
- Analysis of school syllabus, textbooks and other printed materials in Biology (NCERT, State) on the basis of NCF 2005 and position paper on teaching of science.
- Concept mapping in the major areas of Biology: the process (inclusion of ICT facilities) and utility

Unit 4 Approaches and Methods of Learning Biology

- Observation: Types, importance in Bio-Science, process, recording of observation
- Experimentation: Experimentation under controlled conditions within laboratory and beyond laboratory situations; Process and limitations
- Problem solving: Problem identification, formulation of hypotheses, collection of data, testing hypotheses and arriving at solution (with suitable examples from Biological Science).
- Project: Situation analysis, selection of the project, preparation of the project proposal, implementation, evaluation and reporting the project.
- Use of ICT for self- learning and collaborative learning in learning concepts of Biological science.

Unit 5 Learning resources in Biological science

- Learning resources in Biological Science: Preparation, collection, procurement and use of Charts, Graphs, Bulletin Boards, and Models.
- ICT materials like film strips, slides, transparencies, and open education resources.
- Laboratory as learning resource; Preservation of Biological specimens and building Biological museum, Science exhibitions and Science clubs.
- Locality and community as learning resources.

Practical

Full Mark-25

Each student teacher is to select *any two* of the following activities and submit the reports/materials developed:

- Developing two learning resource for Biology (one including using ICT).
- Interviewing the practitioners of Biological Science (University teachers and school teachers) on nature and practices in biological science and preparing a report
- Comparing the Biology text books (elementary and secondary) on the basis of conceptual development, unifying themes and forms of knowledge.
- Analyze NCF 2005, position paper on teaching of science and habitat and learning w.r.t. nature and aims of teaching and learning of Bioscience.

Suggested Readings

- Fraser, B. J. and Tobin, K. G. (Eds.). *International handbook of science teaching (Part 1)*. Dordrecht, The Netherlands: Kluwer Academic.
- Mintzes J., Wandersee, J. and Novak, J. (Eds.) (2000). *Assessing science understanding: A human constructivist view*. San Diego, CA.: Academic Press.
- NCERT (2000). *Position paper of national focus group (NFG) on aims of education*. National Council of Educational Research and Training (NCERT), New Delhi.
- NCERT (2000). *Position paper of national focus group (NFG) on education for peace*. National Council of Educational Research and Training (NCERT), New Delhi.
- NCERT (2000). *Position paper of national focus group (NFG) on examination reforms*. National Council of Educational Research and Training (NCERT), New Delhi.
- NCERT (2000). *Position paper of national focus group (NFG) on gender issues in education*. National Council of Educational Research and Training (NCERT), New Delhi.

- NCERT (2000). *Position paper of national focus group (NFG) on habitat and learning*. National Council of Educational Research and Training (NCERT), New Delhi.
- NCERT (2000). *Position paper of national focus group (NFG) on teaching of science*. National Council of Educational Research and Training (NCERT), New Delhi.
- NCERT (2005). *National curriculum framework for school education*. National Council of Educational Research and Training (NCERT), New Delhi.
- Sutton, C.R. & Hayson, J.H. (1974). *The art of the science teacher*, McGraw Hill Book Company Ltd.
- Vaidya, N. (1999). *Science teaching for 21st Century*. Deep & Deep Publication.
- Journal of Research in Science Teaching (Wiley-Blackwell)
- *Science & Children*. A peer reviewed journal published by National Science Teachers Association (NSTA).
- *The Science Teacher*. A peer reviewed journal published by National Science Teachers Association (NSTA).

CPS 3: Pedagogy of Social Science (Part-I)

Total Marks:100 (Mid Term:15 + End Term:60 + Practical:25)	Credits-4
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Objectives

The course will enable the student- teachers to -

- develop an understanding of the nature of Social Sciences, both of individual discipline and as an integrated/ interdisciplinary area of study;
- identify, prepare, collect different teaching-learning resource materials and use effectively in the classroom;
- examine the prevailing pedagogical practices in classrooms while facilitating learning of social sciences;
- acquire basic knowledge and skills to analyze and transact the Social Sciences curriculum effectively following wide-ranging teaching learning strategies in order to make it enjoyable and relevant for life;
- develop lesson plans by integrating it with life, nature, mathematics, science and technology for effective teaching-learning in social sciences;
- State the concepts of History, Geography, Political sciences and Economics included in the secondary curriculum and make pedagogical analysis of these concepts

Unit-I Status and Issues in Social Science

- Meaning, Nature, Scope and Importance of Social Sciences
- Perspectives of Social Sciences in school curriculum: How social facts and opinion, explanations and arguments; and spatial and temporal contexts are constructed
- Present position of social sciences in school curriculum
- General and subject specific objectives of social sciences at different stages of school education

- Development and organization of subject related content at different stages of school education
- Development of values through social science teaching

Unit-II Learning Resources in Social Sciences

- Primary and Secondary Sources: Data from field, library materials such as textual/reference materials, journals, magazines, newspapers, reports, documents, records and gazettes, dictionaries and encyclopedias
- Teaching-learning resources in Social Sciences: Preparation, collection and use of content specific teaching learning materials-
 - atlas, map, globe, map book
 - timeline, historical map
 - table, diagram, graph
 - chart, picture, photograph, model
 - T. V., radio, CDs, multimedia and internet, satellite imagery and aerial photograph.

Unit-III Teaching-learning Strategies in Social Sciences

- Interactive, critical pedagogy and constructivist strategies in social sciences
- Teaching-learning strategies in social sciences: Narration cum discussion, problem solving, observation, field trip, project work, concept mapping, collaboration, co-operative learning, dramatization, simulation, bal-panchayat, mock parliament, storytelling, computer assisted learning and teaching-learning strategies for children with different abilities
(Meaning and uses of above mentioned teaching-learning strategies in different subject areas)

Unit-IV Lesson Planning and Instruction

- Planning for instruction in social sciences (Planning of different skills, strategies, activities and learning experiences in different social sciences subject areas)
- Development of year plan, unit plan and lesson plan
- Active learning method, Interactive group discussion method and constructivist learning situations
- Correlation of social sciences with life, nature, mathematics, science and technology

Unit-V Pedagogical Analysis of Content

Each of the following contents shall be analyzed in terms of the pedagogical treatment indicated below:

Content	Aspects of Pedagogical Treatment
<u>History</u> <ul style="list-style-type: none"> • The French Revolution • Peasants and Farmers • Clothing: A social history • Nationalism in India • Work, life and leisure 	Pedagogical content analysis of the units with reference to: <ul style="list-style-type: none"> ➤ Identification of concepts and sub concepts ➤ Preparation of concept map ➤ Determination of expected specific

<ul style="list-style-type: none"> • Art and Culture <p><u>Geography</u></p> <ul style="list-style-type: none"> • India- size and location • Drainage • Climate • Natural vegetation and wild life • Population <p><u>Political Science</u></p> <ul style="list-style-type: none"> • Democracy in the contemporary world • Constitutional Design • Electoral politics • Working of institutions • Democratic rights <p><u>Economics</u></p> <ul style="list-style-type: none"> • People as resource • Poverty as a challenge • Food security in India 	<p>learning outcomes</p> <ul style="list-style-type: none"> ➤ Identification of inter-disciplinary of content ➤ Methods/ Approaches/ Strategies of Teaching learning ➤ Teaching learning materials to be used ➤ Expected teacher and students experiences and activities ➤ Assessment strategies (Formative)
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Transaction Modalities:

Lecture-cum-discussion along with interactive group discussion, field trips, group discussions, brain storming and simulation in the form of mock session, Bal Panchayat etc. Development of skills and demonstrations of timelines, charts, models and map by hand on experience be made, use of ICT and Newspaper clippings, Quiz box on current affairs, wall magazines.

Practical

Full Mark-25

Each student teacher is to select *any two* of the following activities and submit the reports/ materials developed:

- Unit test, semester examination, term paper, assignments, seminar presentation
- Organization of Programmes
 - ✓ Organization of Group Discussion
 - ✓ Development of CAL package
 - ✓ Organization of environmental and social awareness programmes
 - ✓ Election Awareness programmes
 - ✓ Exhibition
 - ✓ Preparation of Annual plan, Unit plan and Lesson plan
 - ✓ Pedagogical content analysis report

Suggested Readings

Arora, K.L. (1976). *The Teaching of Geography*. Jullandhar: Prakash Brothers.

Bhaduri, A. (2005). *Development with Dignity: A case for full Employment*, New Delhi: National Book Trust.

- Blaug, M. (1992). *The Methodology of Economics or How Economists Explain*. Cambridge: Cambridge University Press.
- Bloch, M. (1990). *The Historian's Craft*. Manchester: Manchester University Press.
- Burton, W. H. (1972). *Principles of History Teaching*. London: Methuen.
- Burke, P. (1991). *New Perspectives on History Writing*. Oxford: Blackwell.
- Broadman, D. (1985). *New Directions in Geography Education*. London: Fehur Press.
- Carr, E. H. (1962). *What is History?* London: Knopf.
- Carretero, M., and Voss, J. F. (Eds.) (1994). *Cognitive and Instructional Processes in History and the Social Sciences*. Hillsdale: Lawrence Erlbaum Associate.
- Chaudhary, K. P. (1975). *The Effective Teaching of History in India*. New Delhi: NCERT.
- Dasgupta, P. (2007). *Economics: A Very Short Introduction*. Oxford University Press.
- Dhamija, N. (1993). *Multimedia Approaches in Teaching Social Studies*. New Delhi: Human.
- Drake, F. D. & Lynn, R. N. (2005). *Engagement in Teaching History: Theory and Practices for Middle and Secondary Teachers*. Columbus, OH: Pearson.
- George, A. M. and Amman, M. (2009). *Teaching Social Science in Schools: NCERT's New Textbook Initiative*. New Delhi: Sage.
- Ghate, V.D. (1956). *Teaching of History*. Bombay: Oxford University Press.
- Gunnin, D. (1978). *The Teaching of History*. London: Goom Helm Ltd.
- Graves, N.G. (1982). *New Source Books for Geography teaching*. Longman.
- Hall, David (1976). *Geography Teacher*. London: Unwin Education Books.
- Huckle, J. (1983). *Geographical Educational Reflection and Action*. London: Oxford University Press.
- James, T. H., Arthur, J. and Hunt, M. (2001). *Learning to Teach History in the Secondary School: A Companion to School Experience*. London: Routledge Falme.
- Kent, A. (Ed.) (2000). *Reflective Practice in Geography Teaching*. London: Paul Chapman Publishing Ltd.
- Kochhar, S. K. (1970). *Teaching of Political Science*. New Delhi: Sterling Publishers Publishing House.

- Kuhn, T. S. (1970). *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.
- Lewis, B. (1975). *History: Remembered, Recovered, Invented*. New York: Simon and Schuster, Inc.
- Mehlinger, Howard D. (Ed.) (1981). *UNESCO Handbook for the Teaching of the Freedom Struggle in India and Pakistan*. New Delhi: Penguin India.
- Morrey, D. C. (1972). *Basic Geography*. London: Hien Manns Education Books.
- Smith, M. (2002). *Teaching Geography in Secondary Schools : A Reader*. London: Taylor & Francis.
- NCERT.(2006). National Focus Group Position Paper on Teaching Social Sciences. New Delhi: NCERT.
- Root, M. (1993). *Philosophy of Social Sciences*. Oxford: Blackwell.
- Sartori, G. (ED.) (1984). *Social Science Concepts: A Systematic Analysis*. New delhi: Sage Publications.
- Slate, F. (1982). *Learning through Geography*. London: Butler and Tanner Ltd.
- Stanford, M. (1985). *The Nature of Historical Knowledge*. Oxford: Basic Blackwell.
- Trigg, R. (1985). *Understanding Social Science: A Philosophical Introduction to the Social Sciences*. Oxford: Basic Blackwell.
- UNESCO.(1965). *Source Book for Geography Teaching*. London: Longman.
- Verma, O. P. (1984). *Geography Teaching*. New Delhi: Sterling Publication.
- Walford, R. (1981). *Signposts for Geography Teaching*. London: Longman.
- Wilkins, E. J. (1979). *Elements of social Science: A Philosophical Introduction to the Social Sciences*. Oxford: Basic Blackwell.

