

COURSES OF STUDIES
BACHELOR OF EDUCATION
(SELF-FINANCING MODE)



Buxi Jagabandhu Bidyadhar Autonomous College

Bhubaneswar - 751014

Accredited at the 'A' Level by

National Assessment and Accreditation Council (NAAC)

Telephone/Fax : 0674-2436971, Website : www.bjbcollege.ac.in

COURSE STRUCTURE

First Year

Course	Title of the Course	Marks			Credits	Contact Hours
		External	Internal	Total		
PERSPECTIVE EDUCATION						
PE-1	Education, School and Society	80	20	100	4	64(5)
PE-2	Childhood and Growing up	80	20	100	4	64(5)
PE-3	Learning and Teaching	80	20	100	4	04(3)
PE-4	Contemporary Concerns in Education	80	20	100	4	64(5)
	Total	320	80	400	16	
COURSES ENHANCING PROFESSIONAL CAPACITIES						
CPS-2	Learning Assessment	80	20	100	4	64(1)
CPS-3 (a & b)	Pedagogy of a School Subject	80	20	100	4	64(5)
	Total	160	40	200	8	
COURSES ENHANCING PROFESSIONAL CAPACITIES						
EPC-3	Final Art / Performing Art (Drama)/ Performing Art (Indian Music)		50	50	2	32(75)
EPC-4	Physical Education and Yoga		50	50	2	32(2.5)
	Total		100	100	4	
SCHOOL INTERNSHIP Part -1			100	100	4	8 (weeks)
OPTIONAL COURSES FOR SKILL DEVELOPMENT						
Any One Course						
OCSD-1	Fruit and Vegetable Preservation		50	50	2	16(00)
OCSD-2	Spinning and Weaving		50	50	2	
OCSD-3	Tailoring		50	50	2	
OCSD-4	Wood Work		50	50	2	
	Total		50	50	2	
	Total (First Year)	480	370	850	34	

COURSE STRUCTURE

Second Year

Course	Title of the Course	Marks			Credits	Contact Hours
		External	Internal	Total		
PREPECTIVES IN EDUCATION						
PE-5	Knowledge and Curriculum	80	20	100	4	64(5)
PE-6	Educational Management	80	20	100	4	64(5)
PE-7a	Creating an Inclusive School	40	10	50	2	32(2.5)
PE-7b	Gender, School and Society	40	10	50	2	32(2.5)
PE-8a	Action Research	40	10	50	2	32(2.5)
PE-8b	Guidance and Counselling	40	10	50	2	32(2.5)
	Total	320	80	400	16	
CURRICULAM AND PEDAGOGIC STUDIES						
CPS-1	Language Across the Curriculum	40	10	50	2	32(2.5)
CPS-3	Pedagogy of a School Subject	80	20	100	4	64(5)
	Total	120	30	150	6	
COURSES ENHANCING PROFESSIONAL CAPACITIES						
EPC-1	Critical Understanding Of ICT		50	50	2	64(4.5)
EPC-2	Understanding the Self		50	50	2	64(3)
	Total		100	150	4	
SCHOOL INTERNSHIP PART -II						
			150	150	6	12
COMMUNITY ACTIVITIES						
			50	50	2	WEEKS
TOTAL (SECOND YEAR)		440	410	850	34	
GRAND TOTAL (First Year + Second Year)						
		920	780	1700	68	

NAME OF THE PROGRAMME – TWO YEARS B.Ed.

PROGRAMME OUTCOMES (POs)

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

- POs-1** Demonstrate pedagogical knowledge in the preparation and transaction of curriculum.
- POs-2** Identify and employ suitable assessment techniques for facilitating learning.
- POs-3** Apply pedagogical skills to enhance learning effectiveness and to deal with classroom problems.
- POs-4** Prepare and present Lesson Plan by applying various pedagogical skills.
- POs-5** Detect diversities in an inclusive classroom setting and provides guidance and counselling services accordingly.
- POs-6** Understand moral values, ethics and accountability for being responsible citizens.
- POs-7** Use information and communication technologies for better engagement of learners.
- POs-8** Develop capacity to deal with adverse situations in school and society.
- POs-9** Develop the power of acceptance, tolerance and inter-personal communication skills for an ideal teacher.
- POs-10** Practice yogic exercise for all round development of personality.

PROGRAMME SPECIFIC OUTCOMES(PSOs)

After completion of this programme, pupil-teachers will be able to:

- PSOs-1** Develop employability skills and competencies for teaching profession.
- PSOs-2** Develop the skills necessary to prepare for OTET, OSSTET, CTET and other certification exams.
- PSOs-3** Use technology in designing and developing ICT integrated learning resources.
- PSOs-4** Develop leadership quality with managerial, organisational and supervision skills for smooth functioning of educational institutions.

A. PERSPECTIVES IN EDUCATION (PE)

PE-1: Education, School and Society

Year : 1	Credit : 4
Marks :100 (Ext: 80+int 20)	Contact Hours : 64

Course Outcomes :

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

- State the narrow and broad meaning of education and form own concept on education
- Identify various modes and processes of education.
- Explain the foundations of education and the aims of education as recommended by different commissions education policies and educational thinkers.

- State the relationship between school and education, school and community and among education, society and culture.
- Elaborate the linkage between education and national development.

Detailed Course Content:

1. Understanding Education

- Meaning: derivational, narrow and wide; Eastern and Western viewpoints
- Process: Bi-polar, tri-polar, multi-polar, Life-long process
- Mode: formal/institutional, Informal/Incidental, Non-formal,
- Aims: Individual and social
- Aims of education according to Secondary Education Commission (1952-1953), Education Commission (1964-1966), National Policy on Education (1986/92), and National Curriculum Framework (2005)

2. Foundations of Education

- Philosophy and Education. Meaning and relationship, Influence of philosophy in determining aims, curriculum and methods of Education with reference to major schools of Educational Philosophy Idealism, Naturalism and Pragmatism
- Sociology and Education: Meaning and relationship; Implications of Sociology for aims, curriculum and methods of Education.
- Psychology and Education: Meaning and relationship; Implications of psychology for Education in organizing contents and understanding the teaching-learning process (understanding learner, teacher characteristics and pedagogy)
- Educational thoughts of Gandhi, Tagore, Sri Aurobindo, Rousseau, Dewey and Freire with reference to aims, curriculum and methods.

3. Education and School

- School as a formal agency of Education: Purpose (Socio-cultural), Location, infrastructure and time, stakeholders (primary and secondary stakeholders) and programmes
- School Activities: Curriculum and other curricular activities-Components, mode of transaction and organization
- School Environment: Learner and Learning-friendly- Characteristics and components: strategies for ensuring learning-friendly environment.
- Resource Requirements: Knowledge, Human, Material, Infrastructural, Technological, Their sources and utilization
- School-Community Interface: Importance, Aspects of interface, strategies for strengthening their inter-relationships, and their roles in building learning communities.

4. Education, Society and Culture

- Society as a system; Education and culture as sub-systems; Their interrelationships
Education as an instrument of social change: Meaning, dimensions and types of social change; Role of education effecting social change and control; Social change influencing education
-

- Education and Modernization: Meaning of modernization; Characteristics of modernized society; Adaptive demands of modernization and role of education,
- Education and culture: Meaning and elements of culture; Role of education for preservation, transmission and enrichment of culture; influence of culture on education, in general, and promotion of meaningful learning, in particular.

5. Education and National Development

- National development- Dimensions and Indicators
- Education as an investment for Human Resource and Socio-economic Development
Education for sustainable development (including sustainable environment)
- Education for inclusive development-Dimensions (social, economic, cultural, technological, spatial), Strategies for promoting inclusion, Role of education.
- Education to meet the situations arising out of conflicts, insurgencies, national calamities and disasters.

Tasks and Assignments

- Each student-teacher is required to submit any two assignments from the following:
- Preparation of a paper on the aims of education as recommended by the commissions, education policies and educational thinkers for comparative analysis. Appraisal of aims of education and curriculum proposed by one of the educational thinkers in the present socio-cultural context of India.
- Survey of a community and working out strategies for mobilization of resources available in the community for improvement of school practices.
- Preparation of a paper on how school has been responsible for modernization of the community within which the school is situated.
- Preparation of a blueprint on the different areas of possible school community interface.

Suggested Readings:

1. Anand, C.L. et.al. (1983). Teacher and education in emerging in Indian society, New Delhi: NCERT.
 2. Clarke, P. (2001). Teaching and learning: The Culture of pedagogy. New Delhi: Sage Publication.
 3. Dewey, John (1916/1977). Democracy and education. New York: MacMillan,
 4. Dewey, John (1956). The Child and the curriculum, school and society. Chicago, Illinois: University of Chicago Press.
 5. Dewey, John (1997). Experience and education, New York: Touchstone.
 6. Ganesh, Kamala & Thakkar, Usha (Ed.) (2005). Culture and making of identity in India. New Delhi: Sage Publications.
 7. Govt. of India (1986/92). National policy on education, New Delhi: MHRD. Krishnamurthy. J. (1947) On education. New Delhi: Orient Longman. B
 8. Krishnamurthy, J. (1953). Education and significance of life. New Delhi: B.I. Publications
 9. Kumar, Krishna (1996). Learning from conflict. New Delhi: Orient Longman.
 10. Margaret, K.T. (1999). The open classroom, New Delhi: Orient Longman.
 11. Ministry of Education (1966). Education and national development, New Delhi: Ministry of Education Government of India.
-

PE-2: Childhood and Growing Up

Year : 1	Credit : 4
Marks : 100 (Ext: 80+int 20)	Contact Hours : 64

Course Outcomes (COs)

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

- Explain the concept of growth and development of human child and the underlying principles of growth and development.
- Describe briefly the periods and the typical characteristics of growth and development during each period.
- Specify the contexts and factors influencing development.
- Explain the theories of socio-emotional, cognitive and language development and their educational implications.
- Describe the developmental characteristics of childhood development and their bearing on school and classroom practices.
- Elaborate the developmental characteristics, contextual needs and tasks during adolescence and the role of school and teachers in addressing the challenges during this period of development.
- State the different forms and characteristics of individual differences and the ways of meeting the classroom issues arising out of these differences.
- Identify the learning needs during the different stages of development and adopt appropriate strategies in and out of school to meet the learning needs.

Detailed Course Content

1. Understanding Learner Development

- Growth and development - Concept and General Principles of Development; Stages of development - concept (sequential, structural identity, critical periods, processes-reversible and irreversible), different stages of human growth and development- infancy, childhood, adolescence, adulthood and oldage.
- Contexts of development : socio-economic, cross-cultural-psychological, and anthropological
- Factors in influencing development: heredity, environment, nutrition, child-rearing practices, socio economic status, siblings and peers

2. Theories of Child and Adolescent Development

- Socio-Emotional Development: Erickson's theory of psycho-social development; Theory of development of social play-Jean Piaget
- Cognitive and Language Development : Cognitive developmental stages of Piaget ; Conceptual and Language development theories of Vygotsky ; Language development theory of Noam Chomsky ; Brief theoretical frame work and its educational implications
- Developmental characteristics during childhood : Physical, social, cognitive and emotional ; Role of school and teachers

3. Developmental Characteristics and Needs During Adolescence

- Growth and development during adolescence : Characteristics during early and late adolescence-Physical, Social, Cognitive and Language, Emotional and Moral ; Challenges of adolescence

- Context-specific developmental tasks based on specific needs and problems during adolescence, Problems of adjustment.
- Role of school and teacher in addressing the challenges of developmental needs of adolescents in various contexts

4. Understanding Individual Differences among Learners

- Individual differences due to cognitive, social and emotional attributes; Individual differences in learning in terms of mental ability, rate of learning motivation to learn, learning style, attitude etc.; recognizing the uniqueness of the learner.
- Learners with different mental abilities: intelligence, emotional intelligence and creativity-their concept, nature and assessment; categorization of learners based on mental abilities.
- Managing individual differences in learning - learning needs of different types of learners (gifted and backward learners; fast and slow learners);

5. Addressing Learning Needs

- Identification of learning needs of children in different stages and contexts of development (socio-economic, cultural, geographical, political, CWSN)
- Strategies to meet the learning needs of children in and out of school: organizing learning in heterogeneous classroom-ability grouping, heterogeneous grouping, grouping by interest and grouping by choice; addressing individual differences in classroom, individual guided learning, peerlearning, co-operative and collaborative learning etc.
- Culture-responsive teaching-learning approaches to meet the learning needs of children in different contexts of development-learning issues of marginalization, diversity, gender in equality.

Tasks and Assignments

Each **student-teacher is required to submit** any two **assignments from the following**:

- Case Study of a problem child / as low learner / a disadvantaged child.
- Administration of a group intelligence test and reporting the result.
- Rating of student-teachers' classroom performance (of any 5 student-teachers' performance)
- Analysis of the common behavioural problems observed in the classroom suggesting the ways to address them.
- Preparation of five activities for promoting creativity among the school students.

Suggested Readings

1. Arnett, Jeffrey (2007). Adolescence and emerging adulthood: A cultural approach. (3rd Edn.). Upper Saddle River, N.J.: Pearson
 2. Berk, Laura E.(2011). Child development (9th Edn.). New Delhi : Prentice Hall of India.
 3. Chauhan, S.S. (1978). Advanced educational psychology. New Delhi: Vikas Publishing House Pvt. Ltd.
 4. Dash, M. and Dash, N. (2006). Fundamentals of educational psychology. New Delhi: Atlantic.
 5. Flavell, J.H. (1963). The developmental psychology of Jean Piaget. New York: Van Nostrand
 6. Hurlock, E. B. (1980). Developmental psychology: All span approach. New York: McGraw Hill Book.
 7. Hurlock, E.B. (1980). Child development (6th Edn.). Tokyo: McGraw-Hill, Kogakusha Ltd.
-

8. Hurlock, E.B. (2007). Child growth and development. New York: Mc Graw Hill.
9. Kail, Robert V (2011). Children and their development (6th Edition). Englewood Cliffs, N.J: Prentice Hall.
10. Nolen-Hoeksema, Susan, Fredrickson, BarbaraL., Loftus, Geoff R., & Wagenaar, Willem, A. (2014). Atkinson & Hilgard's Introduction to Psychology. Belmont, California: Wadsworth
11. Saraswathi, T. S. (Ed.) (1999). Culture, Socialization and Human Development: Theory, Research and Applications in India. New Delhi: Sage publications.
12. Stephens, J.M.; Evans, E.D. (1973). Development and classroom learning: An introduction to educational psychology. New York: Holt, Rinehart and Winston.