CPS 3- Pedagogy of Physical Science (Part-I)

Total Marks:100 (Mid Term:15 + End Term:60 + Practical:25)

Credits-4

Objectives

The course will enable the student teachers to -

- gain insight on the meaning and nature of physical science
- understand various aims and objectives of learning physical science
- familiarize with different types of curricular projects in physical science, their purpose and themes

- understand the process of science and role of laboratory in teaching- learning situation
- appreciate and use various approaches of teaching-learning of physical science
- explore and develop different learning resources and materials in learning different units in Physical Science.

Unit 1: Nature and Scope of Physical Science

- Physical Science as a domain of inquiry, as a dynamic and expanding body of knowledge
- Historical Perspectives in Physical Science
- Scope of Physical Science
- Interdisciplinary linkages and social concerns in physical science
- Scientific methods in Physical Science: a critical view

Unit 2: Aims and objectives of Learning Physical Science

- Knowledge and understanding through science, Nurturing process skills of science, developing scientific attitude and scientific temper
- Nurturing curiosity, creativity and aesthetic sense in Physical science
- Imbibing various values related to Science
- Developing problem solving skills in Physical Science

Unit 3: Physical Science Curriculum

- Place of Physical Science in School Curriculum
- Selection and Organization of Content in Physical Science
- National Curriculum Frameworks of NCERT with specific reference to Physical Science Education
- Analysis of school syllabus, textbooks and other printed materials in Physical Science (NCERT, State)
- Analysis of Physical Science curriculum at International Level: PSSC curriculum projects, Nuffield Physics, Nuffield Chemistry; Harvard Physics Project, ChemStudy

Unit 4: Approaches and Strategies in Learning Physical Science

- Selecting appropriate approach and strategy in learning Physical Science based on content, learner, context
- Role of Observation and Experimentation in learning Physical Science
- Approaches and Strategies of learning Physical Science: Collaborative learning, Problem solving, Concept mapping, Conceptual Change Model, Experiential learning, Inquiry approach, Project Method, Analogy strategy
- ICT integrated Physical Science Learning

Unit 5: Preparation and Use of Learning Resources in Physical Science

- Preparation, collection, procurement and use of learning resources in Physical Science such as Charts, Graphs, Bulletin Boards, Models, ICT resources etc
- Laboratory as a learning resource to facilitate induction, deduction, process Skills acquisition, nurturing creativity, Experiences in organizing physical science laboratory
- Role of Science museum, Science exhibitions and Science clubs in facilitating learning Physical Science
- Innovative materials and processes, Community resources in learning Physical Science

Each student teacher should undertake minimum two of the following:

1. Interviewing a few Secondary school Science teachers, University Professors on nature and practice of Science
2. Assignment on Contribution of eminent scientists- Isaac Newton, John Dalton, J.C. Bose, Albert Einstein, Niels Bohr, C.V. Raman, Marie Curie, De Broglie, V. Ramakrishnan, etc.
3. Comparing the Science text books at Secondary stage on the basis of different validities of Science curriculum stipulated in NCF 2005
4. Design a learning situation in Physical Science by selecting an appropriate strategy
5. Design and develop at least two learning resources for physical science(one out of them has to be an ICT based learning resource)

Suggested Reading

1. Fraser, B. J. and Tobin, K. G. (Eds.). *International handbook of science teaching (Part I)*. Dordrecht, The Netherlands: Kluwer Academic.
2. Mintzes J., Wandersee, J. and Novak, J. (Eds.) (2000). *Assessing science understanding: A human constructivist view*. San Diego, CA.: Academic Press.
3. NCERT (2000). *Position paper of national focus group (NFG) on aims of education*. National Council of Educational Research and Training (NCERT), New Delhi.
4. NCERT (2000). *Position paper of national focus group (NFG) on education for peace*. National Council of Educational Research and Training (NCERT), New Delhi.
5. NCERT (2000). *Position paper of national focus group (NFG) on examination reforms*. National Council of Educational Research and Training (NCERT), New Delhi.
6. NCERT (2000). *Position paper of national focus group (NFG) on gender issues in education*. National Council of Educational Research and Training (NCERT), New Delhi.
7. NCERT (2000). *Position paper of national focus group (NFG) on habitat and learning*. National Council of Educational Research and Training (NCERT), New Delhi.
8. NCERT (2000). *Position paper of national focus group (NFG) on teaching of science*. National Council of Educational Research and Training (NCERT), New Delhi.
9. NCERT (2005). *National curriculum framework for school education*. National Council of Educational Research and Training (NCERT), New Delhi.
10. Mohan, R. (2002) , *Innovative Science Teaching for Physical Science Teachers*, Prentice Hall of India Pvt. Ltd., New Delhi
11. Steve Alsop, Keith Hicks (2007). *Teaching Science : A Handbook for Primary and Secondary School Teachers*, Kogan Page, New Delhi.
12. Sutton, C.R. & Hayson, J.H. (1974). *The art of the science teacher*, McGraw Hill Book Company Ltd.
13. Vaidya, N. (1999). *Science teaching for 21st Century*. Deep & Deep Publication.
14. *Journal of Research in Science Teaching* (Wiley-Blackwell)
15. *Science & Children*. A peer reviewed journal published by National Science Teachers Association (NSTA).
16. *The Science Teacher*. A peer reviewed journal published by National Science Teachers Association (NSTA).

CPS 2: Pedagogy of First Language (Odia/Hindi/Bengali) (Part-II)

(Question Paper will be prepared separately for each Language)

Total Marks:100 (Mid Term:15 + End Term:60 + Practical:25)

Credits-4

Objectives

The course will enable the student teachers to -

- understand the different roles of language;
- understand the use of language in context such as grammar and vocabulary;
- identify methods, approaches and materials for teaching English at various levels in the Indian context;
- be able to develop activities and tasks for learners including audio-video materials, ICT and Internet;
- understand the process of language assessment;

Unit 1: Methods and Techniques of Teaching-Learning First Language

- Understanding the meaning of method and techniques and their differences
- Methods: Audio-lingual method, Comprehension-Appreciation, Communicative teaching- learning
- Techniques and Activities: Language games, Group work, Pair work, Collaborative and Co-operative work, Project and Peer interaction
- Implications of methods and techniques for classroom transaction.

Unit 2: Planning Teaching- Learning in First Language

- Prerequisites for planning lessons: Determining the scope of content to be dealt with, specifying learning objectives, choosing methods, approaches and strategies, arranging teaching- learning materials, designing teaching learning activities and designing formative assessment strategies.
- Teaching-learning Prose (detailed and non-detailed): Objectives, transactional strategies following communicative and constructivist approaches(5E and ICON Model)
- Teaching-learning Poetry: Objectives, transactional strategies following communicative and constructivist approaches(5E and ICON Model)
- Teaching-learning Grammar: Functional and Formal Grammar; Objectives & Transactional strategies
- Teaching-learning Composition and Vocabulary: Objectives of teaching learning composition and vocabulary, Teaching-Learning strategies for different forms of composition(Essay, Letter, Noting and Drafting),Teaching –Learning strategies for vocabulary- word formation(affixation, blending, back formation), their uses in different forms and meaning(action, qualities etc.)

Unit 3: Assessing Learning in First Language

- Assessing language skills: strategies –oral & written; peer and group assessment; assessment within and beyond class room.
- Continuous Compressive Assessment (CCA) of learning in First Language– periodicity, assessment tools, reporting and feedback.
- Framing objective - based test items: extended response type, restrictive response type and objective type.

- Constructive approach to assessment: Rubric, Portfolio, Journal writing & Open ended item.

Unit 4: Learning Resources for Teaching-Learning First Language

- Innovative practices: Online language learning resources- access and use of ICT.
- Developing local specific teaching learning materials & ICT based instructional material
- Use of language laboratory for promoting language proficiency.
- Formation of language clubs: organizing various activities for promoting functional competency in First Language.
- Text book analysis: purpose and process.

Unit 5: Place and Manner of Articulation in First Language

- Sounds of First Language (Odia/Hindi/Bengali): Vowels, Diphthongs and Consonants.
- Organs of speech: Their role in articulation.
- Stress: Meaning, pattern, form and principles.
- Intonation: Meaning and types
- Problems of articulation in First Language in Indian context: Nature, causes and remediation.

Practical

Full Mark-25

Each student teacher should undertake minimum two of the following:

- Do a comparative study of one textbook of English from any class (VI to VIII) developed by any two states.
- Identify and prepare different types of teaching aids for children with special needs.
- Analyze the question papers of English language (Previous-3 years) — classes X & XII (any board) in the light of new approach of assessment.
- Develop a question paper for upper primary and secondary stage to assess all the aspects of language learning.
- Select any ten questions from the class VI English textbook which lend scope to the creativity of the learners.
- Devise a strategy to incorporate the suggestions given in the Ist CCE report for the progress of the learner.
 - Prepare an outline for a school magazine.
 - Identify and list Language (English) related errors common among students.

Note: Project work, Students Teacher's Portfolio, Activities, Presentations, Workshops and Educational tours to be carried out during both the years. (Some activities have been given in each unit as examples. Such other activities may be developed as per the need. Every student has to prepare her/his own portfolio and four projects are compulsory for each semester.)

Suggested Readings

- National Curriculum Framework 2005; NCERT, December 2005.
- National Curriculum Framework 2005, Position Paper, National Focus Group on Teaching of Indian languages, NCERT, 2006.
- The Right of Children to Free and Compulsory Education Act-2009, The Gazette of India, 2009.

- Brumfit. C (1984); Communicative methods in Language Teaching; Cambridge University press: Cambridge.
- Continuous Comprehensive Evaluation – Exemplar Package for Upper Primary Stage in language, National Council of Educational Research and Training, New Delhi 2015
- Cummins, J. and Swain, M. 1986. Bilingualism in Education. London: Longman.
- Krashen, Stephen. 1989. We acquire vocabulary and spelling by reading: Additional evidence for the input hypothesis. Modern Language Journal 73:4. Pp. 440-64.
- Kumar, Krishna, 2011. The Child's Language and the Teacher, a Handbook, New Delhi, National Book trust India,.
- Techniques and Principles in Language Teaching – Diane Larsen – Freeman: Oxford University Press
- S.K.Kochhar (1990).Teaching of Mother Tongue,Sterling ,New Delhi

Odia

Ryburn,W.M.Teaching of Mother Tongue,Falmer Press

Palmer, H,R.Principles of Language teaching

Nayak,B;Mohanty,J:Odiya Bhasa O Sahityara Bhitibhumi O Shikshyadan Padhati

Pattnaik,D.P.Mother tongue and Destiny

Pattnaik,D.P. OdiyaBhasa O Bhasa Bigyan

Mohapatra,B.P.Matrubhasa Odiya

Hindi

Diwedy,K.D.(1991).Bhasa Vigyan and Bhasa Shastra,Viswa Vidyalaya Prakashan,Varanasi
National Curriculum Framework-2005, Position Paper on Examination Reforms, N.C.E.R.T, New Delhi

Pandey, R.S (1984).Hindi Shikshyan,Vinod Pustak Mandir,Agra

Pattnaik, D.P (1981).Multi lingualism and Mother Tongue Education, OUP,Delhi

Srivastav, R.N (1992).Bhasa Shikshan, Vani Prakasan,New Delhi

Bengali

Mishra,S.Matrubhasa Sikshyan Prasanga, Prabhu Prakasan,Calcutta

CPS 2: Pedagogy of Language (English) (Part-II)

Total Marks:100 (Mid Term:15 + End Term:60 + Practical:25)	Credits-4
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Objectives

The course will enable the student teachers to -

- understand the different roles of language;
- understand the use of language in context such as grammar and vocabulary;
- identify methods, approaches and materials for teaching English at various levels in the Indian context;
- be able to develop activities and tasks for learners including audio-video materials, ICT and Internet;
- understand the process of language assessment;

Unit 1: Approaches, Methods and Techniques of Teaching-Learning English Language

- Understanding the meaning of approach, method and techniques and their differences
- Approaches: Structural-oral-situational approach, Communicative approach, Silent way, Suggestopedia, Total Physical Response(TPR) with reference to their meaning, focus, principles, techniques, advantages and limitations

- Methods: grammar-translation, Direct method, Audio-lingual method, Bilingual method, Communicative teaching- learning
- Techniques and Activities: Language games, Group work, Pair work, Collaborative and Co-operative work, Project and Peer interaction
- Implications of approaches, methods and techniques for classroom transaction.

Unit 2: Planning Teaching- Learning in English Language

- Prerequisites for planning lessons: Determining the scope of content to be dealt with, specifying learning objectives, choosing methods, approaches and strategies, arranging teaching- learning materials, designing teaching learning activities and designing formative assessment strategies.
- Teaching-learning Prose (detailed and non-detailed): Objectives, transactional strategies following communicative and constructivist approaches(5E and ICON Model)
- Teaching-learning Poetry: Objectives, transactional strategies following communicative and constructivist approaches(5E and ICON Model)
- Teaching-learning Grammar: Functional and Formal Grammar; Objectives & Transactional strategies
- Teaching-learning Composition and Vocabulary: Objectives of teaching learning composition and vocabulary, Teaching-Learning strategies for different forms of composition(Essay, Letter, Noting and Drafting),Teaching –Learning strategies for vocabulary- word formation(affixation, blending, back formation), their uses in different forms and meaning(action, qualities etc.)

Unit 3: Assessing Learning in English

- Assessing language skills: strategies –oral& written; peer and group assessment; assessment within and beyond class room.
- Continuous Compressive Assessment(CCA) of learning in English – periodicity, assessment tools, reporting and feedback.
- Framing objective - based test items: extended response type, restrictive response type and objective type.
- Constructivist approach to assessment : Rubric, Portfolio, Journal writing & Open ended test.

Unit 4: Learning Resources for Teaching-Learning English

- Innovative practices: Online language learning resources- access and use of ICT.
- Developing local specific teaching learning materials& ICT based instructional material
- Use of language laboratory for promoting language proficiency.
- Formation of language clubs: organizing various activities for promoting functional competency in English language.
- Text book analysis: purpose and process.

Unit 5: Place and Manner of Articulation in English

- Sounds of English language: Vowels,Diphthongs and Consonants along with phonetic transcription.
- Organs of speech: Their role in articulation.
- Stress: Meaning, pattern, form and principles.
- Intonation: Meaning and types
- Problems of articulation in English in Indian context: Nature, causes and remediation.

Practical

Full Mark- 25

Each student teacher should undertake minimum two of the following:

- Do a comparative study of one textbook of English from any class (VI to VIII) developed by any two states.
- Identify and prepare different types of teaching aids for children with special needs.
- Analyze the question papers of English language (Previous-3 years) — classes X & XII (any board) in the light of new approach of assessment.
- Develop a question paper for upper primary and secondary stage to assess all the aspects of language learning.
- Select any ten questions from the class VI English textbook which lend scope to the creativity of the learners.
- Devise a strategy to incorporate the suggestions given in the Ist CCE report for the progress of the learner.
 - Prepare an outline for a school magazine.
 - Identify and list Language (English) related errors common among students.

Note: Project work, Students Teacher's Portfolio, Activities, Presentations, Workshops and Educational tours to be carried out during both the years. (Some activities have been given in each unit as examples. Such other activities may be developed as per the need. Every student has to prepare her/his own portfolio and four projects are compulsory for each semester.)

Suggested Readings

- National Curriculum Framework 2005; NCERT, December 2005.
- National Curriculum Framework 2005; Position Paper, National Focus Group on Teaching of English; NCERT, 2006.
- National Curriculum Framework 2005, Position Paper, National Focus Group on Teaching of Indian languages, NCERT, 2006.
- The Right of Children to Free and Compulsory Education Act-2009, The Gazette of India, 2009.
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- Chomsky (1964) in Day. E. M (2002): Identity and the young English language learner; Multilingual Matters Limited; London.
- Gardner and Lambert (1972) Attitudes and Motivation in second language learning; Rowley; Newbury house.
- Jeremy Harmer, Longman Handbooks for Language Teachers, The Practice of English Language Teaching, 1998.
- Srijan1, Creative Writing and Translation, National Council of Educational Research and Training, New Delhi 2010.
- Samajh ka Madhyum, National Council of Educational Research and Training, New Delhi 2009
- Source Book on Assessment for Classed I-V, Language English, NCERT, October 2008.
- Learning Indicators till the Elementary Stage, National Council of Educational Research and Training, New Delhi 2015

- Continuous Comprehensive Evaluation – Exemplar Package for Upper Primary Stage in English, National Council of Educational Research and Training, New Delhi 2015
- Agnihotri, R.K., Khanna, A.L. 1994. (eds.), Second Language Acquisition: Socio-cultural and Linguistic Aspects of English in India (RAL1). New Delhi: Sage Publications.
- Beaumont, M. 1996. The Teaching of Reading Skills in Second/Foreign Language. Patras: The Hellenic Open University.
- Cummins, J. and Swain, M. 1986. Bilingualism in Education. London: Longman.
- Ellis, R. 1985. Understanding Second Language Acquisition. Oxford: Oxford University Press.
- Prabhu, N.S. 1987. Second Language Pedagogy. Oxford; New York: Oxford University Press.
- Krashen, Stephen. 1989. We acquire vocabulary and spelling by reading: Additional evidence for the input hypothesis. Modern Language Journal 73:4. Pp. 440-64.
- Kumar, Krishna, 2011. The Child's Language and the Teacher, a Handbook, New Delhi, National Book trust India.

CPS 2: Pedagogy of Mathematics (Part-II)

Total Marks:100 (Mid Term:15 + End Term:60 + Practical:25)	Credits-4
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Objectives

After completion of this course, the student teacher shall

- Understand and adopt ways in enhancing quality of Mathematics learning.
- Develop competency in the use of learner friendly information and communication technologies for widening scope and enhancing quality of Mathematics learning.
- Acquire expertise in development, adoption and use of different types of teaching learning material for effective Mathematics learning and teaching.
- Develop awareness of innovations in the teaching-learning processes of Mathematics and ways to adopt those in the classroom practices.
- Understand the various ways of continuing professional development as Mathematics.

Unit 1 Enhancing Quality of Mathematics Learning

- Exploring the learner: Identifying students' strengths and weaknesses in Mathematics learning; Remediation of weaknesses in Mathematics,
- Activities for enhancing motivation in Mathematics learning: Participation in Mathematics competitions (like Mathematics Olympiads. National Talent Search) quizzes, debates and exhibitions, Collection of mathematical riddles, puzzles, life sketches of great mathematicians,
- Encouraging Creativity in Mathematics: Developing innovative materials and games in mathematics, Collaborative peer activities, Mathematics club activities, Peer Learning Groups for brainstorming and developing alternative ways of solving problems and framing mathematical problems and activities

Unit 2 Use of ICT in Teaching and Learning Mathematics

- Concept of ICT
- Need of Technological, Pedagogical Content and Knowledge (TPACK) in Mathematics

- Use of Computer and other ICT equipments
- Using open education resources (OERs) in Mathematics (like *Geogebra, C-map*)

Unit 3 Teaching Learning Materials of Mathematics

- Mathematics Textbooks: Characteristics and functions of a good Mathematics textbook,
- Evaluation of Mathematics Text books: Physical aspects, Concept load, Presentation styles- Diagrams, Graphs, Boxes, Anecdotes, Interesting , Clarity and precision, Activities, Practice and enrichment problems
- Use of various Teaching-Learning Material in Mathematics - Charts, models, overhead projector, films with their specific use and limitations
- Innovative Materials in Mathematics learning: Using community resources for mathematics learning, pooling of learning resources in school complex/block/district level.

Unit 4 Innovations in teaching of Mathematics

- Teaching of Mathematics in the socio-cultural context
- Recreation in Mathematics (Mathematics Club & Activities for Mathematical creativity & Vedic Mathematics)
- Mathematics Laboratory: Need, Materials in the laboratory, Setting the Laboratory, Functions of the Math. Laboratory
- Developing methodology for teaching children with dyscalculia: Symptoms, Types, Treatment and Strategies of teaching

Unit 5 Professional Development of Mathematics Teachers

- Types of continuing professional development(CPD) of Mathematics teachers:
- Courses and in-service programmes for mathematics teachers;
- Role of mathematics teachers association;
- Journals and other resource materials in mathematics education; Using ICT and internet for professional development
- Professional growth—participation in Conferences/seminars/workshops; Participation in professional learning communities (PLCs) within and outside the school.

Transactional Strategies

- Lecture cum Discussion, audio-visual aids charts, models, power point presentations,
- Group work and its presentation on different themes be made.
- Critical analysis of the school text book and syllabus be made.
- Action research may be undertaken on innovative practices
- Visits to schools in different socio-cultural contexts may be made.

Practical

Full Mark- 25

Each student teacher is to select *any two* of the following activities and submit the reports/materials developed:

- Preparation of a report of observation of children doing everyday Maths, playing folk games;or community numeracy practices.
- Case study of slow learners or child with dyscalculia
- Action Research on selected classroom problems in teaching and learning Mathematics.

- Development and trying out of innovative teaching-learning strategy for teaching of specific Mathematical concepts.
- Analysis of Mathematics text book.
- Use of Computer in Teaching of Mathematical concepts. (PowerPoint presentation)
- Use of Mathematics activities for recreation.
- Plan for development and use of Mathematics laboratory.
- Preparation of report after observing a 'Mathmela' or Mathematics exhibition in a school or a locality.
- Development of innovative teaching-learning materials and activities in Mathematics

Suggested Readings

- Anice, J. (2008). *Methods of Teaching Mathematics*. New Delhi: Neelkamal Publications.
- Butler, C.H., Wren, F.L. and Banks, J.H. (1971). *The teaching of Secondary Mathematics*. New York: McGraw Hill.
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- Paul Chambers (2008). *Teaching mathematics: developing as a reflective secondary teacher*. New Delhi: Sage Publication.
- Rao, N.M. (2007). *A manual of mathematics laboratory*. New Delhi: Neelkamal Publications.
- Reeve, W.D. (1954). *Mathematics for the secondary school*. New York: Holt, Rinehart and Winston, Inc.
- Servais, W., and Varga, T. (ed.) (1971). *Teaching school mathematics. A UNESCO Source Book*. UNESCO, Penguin books.