PE-3: Learning and Teaching

Year : 1	Credit : 4
Marks : 100 (Ext: 80+int 20)	Contact Hours : 64

Course Outcomes (COs)

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

- State the meaning, nature, dimensions, basic conditions and categories of learning.
- Discuss the broader perspectives of behaviouristic, social cognitive and constructivist theories of learning and their educational implications and apply implications as and when required in teaching learning process.
- Explain the process of meaningful learning and ways of facilitating meaningful learning in and out of the school.
- Define paradigm shift in teaching for meaningful learning and different modes of teaching learning and accordingly applying the strategies in classrooms for promoting meaningful learning.
- Elaborate the processes of teacher preparation, teacher development, teachers' professional ethics and accountability and strategies for ensuring accountability.

Detailed Course Content

1. Understanding Learning Process

- Meaning, nature, and dimensions of learning; Learning as a process and as an outcome.
- Basic conditions of learning-Maturation, Readiness, Attention, Motivation, Fatigue, Materials, Learning Style, Tasks and Methods etc.
- Types / Categories of learning: Gagne's categories of learning

2. Theoretical Perspectives of Learning

- Behaviouristic Theories: Classical Conditioning Theory of Pavlov and Operant Conditioning Theory of Skinner: Theoretical framework and educational implications
 - Social Cognitive Theory: Social Learning Theory of Bandura, Advance Organizer Theory of Ausubel: Theoretical framework, and educational implications
 - Constructivist theories: Radical constructivism of Jean Piaget and Social constructivism of Lev Vygotsky: Theoretical framework, and educational implications
-

3. Meaningful learning

- Meaning and attributes - active or manipulative, constructive, reflective, intentional, complex, contextual, collaborative, and conversational;
- Learning as meaning making: Concept and process of meaning making; Learner as meaning maker- Characteristics of learner as meaning maker - curiosity, interest, active engagement: Role of inquiry in meaning making.
- Meaningful Learning as Experiencing: Observing, Perceiving and internalizing, and Deriving meaning from experiences;
- Facilitating Meaningful Learning in and out of school: strategies and role of teacher

4. Teaching for Meaningful Learning

- Teaching and Learning: Teaching as instructing vs Teaching as facilitating learning; Teaching as empowering learners; Bruner's Model of Teaching for meaningful learning - process and implications for classroom instruction in promoting meaningful learning.
- Teaching in Diverse Classrooms. Paradigm shift in organizing learning: Teacher centric to learner centric, and to learning centric (characteristics and process); Grouping for facilitating learning- Ability Grouping, Heterogeneous Grouping, grouping by interest, Grouping by Choice; Teaching for motivating towards learning- types of motivation and teaching strategies
- Modes of teaching-learning: face to face and distance mode, oral-aural and digital, individualized and group-based; Individualizing instruction in regular classroom.

5. Teaching as a Profession

- Importance and Characteristics of teaching profession; Characteristics of an effective teacher
- Teacher Preparation: Needs, components and modes of pre-service teacher-education programmes for different school levels (pre-school, elementary, secondary, higher secondary)
- Teacher Development: Needs and Stages, Survival, Consolidation, Renewal and Maturity; Continuing Professional Development of in-service Teachers-Needs and Strategies.
- Teachers' Professional Ethics and Accountability: Meaning, importance and dimensions; Recommendations of NPE 1986/92; Strategies for ensuring teacher accountability.

Tasks and Assignment

Each student-teacher is required to submit assignments selecting any two of the following:

- Preparation of report of observation of two classroom transactions on any subject in respect of the indicators of meaningful learning,
- Preparation of a paper for a seminar presentation on comparing the educational implications of any two theories of learning in the context of promoting meaningful learning.
- Survey of teacher's classroom activities of at least 10 teachers and preparation of report.
- Conducting group activities in the classroom and preparing a report on the process in terms of students' participation and quality of learning.
- Observing classroom transactions of teachers with high and low experience in teaching.

Suggested Readings

1. DeCecco, J.P., & Crawford, W.R. (1974). Psychology of learning and instruction: Educational psychology. Englewood Cliffs, N.J.: Prentice Hall.
-

2. Gagné, R.M. (1985). The conditions of learning and theory of instruction (4th edition). New York: Holt, Rinehart and Winston.
3. Klausmeir, H.J., & Ripple, R.E. (1971). Learning and human abilities: Educational Psychology. New York: Harper & Row.
4. Lefrancois, Guy R. (1994). Psychology for teaching. Belmont, California: Wadsworth Publishing Company.
5. Lindgren, H.C. (1980). Educational psychology in the classroom. New York: Oxford University Press.
6. Mohapatra, J.K., Mahapatra, M. and Parida, B.K. (2015). Constructivism: The new paradigm: From theory to practice. New Delhi: Atlantic Publishers.
7. Nolen Hoeksema, Susan, Fredrickson, Barbara L., Loftus, Geoff R., & Wagenaar, Willem, A. (2014). Atkinson & Hilgard's introduction to psychology. Belmont, California: Wadsworth.
8. Piaget, J. and Inhelder, B. (1969). The psychology of the child. London: Routledge Kegan Paul.
9. Sahakian, W.S. (1976). Introduction to the psychology of learning. Chicago: Rand McNally College Publishing Company.
10. Snowman & Baihler (2006). Psychology applied to teaching. Boston: Houghton Mifflin Company.
11. Von Glasersfeld, F. (1995). Radical constructivism: A way of knowing and learning. Washington D.C.: Falmer Press.
12. Vygotsky, Lev (1986). Thought and language. Cambridge, MA: The MIT Press.
13. Woolfolk, A.E. (2012). Educational psychology (12th Edn.) Englewood Cliffs, N.J.: Prentice Hall.

PE-4: Contemporary Concerns in Education

Year : 1	Credit : 4
Marks : 100 (Ext: 80+int 20)	Contact Hours : 64

Course Outcomes (COs)

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

- Describe the prevailing social inequalities, diversities and marginalization in India and their implications for education and role of school and its teachers in addressing these issues.
 - State the relevant Constitutional provisions, policy recommendations and the provisions in different Acts relating to education, specifically to school education.
 - Explain the human rights and Child Rights and constitutional provisions for safeguarding these rights with special focus to Child rights to Education.
 - Analyse various global concerns in education especially in school education and define the role of school, teacher and community to address these concerns.
 - Define Quality Education and various initiatives taken for enhancing quality school education and role of school, teachers and community to promote it.
-

Detailed Course Content

1. Diversity, Inequality and Marginalization in Society

- Understanding Indian Society with reference to diversities in Language, Culture, Religion, Socio-economic class, Ethnic group
- Issues of Inequality in Society and their Socio-cultural and Educational Implications
- Discrimination and marginalization as barriers for Universalization of Education
- Role of Education, School and Teacher in addressing issues related to diversity, inequality and marginalization.

2. Constitutional Provisions, Policies and Acts in Education

- Constitutional provisions and values for resolving the issues of diversity, inequality and marginalization in education.
- Policies and programmes for addressing these issues-NPE 1968 and 1986/92; SSA and RMSA; State Policy on Multilingual Education in Odisha (2014)
- Problems in implementation of the policies with reference to access, enrolment, retention and quality in education.

3. Child Rights and Human Rights

- Human Rights: concept and covenants of human rights (Universal Declaration of Human Rights); constitutional provisions for safeguarding human rights
- Child Right: concept and rights of child; constitutional provisions for safe-guarding child rights; UN Convention of Child Rights, 1989
- Initiatives for protection of Child's Right to Education: RCFCE Act, 2009 (RTEAct)-objectives and provisions

4. Global Concerns in Education

- Environmental Education : context and concept, objectives, scope and strategies
- Life skill education - concept and importance; core life skills (WHO identified); role of school, teacher and community for developing life skills of the learners; National Skill Development Framework
- Privatization and globalization of education meaning and their impact on the contemporary education scenario with reference to curriculum, pedagogy and management.
- Peace education: concept, need, scope and strategies.

5. Quality Concerns in Education

- Quality education-concept, dimensions and indicators
- Factors determining quality education.
- Initiatives for enhancing quality education in school: decentralized planning, innovative materials and pedagogy, capacity building of teachers, reforming teacher education programme, community involvement etc.
- Role of school, teacher and community to promote quality education in school.

Tasks and Assignments

Each student-teacher is required to submit assignments selecting any two of the following:

- Conducting social survey in respect of inequality and marginalization and preparing a report
-

- Preparation of Case Studies of Violations of Child Rights/Human Rights
- Field study for identification of environmental hazards and preparing a plan for Environmental Education
- Preparation of a term paper on Constitutional values with reference to the issues of equality
- Debate/discussion/seminar on quality issues in education and preparation of a report
- Projects on school-based activities for Peace education/life skill education

Suggested Readings

1. Glasser, W.(1990). The quality school: Managing students without coercion. New York: Perennial Library.
 2. Govt.of India (1992). Report of core group on value orientation to education. New Delhi: Planning Commission, Govt. of India.
 3. Kaur, B. (2006). Teaching peace, conflict and pride. New Delhi: Penguin Books.
 4. Kumar, Arvind (2003). Environmental challenges of the 21st century. New Delhi: APH Publishing Corporation.
 5. Kumar, Krishna (1996). Learning from conflict. New Delhi: Orient Longman.
 6. MHRD (2008). Framework for implementation of Rastriya Madhyamik Shiksha Abhiyan: A scheme for universalisation of access to and improvement of quality at the secondary stage. New Delhi: Department of School Education and Literacy.
 7. MHRD (2011). Sarva Shiksha Abhiyan: Framework for implementation based on the Right of Children to Free and Compulsory Education Act, 2009. New Delhi: Department of School Education and Literacy.
 8. Ministry of Law and Justice (2009). Right to education. New Delhi: Govt of India.
 9. NCERT (2005). National curriculum framework 2005. New Delhi: NCERT.
 10. Panneerselvam, A. & Ramkrishnan, M. (1996). Environmental science education. New Delhi: Sterling Publishers
 11. Puri, M. & Abraham. (Eds.) (2004). Handbook of inclusive education for educators, administrators and planners. New Delhi: Sage Publications.
 12. Sharma, R. A.(1998).Environmental education. Meerut: Surya Publication.
 13. UNESCO (1990). Source Book on environmental education for secondary teachers. Bangkok: UNESCO Principal Regional Office for Asia Pacific
 14. UNESCO (1994). Source Book on environmental education for elementary teacher educators. Bangkok: UNESCO Principal Regional Office for Asia Pacific
 15. UNESCO(1997).Trends in environmental education.Paris:UNESCO
 16. UNESCO (1998). Educating for a sustainable future: A trans disciplinary vision for concerted action. Paris: UNESCO.
 17. UNESCO (2001). Learning the way to peace: A teacher's guide to peace education. Paris: UNESCO.
 18. UNESCO (2004). Education for all: The quality imperative. EFA Global Monitoring Report. Paris: UNESCO.
 19. UNESCO (2012). Shaping the education of tomorrow: 2012 Report on the UN decade of education for sustainable development. Paris: UNESCO.
-

20. Unicef (2000). Defining quality in education. New York: Programme Division (Education), UNICEF.
21. WHO (1991). Comprehensive school health programme. New Delhi: World Health Organization Regional Office.
22. WHO (1997). Life skills education for children and adolescents in schools: Introduction and guidelines to facilitate the development and implementation of life skills programmes. Geneva: Division of Mental Health and Prevention of Substance Abuse, World Health Organization.
23. WHO (1999), Partners in Life Skills Training: Conclusions from a United Nations Inter-Agency Meeting. Geneva: World Health Organization.
24. WHO (2004). Skills for health: An important entry-point for health promoting/child- friendly schools. Geneva: World Health Organization

CPS-2: Learning Assessment

Year : 1	Credit : 4
Marks : 100 (Ext: 80+int 20)	Contact Hours : 64

Course Outcomes:

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

- State 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.
- Analyse the trends and issues in learning and learner assessment.
- Analyse and interpret results of the assessment using different statistical methods.

Detailed Course Content

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); Inter relationship 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).
- The terms to be explained in brief with suitable examples.
- Continuous and Comprehensive Assessment: Meaning, Importance and Scope; Learning and Assessment: Assessment of Learning, Assessment for Learning, and Assessment as Learning; CCA vs CCE
- Assessment of Learning: Assessment at the end of learning experience; Processes of assessment of learning - testing, measurement, and non-testing methods of assessment observation, interview, FGD

2. Assessment for Learning

- Meaning, Importance and Purpose; Nature-formative, continuous with learning, comprehensive (assessing all aspects of learning-cognitive, affective and psychomotor), culturally responsive (elements from the local culture of the learners are extensively used in the assessment); relevance for CCA
- Tools and Techniques: Wide range of formal (testing, observation schedules, video recordings etc.) and informal methods (participant observation, talking, taking notes, interviewing, engaging in activities etc.); use of testing (achievement tests of different forms, diagnostic tests, proficiency tests etc.) and non-testing (analysis of verbal and non-verbal activities, reflective journals, projects, portfolio etc.) tools; use of multiple methods and tools (situation specific combinations)
- Self and Peer-assessment techniques, Observation, Portfolio, interview, focused group discussion, rubrics (Their description with examples and the context in which they are used)
- Provision of feedback for students and parents- need and modes, for teachers (for timely improvement of teaching-learning process); Role of community in CCA.

3. Construction of Test and Its Use

- Steps: Planning, Preparing, Trying-out and Evaluation.
- Planning the test: Development of table of specifications (blue print), 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.
- Characteristics of a good test: Reliability, Validity, Usability (discussion on concept and use)
- Administration of the test and analysis of students' performance; Preparation of report and its use in enhancing learning.