Web Resources

- <https://www.youtube.com/watch?v=hbDkSaSnbVM> (Unit I)
- <https://www.youtube.com/watch?v=IO19-MTwThI> (Unit I)
- <https://www.youtube.com/watch?v=MrIdc-Hs-is> (Unit I)
- <https://www.youtube.com/watch?v=lhwAMhZQ6kU> (Unit I)
- <http://mathigon.org/resources/value-of-mathematics.pdf> (Unit I)
- <http://mathedu.hbcse.tifr.res.in> (Unit 3)
- http://www.ncert.nic.in/departments/nie/dee/publication/pdf/CCE_Math.pdf (Unit V)
- http://www.ncert.nic.in/departments/nie/niew/school_kits/kit_manuals.html
- <http://nrich.maths.org>
- <http://www.slideshare.net/MiraculeDanielGavor/ict-tools-in-mathematics-instruction>
- <http://www.arvindguptatoys.com/math-magic.php>
- <http://karnatakaeducation.org.in/KOER/en/index.php/Portal:Mathematics>
- <http://www.mathcelebration.com/index.html>
- <http://map.mathshell.org>
- <http://www.cimt.plymouth.ac.uk/projects/mep/default.htm>
- <http://nrich.maths.org/students>
- <http://mathbits.com>
- <http://www.math-play.com>
- <http://www.geogebra.org>
- <http://classroom-aid.com/educational-resources/mathematics>
- <http://etc.usf.edu/math>
- <http://mathworld.wolfram.com>
- <https://www.merlot.org/merlot/materials.htm?category=2513>
- <http://www.ck12.org>
- <https://www.khanacademy.org>
- <http://www.learner.org/resources/browse.html?d=5>
- https://blossoms.mit.edu/resources/math_resources
- Matthew J. Koehler, Punya Mishra , Mete Akcaoglu & Joshua M. Rosenberg (2013), The Technological Pedagogical Content Knowledge Framework for Teachers and Teacher Educators,
[http://cemca.org.in/ckfinder/userfiles/files/ICT%20Integrated%20Teacher%20Education%20\(Chapter%201\).pdf](http://cemca.org.in/ckfinder/userfiles/files/ICT%20Integrated%20Teacher%20Education%20(Chapter%201).pdf)
- Integrating Open Educational Resources Lesson Plan Integration Model Designed for Pre-Service Elementary Educators Course: Mathematics Methods,
https://currikicdn.s3-us-west-2.amazonaws.com/resource_files/54d2dd15bb67b.pdf
- Teaching of Mathematics, NCERT
http://www.ncert.nic.in/departments/nie/dse/activities/advisory_board/PDF/teaching_maths.pdf

CPS 2: Pedagogy of Biological Science (Part II)

Total Marks:100 (Mid Term:15 + End Term:60 + Practical:25)

Credits-4

Objectives

The course will enable the student teachers to-

- Develop understanding about linkage among different concepts and themes in Biological sciences and also with real world/ life
- Explore different ways to create learning situations for different concepts of Biological sciences for learners of different abilities
- Effectively use different activities and laboratory experiments for facilitating learning of Biological sciences
- develop appropriate assessment tools for the evaluation of learning of different concepts of Biological sciences
- Examine different issues in Biological science and well as in pedagogical processes.

Unit 1: Planning the process of teaching and learning in Biological Science

- Identification of concepts and unifying themes related to teaching-learning of Biology; Designing year and unit plan along with appropriate selection of learning resources
- Planning for transaction of concepts as well as to create the big picture by making connections: across concepts/ themes; between scientific advances and the real world and outside the class.
- Designing lesson plans based on different approaches (Behaviorist and Constructivist-5E and ICON) by considering students' pace, learning styles and learning needs; Steps involved in developing lesson plans.

Unit 2 Learning assessment in Biological Science

- Learning indicators in Biological sciences and assessment of these learning indicators in the form of learning evidences/ outcome in classroom and laboratory
- Development of assessment framework on the basis of CCE: Tools and techniques for learning assessment in Biology like construction of classroom tests and unit test.
- Alternative strategies for assessment like assignments; reports and records (laboratory record, reports of field visits and excursion, Project work report); Portfolios and Rubrics; Preparation of learners' profile.
- Recording and reporting of learning evidences/outcome: Marks and grades; Assessment as reflecting process to facilitate further learning.

Unit 3 Pedagogical treatments in Biology

- Using different pedagogical approaches (Behaviourist and Constructivist) and strategies (Problem solving, experimenting, project based, cognitive conflict) along with identification of major concepts, themes and criteria for assessment to treat major concepts in school Biology content:
 - Cell and its organization
 - Plant and animal kingdom
 - Environment and its protection
 - Principles of evolution
 - Principles of Genetics and heredity

Unit 4 Issues and challenges in Biological Science

- Changing trends in Biological science;
- Role of Biotechnology in society
- Democratization of science learning
- Critical pedagogy (Critical theory) as basis to analyze progress in Biological science as well as pedagogy of Biology (from the perspective of economic development and politics of knowledge)

Unit 5 Continuing Professional development of Biology teacher

- Professional development programmes for teachers: In-service teacher training, Seminar, Conferences, participation in professional learning communities.
- Field visits of teachers to botanical garden, National parks and Collaboration with different schools, institutions of higher education and research in the field of Biology
- Exploration of ICT based online platforms for sharing the ideas, methods, strategies and teaching learning resources.
- Reflective practices and its role in professional development

Practical

Full Mark- 25

Each student teacher should undertake minimum two of the following:

- Design a year plan considering the content and time.
- Designing lesson plan for a particular concept in Biology keeping in mind the expected operational level of child.
- Construction of tools (including alternative tools) for assessment.
- A case study on pedagogy of Biology from critical point of view.

Suggested Reading

Fraser, B. J. and Tobin, K. G. (Eds.). *International handbook of science teaching (Part 1)*.
Dordrecht, The Netherlands: Kluwer Academic.

Mintzes J., Wandersee, J. and Novak, J. (Eds.) (2000). *Assessing science understanding: A human constructivist view*. San Diego, CA.: Academic Press.

NCERT (2000). *Position paper of national focus group (NFG) on aims of education*. National Council of Educational Research and Training (NCERT), New Delhi.

NCERT (2000). *Position paper of national focus group (NFG) on education for peace*. National Council of Educational Research and Training (NCERT), New Delhi.

NCERT (2000). *Position paper of national focus group (NFG) on examination reforms*. National Council of Educational Research and Training (NCERT), New Delhi.

NCERT (2000). *Position paper of national focus group (NFG) on gender issues in education*. National Council of Educational Research and Training (NCERT), New Delhi.

NCERT (2000). *Position paper of national focus group (NFG) on habitat and learning*. National Council of Educational Research and Training (NCERT), New Delhi.

NCERT (2000). *Position paper of national focus group (NFG) on teaching of science*. National Council of Educational Research and Training (NCERT), New Delhi.

- NCERT (2005). *National curriculum framework for school education*. National Council of Educational Research and Training (NCERT), New Delhi.
- Sutton, C.R. & Hayson, J.H. (1974). *The art of the science teacher*, McGraw Hill Book Company Ltd.
- Vaidya, N. (1999). *Science teaching for 21st Century*. Deep & Deep Publication.
- Journal of Research in Science Teaching (Wiley-Blackwell)
- Science & Children*. A peer reviewed journal published by National Science Teachers Association (NSTA).
- The Science Teacher*. A peer reviewed journal published by National Science Teachers Association (NSTA).

CSP 3: Pedagogy of Social Science (Part-II)

Total Marks:100 (Mid Term:15 + End Term:60 + Practical:25)

Credits-4

Objectives

The course will enable the student- teachers to:

- develop skills and pedagogical competencies to formulate specific learning outcomes for different contents of History, Geography, Political sciences and Economics;
- acquire different characteristics to become a professionally competent social science teacher
- construct appropriate tools and techniques for assessment of the students learning outcomes in social sciences
- critically analyze text book and syllabus of social science subjects at different stages of school education
- develop skills to organize and conduct various activities related to social science areas

Unit-I Human Relationships, Identities and Interactions

- Issues of social change and social stratification in India: Caste, class, religion and gender
- Human-environment interaction: Location, place, region, movements and distribution of resources
- Society and political processes: Organs and functions of government, constitutional vision, electoral procedure and social movements
- Developmental issues: Resources, production, distribution, demand-supply and market mechanisms

Unit-II Professional Development of Social Science Teacher

- Characteristics of social science teachers, skills and competencies
- Professional development of social science teachers: Orientation programmes and training (Seminars/conferences/symposium/workshops/panel discussion/exhibition and simulation activities like-nukad, role-play and games)

Unit-III Assessment in Social Sciences

- Importance of assessment in social sciences
- Continuous comprehensive assessment (CCE) in social sciences

- Quantitative and qualitative tools and techniques in social sciences (checklist, anecdotal records, observation, sociometry, rating-scale, rubrics and portfolio)
- Construction of tests: questions for testing cognitive and co-cognitive areas of learning
- Importance of diagnostic and remedial activities in social sciences

Unit-IV Social Science Text Book and Club

- Characteristics of good text book in social sciences
- Significance, formation and activities of social science club
- Analysis of social science text books in the light of concepts, pedagogical processes, resources, child perspective, national and state interests (social sciences text books of different school boards may be taken up for discussion and analysis)

Unit-V Practicum in Social Sciences

Practicum Activities	Suggestive Areas
<ul style="list-style-type: none"> • Project • Case study • Survey • Field notes • Reflective diary • Action research • ICT integrated teaching-learning packages 	<ul style="list-style-type: none"> • Visit to historical sites/monuments/national archives/state archives/museum • Visit to village/town/industrial sites/hydro/power point stations/mining/tourism places/agricultural/production sites • Unemployment/socio-economic status of family/child labour/raw material/labour/finance and marketing • Visit to Vidhan sabha/municipal council/panchayati raj institutions(PRIs) and village

Transaction Modalities:

Lecture cum Discussion with sharing of experiences of students in class. Narration cum discussion on qualities of an effective teacher should be made through socio metric techniques. Organization of opinion forum. A comparative enquiry based on different socio-economic contexts of schools could be made. Students should engage with sample, illustrative tools, use of ICT to construct tests. Critical analysis of a text book be made and discussed in class with reference to NCF 2005. Formation of social science clubs, Heritage Walks. Conduct and preparation of projects on various themes /contemporary social issues may be given to students in small groups. Action research to be conducted, case studies from different contexts to be presented in class.

Practical

Full Mark- 25

Each student teacher should undertake minimum two of the following:

- Unit test, semester examination
- seminar presentation on themes reflecting innovations on social science issues
- Submission of project, survey, action research and case study reports on suggested areas of social sciences

- Text book and syllabus analysis reports
- Preparation of test items and testing tools
- Preparation of portfolio and rubrics

Suggested Readings

- Arora, K.L. (1976). *The Teaching of Geography*. Jullandhar: Prakash Brothers.
- Bhaduri, A. (2005). *Development with Dignity: A case for full Employment*, New Delhi: National Book Trust.
- Blaug, M. (1992). *The Methodology of Economics or How Economist Explain*. Cambridge: Cambridge University Press.
- Bloch, M. (1990). *The Historian's Craft*. Manchester: Manchester University Press.
- Burton, W. H. (1972). *Principles of History Teaching*. London: Methuen.
- Burke, P. (1991). *New Perspectives on History Writing*. Oxford: Blackwell.
- Broadman, D. (1985). *New Directions in Geography Education*. London: Fehur Press.
- Carr, E. H. (1962). *What is History?* London: Knopf.
- Carretero, M., and Voss, J. F. (Eds.) (1994). *Cognitive and Instructional Processes in History and the Social Sciences*. Hillsdale: Lawrence Erlbaum Associate.
- Chaudhary, K. P. (1975). *The Effective Teaching of History in India*. New Delhi: NCERT.
- Dasgupta, P. (2007). *Economics: Avery Short Introduction*. Oxford University Press.
- Dhamija, N. (1993). *Multimedia Approaches in Teaching Social Studies*. New Delhi: Human.
- Drake, F. D. & Lynn, R. N. (2005). *Engagement in Teaching History: Theory and Practices for Middle and Secondary Teachers*. Columbus, OH: Pearson.
- George, A. M. and Amman, M. (2009). *Teaching Social Science in Schools: NCERT's New Textbook Initiative*. New Delhi: Sage.
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- Gunnin, D. (1978). *The Teaching of History*. London: Goom Helm Ltd.
- Graves, N.G. (1982). *New Source Books for Geography teaching*. Longman.
- Hall, David (1976). *Geography Teacher*. London: Unwin Education Books.
- Huckle, J. (1983). *Geographical Educational Reflection and Action*. London: Oxford University Press.
- James, T. H., Arthur, J. and Hunt, M. (2001). *Learning to Teach History in the Secondary School: A Companion to School Experience*. London: Routledge Falme.
- Kent, A. (Ed.) (2000). *Reflective Practice in Geography Teaching*. London: Paul Chapman Publishing Ltd.
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- Kuhn, T. S. (1970). *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.
- Lewis, B. (1975). *History: Remembered, Recovered, Invented*. New York: Simon and Schuster, Inc.
- Mehlinger, Howard D. (Ed.) (1981). *UNESCO Handbook for the Teaching of the Freedom Struggle in India and Pakistan*. New Delhi: Penguin India.
- Morrey, D. C. (1972). *Basic Geography*. London: Hien Manns Education Books.
- Smith, M. (2002). *Teaching Geography in Secondary Schools : A Reader*. London: Taylor & Francis.

- NCERT.(2006). National Focus Group Position Paper on Teaching Social Sciences. New Delhi: NCERT.
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- Sartori, G. (ED.) (1984). *Social Science Concepts: A Systematic Analysis*. New delhi: Sage Publications.
- Slate, F. (1982). *Learning through Geography*. London: Butler and Tanner Ltd.
- Stanford, M. (1985). *The Nature of Historical Knowledge*. Oxford: Basic Blackwell.
- Trigg, R. (1985). *Understanding Social Science: A Philosophical Introduction to the Social Sciences*. Oxford: Basic Blackwell.
- UNESCO.(1965). *Source Book for Geography Teaching*. London: Longman.
- Verma, O. P. (1984). *Geography Teaching*. New Delhi: Sterling Publication.
- Walford, R. (1981). *Signposts for Geography Teaching*. London: Longman.
- Wilkins, E. J. (1979). *Elements of social Science: A Philosophical Introduction to the Social Sciences*. Oxford: Basic Blackwell.

CPS 3: Pedagogy of Physical Science (Part-II)

Total Marks:100 (Mid Term:15 + End Term:60 + Practical:25)	Credits-4
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Objective:

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

- Plan learning designs based on problem situations, inquiry and projects to facilitate learning of Physical Sciences.
- Realise his/her role as a facilitator in enhancing Physical Science learning in the real classroom situation.
- Explore different ways of creating learning situations considering learning needs and context of the learner
- Familiarize with various tools and techniques of assessing physical science learning
- Critically analyse various issues in Physical Science
- Become aware of various professional development programs in Physical Science.

Unit 1: Planning of facilitating Learning in Physical Science

- Need for planning teaching-learning experiences in Physical Science
- Identification of Concepts and unifying themes related to Physical Science, inter-relation among various concepts in Physical Science
- Designing of Year plan and Unit Plan in Physical Science and its significance in understanding comprehensive nature of knowledge
- Writing learning objectives for different content areas in Physical Science
- Planning lessons based on behaviourist and constructivist approaches—5E model, ICON model considering learners with different pace, learning styles and learning needs
- Planning laboratory work and ICT application in learning Physical Science

Unit 2: Learning Assessment in Physical Science

- Planning assessment framework in Physical Science
- Learning Indicators in Physical Science
- Tools and techniques of assessment in Physical Science—assessment of written and oral work, project work, laboratory work, field trips, journal writing, concept map and V mapping

- Assessment of learners with special needs
- Recording and reporting of learning evidences – Measurement of students’ achievement in Physical Science – marks and grading, Measurement of science process skills and aptitude of learners, Portfolio – its role in evaluating students’ performance

Unit 3: Pedagogical Processes in Physical Science

- Using different pedagogical approaches (Behaviourist and Constructivist) and strategies (Problem Solving, experimenting, project based, cognitive conflict) along with identification of major concepts, themes and criteria for assessment to treat major concepts in school Physical Science content -Motion, Force, Heat, Electricity, Magnetism, Acids and Bases, Physical and chemical changes, Matter

Unit 4: Issues and Concerns in Physical Science

- Social and ethical issues related to Physical Science
- Role of Language in Physical Science
- Gender and Physical Science
- Inclusiveness in Physical Science learning
- Physical Science and Sustainable development

Unit 5: Professional Development of Physical Science Teachers

- Need for professional development of Physical Science Teachers
- Various opportunities for in-service professional development–interaction with peer teachers, membership of professional organization such as National Physics Teacher Association, sharing through conferences, seminars and Journals
- Collaboration with Research Institutes such as IISc, IPA, HBCSE, Regional Science Centre
- Participation in Professional Learning Community and in Online forum for Science Teachers
- Role of reflective practices in professional development

Practical

Full Mark- 25

Each student teacher should undertake minimum two of the following:

1. Preparation of year plan and unit plan in Physical Science
2. Preparation of 2 lesson plans in Physical Science- one based on behaviourist and another on constructivist approach
3. Preparation of an assessment framework in any one unit in Physical Science
4. Debate(choose any one topic from unit 4)
5. Visit to any of the professional organization and prepare a report on the in-service professional development programmes that they undertake for Science teachers

Suggested Readings

1. NCERT (2000). *Position paper of national focus group (NFG) on teaching of science*. National Council of Educational Research and Training (NCERT), New Delhi.
2. Steve Alsop, Keith Hicks. (2007). *Teaching Science: A Handbook for Primary and Secondary School Teachers*, Kogan Page, New Delhi.

3. Judith Bennett (2003) Teaching and Learning Science : A guide to recent research and its applications, Continuum, London.
4. Robin Millar (1984) Doing Science : Images of Science in Science Education, The Falmer Press, London.
5. NCERT Textbook in Physics for IX and X Students.
6. State Textbook in Physics for IX and X students.
7. Nathan S Washton (1967). Teaching Science Creatively, Saunders Company, London.
7. Novak D J and D Bob Gowin (1984) Learning how to learn, Press Syndicate of the University of Cambridge, Ohio.
8. Carin A and B R Sund (1964), Teaching Science through Discovery, Charles E. Merrill Books Inc., Columbus Ohio.
9. Ralph Martin, Colleen Sexton, Kay Wagner, Jack Gerlovich (2000) Science for All Children : Methods for Constructing Understanding, Allyn and Bacon, London.
10. School Science Review, The Association for School Education, College Lane, Hatfield, Hertfordshire, AL 109 AA, UK.
11. Physics Education, Institute of Physics Publishing, Dirac House, Temple Block, Bristol BS1 6BE, UK.
12. Physics Teacher, American Association of Physics Teachers, Department of Physics and Astronomy, University of Maryland, College Park, MO 20742.

EPC 1: Learning to Function as a Teacher

Total Marks:50 (Practicum)	Credit-2
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Objective

After completion of this course, the student teacher shall

- Develop an ability to engage students in various activities as per the emerging demands in the classroom.
- Develop self-confidence and skill to engage learners and meet their diverse needs.

Transaction Mode:

- a. Presentation in workshop mode
- b. Discussion & reflection session / collective feedback
- c. Reporting
- d. Viewing video clippings followed by discussion and reflection

The following process based skills essential for secondary schools to be taken up.

- critical thinking and reflection,
- class room management
- managing diversity
- contextualization
- observation
- communication
- organisation of group activity/project
- assessing learner and giving feedback
- process of facilitating learning
- core teaching competencies:
 - a. *Introducing the lesson*
 - b. *Asking different types of questions during the class*
 - c. *Giving explaining about the content*

- d. *Encouragement and appreciation students during learning*
- e. *Variation in action and activities in the classroom process*
- f. *Using Blackboard /white board/ smart board*
- g. *Using instructional resources and ICT*

Guidelines for internal assessment –The above stated ten processes based competencies will be practiced by the students which will be observed and evaluated during the classes. The best five performances would be taken into consideration for the internal assessment out of 50.

EPC 2: Understanding ICT and Its Application

Total Marks:50 (Mid Term:10 + End Term:40)	Credit-2
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Objectives

After completion of this course, the student teacher shall

- Appreciate the historical development of various educational media.
- Demonstrate understanding of the main components of the computer hardware in use.
- Use various digital technologies (hardware and software) for creating resources and enhance learning experiences for all types of learners (including differently abled).
- use various ICTs for project based/problem based constructivist learning environment
- explain the role of ICT in authentic and alternative assessment
- understand the social, economic, and ethical issues associated with the use of ICT

Unit 1 - Introduction to Information and Communication Technology

- Use of Technology in Education: In Retrospect.
- Information and Communication Technology: Meaning, nature and advantages
- Hardware and Software Fundamentals
 - ✓ Computer hardware fundamentals (anatomy, input devices, output devices, storage devices, display devices), types of computers and Computer Network
 - ✓ Use of digital camera, recorder, scanner, printer, interactive white board, visualizer, and multimedia projector for creating and using multimedia resources
- Software Fundamentals
 - ✓ Software – Meaning and types; System software and Application software
 Introduction to office applications (Word processing, Spreadsheet Presentations, Databases, Drawing tools, Multimedia tools, File formats and conversion, utility tools)

Unit 2: ICT and Pedagogy

- Subject specific ICT tools for creating and facilitating learning
- Subject specific online resources and their use
- Designing technology integrated learning experiences
- ICT for Pedagogical Innovations
 - ✓ Project/problem based learning (PBL): Role of ICT in developing technology integrated PBL unit
 - ✓ Web Quest and virtual field trips: Concept, process, and use in the classroom
 - ✓ Mobile learning and related applications

- ✓ Open Educational Resources – Meaning and importance, various OER initiatives
- Approaches to integrating ICT in teaching and learning: Technological Pedagogical Content Knowledge (TPCK)
- Assistive technology for children with special needs: Tools and processes; Universal Design for Learning (UDL)

Unit 3: ICT for Assessment and Management

- ICT and Assessment
 - ✓ Electronic assessment portfolio – Concept and types; e-portfolio tools
 - ✓ Creating and use of electronic rubrics for assessment
 - ✓ Online and offline assessment tools – Rubrics, survey tools, puzzle makers, test generators, reflective journal, question bank
 - ✓ ICT applications for CCE
 - ✓ Learning analytics and feedback
- ICT and Management
 - ✓ ICT initiatives and standards
 - ✓ ICT for personal management: e-mail, task, events, diary, networking
 - ✓ ICT for educational administration: Scheduling, record keeping, student information, electronic grade book, connecting with parents and community
 - ✓ Computer security: Privacy, hacking, virus, spy ware, misuse, abuse, antivirus, firewall, and safe practices.

Suggested Readings

- Ahmad, J., Ahmad, M.S. and Khan, A. (2012), *Computer Applications in Education*, Neelkamal Publication, Hyderabad, PP-288, ISBN: 978-81-8316-293-7.
- Bharihok, D. (2000). *Fundamentals of Information Technology*. Pentagon Press: New Delhi.
- CEMCA (2014). *Technology Tools for Teachers*, Commonwealth Educational Media Center for Asia, 13/14 SarvaPriyaVihar, New Delhi.
- David, M. (2009). *Project Based Learning- Using Information Technology- Second Edition*. Viva Books: New Delhi.
- James, K.L. (2003). *The Internet: A User's Guide*. Prentice Hall of India Pvt. Ltd: New Delhi.
- LaxmanMohanty, NeeharikaVora (2008). *ICT strategies for schools- a guide for school administrators*. Sage Publications: New Delhi.
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- MHRD-GOI (2012) National Mission on Education through ICTs (NME-ICT), Department of Higher Education, MHRD, Govt. of India, New Delhi
- Mishra, S. (Ed.) (2009). *STRIDE Hand Book 08: E-learning*. IGNOU: New Delhi. Available at http://webserver.ignou.ac.in/institute/STRIDE_Hb8_webCD/STRIDE_Hb8_index.html
- Mohit K (2003). *Design and implementation of Web-enabled Teaching Tools*: IRM Press, UK.