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 NPE 1986/92, 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

5. Elementary Statistics

- Measures of Central Tendency: Mean, Median, Mode-their uses and limitations.
 - Measures of Variability: Range, Average Deviation, Quartile Deviation, Standard Deviation-their uses and limitations
 - Correlation: Meaning and uses; Calculation of correlation coefficients by Rank-difference and Product moment method
 - Characteristics of normal curve and its uses
 - Standard Scores-Z-Score, T-score and Percentile
-

Tasks and Assignments

Each **student-teacher is required to submit assignments** on any two **of the following**:

- 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.
- Case study of a participatory assessment programme
- 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

1. Anderson, L.W. (2003). Classroom assessment: Enhancing the quality of teacher decision making. Mahwah, New Jersey: Lawrence Erlbaum Associates.
 2. Burke, K. (2005). How to assess authentic learning (4th Ed.). Thousand Oaks, CA: Corwin.
 3. Cooper, D. (2007). Talk about assessment: Strategies and tools to improve learning. Toronto, Ontario: Thomson Nelson.
 4. Danielson, C. (2002). Enhancing student achievement: A framework for school improvement. Alexandria, VA: Association for Supervision and Curriculum Development
 5. Garrett, H.E. (1973). Statistics in psychology and education (6th ed.). Bombay: Vakils, Feffer & Simon.
 6. Gronlund, N.E. & Linn, R.L. (2009). Measurement and assessment in teaching (10th Edn). Upper Saddle River, NJ: Pearson Education, Inc.
 7. Newman, F.M. (1996). Authentic achievement: Restructuring schools for intellectual quality. San Francisco, CA: Jossey-Bass.
 8. Nitko, A.J. (2001). Educational assessment of students (3rd ed.). Upper Saddle River, NJ: Prentice Hall.
 9. Popham, W.J. (1993). Modern educational measurement. Englewood Cliffs, N.J.: Prentice Hall.
 10. Popham, W.J. (2010). Classroom assessment: What teachers need to know (6th ed.). New York: Prentice Hall.
 12. Shepard, L.A. (2000). The role of assessment in learning culture. Educational Researcher, 4-14.
 13. Stiggins, R. (2005). Student-involved classroom assessment. (4th ed). Columbus, Ohio: Merrill.
-

CPS 3(a&b): Pedagogy of Physical Science

Year : 1	Credit : 4
Marks :100 (Internal)	Contact Hours : 64

Course Outcome:

On completion of this course, the student-teacher shall

- State the nature and importance of physical science and its relevance in secondary school curriculum.
- Use various methods and approaches to teaching-learning Physical Science suitable for the secondary school classes.
- Plan lessons in physical science for effect classroom transactions.
- Develop and collect activities and resource materials for their use in enhancing quality of learning of Physical Science at the secondary level.
- Use appropriate tools and techniques for continuous and comprehensive assessment of learning in Physical Science.
- Slate the concepts in Physical Science included in the secondary school curriculum and make pedagogical analysis of those concepts.

Detailed Course Content

1. Physical Science in School Curriculum

- **Nature of Physical Science** : Nature and Scope of Science and Physical Science in particular, Importance of Physical Science in daily life.
- **Objectives of teaching-learning:** Physical Science at the secondary school level.
- **Curriculum Reforms in Science Education:** Rationale, objectives, principles, designs and materials in Science, recent curricular reform at the National and State levels (NCF 2005).

2. Method of Teaching-learning Science

- **Discovery** - Nature and purpose: guided discovery strategies in teaching and learning of concepts in science.
- **Experimentation: Experimentation under** under controlled conditions within **laboratory and beyond laboratory situation**; Process and limitations.
- **Problem Solving-** Problem identification, formulation of hypotheses, collection of data, testing hypotheses and arriving at solution.
- **Demonstration-cum-Discussion.**
- Project Situation analysis, selection of the project, preparation of the project proposal, implementation **of the** project, evaluation and reporting.
- **Constructivist Approaches:** Self learning and peer learning strategies, Collaborative strategies; 5E and ICON Models

3. Curricular Activities

- Preparation of Unit Plan; Preparation of Lesson Plans (Traditional, Activity Approach and Constructivist approach)
- Teaching-Learning Materials Preparation, collection, procurement and use of teaching-

learning materials in Science like Charts, Graph, Bulletin Board, Models; ICT materials like Filmstrips, Slides, Transparencies, TV, Audio and Video, Computer, and Internet.

- Learning Activities Science Laboratory Activities; Field Trip, Science Club, Science Seminar, Science Exhibition
- Key Learning Resources in Science; Assessing progress and performances, Monitoring and giving feed back, Local and community resources; Using pair work, Using group work, Using questioning (both by teacher and learners) to promote thinking, Talk for learning and involving all.

4. Assessment in Science Learning:

- Construction of classroom tests and Unit tests, designing blueprint, preparation of test items
- Assessment devices; Assignments, projects work, portfolios, Observation of activities.
- Diagnosis of learning difficulties in Physical Science, Remediation of difficulties, Enrichment Programmes.
- Planning for continuous assessment of classroom learning.

5. Pedagogical treatment of Content:

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

Content	Aspects of Pedagogical Treatment
<ul style="list-style-type: none"> • Atomic Structure: Atoms and Molecules Classification of elements. • Motion, Laws of Motion, Concepts of work, Energy, Pressure and their measurement, • Energy: Sources and forms of energy, Renewable and non-renewable energy. • Electricity and Magnetism: Electric Circuit, Potential Difference, Magnetic Field, Lines of Force, Electromagnetic induction. • Chemical Reactions and Equation • Heat, Light and Sound 	<ul style="list-style-type: none"> • Identification of concepts and sub-concepts. • Expected specific learning outcomes. • Methods/approaches of teaching-learning • Teaching-learning materials to be used . • Expected teacher and students activities, and • Assessment strategies.

The scope of discussion of the above concepts should be limited to the prescribed Science curriculum for the secondary school level of the state.

Tasks and Assignments

Each student-teacher is required to submit assignments on **any two** of the following:

- Preparation of five lesson plans on any topic of Physical Science included in the Science textbook for the secondary schools.
- Preparation of a unit test on any topic by developing the Blue Print and the test items conforming to the blue print.
- Developing five activities/experiments in Physical Science and prepare a brief report.
- Preparation of a model/tool/device based on any principle of Physical Science included in the course preferably using locally available materials.

- Designing pedagogical treatment for any topic of Physical Science and designing learning activities

Suggested Readings

1. Das, R.C. (2005). *Science teaching in schools*, New Delhi; Sterling Publishers.
2. Herr, Norman & Cunningham, James (1999). *Hands-on chemistry activities with real-life applications*, San Francisco, CA-Jossey-Bass.
3. Herr, Norman & Cunningham, James (1999). *Hands-on chemistry activities with real-life applications*, San Francisco, CA-Jossey-Bass.
4. Joseph, A. (2011), *Teaching high school science: A source book for the physical sciences*. Harcourt, Brace & World.
5. Kumar, A. (2003). *Teaching of physical science*. New Delhi; Anmol Publications.
6. Mohan, R. (2007), *Innovative science teaching for physical science teachers* (3rd Edn.), New Delhi: prentice Hall.
7. NCERT (1982). *Teaching of science in secondary schools*. New DeolhiO: NCERT.
8. NCERT (2005), *National curriculum framework 2005*. New Delhi: NCERT.
9. Sharma, R.C. (1998). *Modern science teaching*. New Delhi: Dhanpat Rai and Sons.
10. TESS India (2015). Key resources. The Open University U.K. ([http//creativecommons.org/licences/](http://creativecommons.org/licences/) and [http//www.tess-india.edu.in/](http://www.tess-india.edu.in/))
11. UNESCO (1979). *Source book for science teaching*. Paris: UNESCO.
12. Vaidya, Narendra (1992). *Science teaching for 21st century*. New Delhi: Deep and Deep.
13. Zaidi, S.M. (2004). *Modern teaching of science*. New Delhi: Anmol Publications.

CPS3 (a&b) : Pedagogy of Social Science (History and Political Science)

Year : 1	Credit : 4
Marks :100 (Ext: 80+int 20)	Contact Hours : 64

Course Outcomes:

On completion of this course, the student-teacher shall

- State the meaning, scope and importance of History and Political Science
- Specify the skills and competencies to formulate specific learning outcomes for different History and Political Science lessons
- Identify the different methods and skills of teaching History and Political Science for transacting the contents effectively.
- Explain the importance of time sense and prepare/utilize timelines for effecting teaching of History
- Prepare Unit Plans and Lesson Plans in History and Political science
- Develop diagnostic achievement test, administer them and analyse the results for providing feedback

Detailed Course Content

1. Concept, Objectives and Values of Teaching History and Political Science

- Meaning, Nature and Scope of History and Political Science
- Values of teaching History and Political Science
- Recommendations of NCF-2005 on teaching of History and Political Science
- Correlation of History and Political Science with other school subjects
- Objectives of teaching History and Political Science at elementary and secondary levels
- Formulation of specific learning outcomes in History and Political Science Lessons

2. Methods and Approaches to Teaching-Learning History and Political Science

- Story-telling
- Narration-cum-discussion
- Dramatization
- Source Method
- Project method
- Teaching History using monuments
- Field Trips

3. Development of Resource Materials

- Curriculum as resource material
- Approaches to curriculum in History-Bio-graphical, Chronological and Concentric
- Development of teaching-learning materials-Maps, Atlas, Globes, Charts, Graphs, Models, Film strips, T.V. Video, OHP and Computer
- Timeline-Concept, Aspects, Type and Use

4. Transactional Strategies

- Preparation of unit plans
 - Preparation of lesson plans (Traditional and Activity approach)
 - Activities in history and political science
 - Visit to Historical Places
 - Group Discussion and Debate
 - Maintenance of Portfolio
 - Assessment
 - Evaluation devices-written, oral, practice Assignment, project work, Portfolio
 - Planning for continuous assessment of classroom learning in History and Political science.
 - Remedial Teaching in History and Political science.
-

5. Pedagogical Analysis of Contents

Content	Aspects of Pedagogical treatment
<p>History</p> <ul style="list-style-type: none"> • Rise of the British power in India • The Great Indian Revolt of 1857 • Socio-religions movements in 19th Century • India's struggle for freedom, American War of Independence • French Revolution • First World War and Second World War 	<ul style="list-style-type: none"> • Pedagogical analysis of the units with reference to: <ul style="list-style-type: none"> → Identification of concepts and sub-concepts → Expected specific Learning outcomes
<p>Political Science</p> <ul style="list-style-type: none"> • Salient features of Indian Constitution • Fundamental Rights, • Legislative Assembly and its function • Powers of Prime Minister • Governor and President • Functions of Parliament: High Court and Supreme Court-Structure and Functions • Role of National Human Rights Commission 	<p>Assessment strategies (Formative)</p> <ul style="list-style-type: none"> → Methods / approaches of teaching-learning → Teaching-learning materials to be used → Expected teacher and students activities → Assessment strategies (Formative)

Tasks & Assignments

Each **student-teacher is required to submit assignments on any two of the following:**

- Identifying the learning difficulties in any topic and prepare remedial programme
- Preparation of no cost and low cost teaching aids on any two topics.
- Content analysis of a selected topic
- Preparation of a blueprint and test items of an achievement test in History/Political Science for any secondary class.

Suggested Readings

1. Burton W.H. (1972). Principles of history teaching, London: Methuen.
2. Carretero, Mario, & Voss, James F. (Eds.) (1994). Cognitive and instructional processes in history and the social sciences. Hillsdale: Lawrence Erlbaum Associate.
3. Chaudhary, K.P. (1975). The effective teaching of history in India. New Delhi: NCERT.
4. Choudhury, K.P. (1975). The effective teaching of history in India. New Delhi: NCERT
5. Drake, Frederick D. & Lynn, R. Nelson (2005). Engagement in teaching history: Theory and practices for middle and secondary teachers. Columbus, OH: Pearson.
6. Ghate, V.D. (1956). Teaching of history. Bombay: Oxford University Press.
7. Gunnin, Dennis (1978). The teaching of history. Goom Helm Ltd. London,
8. 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.
9. Kochhar, S.K. (1970). Teaching of political science. New Delhi: Sterling Publishers

CPS-3 (a&b) : Pedagogy of Social Science (Geography)

Year : 1	Credit : 4
Marks : 100 (Ext: 80+int 20)	Contact Hours : 64

Course Outcomes:

On completion of this course, the student-teacher shall

- State the importance of teaching and learning of Geography at the secondary level.
- Use appropriate teaching methods and strategies while facilitating learning of Geography.
- Develop lesson plans for effective teaching and learning of Geography
- Prepare, collect and procure resource materials including suitable teaching aids and use them effectively in the classroom
- Develop appropriate tools and techniques for comprehensive assessment of learning in Geography.
- State the concepts in Geography included in the secondary school curriculum and make pedagogical analysis of those concepts.

Detailed Course Content

1. Geography in School Curriculum

- Meaning, nature and scope of Geography
- Importance of Geography in school curriculum at elementary and secondary levels
- Correlation of Geography with other school subjects
- Objectives of teaching-learning Geography at the secondary school level

2. Methods and Approaches to Teaching-learning Geography

- Emerging Curricular trends in Geography as per NCF-2005
- Constructivist approach to Teaching-Learning Geography
- Methods of teaching-learning Geography:
 - Lecture-cum-discussion
 - Observation
 - Discovery
 - Problem-solving
 - ProjectMethod

(To be discussed in terms of meaning, process, merits and limitations)

3. Learning Resources in Geography

- Preparation, collection, procurement and use of teaching-learning materials like Maps, Globe, Charts, Graphs, Bulletin board, Models.
- ICT in Learning of Geography - Film strips, Slides, transparencies T.V., Video, computer, internet.
- Map reading and map preparation.

- Geography Laboratory and Resource Room
- Use of community resources.

4. Curricular Activities

- Preparation of unit plans.
- Preparation of unit plans
- Preparation of lesson plans-Traditional, Activity and Constructivist approaches (ICON and 5E model)
- Activities in geography-field trip, Geography club, exhibition
- Assessment
 - Evaluation devices-written, oral, assignment, project work, Portfolio
 - Planning for continuous assessment of classroom learning in Geography.
- Remedial Teaching in Geography

5. Pedagogical Treatment of Contents

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

Content	Aspects of Pedagogical treatment
<ul style="list-style-type: none"> • Latitudes & Longitudes • Rotation & Revolution • Agents of denudation • Physical division of India • Climate and vegetation • Natural resources • Social and economic resources • Conservation of Forests and wild life. 	<ul style="list-style-type: none"> • Identification of concepts and sub-concepts • Expected specific learning outcomes • Methods/approaches of teaching-learning • Teaching-learning materials to be used • Expected teacher and student activities • Assessment strategies

Tasks & Assignments

Each **student-teacher is required to submit assignments on any two of the following:**

- Identifying the learning difficulties in any topic and prepare remedial programme
- Preparation of no cost and low cost teaching-learning materials on any two topics.
- Content analysis of a selected topic
- Preparation of a blueprint and test items of an achievement test in geography for any secondary class.

Suggested Readings

1. Arora, K.L.(1976). The Teaching of geography. Jullandhar: Parakash Brothers,.
2. Broadman, David(1985). New directions in geography education. London: Fehur Press.
3. Dhamija, Neelam(1993). Multimedia approaches in teaching social studies. New Delhi: Human Publishing House.
4. Graves, N.G.(1982).New source books for geography teaching. Longman.
5. Hall, David(1976). Geography teacher. London: Unwin Education Books,.

6. Huckle, J.(1983). Geographical educational reflection and action.London: Oxford University Press.
7. Morrey, D.C.(1972). Basic geography. London: HienManns Education Books.
8. Smith, Margaret (2002). Teaching geography in secondary schools: Areader. London: Taylor & Francis.
9. UNESCO (1965). Source book for geography teaching. London: Longman.
10. Verma, O.P.(1984). Geography teaching. New Delhi: Sterling Publication.
11. Walford Rex(1981). Signposts for geography teaching. London: Longm

EPC-3 : Fine Art

Year : 1	Credit : 2
Marks :50 (Internal)	Contact Hours : 32

Course Outcomes:

On completion of this course, the student-teacher shall

- Explain different Art forms
- Prepare two dimensional and three dimensional teaching aids
- Collect materials from the locality and prepare low cost and no cost teaching aids
- Organize exhibitions of different Art forms

Detailed Course Content

1. Visual Art

Visual art: Importance, Scope, Characteristics of child art, folk art and fine art, Developing skills in visual art.

2. Survey of the Natural Resources:

Survey of the natural resources in the immediate environment; collection of specimens for preparation of artistic materials, preparation of report on the collected materials and their use.

3. Reproduction of Art:

Reproduction of child art, tribal art, handicrafts, landscape, flowers, vegetables, trees, birds, animals. book illustrations comprising of human figures book covers, newspapers advertisements, invitation and greeting cards-collection of at least six of each kind and preparation of an album with proper captions.

Drawing of pictures of vegetables, fruits, flowers, animals, birds, human figures and houses in simple form on the black board.

4. Finished Drawing:

Outlines of flowers, birds, animals and human figures; Multi-coloured design with geometrical forms and floral motif suitable for textile designs, book cover, invitation and greeting cards; Technique of preparing designs for line block and halftone printing.

5. Pencil and Colored Layouts:

Preparation of pencil and colored layouts for book cover designs, invitation and greeting card

designs and poster designs; Practice of simple and decorative lettering suitable for block designs and signboards; Mounting pictures and organizing exhibitions.

Tasks and Assignments

Each student-teacher is required to submit assignment on any one of the following:

- Collection of any three forms of folk art and preparation of a detailed report.
- Preparation of a report on specimens of visual art available in the neighbourhood.
- Preparation of an album of greeting cards of children's concern with appropriate caption.

EPC-3 : Performing Art (Drama)

Year : 1	Credit : 2
Marks :50 (Internal)	Contact Hours : 32

Course Outcomes:

On completion of this course, the student-teacher shall

- Study the function of drama as a tool of instruction to move beyond the classroom and to invoke collective consciousness.
- Develop awareness regarding the rich heritage of drama and contributions of artists
- Recognize the role of drama as education in the secondary school
- Learn to identify areas that are best suited for drama exploration
- Examine through chosen themes, how learning can take place in the classroom through group drama exploration by a whole class of elementary school students.
- Learn the use of drama in teaching-learning.
- Explore the role of the teacher as creative guide in learning that is drama driven

1. Introduction to Drama

- Meaning and relevance of drama to life today
- Elements of Drama: Literary elements, Technical elements, Performance elements, Character, Plot, Theme, Dialogue, Convention, Genre, Audience.
- Forms and Styles of Theatre Comedy and Tragedy, Solo performance, Mime, Melodrama, Musical theatre, Realism, Symbolism, Ballet and Dance, Street theatre, Folk theatre, etc

Activity: Acting exercises for body and movement.

Activity: Acting exercises for voice and speech

Activity: Viewing films or videos to identify and discuss dramatic styles

Activity: Creating performance of a story based on student's own experiences

2. Indian Folk and Street Drama

- Regional folk theatre Jatra, Nabaranga, Swang
- Influence of Folk Theatre on Street Play
- Street Play as social education
- Role of Street Drama as teaching-learning tool

Activity: Viewing Street Drama live or on video

Activity: Student Journals and video record of activities

3. Drama Production:

- Play production: Choosing a play: considering language, style, characters, Casting a play, Designing a play: sets, costumes, lighting, sound design,
- Rehearsals and Staging a play
- Use of dramatics in curriculum transaction

Activity: Choosing /writing a Street Play

Activity: Casting for the chosen play

Activity: Designing the costumes, music for the chosen play

Activity: Directing the chosen play

Activity: Staging the chosen play

Activity: Student Journals and video record of activities

Tasks and Assignments

Each student-teacher is required to submit assignment on any one of the following

- Observation of performance of a folk form in the immediate cultural region and preparation of a report.
- Developing a script on any social issue for a street play.
- Dramatize any topic for classroom presentation

EPC-4: Physical Education and Yoga

Year : 1	Credit : 2
Marks :50 (Internal)	Contact Hours : 32

Course Outcomes:

On completion of the course, the student-teacher shall

- Understand the importance of Physical Education in Human life
- List the different programmes of Physical Education
- Practice Yoga for peaceful and harmonious living
- Enumerate the relationship between Yoga and goals of life

Detailed Course Contents

1. Understanding Physical Education

- Concept, need, scope, objectives
 - Organization of various Physical Education Activities
 - Role of Physical Education Teacher
 - Preliminary idea of some common Games.
-

2. Programmes of Physical Education

- Preliminary idea of some common programmes of physical education
- Recreation and work-values of play Need for recreation, different types recreational activities and their
- Provisional play and recreation in school time table
- Physical education in the context of NCF 2005

3. Yoga and Life goals

- Concept, need and objectives of Yoga
- Asthanga Yoga
- Benefits of Yogic practices
- Different postures /asanas
- Relation between Yogic practices and life goals

Tasks and Assignments

Each student-teacher is required to submit assignment on any one of the following

- Preparation of a report on different Physical Education programmes organized in school
- Preparing a report on different Yogic practices
- Developing a set of recreation activities for secondary school students

School Internship

Year - 1 & 2

Course Outcomes (COs)

- Developing professional capacities, teacher sensibilities and sustained engagement of student-teachers (prospective teachers) with learners and schools.
- Equipping the student-teachers with required skills and competencies to cater to diverse needs of the learners in schools
- Exposing the student-teachers to multicultural contexts of the society which influence the school environment and its functioning
- Validating the theoretical understanding of the student-teachers developed through various perspective and pedagogic courses
- Enabling the student-teachers internalize the role of a teacher as a facilitator of learning, classroom manager, resource mobilizer and manager, innovator, evaluator of learner performance, planner and organizer of other curricular activities, mentor and counsellor for children, service provider for the community and parents, developer and evaluator of curriculum text books and other TLMs etc.

Duration

- Eight (08) weeks in first year
 - Twelve (12) weeks in the 2nd / final year
-

Levels

- Upper Primary Level (Classes VI-VIII)
- Secondary Level (Classes IX-X) or Higher Secondary Level (Classes XI - XII)

Organization

a. Pre-internship Activities

- Orientation of the student-teachers
- Observation of school site and activities by the student-teachers (timetable, work allocation among teaching and non-teaching staff, regular classroom with regular teacher, day-to-day other school activities etc.)
- Sharing meeting with the teachers and Headmasters of the cooperating schools in the institution and working out the programme details for the internship Demonstration lessons by the faculty members followed by post- demonstration discussion
- Criticism lessons by the student-teachers(one lesson by each student teacher in any one of the methods opted) under the supervisory support of the method teachers, attended by all student-teachers of the method concerned Placement of student-teachers in cooperating schools for internship activities.

b. During Internship Activities

- Preparation of lesson plans by the student-teachers in their concerned method subjects
 - Delivery of practice lessons with supervisory support and feedback from faculty members. Each student-teacher shall deliver 40 lessons (20 lessons in each method subject) excluding the criticism lesson, Out of the 40 lessons, 30% (12nos.) shall be delivered in the upper primary classes (Classes VI to VIII) and the remaining 70% (28 nos.) lessons in the secondary classes (Classes IX and X).
 - Observation of five peer-lessons and recording of the performance of the peer student-teachers with authentication by concerned supervisors.
 - Feedback session in the Teacher Education Institution after each spell of ten-day practice teaching to be attended by all student-teachers for sharing their experiences. Administration of diagnostic tests on the students and identifying their learning difficulties by the student-teachers
 - Attendance in school assembly
 - Participation in campus cleaning and beautification activities
 - Taking arrangement classes when required
 - Organization and participation in literary and recreational activities of the school
 - Participation in school games and sports activities
 - Organization and participation of science exhibition, science fair, science club/nature study club/eco club activities
 - Organization of awareness campaign on HIV/AIDS, blood donation, conservation and protection of environment etc.
 - Organization of blood donation camps
 - Preparation of report on Annual sports and celebration of important occasions and events
Preparation of report on maintenance of registers and records by the school
-

- Preparation of scheme of lessons in any subject for any class
- Dialoguing with SMC / SMDC members and preparation of reports on their meetings in the school
- Conducting case studies/action research
- Liaison with parents community and authorities
- Sharing learner perceptions, teacher perceptions and parental/community perceptions

C. Post-Internship Activities

- Overall sharing of student-teachers' internship experiences in the institution.
- Suggestions and feedback from the teachers and Heads of the practicing schools for further improvement of the internship activities
- Exhibition/demonstration of innovative and creative work done by the student-teachers during internship.
- Student-teachers' feedback on overall organization of internship programme by the institution for future action.

Assessment of Internship Performance

- Assessment by supervisors, cooperating teachers and headmasters, and peer assessment on the basis of observation and records

Attendance

- The minimum attendance of student-teachers for school internship programme shall be 90%

Assessment of Internship Performance

- Internal assessment of internship activities and records: 250 marks (100 marks in first year, 150 marks in second year)

First year

- Assessment of overall activities of the student-teacher in the school during internship: 30 marks
- Assessment of lesson plan record (method 1): 20 marks
- Peer assessment of lessons delivered (method1): 10marks
- Faculty assessment of lessons delivered (method 1): 20 marks
- Innovative practices and TLM: (10+10) 20 marks

Second Year

- Assessment of overall activities of the student-teacher in the school during Internship: 30 marks
 - Assessment of lesson plan record (method 2): 20 marks
 - Peer assessment of lessons delivered (method1): 10marks
 - Faculty assessment of lessons delivered (method 1): 20 marks
 - Innovative practices and TLM: (10+10) 20 marks
 - Assessment of observation record and scheme of lessons by faculty: 10 marks
-

- Assessment of reports prepared on school activities: 20 marks Assessment of school-based project: 20 marks

Each Teacher Education Institution has to prepare a detailed plan on school internship programme for each academic year in consideration of the activities indicated above under pre-internship, during internship and post internship activities.

Community Activities: 50 Marks

- Organisation and participation in any community awareness building programme and preparation of report: 10 marks
- Conducting any community activity like plantation, mass safai, public utility service (road repair, cleaning water sources and public places etc.), blood donation camp, health check- up and submission of a report. 10 marks
- Survey of community resources and their utilization in school improvement: 10 marks Survey and mobilization of out of school children in the community and preparation of a report: 20 marks.

(N.B.: The first two activities shall be undertaken in the First Year and the remaining two activities shall be undertaken in the Second Year. However, the marks awarded to the student- teacher in all the four community activities shall be included in the aggregate marks of Second Year Examination.)

D. OPTIONAL COURSES FOR SKILL DEVELOPMENT (OCSD)

(A student-teacher has to select **any one** of the following courses. The performance shall be assessed internally and shall be awarded grades)

OCSD-1 : Fruit and Vegetable Preservation

Year : 1	Credit : 2
Marks :50 (Internal)	Contact Hours : 32

Course Outcomes:

On completion of course, the student-teachers shall

- Develop economic values through fruit and vegetable preservation
- Gain knowledge about fruit preservation industry
- Gain knowledge about different type of preservatives for different type of preservation
- Have appropriate use of fruits and vegetables by avoiding wastage and spoilage

Detailed Course Content

1. Need and importance

- The need for fruit preservation industry-its relationship with horticultural development, developing and modernizing.
- Fruit preservation as a home scale industry and as an educative craft, causes of wastage and spoilage and remedies.

2. Raw materials

- Raw materials for fruits and vegetables preservation-kinds, varieties and types of useful raw materials, Geographical and seasonal distribution, quantity produced.
- Medicinal value, suitability for processing and preservation,

- Effects of processing on the food value of preserved fruits and vegetables and possible Industrial applications

3. Principles and Methods of Preservation

- Various types of tin and glass containers and packing materials, general principles of preservation-selecting, grading, washing, bunching, peeling and pitting of fruits and vegetables-pasteurization and sterilization.
- Methods of preservation: Heating, drying, salting freezing, use of oil and vinegars, use of sugar, use of chemicals by fermentation and by the production of vinegar.

PRACTICAL

(To be conducted along with the theoretical discussions of the above subject units)

- I. Acquaintance with learning and the operation of various equipment improvising cheap equipment for purpose of processing.
- II. Selecting, grading, washing, peeling and pitting of fruits for processing and preservation.
- III. Preparation of sugar syrups and brine testing syrups strength.
- IV. Bottling of fruits, Preparation and preservation of fruit juices, squashes cordials and syrups of locally available fruits.
- V. Canning-canning of fruits in syrups, vegetables in brine and curried vegetables.
- VI. Preparation of jams, jellies, marmalades and cordials.
- VII. Preparation of oil and vinegar pickles, chutneys, ketchups and sources.
- VIII. Preparation of fruit vinegars.
- IX. Drying and dehydration-sun drying and dehydration by the home made drier.

OCSD-2 : Spinning and Weaving

Year : 1	Credit : 2
Marks :50 (Internal)	Contact Hours : 32

Objectives

On completion of course, the student-teachers shall:

- Develop a sense of appreciation towards Khadi
- Know the processing of cotton for Khadi
- Master the skill of spinning and weaving
- Develop proficiency in spinning yarn of counts (10-25)
- Organize exhibitions of different spinning and weaving materials

Detailed Course Content

1. Khadi

Preparation of Khadi and weave Khadi

2. Picking and Processing of cotton

Knowledge and practice in picking cotton and its processing: such as learning, spinning, processing carding and silver making,

3. Spinning yarn of counts

Proficiency in spinning yarn of counts.

4. Twisting preparing Toni

Practice in twisting preparing Toni realign simple designing and all the processes of weaving on handloom.

5. Estimating yarn and price

Ability to estimate the weight of yarn, count of yarn, strength of yarn and finished product of yarn
Ability to estimate the price of a 'Than' prepared.

Practicals as appropriate to the topics detailed above shall be conducted simultaneously along with the discussion of the theoretical aspects.

OCSD-3 : Tailoring

Year : 1	Credit : 2
Marks :50 (Internal)	Contact Hours : 32

Objectives

On completion of course, the student-teachers:

- Know different parts of the sewing machine and its maintenance
- Develop skills in stitching, mending and cutting the garments Develop aesthetic and creative abilities through tailoring
- Design different garments
- Organize exhibition in various type of designed garments
- There will be no separate theoretical instruction. Such theory as is needed for practical work may be given during practical work.