- NCERT (2013). Information and Communication Technology for School System: Curricula for ICTs in Education (students and Teachers), Version-1.2, CIET-NCERT, NCERT, New Delhi (www.ictcurriculum.gov.in).
- NCERT (2013). National Repository of Open Educational resources (NROET), CIET-NCERT, NCERT, New Delhi (nroer.gov.in).
- Roblyer M.D., Aaron H. Doering (2012). Integrating Educational Technology into Teaching (6th Edition).
- Pradeep Kumar (2011). Web Resources in Pedagogy. Apple Academics: Oakville.
- Semenoy, Alexy (2005). Information and Communication Technologies in Schools. A handbook for Teachers. UNESCO.
- UNESCO. (2002). UNESCO Report: Information and Communication Technologies in Teacher Education, A Planning Guide, Division of Higher Education, UNESCO.
- UNESCO. (2002). UNESCO Report: Information and Communication Technology in Teacher Education, A Curriculum for Schools and Programme of Teacher Development. Division of Higher Education, UNESCO.

EPC 3: Health, Yoga and Physical Education

Total Marks:50 (Mid Term:10 + End Term:40)	Credit-2
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Objectives

After completion of this course, the student teacher shall

- to understand the concept of holistic health, its various dimensions and determinants for all round development.
- to know the health status, identify health problems and be informed for taking remedial measures;
- to be aware about rules of safety in hazardous situation (illness, accident and injury) and equip them with first aid measures about common sickness and injuries;
- to encourage to form right habits about exercise, games and sports, sleep, rest and relaxation;
- to understand various policies and programmes related to health, physical education and yoga.
- To understand the process of assessment of health and physical fitness.

Unit 1: Health Education

- Concept of health, importance, dimensions and determinants of health; Health needs of children and adolescents, including differently-abled children
- Impact of Physical activities, games, sports and yoga on different body systems, Management of stress and strain and life skills.
- Food and nutrition, food habits, timing of food, nutrients and their functions, diversity of Indian food, seasonal foods and festivals, economics of food, malnutrition, including obesity,
- Dietary requirements of human body with special emphasis on the nutritional needs according to age, sex, occupation, pregnancy and also with reference to sports-personship; Need for diet planning, Balanced diet.

Unit 2: Physical Education

- Physical fitness, strength, endurance and flexibility, its components, sports skills, indigenous and self-defense activities
- Development of physical fitness; Postures; Importance of relaxation; Fitness tests; Resources and services for games and sports and Health. Common Sports Injuries and First aid.
- Games and sports — athletics (general physical fitness exercises), games (lead-up games, relays and major games) rhythmic activities, gymnastics and their impact on health
- Fundamentals skills of games and sports; Sports for recreation and competition; Rules and regulations of sports; sports ethics; sports awards and scholarships, sports-person ship.
- Drawing of Fixtures for conducting Tournament, knock-out, league, Layout of Track & Field areas.
- Commonly-abused substance and drugs and ways of prevention and inhabitation.

Unit 3: Yoga

- Concept, need and importance of yoga, History of yoga
- Yogasanas- Standing, Sitting, Prone and Supine positions (5 Asanas each)
- Surya Namaskar and Pranayams, Meditation
- Precautionary measures for yogic practices.
- Role of yogasanas for prevention of common diseases

Suggested Readings

Health Education

- K. Park, “Preventive and Social Medicine” BanarsidasBhanoth, Publishers Nagpur Road, Jabalpur, India.
- NCERT (2013). Training and resource materials on Adolescence Education, NCERT, New Delhi (This material is also available on www.aeparc.org.www.ncert.nic.in)
- NCERT (2014). Population Education: Source Material, NCERT, New Delhi
- Stephen J. Williams, Paul R. Torrens, “Introduction to Health Service, Delmore Publications

Physical Education

- Deborah A. Wuest, Charles A. Bucher, “Foundation of Physical Education Exercise Science and Sports” Tata McGraw Hill, Pvt. Ltd., New Delhi
- John E. Mixton, Ann E. Jewett, “An Introduction to Physical Education, W.B. Saunders Company, London
- John Cheffers, Tom Evaul, “Introduction to Physical Education-Concept of Human Movement Prentice Hall Engle Wood” New Jersey
- Bette J., Logdson& Others, “Physical Education for Children”, Lea &Febiger, Philadelphia
- Roberts S. Weinberg & Daniel Gould, “Foundation of Sports and Exercise Psychology”, Human Kinetics Publication
- A.K. Uppal, Lawrance Gray Kumar, “Biomechanics in Physical Education and Exercise Science” Friends Publication, New Delhi
- Jack H. Wilmore, David L. Costill, W. Larry Kenney, “Physiology of Sports and Exercise” Human Kinetics Publication

Yoga

- Swami SatyanandSaraswati, “Asana Pranayama Mudra Bandh”, Bihar School of Yoga, Munger

- M.M. Ghore, “Anatomy and Physiology of Yogic Practices” Lonavala Yoga Institute, Lonavala
- Gharote M.L. (2004). Applied Yoga, Kaivalyadhama S.M.Y.M. Samiti, Lonavala
- “Yogasana” Morarji Desai National Institute of Yoga, New Delhi
- “Pranayama” Morarji Desai National Institute of Yoga, New Delhi
- MDNIY (2010). “Yoga Teachers Manual for School Teachers, New Delhi
- NCERT (2015). Yoga: A Healthy Way of Living Upper Primary Stage, New Delhi
- NCERT (2015). Yoga: A Healthy Way of Living Secondary Stage, New Delhi

EF-1: School Exposure

Grade	Credit-2
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Duration: 2 weeks

Objectives

After completion of this course, the student teacher shall

- To experience school activities in totality
- To develop awareness about the functioning school and its relation with neighborhood.
- To develop an insight into the role of a teacher and learner

Activities

A group of student teachers need to visit schools. A brief orientation programme can be arranged before sending the student teachers to schools to acquaint them with the objectives and modalities of such programme. After completion of the field exposure programme, student teachers shall be required to develop a detailed report and share the same in a seminar/meeting at the Institute.

Evaluation: The activity will be assessed and graded as follows:

Grading on Five Point Scale

- A – Excellent
- B – Very Good
- C - Good
- D - Average
- E - Poor

The grading will take into account the preparation of report, presentation and reflection of student teachers

SEMESTER-VIII

EPC 4: Understanding the Self

Total Marks: 50 (Internal)	Credit-2
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Objectives

After completion of this course, the student teacher shall

- Gain an understanding of the central concepts in defining ‘self’ and ‘identity’
- Reflect critically on factors that shape the understanding of ‘self’
- Build an understanding about themselves , i.e. the development of self as a person as well as a teacher
- Reflect on one’s experiences, aspirations and efforts towards becoming a humane individual and teacher
- Develop effective communication skills including the ability to listen, observe etc.
- Build resilience to deal with conflicts at different levels and learn to draw upon collective strengths to live in harmony with one’s surroundings
- Appreciate the critical role of teachers in promoting ‘self’ and students’ well-being.

Theme 1: Understanding of Self

- Reflections and critical analysis of one’s own ‘self ‘and identity
- Identifying factors in the development of ‘self’ and in shaping identity
- Building an understanding about philosophical and cultural perspectives of ‘Self’ and
- Developing an understanding of one’s own philosophical and cultural perspectives as a teacher

Theme 2: Development of Professional Self and Ethics

- Understanding and sharing one’s identity and socio-cultural, historical and political influences in shaping the professional identity
- Exploring, reflecting and sharing one’s own aspirations, dreams, concerns and effort in becoming a teacher
- Reflections on experiences, efforts, aspirations, dreams etc. of peers
- Building an understanding about values and professional ethics as a teacher to live in harmony with one’s self and surroundings
- Understanding the role of teacher as facilitator and partner in well-being among learners

Theme 3: Role of Teacher in Developing Understanding of Self among Learners

- Creating a situation opportunity/context in reflecting on one’s own childhood and adolescent years of growing-up for learners
- Facilitating awareness about identity among learners through reflective practices
- Developing skills of effective listening, accepting, positive regard, understanding body languages among the learners.

Mode of Transaction:

The course will be transacted in workshop mode through individual and group experiential activities such as

- Personal narratives and storytelling, group interactions, film reviews to help explore one's self and identity. Student-teachers to engage in varied forms of self-expression such as poetry, painting and creative movements, humor, aesthetic representations, etc.
- Sharing of case studies by student-teachers, critical analysis of biographies and presentations, group readings and sessions on stories children raised in different circumstances and how this affects self and their personal and social identity formation.
- Reflective discussions on films/documentaries where the protagonist undergoes trials and finally discovers her/his potential
- Development of reflective journals/diaries by the student teachers.
- Introduction of Yoga, meditation as one of the important component to enhance student-teachers understanding of body and mind.

Guidelines for assessment

Sl.No	Activities	Marks
1	Exploring the 'known' and 'unknown' self in relation to what one and others know about one self and what others do not know (group activity)	5
2	Reflecting, recording and sharing of critical moments in one's life (individual activity and presentations)	10
3	Reflections on critical moments in the lives of peers (small group activity)	5
4	Exploring one's strengths, weaknesses, opportunities and threats (SWOT analysis)	10
5	Group activities involving community participation	20
Total		50

Suggested Readings

- Bhatt, H. (n.d.). *The diary of a school teacher*. An Azim Premji University Publication. Retrieved from www.arvindguptatoys.com/arvindgupta/diary-school-teacher-eng.pdf
- Bhattacharjee, D.K (ed). (2010). *Psychology and Education – Indian Perspectives*, Section III 'Self and Growth Process' pg. 255-402, NCERT Pub
- Dalal, A.S. (ed) (2001). *A Greater Psychology – An Introduction to the Psychological thoughts of Sri Aurobindo*. Puducherry, Sri Aurobindo Ashram Pub.
- Delors, J. (1996). *Learning the Treasure within – Twenty First Century Education*. UNESCO Education Commission Report.
- Goel, D.R. (2005). *Quality Concerns in Education*. Centre for advanced study in Education- M. S. University of Baroda
- Gulati, S., and Pant, D. (2012). *Education for Values in Schools – A Framework*. NCERT Pub
- Krishnamurti, J. (1998) *On Self- knowledge*. Chennai, Krishnamurti Foundation India.
- Krishnamurti, J. (2000). *Education and Significance of Life*. Chennai, Krishnamurti Foundation India.
- Mukunda, K.V. (2009). *What did you ask at school today? A handbook of child learning*, Harper Collins
- Olson, D.R, and Bruner, J.S. (1996). *Folk Psychology and folk pedagogy*. In D.R. Olson & N. Torrence (Eds.), *The Handbook of Education and Human Development* (pp. 9 -27), Blackwell

Pant, D. and Gulati, S. (2010). *Ways To Peace – A Resource Book for Teachers*. NCERT Pub

Venkateshamurthy, C. G., and Rao, A.V.G (2005). *Life Skills Education Training Package*. R.I.E., Mysore

EPC 5: Arts in Education

Total Marks:50 (Internal)	Credit-2
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Objectives:

After completion of this course, the student teacher shall

- express ideas and emotions about different aspects of life through different art forms
- Appreciate and distinguish different art forms.
- Develop aesthetic sensibility among learners about the good and beautiful 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 aware about the rich cultural heritage of their own locality/state/region as well as that of the nation.
- get acquainted with the life and work of artists and their contribution to teaching and learning.