Detailed Course Content**1. Machine Parts and Their Maintenance**

Study of the various parts of the sewing machine Process of oiling and cleaning the parts.

2. Different kinds of stiches

Use of the different kinds of stitches, such as hem, backstitch, French seam, button-hole stitch.

3. Cutting and finishing

Cutting and finishing on machine of the following garments: Jumpers, Kamis, Junghiyas, banyans, Kurtas, shirts, half pants, blouses, frocks different stitches, such as hem, back stitch, French seam, button holes.

4. Mending of clothes

Mending of clothes as round holes, rectangular holes, tom slits.

5. Measurement for various garments

Measurement for various garments and calculation of the quantity of materials of different width,

OCSD-4 : Woodwork

Year : 1	Credit : 2
Marks :50 (Internal)	Contact Hours : 32

Objectives:

On completion of course, the student-teachers shall:

- Know different types of tools and their safe uses
- Develop skills in preparing wooden products like pointer, duster, blackboard, chair, table stool etc.
- Know different types of timbers for preparing various finished products and process of protecting wooden materials

Detailed Course Content**1. Concept of wood work**

Need, importance and scope of woodwork.

2. Workshop Activities

Workshop discipline, safety, precaution, safe handling of tools, first aid; definition of push and pull saw, fret saw and saw sharpening.

3. Tools for Woodwork

Types of timber and its structure, selection of the size of wood to be planed first, face side marking setting of marking gauges, Martice gauge and testing with try square. Different types of chisels, mallets and hammers. Hardware uses in the wood section

4. Timber and its protection.

Timbers- their sources and uses, structure of trunk properties, Insects and wood protection. Natural and artificial seasoning, commercial firm of timber, plywood, particle boards, glues.

5. Quantifying timber and wood finishes

Calculation of measures of timber, Preparing, cutting. Wood finishing: Polish, varnish and paints.

In course of discussion of the above theoretical aspects and related practical work, the following articles (at least three by each student-teacher) need to be prepared as a part of practical work:

Hangers, wall-brackets, book-shelves, tools, bench, desk, chair, black-board, pointer, duster, stationery rack, round table, pet table, Wood turning work such as cups, plates, roller, table lamp and other ornamental designs.

B.Ed. IIInd Year

PE-5 : Knowledge and Curriculum

Year : 2	Credit : 4
Marks : 100 (Ext: 80+int 20)	Contact Hours : 64

Course Outcomes:

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

- State and explain the nature of knowledge.
- Describe the process of constructing knowledge.
- Differentiate different types of curriculum and define mandates for formulation of curriculum policy
- Explain the principles and processes of curriculum planning and development.
- Elaborate the transaction, evaluation and renewal processes of curriculum.

Detailed Course Content

1. Understanding the Nature of Knowledge

- Knowledge: Concept (difference between knowledge and skill, knowledge and information, teaching and training, reason and belief) and Nature
- Types and theories of knowledge
- Knowledge Acquisition: source of knowledge and process of acquisition

2. Construction of Knowledge

- Knowledge transmission(teacher-centric) vs. Knowledge construction(learner-centric)
- Process of knowing: activity, discovery and dialogue-views of Dewey, Ausubel and Bruner
- Construction of knowledge: theories of Piaget and Vygotsky; implications for curriculum

3. Understanding Curriculum

- Concept (difference between curriculum and syllabus), types (subject-cantered, teacher-cantered, learner-cantered, learning-centered, experience-centered, activity-centered, hidden manifest) and components (core-elective)
- Mandates for formulation of curriculum policy (Constitutional, socio-cultural, political, economic, global concerns, environmental, etc.)
- Curriculum framework Concept, principles and coverage; NCF 2005, SCF 2007 and NCFTE2009 objectives, aspects and recommendations.

4. Curriculum Planning and Development

- Determinants of curriculum development
- Principles of curriculum development
- Approaches to curriculum planning
- Processes/stages of curriculum development (preparation, try out and finalization)

5. Curriculum Transaction, Evaluation and Renewal

- Classroom Transaction: Planning (time, space, manpower, material and scheme and plan of lessons), Preparation of curricular materials and activities (text and support materials, learning activities), mode of transaction and learners' involvement- resource management (use of TLMs, activity and question banks etc), 'use of assessment mechanism for learning

- 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
- Current provisions and practices for curriculum development, transaction, evaluation and renewal in School Education and Teacher Education in the State

Tasks and Assignments

Each **student-teacher is required to submit assignments selecting any two of the following:**

- 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 classroom activities for transacting 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

1. Arora, G. L.(1984). Reflections on curriculum. New Delhi: NCERT.
2. Dewey, John (1956). *The child and the curriculum*. Chicago, Illinois: University of Chicago Press.
3. Dewey, John (1997). *Experience and Education*, New York: Touchstone.
4. Dewey, John (1997). My pedagogic creed, in D.J. Flinders and S.J. Thorton (eds.), *The Curriculum studies reader*. New York: Routledge, Kegan & Paul.
5. Egan, K. (2005). *An imaginative approach to teaching*. San Francisco: Jossey-Bass.
6. Erickson, H.L (2002). Concept-based curriculum and instruction. California: Corwin Press.
7. Jangira, N.K. & Singh, A.(1982). *Core teaching skills: The microteaching approach*. New Delhi : NCERT Mohapatra, J.K., Mahapatra, M. and Parida, B.K. (2015). *Constructivism: The new paradigm: From theory to practice From theory to practice*. New Delhi: Atlantic Publishers.
8. NCERT(2005). National curriculum framework 2005. New Delhi: NCERT.
9. NCTE (1990). *Policy perspective in teacher education*. New Delhi: NCTE
10. Olivia, Peter F. (1988). Developing the curriculum. London: Scott and Foresman.
11. Sharma, S. (2006). *Constructivist approaches to teaching and learning*. New Delhi: NCERT.
12. Taba, Hilda (1962). *Curriculum development: Theory and practice*. New York: Harcourt, Brace and Wald.
13. von Glasersfeld, F. (1995). *Radical constructivism: A way of knowing and learning*. Washington D.C.: Falmer Press.
14. Vygotsky, Lev (1986). *Mind in society*. Cambridge, MA: Harvard University Press.

PE-6: Educational Management

Year : 2	Credit : 4
Marks : 100 (Ext: 80+int 20)	Contact Hours : 64

Course Outcomes:

On completion of this course, the student-teacher shall

- Spell out the structure of educational management at different levels from national to institution level
- Explain the implications of various policies and provisions in respect of educational management
- Identify and utilize various resources for effective school functioning
- Actively participate in the preparation of school development plan
- Explain the role of monitoring and feedback mechanism for effective school functioning

Detailed Course Content

1. Educational Management:

- Concept, Scope and Types- centralized and decentralized, democratic and authoritarian, participatory and non-participatory
- Structure at national, state, district, sub-district and institution levels and their roles

2. School-based Management:

- Concept, importance, scope and processes
- School Management Committee (SMC) and School Management Development Committee (SMDC)
- State policies on school management (RCFCE ACT, 2009 and State Rules 2010)

3. Resource Management: Sources, Utilization and Mobilization

- Infrastructural resources: physical space (building, open space, furniture, water and sanitation facilities, etc.), barrier free environment.
- Material resources: equipment and TLMs
- Financial resources: Grants, Donations, Fees, Funds Generation, other sources Human resources: Students, Teachers, Parents, Community and local resource persons their inter relationship
- Role of School and Community in resource mobilization: Local resources and other resources through Corporate Social Responsibility and Public Private Partnership; resource management in school

4. School Development Plan (SDP)

- Meaning, Importance and Process
- State Policies in School Development Plan
- Actors and their roles in the Preparation of SOP
- Addressing Issues in the implementation of SDP

5. Review, Monitoring and Feedback Mechanisms

- Monitoring: Meaning, importance, scope and objectives
- Monitoring Mechanisms: Structure, personnel and functions, existing monitoring practices and related issues
- Feedback Mechanism: Structured vrs. Unstructured; Use of feedback for effective school functioning

Tasks and Assignments

Each student-teacher is required to submit assignments selecting any two of the following:

- Case study on school-community collaboration in school improvement
- Observation of SMC/SMDC meeting and preparation of report
- Survey of resources available in a school and the manner of their utilization.
- Appraisal of a School Development Plan.
- Assessment of the existing monitoring mechanism at the secondary level in the state and suggestions for improvement.

Suggested Readings

1. Buch, T. et al. (1980). Approaches to school management. London: Harper and Row.
2. Chalam K.S. (2003): Introduction to Educational Planning and Management: New Delhi, Anmol Publications Pvt. Ltd.
3. Chandrasekharan P. (1997): New Delhi, Educational Planning and Management, Sterling Publishers Pvt. Ltd. Glasser, William (1990). The quality school. New York, NY: Harper Collins Publishers, Inc.
4. Glasser, William (1990). The quality school. New York, NY: Harper Collins Publishers, Inc. Government of India (1986/92). National policy on education. New Delhi: MHRD. Government of India (1992). Programme of action. New Delhi: MHRD.
5. Gupta, S.K. & Gupta, S. (1991). Educational administration and management, Indore: Manorama Prakashan.
6. Hallak, J. (1990). Investing in the future: Setting educational priorities in the developing world. Paris: UNESCO.
7. Kalra, Alka (1977). Efficient school management and role of principals: New Delhi: APH Publishing Corporation.
8. Lockheed, M.E. & Verspoor, A.M. et al. (1991), Improving primary education in developing countries: A review of policy options. New York: Oxford University Press.
9. Shaeffer, S. (1991). Collaborating for educational change: The role of parents and the Community in school improvement. Paris: UNESCO.
10. Tyagi R.S. and Mahapatra P.C. (2000), Educational Administration in Orissa New Delhi,
11. National Institute of Educational Planning and Administration (NIEPA) 11. Vashist, Savita (ed.) (1998). Encyclopaedia of school education and management. New Delhi: Kamal Publishing House..

PE-7a: Creating an Inclusive School

Year : 2	Credit : 2
Marks : 50 (Ext: 40+Int 10)	Contact Hours : 32

Course Outcomes:

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

- Explain the changing concepts related to inclusive education.
- Elaborate the different categories of children with special needs and their problems in schooling.
- State the barriers of inclusion in the existing schools.
- State the characteristics and dimensions of an inclusive school.
- Describe the process of developing an inclusive school.

Detailed Course Content

1. Inclusive Education

- Changing concept of inclusion (Shifting from Separation to Integration to Inclusion); Inclusion as 'Education for all'
- Inclusion in Education- a human right (Right to Access, Equality and Quality Education)
- Inclusive Education: Definition, rationale, characteristics and principles

2. Children With Special Needs

- Types of disabled children (physical, social and/or emotional) and their needs • Problems in schooling CWSN: Physical, Cognitive, Emotional
- Strategies for addressing their educational needs in inclusive set up: Specific attention to their needs in classroom management - seating arrangement, aids and appliances, light and ventilation, access to TLMs, mobility inside the class, interpersonal relation and support etc, Flexible curriculum, Flexible teaching-learning strategies - Child-centred, interactive, individual, group, collaborative and participatory classroom transaction.

3. Inclusive School

- Barriers for inclusion in school: Psycho-social, Infrastructure! Resource, Whole class-based instruction, Lack of participation
- Concept, dimensions and features of an inclusive school
- Developing an inclusive school: Creating inclusive cultures (building communities, establishing inclusive values), Producing inclusive policies (Developing the school for all, organizing support for diversity), and evolving inclusive practices (Orchestrating learning, mobilizing resources)

Tasks and Assignments

Each student-teacher is required to submit assignment on any **one** of the following:

- Observation of an inclusive classroom set up and reporting.
 - Preparation of a report on classroom problems faced by any category of CWSN and the strategies adopted by the teacher.
 - Preparation of a report on various types of interventions provided for any category of CWSN in school.
-

Suggested Readings

1. Ainscow, M. (1999) *Understanding the development of inclusive schools*. London: Palmer.
 2. Ainscow, M., Dyson, A. and Weiner, S. (2013). *From exclusion to inclusion: Ways of responding in schools to students with special educational needs*. Berkshire, London: CIBT Education Trust.
 3. Booth, Tony and Ainscow, Mel (2002). *Index for inclusion: Developing learning and participation in schools*. London: Center for Studies on Inclusive Education.
 4. Dyson, A. and Millward, A. (2000) *Schools and special needs: issues of innovation and inclusion*. London: Paul Chapman.
 5. Hart, S., Dixon, A., Drummond, M.J. and McIntyre, D. (2004). *Learning without limits*. Maidenhead: Open University Press.
 6. Nind, M., Sheehy, K. and Simmons, K. (eds). *Inclusive education: learners and learning contexts*. London: Fulton.
 7. Thomas, G., & Loxley, A. (2007). *Deconstructing Special Education and Constructing Inclusion* (2nd Edn.). Maidenhead: Open University Press.
 8. Tomasevski, K. (2004). *Manual on rights-based education*. Bangkok: UNESCO.
 9. UNESCO (1985). *Helping handicapped pupils in ordinary schools: Strategies for teacher training*. Paris: UNESCO.
 10. UNESCO (1990). *World declaration on education for all and framework for action to meet basic learning needs*. International Consultative Forum on Education for All. Paris: UNESCO.
 11. UNESCO (1994). *The Salamanca world conference on special needs education: Access and quality*. UNESCO and the Ministry of Education, Spain. Paris: UNESCO
 12. UNESCO (1996). *Learning: the treasure within, report to UNESCO of the International Commission on Education for the Twenty-first Century*. Paris: UNESCO.
 13. UNESCO (1998). *Wasted opportunities: When schools fail. Education for all. Status and trends*. Paris: UNESCO.
 14. UNESCO (1999). *From special needs education to education for all: A discussion document*. Tenth Steering Committee Meeting UNESCO, Paris 30 September - 1 October 1998.
 15. UNESCO (1999) *Welcoming schools: Students with disabilities in regular schools*. Paris: UNESCO
 16. UNESCO (2005). *Guidelines for inclusion: Ensuring access to education for all*. Paris: UNESCO.
 17. United Nations (1989). *Convention on the rights of the child*. New York: United Nations.
-

PE-7b: Gender, School and Society

Year : 2	Credit : 2
Marks : 50 (Ext: 40+Int 10)	Contact Hours : 32

Course Outcomes:

On completion of this course, the student-teacher shall

- State the key concepts related to the gender issues.
- Identify key gender issues in school, curriculum, textbooks and pedagogical process.
- Understand the ways to address gender issues in and out of school context.

Detailed Course Content

1. Gender Related Concepts

- Key concepts: sex and gender, masculinity vs feminism, patriarchy, gender bias, gender parity, gender asymmetry
- Gender identity construction: Influence of home, society, culture

2. Forms of Gender Inequality and Issues

- Forms and issues: Mortality inequality, Natality inequality, Special opportunity inequality, Professional inequality, Basic facility inequality, Ownership inequality, Household inequality
- Gender inequality in school context: access and participation, gender stereotype role assignments, curriculum and text books, inadequate gender sensitive facilities, teachers' preferential treatment, sexual abuse in school.

3. Addressing Gender Issues: Interventions and strategies

- Role of family, school, community and media in addressing the issues
- Policy provisions NPE (1986/92), NCF (2005), RTE (2009), State Women Policy (2014)

Tasks and Assignments

Each student-teacher is required to submit any one assignment from the following:

- Surveys of five families on role distribution among family members and preparation report
- Preparation of a report on gender-based roles and practices of the students and staff
- Analysis of a secondary level textbook from gender perspectives

Suggested Readings

- Chakravarti, Uma. (2003). Gendering cast through a feminist lens. Calcutta, Bhatkal and Sen. Govt. of India (1992). National policy on education 1986/92. New Delhi: MHRD, Govt. of India,
- Govt. of India (1992). Programme of action. New Delhi: MHRD, Govt. of India.
- Jone, Mary E. (Ed.) (2008). Women's studies in India: A reader. New Delhi: Penguin Books.
- Nayar, U. & Duggal, J. (1997). Women's equality and empowerment through curriculum: A hand book for teachers at primary stage. New Delhi: NCERT
- NCERT (2005). National curriculum framework 2005. New Delhi: NCERT.
- Srivastava, Gouri (1997). Women who created history: Exemplar materials for textbook writers and teachers. New Delhi: NCERT

PE-8a: Action Research and Innovation

Year : 2	Credit : 2
Marks : 50 (Ext: 40+Int 10)	Contact Hours : 32

Course Outcomes:

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

- *Define the concept, need and importance of action research and differentiate between pure and applied researches in Education.*
- Conduct action research, selecting and using the appropriate methods
- *Report action research by following the approved format and style*
- *Evaluate an action research project in terms of its objectives, processes and implications of the outcomes*

Detailed Course Content

1. Understanding Action Research

- Need for research in improving educational practices
- Importance, characteristics and objectives of action research
- Comparison between Pure, Applied and Action Research

2. Conducting Action Research

- Designing Action Research Project
- Procedure and steps in conducting Action Research
- Tools and techniques used in conducting Action Research

3. Reporting Action Research

- Format and style
- Evaluating an Action Research Project
- Sharing and reflecting on the process of research and implications of the outcomes

Tasks and Assignments

Each **student-teacher is required to conduct an action research on any school / classroom problem he/she encounters and prepare a report.**

Suggested Readings

1. Atkins, L & Wallace, S. (2012). *Qualitative research in education*. London: Sage Publications.
2. Best, J.W., & Kahn, J.V. (1998). *Research in education* (8th ed.). Needham Heights, MA: Allyn and Bacon.
3. Borg, W. (1981). *Applying educational research: A practical guide for teachers*. New York: Longman.
4. Ferrance, Eileen (2000). *Action research*. Providence, RI: Laboratory at Brown University (LAB).
5. Johnson, A.P. (2005). *A short guide to action research* (2nd ed.). Boston: Allyn & Bacon.
6. Mertler, C.A. (2006). *Action research: Teachers as researchers in the classroom*. New Delhi: Sage Publications.
7. Oja, S.N., & Smulyan, L. (1989). *Collaborative action research: A developmental approach*. New York: Falmer Press.

8. Schmuck, R.A. (1997). *Practical action research for change*. Arlington Heights, Illinois: Sky Light Professional Development.
9. Stringer, E.T. (1999). *Action research*. Thousand Oaks, CA: Sage Publications.

PE-8b: Guidance and Counselling

Year : 2	Credit : 2
Marks : 50 (Ext: 40+Int 10)	Contact Hours : 32

Course Outcomes:

On completion of this course, the student-teacher shall:

- State the concept, need and principles of guidance.
- Explain the role of school in organizing different guidance programmes.
- Use various tools and techniques of guidance in appropriate contexts.
- Narrate the process, tools and techniques of counselling.
- Explain the qualities and role of a school counsellor.

Detailed Course Content

1. Understanding School Guidance Programme

- Concept, Need and Importance and Principles of Guidance.
- Types of Guidance: Educational, Vocational and Personal (Nature and Objectives at Elementary and Secondary levels)
- Guidance Services in Schools Counselling, Occupational Information Service, Placement, Pupil Inventory Services, etc.
- Organizing guidance programmes in schools
- Addressing Issues of Guidance programme in schools

2. Understanding School Counselling Programme

- Meaning, principles and purposes of counselling
- Types of Counselling: Directive, Non-directive and Eclectic counselling
- Processes involved in counselling.
- Qualities and role of a school counsellor

3. Tools and techniques of Guidance and Counselling

- Guidance and counselling for Individual and Group
- Tools in guidance and Counselling: Blanks, Cumulative Record Cards, Rating scale, Questionnaires, Psychological Tests and Inventories
- Techniques of Guidance (Observation, Interview and Sociometry) and Counselling (Lecture, Discussion and Dramatics); Group Guidance concepts and techniques.

Task and Assignments

Each student-teacher is required to submit **one assignment** from the following:

- Preparation of a comprehensive guidance programme for a school on the basis of need survey.

- Preparation of a vocational /educational counselling programme for class X students
- Preparation of a questionnaire for socio-economic survey of secondary school students
- for providing career counseling

Suggested Readings

1. Bhatnagar, Asha and Gupta, Nirmala (Eds) (1999). *Guidance and counselling: A theoretical perspective* (Vol.I). New Delhi: Vikas.
2. Bhatnagar, Asha and Gupta, Nirmala (Eds) (1999). *Guidance and counselling: A practical approach* (Vol.II). New Delhi: Vikas.
3. Dave, Indu (1984). *The basic essentials of counselling*. New Delhi: Sterling Pvt. Ltd.
4. Gazda George R.M.(1989). *Group counselling: A development approach*. London: Allyn and Bacon.
5. Gibson, R.L. & Mitchell, M.H. (1986). *Introduction to guidance*. New York: McMillan.
6. Nugent, Frank A. (1990). *An Introduction to the profession of counselling*. Columbus: Merrill publishing Co.
7. Pietrofesa, J.J., Bernstein, B., and Stanford, S.(1980). *Guidance: An introduction*. Chicago: Rand McNally.
8. Rao, S.N. (1981). *Counselling psychology*. New Delhi: Tata McGraw Hill.
9. Saraswat, R.K. & Gaur, J.S. (1994). *Manual for guidance counsellors*. New Delhi: NCERT.

CURRICULUM AND PEDAGOGIC STUDIES (CPS)

CPS 1: Language across the Curriculum

Year : 2	Credit : 4
Marks :100 (Ext: 80+int 20)	Contact Hours : 64

Course Outcomes:

On completion of this course, the student-teacher shall

- Identify the language backgrounds of students and facilitate their movement from home/ regional language to standard language.
- Analyze the nature of classroom discourse and devise strategies to improve communication skills of students. Develop appropriate skills of reading and writing among the learners and facilitate reading writing connection.
- Envision their role as facilitators of learners' language enrichment irrespective of the subjects

Detailed Course Content

1. Language background of Learners

- Varied language contexts of the learners: dialect, regional varieties and standard language; significance of first language in learning
- Home language Vrs School Language: Transmission and movement: challenges and strategies
- Understanding multilingual context-Challenges and strategies

2. Language in Classroom

- Nature of classroom discourse and significance of language
- Communication skills, promotion of oral skills through questions, discussion, sharing and interaction
- Language across various disciplines and subjects: humanities and science; Role of language in ensuring optimum learning in subject areas

3. Reading-writing connection

- Reading in different content areas for information and data gathering, critical understanding; Strategies for developing reading skills such as scanning, skimming, in-depth reading, note making
- Reading-writing connection in different content areas Use of note making for preparing a write-up, use of information gathering for summarizing,
- Writing for various purposes preparing report, writing paragraph, explanatory notes, expansion of ideas, presenting information in various forms such as flow-chart, diagram, pie-chart, histogram
- Process writing generating/gathering ideas, drafting, revising and finalizing

Tasks and Assignments

Each student-teacher is required to submit assignment **on any** one of the following: .

- Preparation of a report on language diversities of learners in a secondary grade with strategies to address the challenges.
- Devising an action plan for developing the components (sub-skills) of reading/writing skill of the learners at the secondary level
- Expansion of an idea/ideas from the secondary level texts and presentation of the same in the form of flow-chart/pie-chart/tree diagram

Suggested Readings

1. Daniel, Larsen Freeman (2010). Techniques and principles of language teaching (2nd Edn.). Landon: Oxford University Press.
 2. Kumar, Krishna (2008). The child's language and the teacher: A handbook, New Delhi: National Book Trust.
 3. Lightbown, P.M. and Spada, N. (1999). How languages are learned. Oxford: Oxford University Press.
-

CPS 3 (A&B): PEDAGOGY OF MATHEMATICS

Year : 2	Credit : 4
Marks : 100 (Ext: 80+int 20)	Contact Hours : 64

Course Outcomes:

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

- Narrate the evolution and nature of Mathematics and its importance in the school curriculum in the context of the recent curricular reforms.
- Use various methods and approaches of teaching and learning mathematics especially suitable for secondary school classes.
- Plan lessons in Mathematics using traditional and constructivist approaches for effective classroom transactions.
- Develop and collect activities and resource materials for their use in enhancing the quality of learning Mathematics at the secondary level.
- Conduct continuous and comprehensive assessments for enhancing the quality of Mathematics learning.
- Explain the concepts in Mathematics included in the secondary school curriculum and make a pedagogical analysis of those concepts.

Detailed Course Content

1. Foundations of Mathematics Education

- *Nature of Mathematics:* Nature and Scope of Mathematics, Nature of Mathematical propositions, Mathematical proof, structure and logic; History of Mathematics with special reference to Indian Mathematics.
- *Learning of Mathematics:* Importance of Mathematics at elementary and secondary levels, Objectives of teaching-learning Mathematics at the two levels,
- *Curriculum Reforms in School Mathematics:* Rationale, objectives, principles, designs and materials in Mathematics, recent curricular reforms at the National and State levels (NCF 2005).

2. Methods of Teaching-learning Mathematics

- *Learning by Discovery:* Nature and purpose of learning by discovery; guided discovery strategies in teaching Mathematical concepts.
- *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, Collaborative strategies; 5E and ICON Models,

3. Curricular Activities in Mathematics

- Preparation of Lesson Plans (Traditional, Activity and Constructivist Approaches),
- Activities in Mathematics: Mathematics Quiz, Mathematics Club activities, Mathematics Exhibition, Planning and organizing Mathematics laboratory activities, Mathematics outside the classroom.

- Learning Materials in Mathematics: Types, functions, preparation and utilization of learning materials - Textbook, Models, Calculators and computers, Graphic calculators, Maintaining portfolio in Mathematics
- Key Learning Resources in Mathematics: Assessing progress and performances, Monitoring and giving feedback, Local and community resources, Using pair work,
- Using group work, using questioning (both by teacher and learners) to promote thinking, talk for learning and Involving all.

4. Assessment of and for Mathematics Learning

- Assessment of Mathematics learning: Unit test Designing blueprint, 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.

5. Pedagogical Treatment of Content

Each of the following contents shall be analysed in terms of the pedagogical treatment indicated in the right cell below.

Content	Aspects of Pedagogical Treatment
<ul style="list-style-type: none"> • Number System, Ratio and Proportion • Set, Relations, and Functions • Algebraic equations: Linear, Simultaneous and Quadratic Equations and their graphical solutions, Polynomials • Theory of Indices, Logarithm and Antilogarithm • Lines and Angles, Axioms, Triangles, Polygons & Circles, Coordinate Geometry, • Trigonometric Ratios and Identities Problemson Height and Distance 	<ul style="list-style-type: none"> • Identification of concepts and sub-concepts • Expected specific learning outcomes. • Methods/approaches of teaching-learning • Teaching-learning materials to be used. • Expected teacher and students' activities. • Assessment strategies

Tasks and Assignments

Each student-teacher is required to complete assignments on **any two** of the following:

- Preparation of five lesson plans on any topic from the mathematics texts of the secondary school following the 5E and/or ICON models.
- Preparation of a unit test on any topic by developing the blueprint and the test items conforming to the blueprint.
- Develop five activities in Mathematics to be used for the enrichment programme.
- Diagnosis of learner difficulty in Mathematics and preparation of remedial exercise.

- Designing pedagogical treatment for any topic of Mathematics and designing learning activities.

Suggested Readings

- Cooney, Thomas J. et al. (1975). *Dynamics of Teaching Secondary School Mathematics*. Boston: Houghton Mifflin.
- Driscoll, M., Egan, M., Nikula, J., & DiMatteo, R. W. (2007). *Fostering geometric thinking: A guide for teachers, grades 6-10*. Portsmouth, NH: Heinemann.
- Driscoll, M. (1999). *Fostering algebraic thinking: A guide for teachers, grades 5-10*. Portsmouth, NH: Heinemann. Grouws, D.A. (ed) (1992). *Handbook of research on mathematics teaching and learning*. New York: Macmillan Publishing.
- Malone, J. and Taylor, P. (eds) (1993). *Constructivist interpretations of teaching and learning mathematics*. Perth: Curtin University of Technology.
- Marshall, S.P. (1995). *Schemes in problem-solving*. New York: Cambridge University Press.
- Moon, B. & Mayes, A.S. (eds.) (1995). *Teaching and learning in secondary school*. London: Routledge.
- NCERT (1998). *A textbook of content-cum-methodology of teaching mathematics*. New Delhi: NCERT.
- NCERT (2005). *National curriculum framework 2005*. New Delhi: NCERT.
- NCERT (2006). *Position paper: National focus group on teaching mathematics*. New Delhi: NCERT.
- TESS India (2015). *Key resources. The Open University U.K.* (<http://creativecommons.org/licenses/> and <http://www.tess-india.edu.in/>)

CPS3 (2nd year): Pedagogy of Language (Odia)

Year : 2	Credit : 4
Marks : 100 (Ext: 80+Int 20)	Contact Hours : 64

Course Outcomes:

On completion of this course, the student-teacher shall

- State the importance and place of Odia as mother tongue in school curriculum.
- Develop the strategies to address the problems of Odia language acquisition in multi lingual context.
- Use various strategies for facilitating the acquisition of language skills in Odia.
- Decide appropriate pedagogic approaches to transact different types of lessons in Odia.
- Prepare appropriate tools for comprehensive assessment of learning in Odia.
- Explain the fundamentals of Odia linguistics and their relevance in teaching learning Odia.
- Plan appropriate pedagogic treatment of the prescribed textual contents (in Odia) of classes IX and X.