Theme 1: Forms of art

- music, dance, theater and visual arts
- appreciate different art forms
- integration of art forms in classroom process
- analyse text books for integration of different art forms

Theme 2: Expression through art forms

- Expressing ideas about different aspects of life
- Expressing various emotions
- Enhancing communication and presentation skills, developing imagination, creativity and aesthetic sensibility among the student teachers
- Utilizing different art expressions in teaching learning situation

Theme 3: Cultural heritage of India

- Exposure to the cultural heritage of
 - Locality
 - state/region
 - nation.
- Reflection and incorporation of the rich cultural heritage during the celebrations of festivals, functions and special days
- 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
- Acquaintance with the life and work of artists and their contribution to teaching and learning.

Guidelines for Assessment:

Sl no	Activity	Marks
1	Presentation on any one art form	10
2	Text book analysis to find out integration of art forms	5
3	Prepare a lesson incorporating one or more artistic expression	15
4	Documentation of any one heritage art form	10
5	Write up on life and work of any one artist (local or national)	10
Total		50

Suggested Readings

- Position Paper- National Focus Group on Arts, Music, Dance and Theater NCERT, 2006, New Delhi
- Position Paper- National Focus Group on Heritage Crafts, NCERT, New Delhi, 2006
- NCF 2005
- NROER- National Repository of Open Educational Resource, Department of School Education & Literacy, MHRD.

The following NCERT books may also be referred to

- Living Craft tradition of India (Textbook in Heritage Crafts) NCERT
- Exploring the Craft Tradition of India NCERT
- BharatiyaHastakalakiParamparayen, NCERT
- An Introduction to Indian Art, NCERT
- BharatiyaHastkalaParamparakiKhoj, NCERT
- Craft Tradition of India (Textbook in Heritage craft for class XII)
- Art Education- Teachers' Handbook for Class I, II, III, IV, V, VI, VII, VIII, IX
- Source Book on Assessment for Classes I- V, Art Education

EPC 6: ICT Practicum

Total Mark: 50 (Internal)

Credit-2

Objectives

Theme1: Providing an exposure on hardware/software and its uses in Teaching

Learning process

- Hands on experience in setting up a desktop/PC and working with various input devices, output devices, storage devices, and display devices
- Practicing word processing using Indian language software
- Using word processor, spread sheet, and presentation software to produce various teaching learning resources.

Theme2: Awareness and exposure to ICT Tools

- Locating internet resources – navigating, searching, selecting, saving and evaluating (use standard internet evaluation criteria)
- Creating screen cast video of a lessons, Embedding Audio , Video With Photos Embedding Animations and Transitions Uploading You Tube Video (Using Movie Maker Software)

- Shooting, editing, and sharing of videos segment on any educational topic
- Creating a podcast using audacity and sharing it on podcasting site

Theme3:- Developing an ICT based lesson Plan

- Creating technology based lesson plan
- Developing lesson plan by using 5E Model and ICON Model and ICT
- Creating e-content

Theme 4:- Use of ICT in Assessment and management

- Creating e-portfolio
- Creating data base of group of students
- Creating and using rubrics for assessment (online, offline)
- Connecting with parents and community through ICT
- Any other activity may also be taken up as per the experience and expertise of the resource person.

Guidelines for Assessment

Sl no	Activity	Marks
1	Preparing a document using word / PPT	10
2	Create a documentary file	10
3	Design a project using e portfolio	10
4	Develop an e-content and share it using blog/Wikipedia/word press/YouTube	10
5	Create a data base for student management system	10
Total		50

Suggested Readings

- Ahmad, J., Ahmad, M.S. and Khan, A. (2012), *Computer Applications in Education*, Neelkamal Publication, Hyderabad, PP-288, ISBN: 978-81-8316-293-7.
- Bharikhok, D. (2000). *Fundamentals of Information Technology*. Pentagon Press: New Delhi.
- CEMCA (2014). *Technology Tools for Teachers*, Commonwealth Educational Media Center for Asia, 13/14 SarvaPriyaVihar, New Delhi.
- David, M. (2009). *Project Based Learning- Using Information Technology-* Second Edition. Viva Books: New Delhi.
- James, K.L. (2003). *The Internet: A User's Guide*. Prentice Hall of India Pvt. Ltd: New Delhi.
- LaxmanMohanty, NeeharikaVora (2008). *ICT strategies for schools- a guide for school administrators*. Sage Publications: New Delhi.
- Manoj Kumar Dash (2010). *ICT in teacher development*, Neel Kamal Publications: New Delhi

EPC 7: Library Resources

Total Mark: 50 (Internal)	Credit-2
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Objectives

After completion of this course, the student teacher shall

- Familiar with the library Facilities, Organization, Resources and Services.
- Learn how to find Books, Periodical Articles and Other Resources.
- Learn how to find and evaluate information based on ones' interest.
- Use of library more effectively by minimizing the time of searching different Resources in Library.
- To get an exposure to school library

Content

Theme 1: Library as a resource of learning

- Layout of a library
- Library Procedures- Cataloguing, classification, Locating a book/material in the library.
- Library as a resource of learning
- Maintain a list of books and journals that has been read during the earlier two semester
- Make a dossier with relevant websites and notes on their learning potential
- Visiting a Library

Theme 2: Library Resource Management

- Types of Books and other Material used by different readers.
- Dimensions of setting up of a school library
- 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.
- Role of teacher/librarian in promoting reading habits among learners
- Write a reviews of at least one book and one article
- Interview resource persons/member of local community and/or organize a 'learning encounter' with any of them for their fellow students

Theme 3: Observation and performance of activities in a school library

- 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.
- A small survey to collect information about different kinds of libraries in the city may be conducted.
- A project may be taken to discern the present status of libraries in schools.
In addition, each student-teacher should also undertake any one of the following:
- Discern learning opportunities in the local environment, and create an occasion and/or a strategy for some significant learning for fellow students

References:

- Blacknell Forest Library & Information Service (2015). Resource Management Policy and Standards.
- CBSE School Library Guidelines (2009).
<http://librarynext.files.wordpress.com/2009/05/library199.pdf>
- Chaudhary, S.K. (2011). Library Preservation and Conservation. New Delhi: APH
- Gorman, G.E. & Shep, Sydney j., ed. (2006). Preservation Management for Libraries, Archives and Museums. London: Facet Publishing.
- Harrison, Colin & Beenham, Rosemary ((1985). The Basics in Librarianship. 2nd rev. ed. London: Clive Bingley.
- Jain, M.K. (2008). Teaching Learning Library and Information Services: a Manual. 2nd rev. ed. Delhi: Shipra.
- Krishan Kumar (1989). Library Administration and Management. 3rd ed. New Delhi: Vikas Publishing
- Krishan Kumar (1996). Library Organization. Rev. ed. New Delhi: Vikas Publishing.
- Ranganathan, S. R. (2008). Library Manual: for School, College and Public Libraries. New Delhi: EssEss Publications.
- Sengupta, Benoyendra (1981). Indian Reference and Information Sources. Calcutta: The World Press.
- Umamathy, K.S. (1978). Information sources: an international selective guide. New Delhi: Vikas Publishing.

Guidelines for Assessment

SINo.	Activity	Marks
1	Practical work on classification, locating and arrangement of books	10
2	Review of any one book and one article	15
3	Observation report on a school library	15
4	Making a plan for setting up of a school library	10
Total		50

EPC 8: Reading and Reflecting on Texts

Total Mark: 50 (Internal)	Credit-2
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Objectives

After completion of this course, the student teacher shall

- Develop proficiency in reading and responding to written texts.
- Examine and appreciate authentic literary and non-literary texts.
- develop study and reference skills
- Reflect on the ideas expressed in the texts.
- Plan, draft, edit and present a piece of writing related to their understanding of a text.

Unit 1: Stories and excerpts from narratives (any one or more)

- *How I Taught My Grandmother to Read and other Stories*- Sudha Murthy-Puffin. Books, 2004
- *Tales from the Indian Jungle*-Kenneth Anderson- Rupa& Co. 2001
- *Tales of the Open Road*- Ruskin Bond- Penguin UK-2006
- *Encounters with Animals*- Gerald Durrel-Penguin-2012

Excerpts from the following:

- *The Diary of a Young Girl: Anne Frank*, Random House.
- *The man who planted trees*- Jean Giono, Chelsea Green Pub.
- *'I have a Dream'* Texts of speech delivered on Aug 28, 1963- Martin Luther King (Text and YouTube version available.)

Unit 2: Essays /Excerpts from literary texts (any one or two)

- *The Elephant, the Tiger and the Cellphone*-ShashiTharoor, Penguin, India.
- *Nine Lives- In Search of the Sacred in Modern India*- William Dalrymple, Bloomsbury, London.
- *Running in the Family*- Michael Ontage, Bloomsbury, London.
- *Interpreter of Maladies* – (Title Story)–JhumpaLahari, Mariner Books.

Unit 3: Essays /Excerpts from Educational and Scientific Texts (Choose any three)

- *Medium of education* (The selected works of Gandhi- Vol.6), Navajeevan Publication.
- *A Brief History of Time*- Stephen Hawking, Random House.
- *Fall of a Sparrow*- Salim Ali, Oxford.
- *Education and world peace. In Social responsibility, (Krishnamurti, J.) Krishnamurti Foundation.*
- *National curriculum framework – 2005. NCERT*
- *Civilization and progress. In Crisis in civilization and other essays. (Tagore, R.) Rupa& Co.*
- *RTE Act, 2009*

Guidelines for Assessment

Sl no	Activity	Marks
1	Narrating any one story selected from Unit 1 in own words; writing the summary of the story, extrapolation of the story; discussion on the ideas expressed	10
2	Converting any one situation from the text specified under Unit 1 into a dialogue followed by role-playing	10
3	Interpretation of the text, reflecting on the key ideas exposed in the texts specified under Unit 2 and preparing a write up based on any one text	10
4	Reflection on the ideas expressed in the selected essays/ excerpts specified under Unit 3	10
5	Seminars and open forum for discussion based on themes related to selected texts from Unit 3	10
Total		50

EF-2: School Exposure (Multicultural Placement)

Grade	Credit-2
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Objectives

After completion of this course, the student teacher shall

- The pupil teachers would be exposed to different type of schools such as urban, rural, tribal, schools for challenged learners with a view to
 - Develop understanding about the school activities with different cultures/set up
 - Develop the process of engaging students in classrooms through observing the practice adopted by regular teachers
 - Develop understanding to manage a substitute(arrangement class)
 - Experience of conducting classroom activities
 - Conduct case studies

The institute will identify suitable number of cooperating urban schools, rural schools, and tribal schools, and students will be placed by rotation in all the three types of schools. All activities listed below are to be completed within two weeks during the placement of student teachers in three types of schools in rotation. Each pupil teacher performs the following activities under the guidance of supervisor/mentor and prepares reports on all the activities. The report will be assessed as the guideline given below.

Guidelines for Assessment

Sl.No	Activities	Marks
1	Observing 10 lessons 5 in each method delivered by regular teachers with the help of observation schedule	10
2	Observation of day-to-day school activities and preparation of comprehensive report highlighting working of the library, co-scholastic activities, games and sports, functioning of laboratory, school morning assembly and preparation of reflective report	05
3	Availing at least 5 substitute teaching opportunities in actual school situation	10
4	Developing 4 lessons (two lessons in each method subject) and use of learning materials/teaching aids and one unit plan.	(10+5)=15
5	Undertaking a case study of student/ institute and reporting	10
Total		50

EF-3: School Internship

Internal: 250 (200 + 50*)	Credit-10
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** Marks will be given by the cooperative/mentor teachers/HM/Principal of mentoring schools*

Objectives

After completion of this course, the student teacher shall

- To develop the ability to define clearly the general and specific objectives of teaching the subject, the different units, and the individual lessons.
- To develop the ability to select units and subject matter suitable to the class, and resource material and aids - readymade, improvised - suitable to the units.