Detailed Course Content

1. Odia as Mother Tongue in School Curriculum

- Importance of mother tongue in the life and education of an individual

- Place of Odia as mother tongue in school curriculum in Odisha (both at elementary and secondary levels) in the context of language policy recommended by NPE, 1986 (three language formula)
- Objectives of teaching-learning Odia at elementary and secondary levels
- Inter-dependence of language skills in Odia
- Strategies for facilitating acquisition of four-fold language skills in ODIA

2. Pedagogic Approaches to Teaching-Learning Odia

- Psychology of language learning and acquisition with reference to Odia as mother tongue.
- Problems and issues related to acquisition of Odia language in multi-lingual context
- Traditional versus modern methods of teaching-learning Odia.
- Different approaches and strategies to the teaching-learning of:
 - Odia prose (detailed and non-detailed)
 - Odia poetry
 - Odia composition (through Rubric)
 - Odia grammar
 - Strategies for enrichment of Odia vocabulary (word formation and spelling)
 - Strategies for developing creative writing skills

3. Curricular Activities in Odia

- Preparation of Unit Plan
- Preparation of Lesson Plan following constructivist approach (5E and ICON Models)
- Learning resources and planning learning activities
- Learning assessment in Odia : Assessing comprehension and expression skills; preparation of objective-based and objective-type test items
- Portfolio Assessment in Odia
- Comprehensive Assessment of Learning in Odia
- Planning remedial measures

4. Relevance of Linguistics in Odia Language Acquisition

- Elements of Language sound, vocabulary and structure
- Odia ଧ୍ୱନି (Sound) Types and manner of articulation
- Odia Vocabulary Types (ତତ୍-ସମ, ଦତ୍-ଭବ, ଦେଶଜ, ବୈଦେଶିକ), ଶବ୍ଦ ଗଠନ ପ୍ରକ୍ରିୟା (ଉପସର୍ଗ, ପ୍ରତ୍ୟୟ, ସମାସ ଓ ସନ୍ଧିର ବ୍ୟବହାର), Semantics (Lexical and Contextual)
- Odia Syntax Processes and Principles
- Use of Linguistics in effective teaching-learning of Odia language

5. Pedagogical Treatment of Content

Each of the following contents shall be analyzed in terms of the pedagogical treatment indicated in the right cell below.

Content	Aspects of Pedagogical Treatment
<ul style="list-style-type: none"> • Poems - ମାଟିର ମଣିଷ, ଗୋପ ପ୍ରାୟାଣ, ହେ ମୋର କଲମ, ପଦ୍ମ • Prose Pieces - ଜାତୀୟ ଜୀବନ, ପ୍ରକୃତ ବନ୍ଧୁ, ଓଡ଼ିଆ ସାହିତ୍ୟ କଥା 	<ul style="list-style-type: none"> • Identification of language items (new vocabulary, expression and grammar components) • Identification of scope in the content to be presented for facilitating learning language skills

Content	Aspects of Pedagogical Treatment
<ul style="list-style-type: none"> Grammar - କାରକ, ବିଭକ୍ତି, ସମାସ (Pieces to be selected from Class X Text as indicated) 	<ul style="list-style-type: none"> Formulation of learning objectives Selection of methods and approaches/strategies Preparation of teaching-learning materials Designing of learning activities Planning teacher and student activities for effective interaction Assessment strategies (focusing formative)

Tasks and Assignments

- Each student-teacher is required to submit assignments on any two of the following:
- Preparation of Five Lesson Plans on the topics from the prescribed text following 5E and ICON Models (at least two plans in each model)
- Preparation of a blue print on any topic from the prescribed text and development of test items in conformity with the blue print.
- Diagnosis of spelling problems among the learners and development of remedial materials
- Preparation of a Rubric for developing an essay in Odia
- Suggested Readings
- ଧଳ, ଗୋଲକବିହାରୀ (1972), ଇଂରାଜୀ ଉଚ୍ଚାଚରଣ ଶିକ୍ଷା, Cuttack: Friends Publisher.
- 2.ଧଳ, ଗୋଲକବିହାରୀ (1974), ଧ୍ୱନି ବିଜ୍ଞାନ, (Bhubaneswar: Odisha Rajya Pathya Pustaka Pranayama Sanstha.
- Mohanty, B. (1970). Odia bhasara utpati O ama bikasha. Cuttack: Friends Publishers.
- Mohanty, J., Barik, N. & Khandai, U. (1983). Odia sikshadana paddhati. Cuttack : Nalanda.
- ମହାପାତ୍ର ଧନେଶ୍ୱର (1976), ଓଡ଼ିଆ ଧ୍ୱନି ତତ୍ତ୍ୱ ଓ ଶବ୍ଦ ସମ୍ଭାର, Cuttack : Grantha Mandir.
- Mohapatra, N. & Das, S. (1943). Sarbasara vykarana. Cuttack: New Student's Store
- Nayak, B. (1974). Matrubhasa Sikshadana paddhati. Bhubaneswar : Odisha Rajya Pathya Pustaka Pranayana Sanstha.
- Padhee, B. (1972). Odia bhasara rupa tattwa. Berhampur: Pustak Mandir.
- Rout, P.C. (1986). Matrubhasa sikshadana paddhati. Jajpur: Saraswati Printers
- Sahoo, B. (1975). Bhasa bigyanara ruparekha. Cuttack: Paramarathi Printers
- Sarang, N. (2001). Bruhat Odia vykarana. Cuttack: Satyanarayan Bookstore
- Tripathy, K.B. (1977). Odia bhasa tattwa O lipira krama bikash. Bhubaneswar: Odisha Rajya Pathya Pustaka Pranayana Sanstha.

CPS3(a & b): Pedagogy of Biological Science

Year : 2	Credit : 4
Marks : 100 (Ext: 80+Int 20)	Contact Hours : 64

Course Outcomes:

On completion of this course, the student-teacher shall

- State the nature and importance of Biological Science and its relevance in secondary school curriculum in context with recent curriculum reforms in School Curriculum.
- Use various methods and approaches to teaching-learning Biological Science suitable for the secondary school classes.
- Plan units' lessons in Biological Science using traditional and constructivist approaches for effective classroom transactions.
- Develop and collect activities and resource materials for their use in enhancing quality of learning of Biological Science at the secondary level.
- Use appropriate tools and techniques for continuous and comprehensive assessment of learning in Biological Science.
- State the concepts in Biological Science included in the secondary school curriculum and make pedagogical analysis of those concepts.

Detailed Course Content

1. Biological Science in School Curriculum

- Nature of Biological Science: Nature and Scope of Science and Biological Science in particular,
- Place of Biological Science in school curriculum, Importance of Biological Science in daily life,
- Objectives of teaching-learning Biological Science at the secondary school level,
- Curriculum Reforms in Science Education : Rationale, objectives, principles, designs and materials in science, recent curricular reforms at the National and State levels (NCF 2005).

2. Approaches and Methods of Teaching-learning Biological Science

- Observation Types, importance in Bioscience, process, recording of observation
- Experimentation: Experimentation under controlled conditions within laboratory and beyond laboratory situation; Process and limitations.
- Problem Solving: Problem identification, formulation of hypotheses, collection of data, testing hypotheses and arriving at solution.
- Demonstration-cum-Discussion
- Project: Situation analysis, selection of the project, preparation of the project proposal, implementation of the project, evaluation and reporting.
- Use of ICT for self-learning, collaborative learning Concept Mapping.

3. Curricular Activities

- Preparation of Unit Plan; Preparation of Lesson Plans -Traditional, Activity Approach and constructivist approach, (ICON & 5E model).

- Teaching-Learning Materials in Science: Preparation, collection, procurement and use of teaching-learning materials in science like, Charts, Graph, Bulletin Board, Models, ICT materials like Film strips, Slides, Transparencies, TV, Audio and Video, Computer, and Internet;
- Learning Activities Science laboratory activities; Observing flora and fauna in their natural setting, Science Club, Science Seminar, Preservation of biological specimens for learning and building Biological Museum, Science Exhibition
- Key Learning Resources in Science: Assessing progress and performances, Monitoring and giving feedback, Local and community resources, Using pair work. Using group work, Using questioning (both by teacher and learners) to promote thinking, Talk for learning and Involving all

4. Assessment in Science learning

- Construction of Classroom tests and Unit tests, designing blueprint, preparation of test items.
- Assessment devices; Assignments, projectwork, portfolios, Observation of activities.
- Diagnosis of learning difficulties in Biological Science, Remediation of difficulties, Enrichment Programmes.
- Planning for continuous assessment of classroom learning.

5. Pedagogical treatment of Content

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

Content	Aspects of Pedagogical Treatment
<ul style="list-style-type: none"> • Improvement of Food production, • Cell and its Organization, • Nutrition, Respiration, Excretion and Reproduction • Biodiversity, • Natural Resources and its Pollution, • Our Environment; Ecosystem, Ecological system flow of energy, Bio-geochemical cycles in nature, Environmental degradation 	<ul style="list-style-type: none"> • Identification of concepts and sub-concepts, • Expected specific learning outcomes, • Methods/approaches of teaching-learning, • Teaching-learning materials to be used, • Expected teacher and students' activities, and • Assessment strategies.

The scope of discussion of the above concepts should be limited to the prescribed Science curriculum for the secondary school level of the state.

Tasks and Assignments

Each **student-teacher is required to submit assignments on any two of the following:**

- Preparation of five lesson plans on any topic of Biological Science included in the Science textbook for the secondary schools.
- Preparation of a unit test on any topic by developing the Blueprint and the test items conforming to the blueprint.
- Developing five activities/experiments in Biological Science and prepare a brief report,
- Collection and preservation of biological specimens from the immediate environment (at least five, selecting minimum two each from preservable plants and animals/insects)

Suggested Readings

1. Buffaloe, Neal. & Throneberry, J.B. (1972). *Principles of biology teaching*. New Delhi: Prentice Hall of India.
2. Herr, Norman (2007) *The Sourcebook for teaching science*. San Francisco, CA: Jossey-Bass.
3. Kulashrestha, S.P. (2009). *Teaching of biology*. Meerut: R. Lall Book Depot
4. Mangal, S.K. & Mangal, S. (2007). *Teaching of biological science*. Meerut: International Publishing House.
5. Miller, D.F. & Blayses, G.W. (2011). *Methods and materials for teaching biological sciences*. New York: McGraw Hill.
6. Sharma, R.C. (1998). *Modern science teaching*. New Delhi: Dhanpat Rai and Sons.
7. TESS India (2015). *Key resources. The Open University U.K.*
(<http://creativecommons.org/licences/> and <http://www.tess-india.edu.in/>)
8. Vaidya, Narendra (1992). *Science teaching for 21st century*. New Delhi: Deep and Deep.
9. Zaidi, S.M. (2004). *Modern teaching of life sciences*. New Delhi: Anmol Publications.

CPS3 (2nd year): Pedagogy of Language (English)

Year : 2	Credit : 4
Marks : 100 (Ext: 80+Int 20)	Contact Hours : 64

Course Outcomes:

On completion of this course, the student-teacher shall

- Analyze the issues relating to importance and place of English in school curriculum, acquisition of skills in English, realization of aims and objectives of learning English and language policy as conceived in NPE, 1986 and NCF 2005
- Use various methods, approaches and strategies for teaching-learning English and transact various types of lesson plans covering all aspects of English language following different approaches
- Develop test items to assess learning in English and provide feedback as well as prepare enrichment materials
- Use the understanding of phonetics for facilitating students' speaking in English
- Plan appropriate pedagogical treatment of the prescribed contents for effective classroom transaction

Detailed Course Content

1. English in School Curriculum

- Language policy in India with reference to NPE, 1986 and NCF 2005
- Importance of English language in India in historical perspectives
- Place of English as a compulsory subject in school curriculum (both at elementary and secondary levels)
- Objectives of learning English at elementary and secondary levels
- English language skills their components, independence and interdependence

2. Acquisition of Second Language (English): Methods, Approaches and Strategies

- Psychology of language acquisition and language learning
- Acquisition of English language : problems and issues with reference to multi-lingual context
- Importance of language context and input-rich classroom environment for acquisition of English language
- Understanding of different methods and strategies : Translation Method, Direct Method, Bi- lingual Method, Communicative Approach including Silent Approach, Suggestopaedia, skill- based activity, Group Learning

3. Transaction of Contents and Learning Assessment in English

- Transaction of Prose (detailed and non-detailed), poetry, grammar and composition lessons Approaches, Methods and Strategies
- Preparation of Unit Plan
- Preparation of Lesson Plan following communicative approach and constructivist approach (5E and ICON Models)
- Strategies for enrichment of vocabulary in English : word formation skill and spelling
- Teaching-learning materials in English : Types and Uses : preparation of low cost no-cost teaching-learning materials in English
- Assessment in English : assessing skills in English; framing different types of objective-based test items (Extended Response Type, Restrictive Response Type and Objective Type), Portfolio assessment in English, Continuous Assessment of Learners performance in English within and beyond classroom situations
- Key Learning Resources in Mathematics: Assessing progress and performances, Monitoring and giving feedback, Local and community resources, Using pair work, Using group work, Using questioning (both by teacher and learners) to promote thinking, Talk for learning and involving all.

4. English Language and its Articulation

- Characteristics of language
- Analysis of English language with reference to its substance, form and context
- Sounds of English language: Consonants and Vowels (Pure and Diphthongs)
- Articulation of sounds in English appropriate use of organs of speech
- Patterns of stress and intonation in English language
- Kinds of errors made by the Odia speaking learners while speaking English and their remediation

5. Pedagogical Treatment of Content

Each of the following contents shall be analyzed in terms of the pedagogical treatment indicated in the right cell below.

Content	Aspects of Pedagogical Treatment
<ul style="list-style-type: none"> • Any six topics (3 prose pieces and 3 poems) from the prescribed text for Classes IX and X by BSE, Odisha • Parts of Speech 	<ul style="list-style-type: none"> • Identification of language items (new vocabulary, expression and grammar components) • Identification of scope in the content to be

Content	Aspects of Pedagogical Treatment
<ul style="list-style-type: none"> • Time and Tense • Change of Voice • Direct and Indirect speech • Sentence Pattern • Translation and Composition (Writing letter and essay, noting, reporting) 	<ul style="list-style-type: none"> presented for facilitating learning of language skills • Specification of learning objectives • Selection of methods and approaches/strategies • Preparation of teaching-learning materials • Designing of learning activities • Planning teacher and student activities for effective interaction • Assessment strategies (focusing formative)

Tasks and Assignments

Each student-teacher is required to submit assignments on any two of the following:

- Preparation of 5 Lesson Plans on the topics from the prescribed text following 5E and ICON Model (at least two plans in each model)
- Preparation of a blue print on any topic from the prescribed text and development of test items in conformity with the blue print
- Diagnosis of learner difficulty in speaking English and preparation of the remedial exercise
- Designing of pedagogical treatment for any topic from the prescribed text in terms of identification of language items (new vocabulary, expression and grammar components) and designing of learning activities

Suggested Readings

1. Bansal, R.K. (1971). An outline of general phonetics. Bombay: Oxford University Press
2. Bansal, R.K. and Harrison, J.B. (1972). Spoken English for India. Madras : Orient Longman
3. Baruah, T.C. (1984). The English teachers handbook. New Delhi: Sterling Publishers
4. Billows, F.N. (1961). The techniques of language teaching. London : William Heffer and Sons.
5. Carrol, J.B. (1972). Systems and structures of english. London: Oxford University Press.
6. Das, B.K. et al. (2009). An introduction to professional english and soft skills. New Delhi: Cambridge University Press
7. Dodson, C.J. (1963). The bilingual method. London : Pitman Publishing.
8. Frisby, A.W. (1970). Teaching english: notes and comments. London: ELBS,
9. Gokak, V.K. (1963). English in India: Its present and future. New Delhi: Asia Publishing House.
10. Harish David, P. (1969). Testing english as second language. NewJersy: McGrawHill
11. Hornby, A.S. (1962). The teaching of structural words and sentence patterns. London: Oxford University Press.
12. Jones, Daniel (1967). An outline of english phonetics. London: William Heffer and Sons
13. Kohli,A.L. (1970). Techniques of teaching english. Jalandhar: Dhanpat Rai and Sons.
14. Krishna Swamy, N. and Sri Raman, T. (1994). English teaching in India. Madras : T.R. Publication.

15. Palmer, H.E. (1980). Grammar of spoken english. Cambridge: Heffer.
16. Prabhu, N.S. (1989). Second language pedagogy. New Delhi: Oxford University Press
17. Sachdeva, M.S. (1973). A new approach to teaching of english in India. Ludhiana : Prakash Brothers
18. Saraswati, V. (2004). English language teaching. New Delhi: Orient Longman
19. Sharma, A.K. (1985). Aspects of english language teaching in India. New Delhi: Bharat Book Depot.
20. Sinha, S.P. (1978). English in India. New Delhi: Janaki Prakashan
21. TESS India (2015). Key resources. The Open University U.K. ([http//creativecommons.org/ licences/](http://creativecommons.org/licences/) and [http//www.tess-india.edu.in/](http://www.tess-india.edu.in/))

Courses on Enhancing Professional Capacities (EPC)

EPC-1: Critical Understanding of ICT

Year : 2	Credit : 2
Marks : 50 (Internal)	Contact Hours : 32

Course Outcomes:

On completion of this course, the student-teacher shall

- Describe a computer system
- Describe the working of a computer
- Operate the windows operating system
- Use word processing package
- Use internet for educational purpose
- Use the word processing package in education Appreciate the use of ICT in teaching and learning
- Acquire the skill of trouble-shooting whenever there are problems in the working of computer

Detailed Course Content

1. Computer Fundamentals

- What is computer - Basic anatomy of computer: Input Devices Keyboards, Mouse, Touch Screen, MICR, Light Pen, Joystick, Digitizer, Scanner, Output Devices VDU, Printers, laser, InkJet; Dafa storage devices Hard disk, Compact disk, Optical disk, Pen drive and other devices.
- Operating System: Types of Operating System DOS, UNIX, WINDOWS; Brief introduction of Window: Utility & application of software.
- Introduction to Networking: Types of networking LAN, WAN, WAN; World Wide Web website.

2. Introduction to Computer Applications

- Word Processing: Creating Documents; Formatting Documents: Proofing and saving Documents; Printing Documents: Use of MS-Words in education
- Power Point Presentation (PPT) Creating a new PPT; Adding to Presentation , Text Colors, Fill-Colors Fill effects, Line effects ; Line Styles, Object Effects, Word Art, Animation Effects;

Using Transition effect; Giving an On –Screen Presentation, Navigation during presentation, Pausing the Presentation; Use of PPT in education

3. ICT in Education

- Concept, Need and Importance of ICT in Education.
- Multimedia approach to education: Role of video conferencing, radio conferencing, television EDUSAT and Internet in teaching-learning process. Their advantages limitations.
- Challenges and Barreir to integration of ICT in Indian schools Classrooms
- ICT Skilled Teacher ICT skills and qualities of ICT teacher

Tasks and Assignments

Each student-teacher is required to submit assignment on anyone of the following:

- Developing a script on any topic of a school subject for an audio-visual programme.
- Developing a power point presentation on any one topic to be transacted at the secondary level Watching any five UGC Sponsored Educational programmes telecast by AVRC/EMRC and preparing a report

Suggested Readings

1. Gorden B. Davis (1982). Introduction to computers. New Delhi: Tata McGraw-Hill
 2. Harold F.O' Neli. (1981), Computer based instruction. Academic Press. Kraynak, Joe &Harbraken, Jow. (1997) 3.
 3. Internet 6 in 1 . New Delhi: Prentice Hall of India Karl Schwartz. (2000). Training Guide- Microsoft Windows2000. DDC Publishing Inc., 4
 4. Kumar, Gaurav (2014). ICT Skill development. Patiala: 21st Century Publication.
 5. Kumar, Khushvinder and Kumar, Sunil (2004). Computer Education, GurusarSadhar: GBD Publications.
 6. Kumar, Khushvinder and Kumar, Sunil (2004). ICT Skill Development. GurusarSadhar, GBD Publications.
 7. Madnick, S.E. and Danovan, JJ. (1987). Operating Systems. New JersyMcGraw Hill Book Company.
 8. Peter Norton. (1999). DOS guide. New Delhi: Prentice-Hall of India.
 9. Rajaraman, V. (1998). Fundamentals of computers. New Delhi: Prentice-Hall of India.
 10. Ralph, W. Gerard. (1967). Computers and education, New Jersey: McGraw-Hill Book Company.
 11. Sharma, Lalit (2006) Computer Education. FerozpurCantt: Wintech Publications.
 12. Sinha, P.K. (1992). Computer Fundamentals: New Delhi: BPB Publications.
 13. Singh, Tarsem (2009). Basic Computer Education. Ludhiana: Tandon Brothers.
 14. Singh, Tarsem (2009). ICT Skill Development, Ludhiana: Tandon Brothers.
-

EPC - 2: Understanding the Self

Year : 2	Credit : 2
Marks : 50 (Internal)	Contact Hours : 32

Course Outcomes:

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

- Explain that any Self is a human resource to exercise all the resources: cognitive, affective and psychomotor.
- Analyse that the Self does not have independent existence but related to Nature, other selves and the 'Unknown' causing it and this great design of the Universe.
- Perform one's function to the possible extent as any part of the Nature is silently doing so; thereby developing self-actualization and self-esteem.
- Elaborate that one is responsible as a person and as a teacher for the integrated development of oneself and one's pupils: Physical, cognitive, social, emotional, aesthetic, moral, and spiritual developments.
- Realize the commonness and uniqueness prevalent in Nature and human nature and feel equality as the reality and contribute to the furtherance of evolution at mental level.

Detailed Course Content

1. Self -Concept • What is self:

- Dimensions of individual self, Maslow's Hierarchy of Needs
- Self-identity and self-esteem
- Self-acceptance: ability to see and recognize all aspects of one's own self without judgments - either positively or negatively, involves self-understanding - a realistic awareness of one's strengths and weaknesses.

(Activity: Critical Thinking Practices - Organization of brainstorming sessions to develop cognitive skills-independent thinking to promote critical thinking and creative thinking; decision making and problem solving with all their components)

(Purpose of this activity is to help student teachers in understanding their cognitive skills using their cognitive resources of their self)

2. Development of Self-Actualization

- Self-awareness: Ability to see oneself objectively both strengths & weaknesses, living in the present moment, free of past conditioning & reactions, observing oneself as the first step to awareness, Self-awareness as a necessary condition for effective living, a quality only human being possess.
- Awareness about one's abilities and opportunities to develop independent thinking, critical thinking and creative thinking, decision making and problem solving.
- Self-actualization: Meaning and strategies of development

(Activity: Encouraging Nature observation, inner observation, nature walks, and reading biographies. of great people who contributed their might out of self-abnegation but not with self-centredness and sharing personal experiences)

3. Development of Professional Identity

- Professional Identity of Teacher: Variations (gender, relational, cultural); implicit beliefs, stereotypes and prejudices resulting from variations
- Problems related to professional identity of a teacher: Lack of self-esteem, social status, addressing problems related to professional identity

Activity: *Self-critical awareness about one's abilities and assets in different contexts of professional life and limitations in terms of knowledge, attitudes, skills and values.*

Tasks and Assignments

Each student-teacher is required to submit assignment on **anyone** of the following:

- Identification and documentation of one's assets and limitations as well as one's opportunities and difficulties in the participated context.
- Documentation of the ways of dealing with conflicts in inter-personal relations at varied contexts.
- Documentation of stressed or emotionally loaded situations where in self-observation helped to build resilience.

Suggested Readings

1. Dalai A.S. (Ed.) (2001). *A greater psychology: An Introduction to the psychological thoughts of Sri Aurobindo*. Puducherry: Sri Aurobindo Ashram Pub.
2. Delors, Jaquis et al. (1996). *Learning the treasure within Twenty first century education: Report of the UNESCO Education Commission*. Paris:UNESCO .
3. Goel, D.R. (2006). *Quality concerns in education*. Vadodara: CASE, M.S. University.
4. Krishnamurti J. (2000). *Education and significance of life*. Chennai, Krishnamurti Foundation India.
5. Krishnamurti, J. (1998). *On self- knowledge*. Chennai, Krishnamurti Foundation India.
6. UNICEF (2006): *Life skills modules-Adolescence education program*. New Delhi: UNICEF House,.
7. Venkateshamurthy, C. G. & Govinda Rao, A.V. (2005). *Life skills education training package*. Mysore: Regional Institute of Education.



ASSESSMENT CRITERIA FOR THE COURSE

The performance of the student-teachers in the courses under the Groups A and B shall be assessed both internally and externally as detailed below:

Group A and B:

- The performance of each student-teacher in each paper under “Perspectives in Education (PE)” and “Curriculum and Pedagogic Studies (CPS)” shall be assessed internally out of 20 marks and externally out of 80 marks for courses carrying 100 marks and out of 10 marks and 40 marks for papers carrying 50 marks.
- Tasks and Assignments in respect of each student-teacher shall be assessed internally by the faculty member concerned both on the process and the final product (Report) and shall be awarded marks out of 10 on each such work (20 marks for two assignments in each paper carrying 100 marks and 10 marks for one assignment in each paper carrying 50 marks). The detailed criteria of assessment of assignments shall be spelt out by a Committee of faculty members constituted by the Head of the Institution.

Group C:

- The performance of each student-teacher in the courses under C3 (EPC) shall be assessed internally out of 50 marks in each course/paper.

Group D:

- The performance of each student-teacher in the courses under OCSD shall be internally assessed separately by the faculty member (s) concerned out of 50 marks.
-

EXAMINATION AND CERTIFICATION OF B.Ed. COURSE

- 20.1 The respective Universities shall conduct two year-end examinations for B Ed (Secondary) Course. The time of examination shall be decided by the Examination Committee of the Universities concerned.
- 20.2 The examination shall be conducted by means of written Test (for Theory Papers) and test of Practical (for Practical Papers) and shall be in accordance with such instructions as may be decided and issued by the Universities concerned.
- 20.3 The examinations shall be open to the candidates who have been duly selected as per the Government approved admission guidelines and admitted in different Teacher Education Institutions of the State.
- 20.4 The candidates who have prosecuted the courses by attending both theory and practical classes, by securing not less than 80% attendance in each theory paper (70% on production of Medical Certificate), and 90% in School internship programme; and have successfully completed the required number of practical assignments (Tasks and Assignments, Practice Teaching etc) duly assessed internally and fulfilling all other required conditions are to be declared eligible for each year-end examination by the Head of the Teacher Education Institutions concerned.
- 20.5 The candidates who are sent up for admission to the examination by satisfying all the conditions as laid down in the Sl. No. 4 supra but could not appear or having appeared have failed at the examination, shall be allowed to appear as ex-regular candidates for three consecutive chances maximum.
- 20.6 The medium of instruction and examination in all the theory papers except the Pedagogy of Language in Odia under CPS 10 shall be English,
- 20.7 Minimum percentage of pass mark in each theory course shall be 40 and in each practical course 50 in aggregate, a candidate has to secure 45% marks in order to be declared pass, subject to condition that he/she must have passed in each individual theory and practical course.
- 20.8 Each candidate has to secure minimum pass marks (40%) in each Task and Assignment under theory courses (PE, CPS, and EPC). If a candidate fails to secure the minimum pass mark in each Task and Assignment, he/she cannot be eligible to fill up the form to sit in the year end examination.
- 20.9 The performance of each candidate in courses on EPC and OCSD : shall internally be assessed continuously on periodical basis (CCA) and the marks secured by him/her in different events of assessment shall be combined and be converted to a score out of 50 and the same shall be added to his/her aggregate marks. The minimum pass mark shall be 40% in each individual course above.
- 20.10 At the final qualifying examination, award of Division shall be considered out of 1700 marks, In award of division, marks obtained by a candidate, both in theory and practical papers, shall be taken into consideration. Division shall be awarded as per the following.
- | | | |
|--------------|---|---|
| First Class | : | 1020 marks and above (60% and above) |
| Second Class | : | 765 to 1019 marks (45% and above but below 60%) |
- 20.11 A candidate failing to secure 40 percent in any theory course(s) and 50 percent marks in any practical course(s) in the year end examination(s) shall be allowed to appear at examination in that course(s) as back paper(s) and be given maximum three consecutive chances to pass in the concerned course(s). The internal marks secured by the candidate in that course(s) shall be retained as such.
-

20.12 If a candidate discontinues the course in the middle at any stage without completing the study of the full course and fulfilling the stipulated requirements thereof, he/she shall not be allowed to appear at the final university examination(s). In such circumstances, he/she may apply a fresh for his/her selection and admission to the course, if he/she desires.

All other conditions for conduct of examination and declaration of result shall be determined by the concerned University as per their regulations and status.