- To develop the ability to plan the lesson effectively with an understanding of the principles of learning and organize the subject matter suitably indicating the appropriate techniques and aids to be used at each stage and for each purpose.
- To develop the ability to prepare the pupils adequately for each lesson and develop it in ways most suitable to the occasion and most appropriate for realizing the objectives set forth.
- To develop the ability to motivate the pupils sufficiently and sustain their interest as well as maintain discipline in the class.
- To develop the ability to adjust the programme to the varying needs interests and abilities of the pupils, while making for maximum group progress.
- To develop the ability, to use different methods and techniques of teaching and use them effectively in appropriate situations.
- To develop the ability to plan the details of the curriculum with the pupils (teacher pupil planning) and work out resource units, spelling out the experiences, activities, aids, techniques, etc.
- To develop the ability to develop and apply different techniques and tools for the continuous evaluation of the achievement and progress of the pupils, taken as individuals and as a group, especially the ability to construct and use oral, written and performance tests.
- To develop the ability to judge the effectiveness of teaching and the success of each programme in relation to the goals, from the participation and performances of the pupils.
- To develop the ability to diagnose the strengths and weaknesses and the achievements and failures of the individual pupils, in relation to the objectives and decide, plan and organize the reinforcement of remedial assistance needed by each.
- To develop the ability to correlate his subject and its teaching with other subjects taught in the class, with other activities in the school with life, so that, the education of the child becomes an integrated programme.
- To develop the ability to plan, organize and guide enrichment activities and field programmes related to the subjects taught.
- To develop the ability to plan, organize and guide various co-curricular activities, which are considered as important constituents of a rich education for the citizens of tomorrow.
- To develop the ability to see the school as organized center of the community and relate the provisions and practices in the school to the needs and conditions of the pupils and of the community.

Duration 16 Weeks

16 weeks internship shall be carried out during the third semester. The student teachers are required to be placed in the schools selected by the Institute. The number of student teachers to be allotted to a particular school shall be 10-12 or as decided by the institute. The institute may appoint a senior faculty as coordinator of the entire programme, who, *inter alia*, would identify and allot schools to student teachers, and maintain liaison with the schools. In addition, a separate coordinator may be appointed for each state knowing the regional language of the respective state.

Nomination of Mentor Teachers

The internship coordinator/s while visiting the schools for identification purposes, would seek information about different teachers of the schools, who may be nominated as mentor teachers. The role of the mentor teacher would be to share his/her professional experiences,

present model lessons, assess student teachers' performance, and provide on-site guidance and support during internship.

Identification of Supervisors

The faculty members of the institute would be allotted to different schools as supervisors during the internship period. Along with the names of the faculty members, the subject/subjects to be observed and the schools for observation may be written. A chart depicting the names of the internship schools, names of student teachers, name (s) of faculty members (supervisors), and the dates of visit shall be prepared and notified by the coordinator every week. The supervisor shall coordinate the activities of the mentor teacher of the school; and assess student teachers' performance, and provide on-site guidance and support during internship.

The institute will:

1. Provide Internship handbook to the internship schools
2. Organize orientation cum -consultation meetings with the school principals and mentors teachers
3. Develop supplementary material for additional activities in collaboration with mentor teachers
4. Hold fortnightly review meetings with mentor teachers
5. Hold follow -up meetings with student -teachers at regular intervals in the TEI.
6. Monitor implementation of internship including observation of practice teaching.
7. Assess, in collaboration with school mentor -teachers, the internship performance of student -teachers.

Student teachers shall undertake the following activities during the internship period:

I. Planning and Facilitating Teaching Learning

- Unit/ Lesson planning
- Classroom teaching in two school subjects
- Lesson observation of mentor teacher and peers
- Developing and Using Teaching Learning Resources
- Integrating ICT in regular teaching

II. Assessment, Remediation and Action Research

- Preparation of CCE activities including unit tests
- Preparation of diagnostic tests and identifying learning difficulties
- Planning and executing remediation
- Conducting action research

III. Understanding School Context

- Prepare Profile of the school (Type of School/infrastructure, facilities teachers, students and community information)
- Analyze Learner Performance(One class)

IV. Participation in School Activities

- Organize all types of curricular activities, e.g. sports and games, debate, song, art, music, painting

V. Community and school Activities

- Survey of households in local community
- Interaction with SDMC/SMC/PTA/MTA members
- Interacting with parents

The 16 week school internship will be organized in three phases: (i) pre internship; (ii) internship (iii) and post internship.

Phase-1: Pre internship

The pre internship will be of one week duration during which necessary orientation programmes for Mentor Teachers and Heads of the selected schools will be organized in the institute. The following activities shall be organized during pre-internship phase:

- Orientation of the mentor teachers and Heads of the schools regarding the objectives and different aspects of internship in teaching
- Orientation about the roles and responsibilities of different personal involved in internship in teaching specially roles of mentor teachers/HM/Principal
- Discussion on process involved in unit planning/ lesson planning
- Discussion on process of developing achievement test and its administration and uses
- Discussion on records to be maintained by student teachers during internship.
- Orientation about process of giving constructive feedback to student teachers
- Demonstration of model lessons by the experts/supervising teacher followed by discussion, preferably in DMS
- Demonstration and criticism lessons of at least 2 lessons, by the student teachers, of their peers in each subject followed by discussion

Phase-2: Internship

Every student teacher shall undergo an internship of 15 weeks in an identified school. During this period the student teacher shall be attached to a school and he/she shall undertake such duties as are assigned to him / her by the Head Master/Principal of the school in all school related activities. During this period, he/she shall teach at least 120 lessons in the school, taking equal number of lessons from each of his/her pedagogy subjects, under the supervision of the mentor teacher and respective teacher educator (s) from RIE. The first week will be utilized for developing rapport with school (Students, teachers, Principal/Head Master/other staffs, etc.) and familiarity with school system.

Practicum during Internship

Student teachers shall perform the following during internship:

- Prepare 120 lesson plans in two school subjects and deliver at least 60 lessons in each subject
- Integrate student assessment activities with teaching learning process
- Development and use learning resources related to pedagogy courses
- Observation of peer teaching: 10 in each school subject
- Observation of teachers' lessons: 5 in each school subject
- Develop, administer, score and analyze at least 2 unit tests: one in each school subject
- Conducting action research based on real classroom problems
- Prepare and maintain student portfolios
- Preparation of the school time table
- Organize and participate in: morning assembly, literary and cultural activities , Club activities, Exhibitions, Excursions and field trip, Mock parliament, Quiz, Games and sports and PTA/SMC meetings
- Maintenance of school library and laboratory
- Maintaining a reflective diary of his/her school experience

Records to be submitted

- Lesson plans/ Unit plans
- School profile: infrastructure; Social Science Laboratory - physical facilities, Equipment, School Library- facilities
- Record of Participation/organization of school activities

- Record of observation of peer teaching
- Record of observation of class of regular teacher/mentor teacher
- Report of action research
- Assessment record
- Reflective Journal

Phase – 3: Post Internship

The post internship is required to be organized in the Institute for one week just after completion of internship in teaching programme. The following activities shall be organized in the Post Internship phase:

- Preparation of brief report by each student teacher on his/her internship experiences.
- Presentation of the reflections of internship by student teachers, which will be conducted in smaller group/subject wise and assessed by the supervisors.
- Some of the video clippings of lesson delivering developed earlier during internship will be shown for critical reflection
- Inviting feedback from cooperating schools/mentor teachers/HM/Principal/institute faculty.

Internal Assessment

The assessment of the performance of student teachers shall be based on the feedback received from all associated with the programme, including mentor teachers/HM/Principal, peers, supervisors of the institute; and various records submitted by the student teachers.

The weightage to different components of internship shall be assigned as under:

Component	Minimum Number	Maximum Marks	Internal- by the faculty of the Institute	External by the Mentor School Teachers and Head Teachers
Demonstration and criticism classes by student teachers in group (16-17 students in group)	2 criticism lesson (1 in each pedagogy course)	10 (5+5)	10	--
Observation record of classes taught by mentor teachers/regular teachers	10 (05 in PC-1 and 05 in PC-2)	10(5+5)	10	--
Unit Plan	2 in each subject/pedagogy	10 (5+5)	10	--
Lesson Plan (PC-1)	50 Lesson Plan 10 Lesson Notes	10	10	--
Lesson Plan(PC-2)	50 Lesson Plan 10 Lesson Notes	10	10	--
Classroom observation record of peers	20 Lesson (10 in PC-1 and 10 in PC-2)	10 (5+5)	10	--
Records of participation/organization in curricular activities	1	10	10	--
Records of school profile	1	10	10	--
Action Research	1	20	20	--
Student Assessment Records	2 (one for each subject)	20 (10+10)	20	

Teaching Learning Resources	All	10 (5+5)	--	10
Reflective Diary	1	10	10	--
Assessment by mentor teacher(s)/HM/Principal /Inst supervisors based on overall performance in school including teaching and participation in other school activities	60 lesson in PC-1 and 60 lesson in PC-2	80	40= (PC-1(20)+ PC-2(20))	40= (PC-1(20)+ PC-2(20))
Overall Assessment of Trainee by Head Teacher/Principal		10	--	10
Presentation of reflections on internship experiences (Post Internship)		20	20	--
Total for III Semester		250	200	50

EF-4: Working with Community

Grade	Credit-2
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Objectives:

After completion of this course, the student teacher shall

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

Student teachers shall be provided exposure to community life for at least one week during which they shall live with the community members and act in terms of preparing school development plan, sharing cultural practices, holding cultural programmes and gaining community's perception about and aspirations from formal education system. The members of SMC/VMC should be associated in these activities.

The institution will form a committee, including faculty members, student teachers and community/SMC members for the smooth organization of this programme. The student teachers shall prepare a detailed report of the programme, individually and/or in group during the activity and submit at the end of the programme.

Transaction Mode

Discussion, Rally, Competitions (Debates) Posters and Banner displays Working in community setting, Mass movement, *Nukkad* Performances, Local action group formation, surveys, interviews, action research, case study, dissemination of success stories etc.

Suggested Activities

- micro planning of a school community relationship
- study of the nature of community participation in a secondary school

- survey of community resources for participation in scholastic and co-scholastic activities of a school educational survey of a slum area
 - report on social customs, traditions and superstition
 - survey of a village/town with at least 20 households in order to study the socio-economic and educational status of the villager
 - study of wastage and stagnation in local primary schools
- study of an area in regard to consumption of electricity and water and suggest remedial measures
- tree plantation programme in the campus/nearby village
 - survey of parent's attitude towards education of their children
 - organization of non-formal education centers for dropouts and out of school children in a locality
 - organization of campus beautification programme
 - identification of problems of parents with respect to education of their children
 - AIDS awareness, electoral awareness, road safety, human rights, women rights etc literacy programmes in the community
 - cleanliness drives in the community and awareness about its needs
 - developing healthy food habits among the community members
 - training of community in some simple vocations for self-employment
 - action research on local problems in consultation with the community
 - micro – planning exercises for assessing the educational status of the community
 - establishment of Peace-committees and making them functional effectively
 - critical review of implementation of RTE Act(2009) .
 - assistance and working with local community in actual relief work whenever needed
 - training of community in First Aid
 - exploiting the community resources and finding means and ways of using them for school

Many more such exercises could be conceived. Any such activities could be planned at the institutional level and executed. It is suggested that these activities may be conducted individually or collectively under the supervision of teacher educators.

The performance of student teachers in all activities will be graded in a five point scale and at the end of the programme overall grade will be awarded.

A-Excellent, B-Very Good, C-Good, D-Average, E-Poor